Next

CITY COUNCIL AGENDA

Wednesday, January 25, 2023

NOTICE IS HEREBY GIVEN that the Herriman City Council shall assemble for a meeting in the City Council Chambers, located at
5355 WEST HERRIMAN MAIN STREET, HERRIMAN, UTAH

5:30 PM – WORK MEETING: (Fort Herriman Conference Room)

1. **Council Business**

   1.1. Review of this Evening's Agenda

   1.2. Future Agenda Items

   1.3. Council discussion of future citizen recognitions

2. **Administrative Reports**

   2.1. Draft Transportation Master Plan & Impact Fee Discussion – Bryce Terry, Assistant City Engineer

   2.2. Discussion regarding a proposed amendment to the Olympia Master Development Agreement – Blake Thomas, Community Development Director

   2.3. 2023 Proposed Event Calendar – Wendy Thomas, Assistant City Manager

   2.4. City Council Boards & Committee Assignment Review – Jackie Nostrom, City Recorder

2.5. Discussion on whether the City should take a formal position on the proposed South Jordan annexation – City Council Roundtable

3. **Adjournment**

7:00 PM – GENERAL MEETING:

4. **Call to Order**

4.1. Invocation/Thought/Reading and Pledge of Allegiance

4.2. City Council Comments and Recognitions

5. **Public Comment**

Audience members may bring any item to the City Council's attention. Comments will be limited to two minutes. State Law prohibits the Council from acting on items that do not appear on the agenda. Public comments for this meeting will also be conducted electronically. Any person interested in addressing the Council may submit a comment by emailing recorder@herriman.org or by visiting Herriman.org/agendas-and-minutes, where there is a link to fill out an online public comment form. Your statement will be incorporated into the public record.

6. **City Council Reports**

6.1. Councilmember Jared Henderson

6.2. Councilmember Teddy Hodges

6.3. Councilmember Sherrie Ohrn

6.4. Councilmember Steven Shields

7. **Mayor Report**

8. **Reports, Presentations and Appointments**

8.1. HPD Badge Presentation – Cody Stromberg, Deputy Police Chief

8.2. Presentation of the Audited Financial Statements for Fiscal Year Ended June 30,

2022 – Kyle Maurer, Finance Director

9. Public Hearing

9.1. Public Hearing and consideration of a resolution approving amendments to the Herriman City Fiscal Year 2023 Budget – Kyle Maurer, Finance Director

10. Consent Agenda

10.1. Approval of a resolution granting a single event permit local consent to Levy Restaurants for a series Utah Warriors Rugby home games events

10.2. Approval of the 2023 Amended Annual Meeting Schedule

11. Discussion and Action Items

11.1. Discussion and consideration of a request from Herriman 73 Partners LLC to amend the Herriman City Zoning Map for ±8.23 acres of property located approximately at 12400 S Mountain View Corridor from A-1-43 Agricultural to AMSD Auto Mall Special District. (City File No. Z2022-175) – Michael Maloy, City Planner

11.2. Discussion and consideration of proposed amendments to Chapters 10-3, 10-16, and 10-25 of the Land Development Code and enacting Title 11 to define and regulate Residential Treatment Facilities for the Disabled (File No. Z2022-172) – Todd Sheeran, City Attorney

12. Future Meetings

12.1. Next Planning Meeting: February 1, 2023

12.2. Next City Council Meeting: February 8, 2023

13. Events

13.1. February 8 – Senior Bingo; 10:00 a.m. City Hall (RSVP Required)

14. **Closed Session**
    The Herriman City Council may temporarily recess the City Council meeting to convene in a closed session to discuss the character, professional competence, or physical or mental health of an individual, pending or reasonable imminent litigation, and the purchase, exchange, or lease of real property, as provided by Utah Code Annotated §52-4-205

15. **Adjournment**

16. **Recommence to Work Meeting (If Needed)**

In accordance with the Americans with Disabilities Act, Herriman City will make reasonable accommodation for participation in the meeting. Request assistance by contacting Herriman City at (801) 446-5323 and provide at least 48 hours advance notice of the meeting.

ELECTRONIC PARTICIPATION: Members of the City Council may participate electronically via telephone, Skype, or other electronic means during this meeting.

PUBLIC COMMENT POLICY AND PROCEDURE: The purpose of public comment is to allow citizens to address items on the agenda. Citizens requesting to address the Council will be asked to complete a written comment form and present it to Jackie Nostrom, City Recorder. In general, the chair will allow an individual two minutes to address the Council. A spokesperson, recognized as representing a group in attendance, may be allowed up to five minutes. At the conclusion of the citizen comment time, the chair may direct staff to assist the citizen on the issue presented; direct the citizen to the proper administrative department(s); or take no action. This policy also applies to all public hearings. Citizens may also submit written requests (outlining their issue) for an item to be considered at a future council meeting. The chair may place the item on the agenda under citizen comments; direct staff to assist the citizen; direct the citizen to the proper administrative departments; or take no action.

I, Jackie Nostrom, certify the foregoing agenda was emailed to at least one newspaper of general circulation within the geographic jurisdiction of the public body, at the principal office of the public body, on the Utah State Public Notice website www.utah.gov/pmn/index.html and on Herriman City's website at www.herriman.org, Posted and dated this . /s/ Jackie Nostrom, City Recorder

HERRIMAN CITY

STAFF REPORT

DATE: **December 1, 2022**

TO: The Honorable Mayor and City Council

FROM: Bryce Terry, Assistant City Engineer

SUBJECT: Draft Transportation Master Plan Discussion

RECOMMENDATION:

It is recommended for the council to review the draft Transportation Master Plan and draft impact fee schedule and provide feedback to staff.

ISSUE BEFORE COMMISSION:

Should the draft Transportation Master Plan, Impact Fee Facility Plan, and Impact Fee Analysis be adjusted at all?

BACKGROUND/SUMMARY:

The City has been working to update the Herriman Transportation Master Plan. This plan will create a vision and project list for the City's transportation system to accommodate future growth in the City. The last Transportation Master Plan was adopted in 2019, before Olympia was annexed into Herriman.

This plan incorporates updates in the city boundaries, and new land uses. The newly adopted General Plan was the basis for the land use assumptions in this plan and is the basis for future traffic projections.

DISCUSSION:

The Transportation Master Plan (TMP) covers a lot of information, but generally speaking, the biggest takeaway is the future roadway project list. The consultant for this project, ran a traffic model based on the newly adopted General Plan land use guidelines. This model was run at several different forecast years:

- Existing (2020)
- Phase 1 (2030)
- Phase 2 (2040)
- Phase 3 (2050)

Based on these model runs, the projected number of trips (vehicles/day) on each road was produced. Then, those trips were compared to the existing roadway network capacity. From this comparison, roadway improvements, such as widening projects or new roads, could be identified as needed to accommodate the future traffic projections. Based on this, a project list of future roadway improvements was developed into the draft Transportation Master Plan.

Here are some key pages for review in the attached draft TMP:

- **2030 Traffic Projections & Level of Surface Maps** – pages 32-34
- **2050 Traffic Projections & Level of Surface Maps** – pages 36-38
- **Herriman City Roadway Classifications and Cross Sections** – pages 40-44
- **Proposed Roadway Network and Traffic Signal Maps** – pages 45-46
- **Streets Facilities Plan (Roadway Project list by Phase – Also included in the IFFP)** – pages 53-59

Impact Fee Analysis:

As a result, of the Transportation Master Plan and the Impact Fee Facility Plan, an impact fee analysis is able to be created to analyze how much of these future roadways projects can be attributed to future growth. Based on this analysis, the consultant calculated the maximum allowable impact fee to be charged to future development. Transportation Impact fees are broken down by the type land use of the development and how many trips each land use produces.

Our current impact fee schedule is as follows:

Table 1. Current Transportation Impact Fee Schedule

Land Use	Unit	Fee
Business	1000 Sq. Feet Gross Floor Area	**$ 1,400.00**
Commercial	1000 Sq. Feet Gross Floor Area	**$ 4,350.00**
Medium/High Density Residential	Dwelling Unit	**$ 1,750.00**
Single Family Residential	Dwelling Unit	**$ 2,100.00**

The proposed updates are as follows:

Table 2. Proposed Update to Transportation Impact Fee Schedule

Land Use	Unit	Fee
Industrial Park	1000 Sq. Feet Gross Floor Area	$ 1,375.40
Mini-Warehouse	Storage Units (100s)	$ 7,330.01
Single-Family Detached Housing	Dwelling Unit	$ 3,848.67
Single-Family Attached Housing (shared wall with adjoining u	Dwelling Unit	$ 2,938.54
Multifamily Housing (Low-Rise) - Not Close to Rail Transit	Dwelling Unit	$ 2,750.80
Hotel	Room	$ 3,260.96
Elementary School	Students	$ 926.46
Middle School / Junior High School	Students	$ 857.07
High School	Students	$ 791.77
Church	1000 Sq. Feet Gross Floor Area	$ 12,839.77
Hospital	1000 Sq. Feet Gross Floor Area	$ 4,395.56
General Office Building	1000 Sq. Feet Gross Floor Area	$ 4,424.13
Retail Strip Mall	1000 Sq. Feet Gross Leasable Are	$ 13,333.61
Drive-in Bank	1000 Sq. Feet Gross Floor Area	$ 26,621.30
Self Service Car Wash	Wash Stall	$ 44,078.04

This update includes more categories to apply land use more accurately to impact fee. The current fee categories are quite ambiguous. This update provides additional and direction clarity for additional land uses.

ALTERNATIVES:

1. Move forward with the TMP, IFFP, and IFA as drafted.
2. The Council has the option to adopt less than the full impact fee as presented, meaning Council can adoptonly a portion of the full impact fee. This option would be detrimental to funding roadway projects in the future, but could incentivize additional growth in the City.

FISCAL IMPACT:

The proposed impact fee schedule is a significant increase as compared to the current impact fees. This will not have an immediate impact to our impact fee budget, but we will have a significant long term impact to increase our ability to fund roadway projects.

ATTACHMENTS:

Draft Transportation Master Plan – Herriman TMP 2022_12_01.pdf
Draft Impact Fee Facilities Plan – Herriman IFFP 2022_12_22.pdf
Draft Impact Fee Schedule – Herriman Impact Fee Schedule_Draft.pdf



HERRIMAN CITY 2022
TRANSPORTATION MASTER PLAN

HERRIMAN CITY

WCG WALL CONSULTANT GROUP

Adopted XX/XX/2022

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5.1.STREET FACILITIES PLAN 53



1. INTRODUCTION

Herriman City, Utah, is located in the southwest portion of Salt Lake County and was incorporated in 1999. The City has contracted with the WCG to update this transportation master plan. The previous transportation master plan was from 2019, and has been updated to reflect the annexation of the Olympia area on January 1, 2022.

The primary purpose of this Herriman City (hereinafter referred to as "Herriman" or "City") Transportation Master Plan is to create a planning document that can be used to help meet the City's transportation goals and facilitate future development that will enhance the positive aspects of the City while minimizing negative impacts associated with new development. Since incorporating in 1999, Herriman has experienced significant population growth, and this growth is expected to continue for the next 30 years. Growth impacts will quickly exceed the capacity of some elements of the City's existing transportation system. This plan addresses future demands on the City's transportation system while retaining safe and active streets for non-motorized travel.

- Section 1: Includes an introduction
- Section 2: Reviews the City's existing conditions and provides Herriman with comparisons to peer cities
- Section 3: Evaluates future transportation conditions that Herriman will likely encounter
- Section 4: Presents the Transportation Master Plan and recommended improvements
- Section 5: Outlines a recommended Street Facilities Plan.
- Appendices: Contain several transportation planning topics to be considered for future implementation.

This plan primarily focuses on automobile trips along arterial and collector roadways as they provide the framework for a city and region wide transportation network. For details on how active transportation ties into this roadway network please see the 2021 Active Transportation Plan.



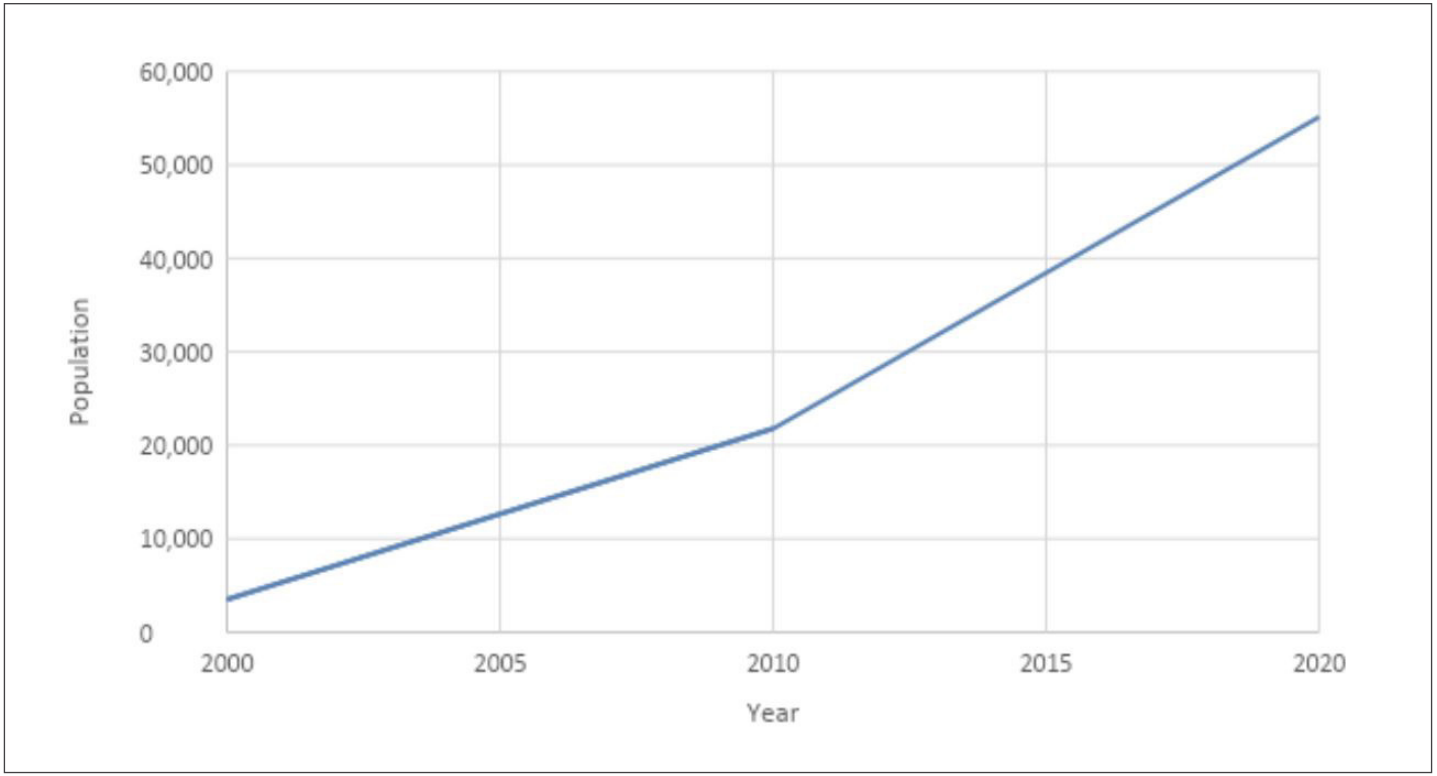
2. EXISTING CONDITIONS

This section evaluates the existing transportation system and demographics with Herriman City. Additionally, roadway safety is reviewed and recommendations for improving safety are provided.

2.1. DEMOGRAPHICS

Herriman has experienced significant population growth over the past 20 years. Figure 1 shows Herriman's growth since 2000, one year after the City's incorporation in 1999. The 2000 census indicated that the population of the City was then 3,514. Between 2000 and 2020, the population increased by more than 50,000. Growth has remained nearly constant, with an average of approximately 2,580 new people added each year.

Figure 1: Historic Herriman Population



Source: US Census Estimates (2000-2020)

Herriman is one of the fastest growing cities in Utah. When looking at percent change, Herriman ranks second in the state with a 153 percent increase from 2010 to 2020. This is well above other top-ranking cities, such as Bluffdale and Saratoga Springs, with 124 percent and 110 percent increases respectively.

Table 1 shows the top 10 fastest growing cities in the state by percent change.

Table 1. Fastest Growing Cities in Utah, 2010-2020, Ranked by Percent Change

City	2010 Population	2020 Population	Percent Change 2010-2018
Vineyard	139	12,543	8924%
Herriman	21,785	55,144	153%
Bluffdale	7,598	17,014	124%
Saratoga Springs	17,919	37,696	110%
Eagle Mountain	21,555	43,623	102%
West Haven	10,317	16,739	62%
Lehi	47,715	75,907	59%
South Jordan	50,595	77,487	53%
Washington	18,816	27,993	49%
Santaquin	9,187	13,725	49%

Source: 2020 US Census Estimates

When considering the total numeric increase in population between 2010 and 2020, Herriman ranks first for all cities in Utah, with a net increase of 33,359 people over ten years (see Table 2). This increase is well above that of larger, more established cities such as South Jordan, Lehi and St. George.

Table 2. Fastest Growing Cities in Utah, 2010-2020, Ranked by Numeric Change

City	2010 Population	2020 Population	Net Change
Herriman	21,785	55,144	33,359
Lehi	47,407	75,907	28,500
South Jordan	50,418	77,487	27,069
St. George	72,897	95,342	22,445
Eagle Mountain	21,415	43,623	22,208
Saratoga Springs	17,781	37,696	19,915
Layton	67,311	81,773	14,462
Salt Lake City	186,440	199,723	13,283
West Jordan	103,712	116,961	13,249
Sandy	87,461	96,904	9,443

Source: 2020 US Census Estimates

Based on data from the US Census, American Community Survey (ACS) Five-Year Estimates, the household characteristics of Herriman are unique to the area. On average, Herriman has larger households (3.86 people per home) and a younger population (25.5 years old) than Salt Lake County and the State of Utah. Dependency ratios are a ratio for those typically too young (0-14, child dependency) or too old (65 and over, aged dependency) to be in the labor force, and are used as an indication of what portion of the population is dependent. Table 3 summarizes household characteristics for Herriman compared to the county and the state. As seen in Table 3, the aged dependency ratio for Herriman is less than the county and the state, and the child dependency ratio is significantly higher. These household characteristics all point to a young population of large families. Educational attainment of a bachelor's degree or higher in Herriman is similar to the county and statewide average (for individuals 25 years and older).

Table 3. Household Characteristics

Household Characteristic	Herriman	Salt Lake County	Utah
Average Household Size	3.86	2.99	3.12
Median Age (years)	25.5	32.8	30.8
Child Dependency Ratio	56.3	33.1	37.3
Aged Dependency Ratio	7.0	16.9	17.6
Bachelor's degree or higher (percent)	35.3	35.6	34.0

Source: US Census, ACS 5-year estimates

Herriman's economic indicators are comparable to that of Salt Lake County and the state. Table 4 shows several economic characteristics for Herriman compared with county and state characteristics. Herriman has a higher percentage of its residents in the labor force, lower unemployment, higher median income, and a lower poverty rate than the averages for the county and State of Utah.

Table 4. Economic Characteristics

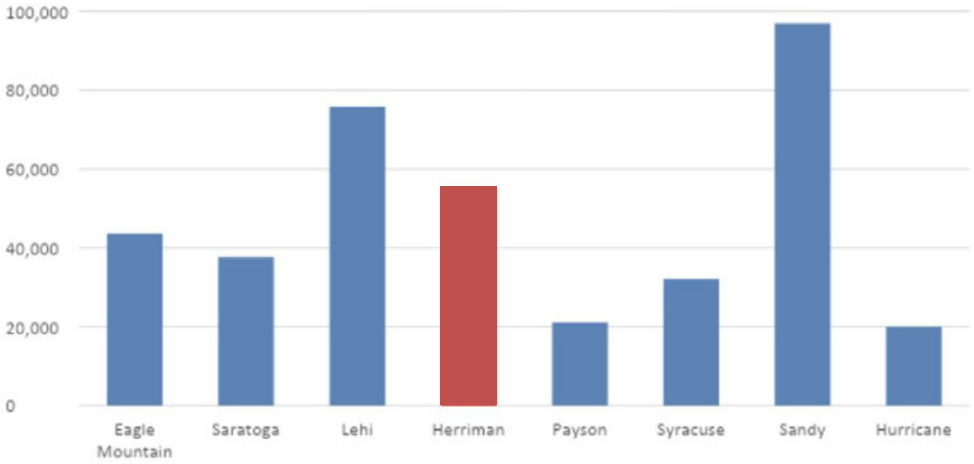
Economic Indicator	Herriman	Salt Lake County	Utah
In labor force	75.1%	71.5%	68.3%
Unemployed	2.1%	3.2%	3.2%
Median household income	$101,460	$74,865	$71,621
Past 12 months income was below the poverty level	2.7%	7.0%	7.3%

Source: US Census, ACS 5-year estimates

2.2. PEER CITY ANALYSIS

A peer city analysis was conducted to compare Herriman's demographics to other cities. Peer cities were chosen based on similarities to Herriman in population size and geographic isolation from a major interstate highway. Based on these criteria, Hurricane, Saratoga Springs, Payson, Eagle Mountain, and Syracuse were chosen. Lehi and Sandy were also included in the analysis to serve as 'aspirational' cities, or cities that may have characteristics of a future Herriman. These cities were then compared to Herriman utilizing available ACS data on median age, place of work (relative to place of residence), mode of travel to work, and travel time to work. The population of each of the peer cities is shown in Figure 2.

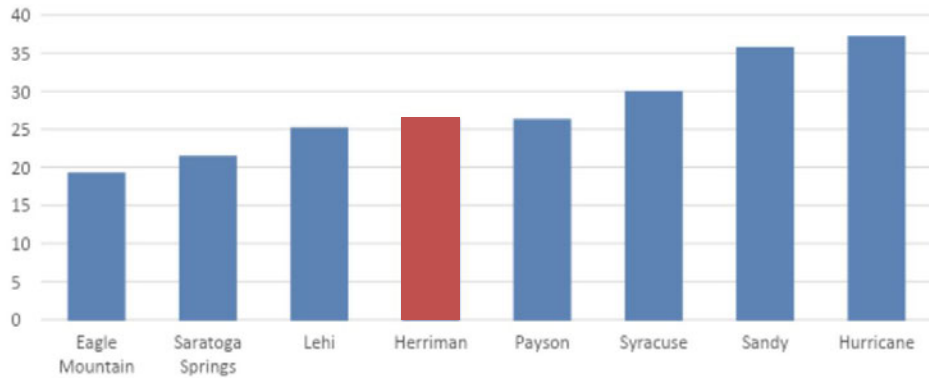
Figure 2: Peer City Population Data



Source: 2020 US Census

Herriman has a median age of 25.5 years old, which is relatively young compared to its peer cities. Only Eagle Mountain, Saratoga Springs, and Lehi are lower, with median ages of 19.2, 21.4, and 25.1 respectively (see Figure 3).

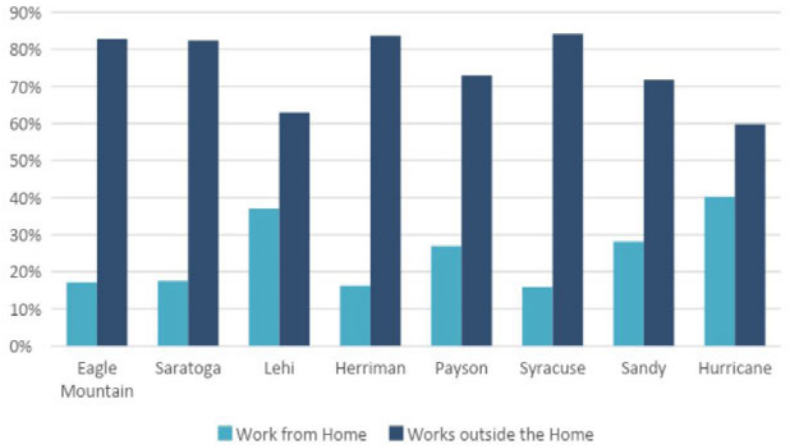
Figure 3: Peer City Resident Median Age (Years)



Source: US Census, ACS 5-year estimate

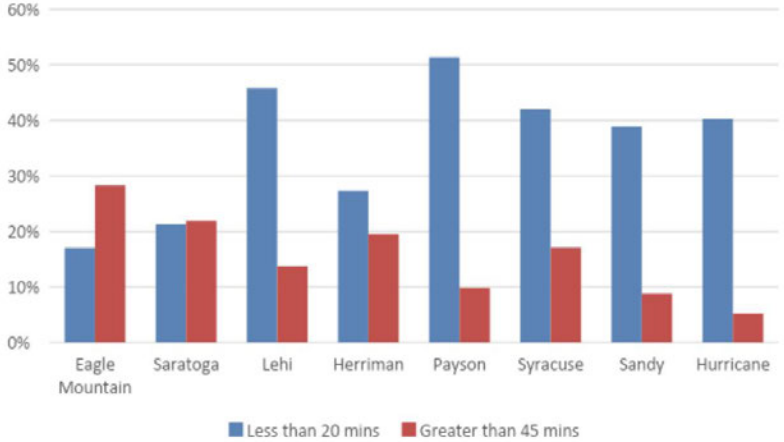
About 15 percent of Herriman residents work from home. The percentage of Herriman residents who work from home is much lower than Hurricane and Lehi, and fairly similar to Eagle Mountain, Saratoga, and Syracuse. (see Figure 4).

Figure 4: Peer City Work Location



Source: US Census, ACS 5-year estimate

Figure 5: Peer City Average Commute

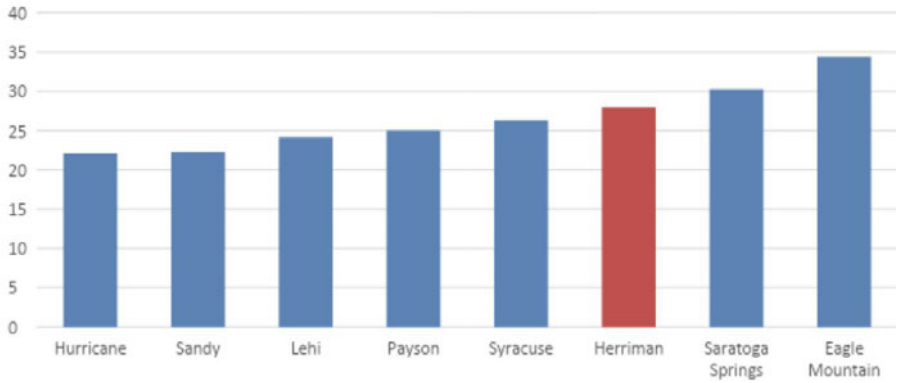


Source: US Census, ACS 5-year estimate

Approximately 28 percent of Herriman commuters have a travel time to work of less than 20 minutes, which is below average for the group and higher than Eagle Mountain and Saratoga (see Figure 5). About 20 percent of residents have a commute of over 45 minutes, which is above average for the group.

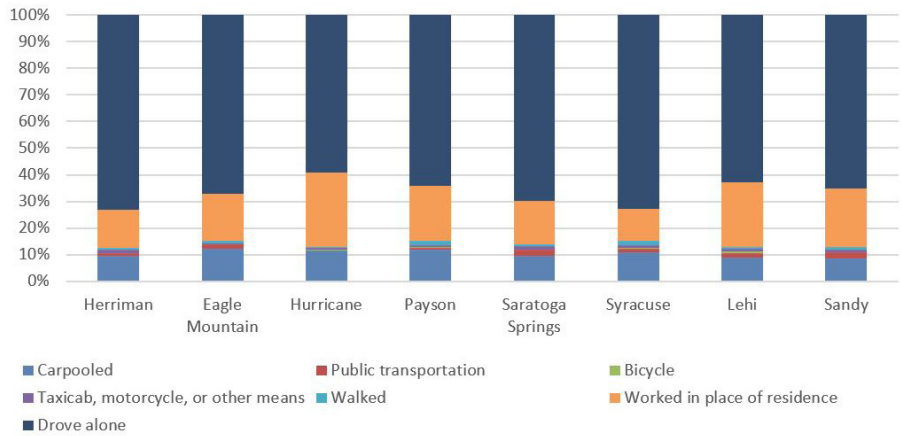
The mean travel time to work is 28 minutes for Herriman residents (see Figure 6). This is above average when compared to the peer cities but is not unexpected due to the relative isolation of Herriman from a major Interstate.

Figure 6: Peer City Mean Travel Time to Work (Minutes)



Source: US Census, ACS 5-year estimate

Figure 7: Peer City Means to Work by Percent of Mode Share



Source: US Census, ACS 5-year estimate

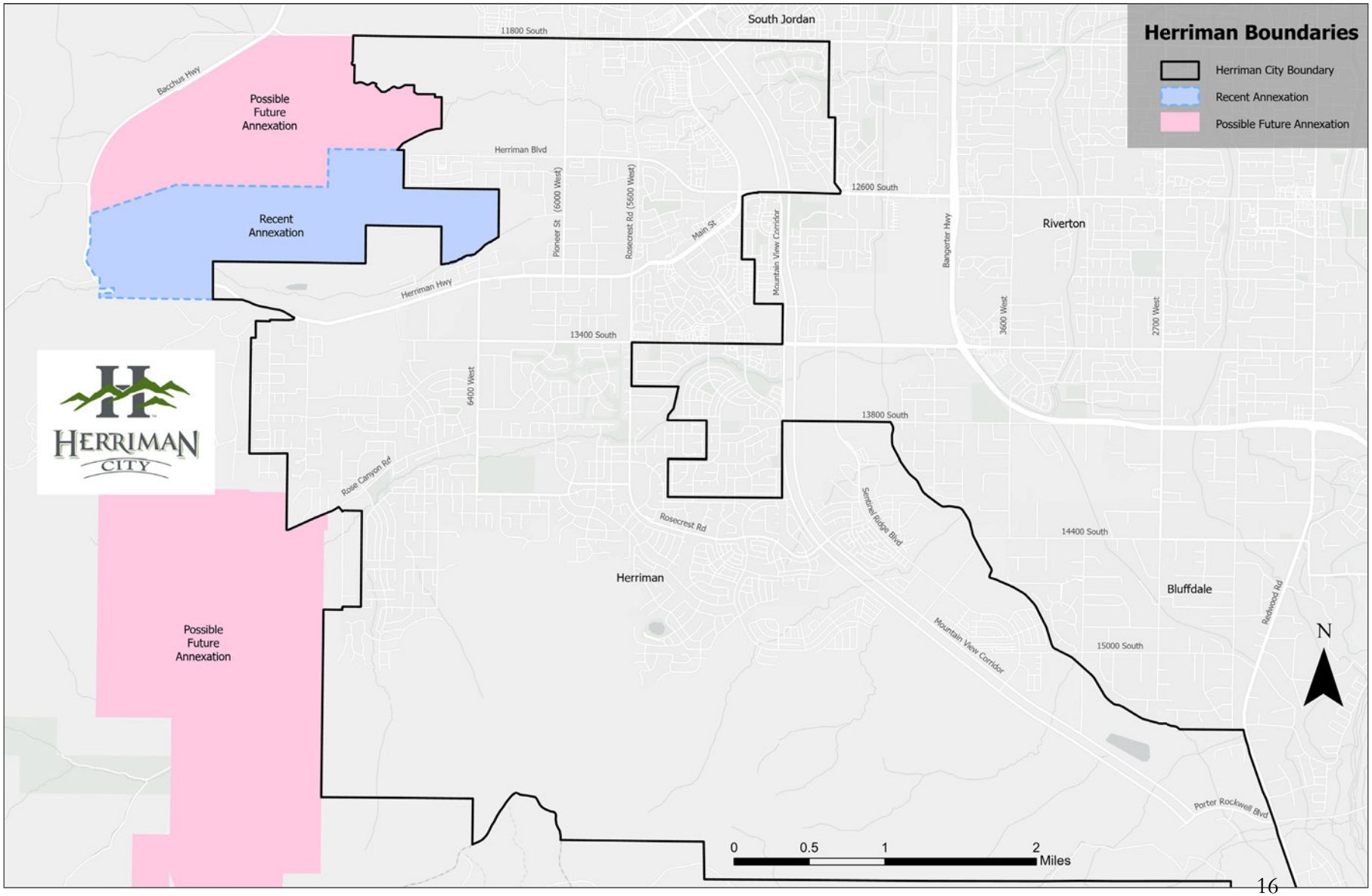
Mode of travel to work is shown in Figure 7. Seventy-seven percent of people in Herriman drive alone to work, which is slightly above average for the group. Residents of Herriman typically do not bicycle or walk to work, and one percent use public transportation (based on the data provided). Fifteen percent of Herriman residents work from home, which is below the average of the group. This auto-dominated mode-split can largely be explained by the long distances to major employment centers and a lack of regular and prevalent public transit service.

2.3. EXISTING LAND USE

Historically, land uses in Herriman can best be described as predominantly residential, low density, and suburban. With intense development pressures, land use is changing rapidly with more medium density housing and commercial development.

On July 1, 2014, Herriman annexed approximately 300 acres in the northwest section of the city. The Dansie Annexation occurred on January 1, 2016 and included approximately 500 acres. On January 1, 2022 Herriman annexed the Olympia area which is shown in the figure below.

Figure 8: Herriman Current Boundaries and Possible Future Annexation



Transportation planning depends on estimating future land uses in addition to demographic changes. This information is used in a computer-modeling tool, known as the Travel Demand Model, which forecasts trips to and from destinations based on smaller regions known as Transportation Analysis Zones (TAZs). The TAZs are geographically smaller than a municipality and are similar in size to census block groups. TAZs are defined by the Wasatch Front Regional Council (WFRC). Data associated with the TAZs from WFRC updated to represent 2020 population and employment status. This information was used to develop the travel demand model shown in Figure 9.

Figure 9: Herriman Area Transportation Analysis Zones

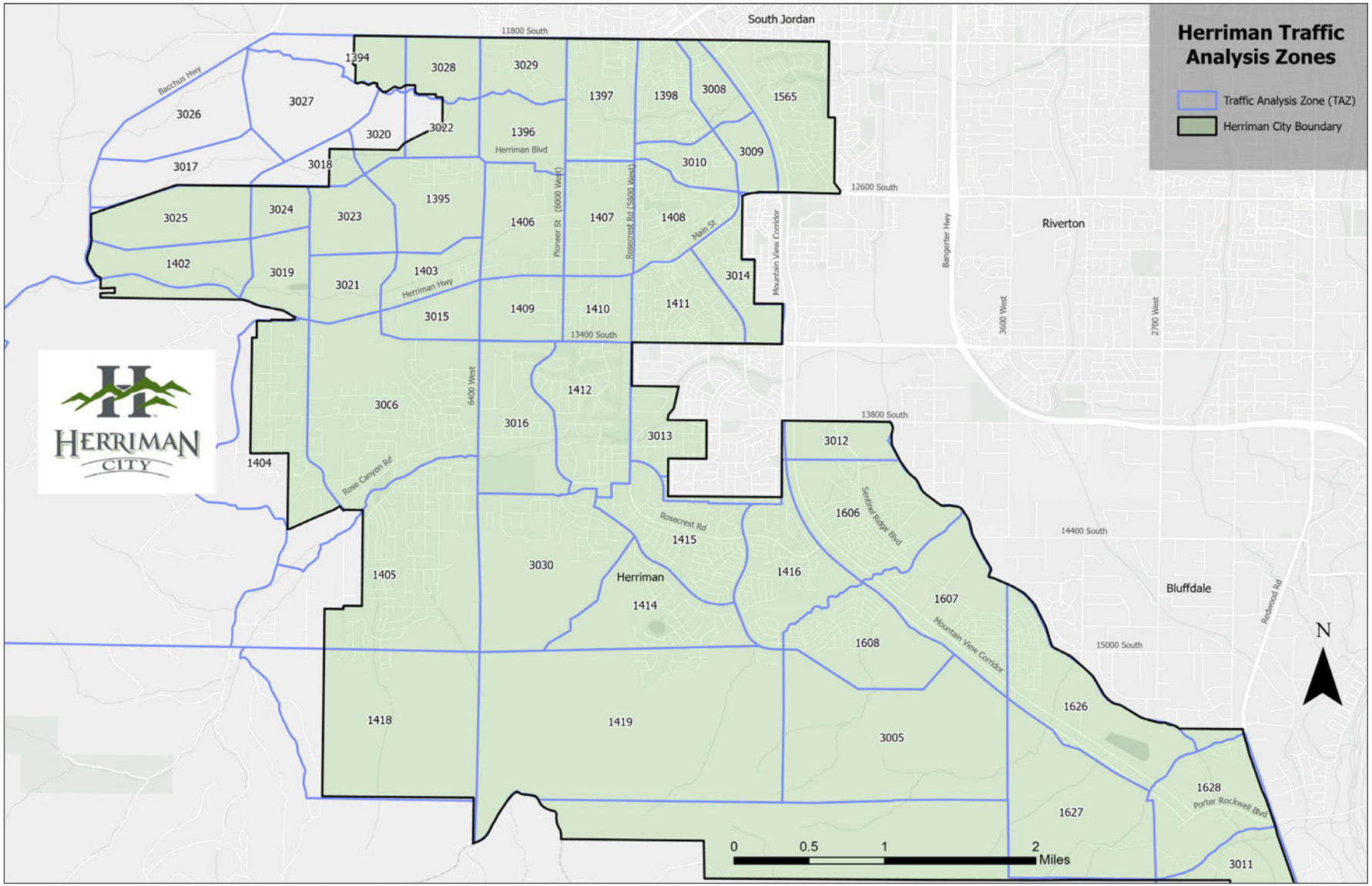


Figure 10 shows the number of existing households by TAZ. The highest densities of households are found in the central portion of the City. Currently, only a small number of homes are located in the southern portion of the City. Unincorporated areas to the northwest also have relatively few households.

Figure 10: 2020 Households by Transportation Analysis Zone

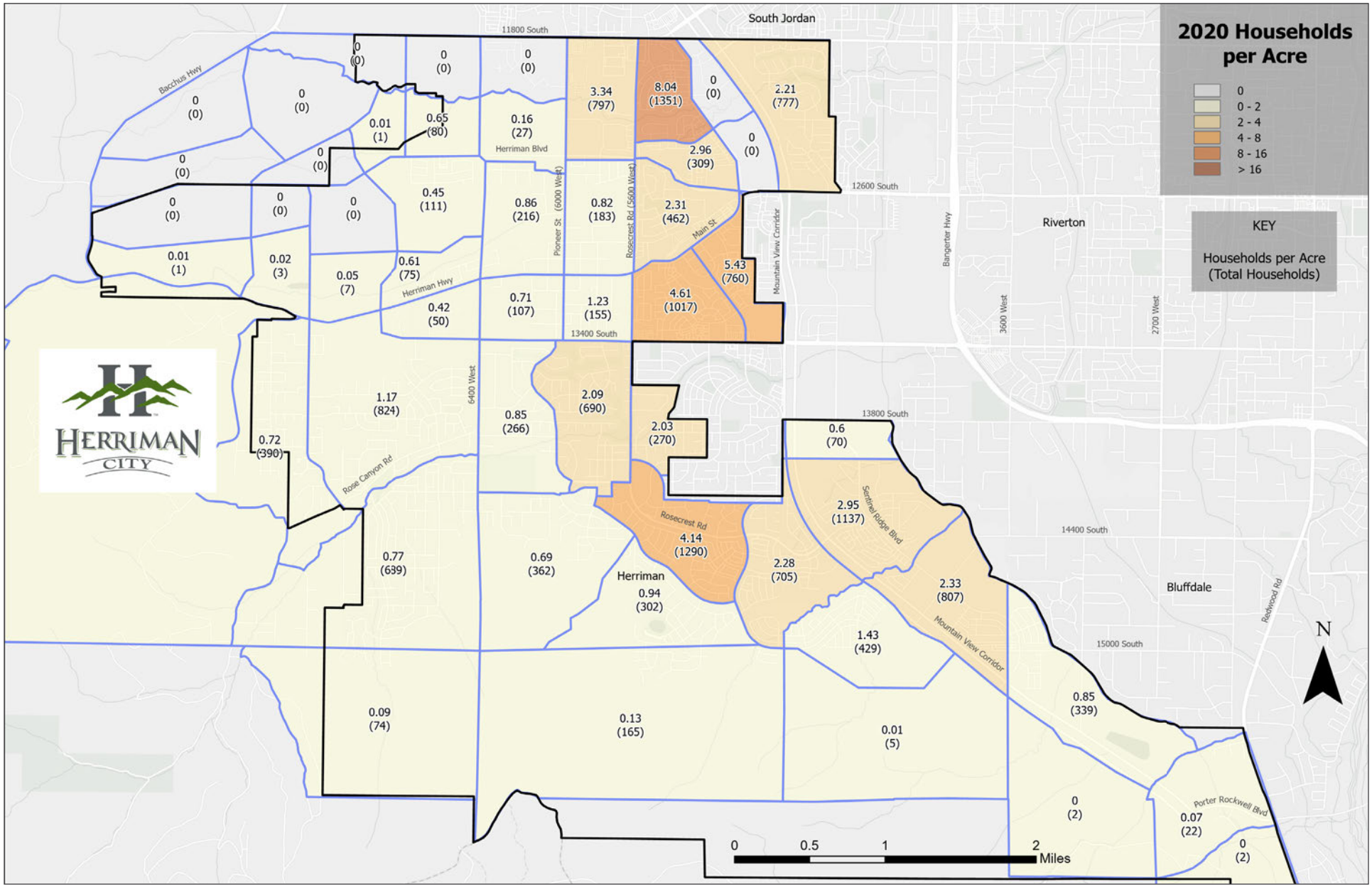
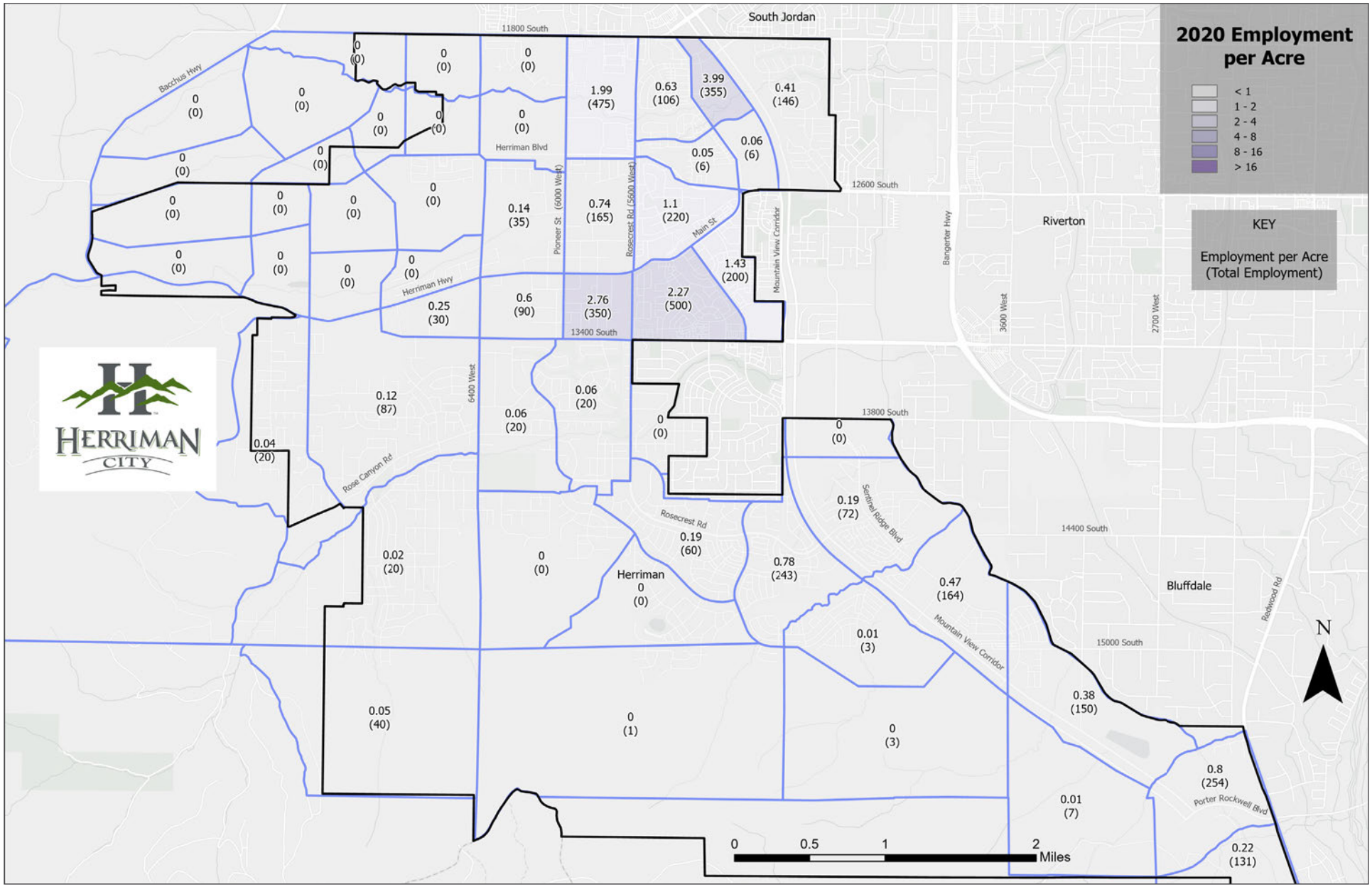


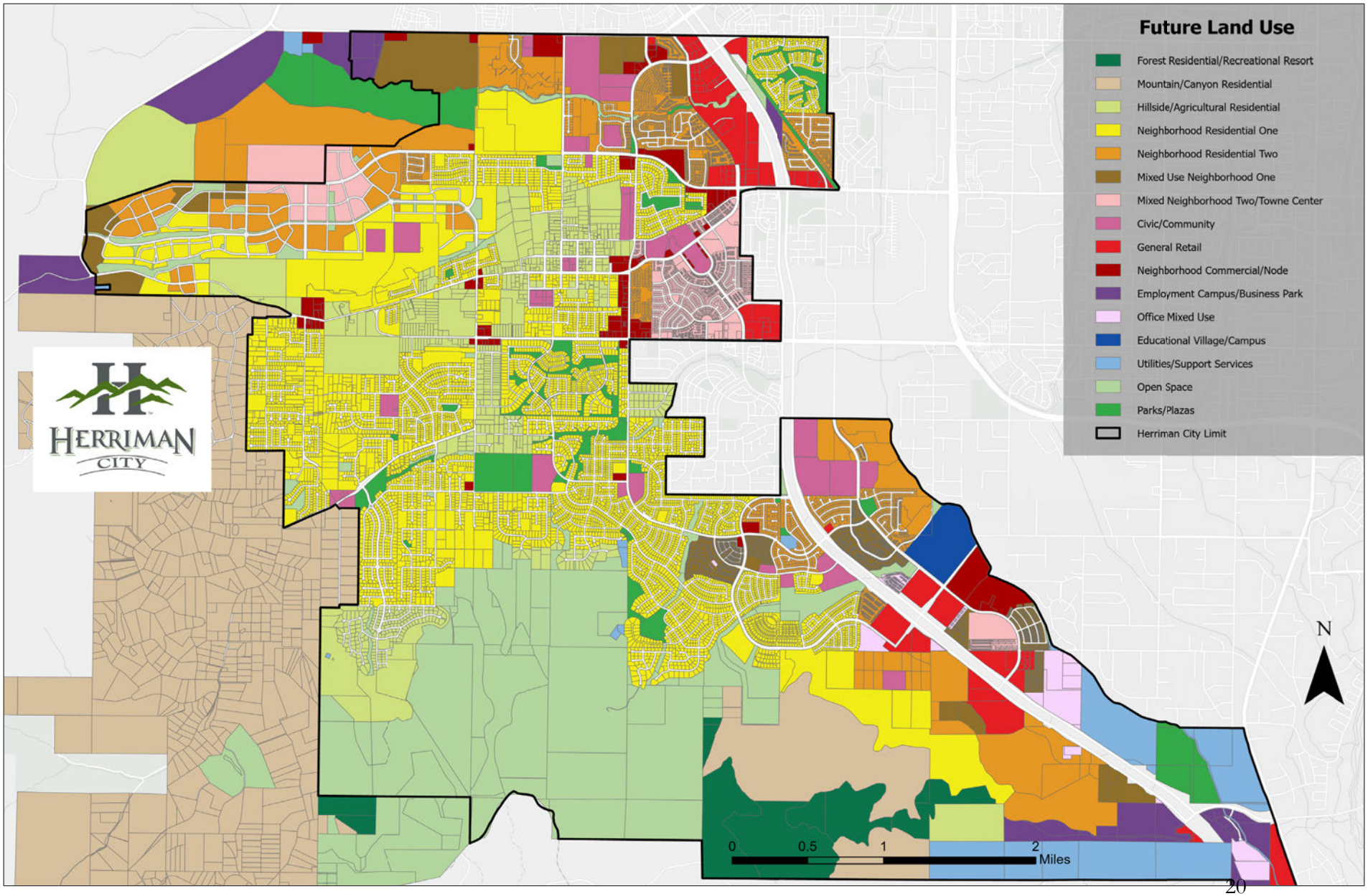
Figure 11 shows the estimated number of employees by TAZ. There is a central band of employment across the City proximate to 13400 South with additional nodes to the northwest and southeast with very low concentrations of employment in the southern portions of the City.

Figure 11: 2020 Employment by Transportation Analysis Zone



Much of the southern portion of Herriman is geographically constrained by the steep slopes of the foothills to the south and west, which inhibits development. Future development in south Herriman will likely be limited to hillside residences. The northwest region, however, does not contain these same constraints and should see higher development densities in the future. The current zoning (see Figure 12) within Herriman closely represents what exists today, with several planned zones for mixed-use development.

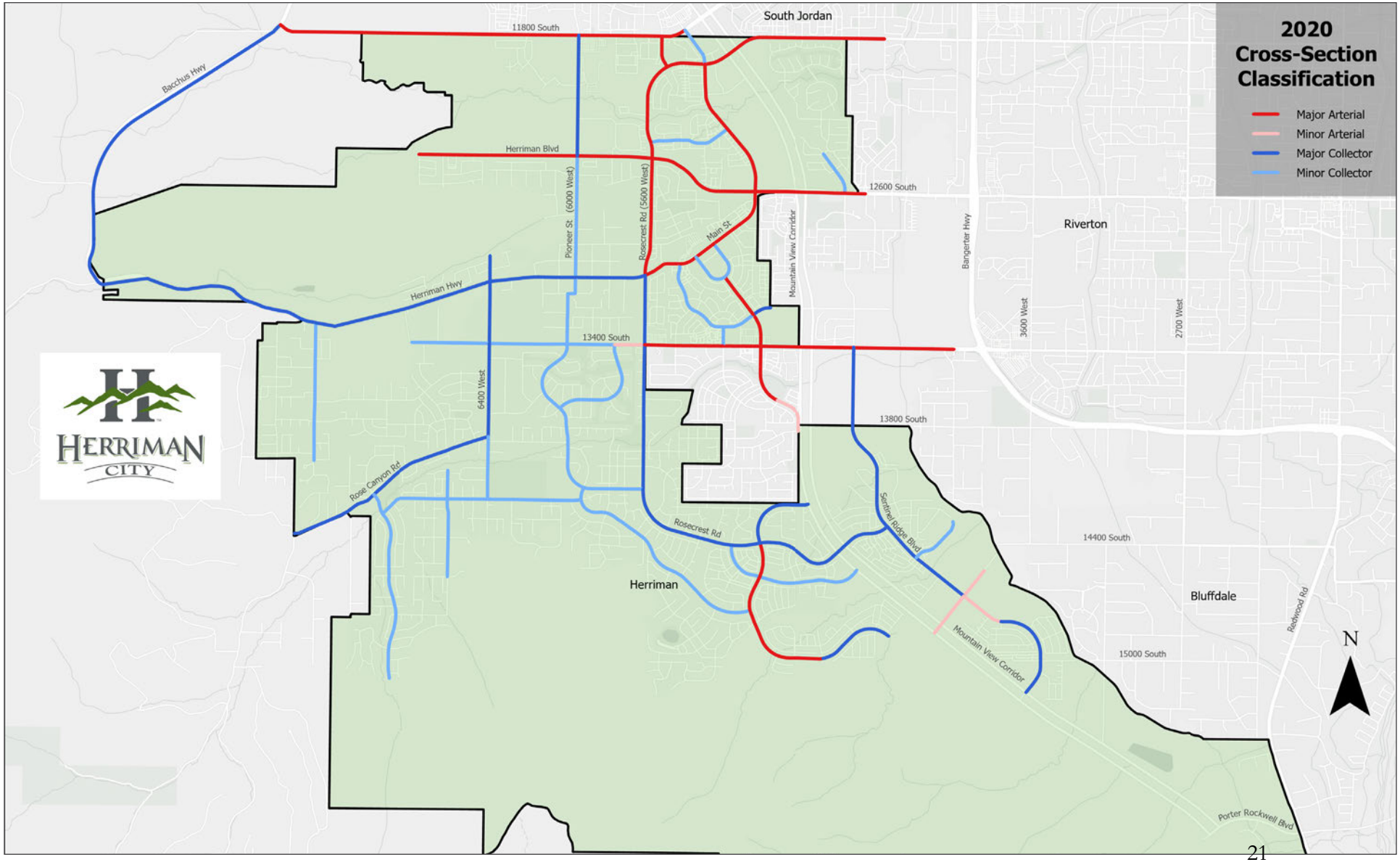
Figure 12: Herriman Current Zoning Map



2.4. EXISTING FUNCTIONAL CLASSIFICATION

Figure 13 shows the existing roadway network by functional classification. This classification includes major and minor collectors and major and minor arterial roadways. Roads that are under construction are not shown on this map. It should be noted that some roadways are a certain functional classification due to their cross section, and not necessary their current regional connectivity demands. For example, Fort Herriman Parkway and Juniper Crest Road are shown as Major Arterials since they are constructed with the Major Arterial cross section, and not do to connectivity demands.

Figure 13: Existing Functional Classification of Roads

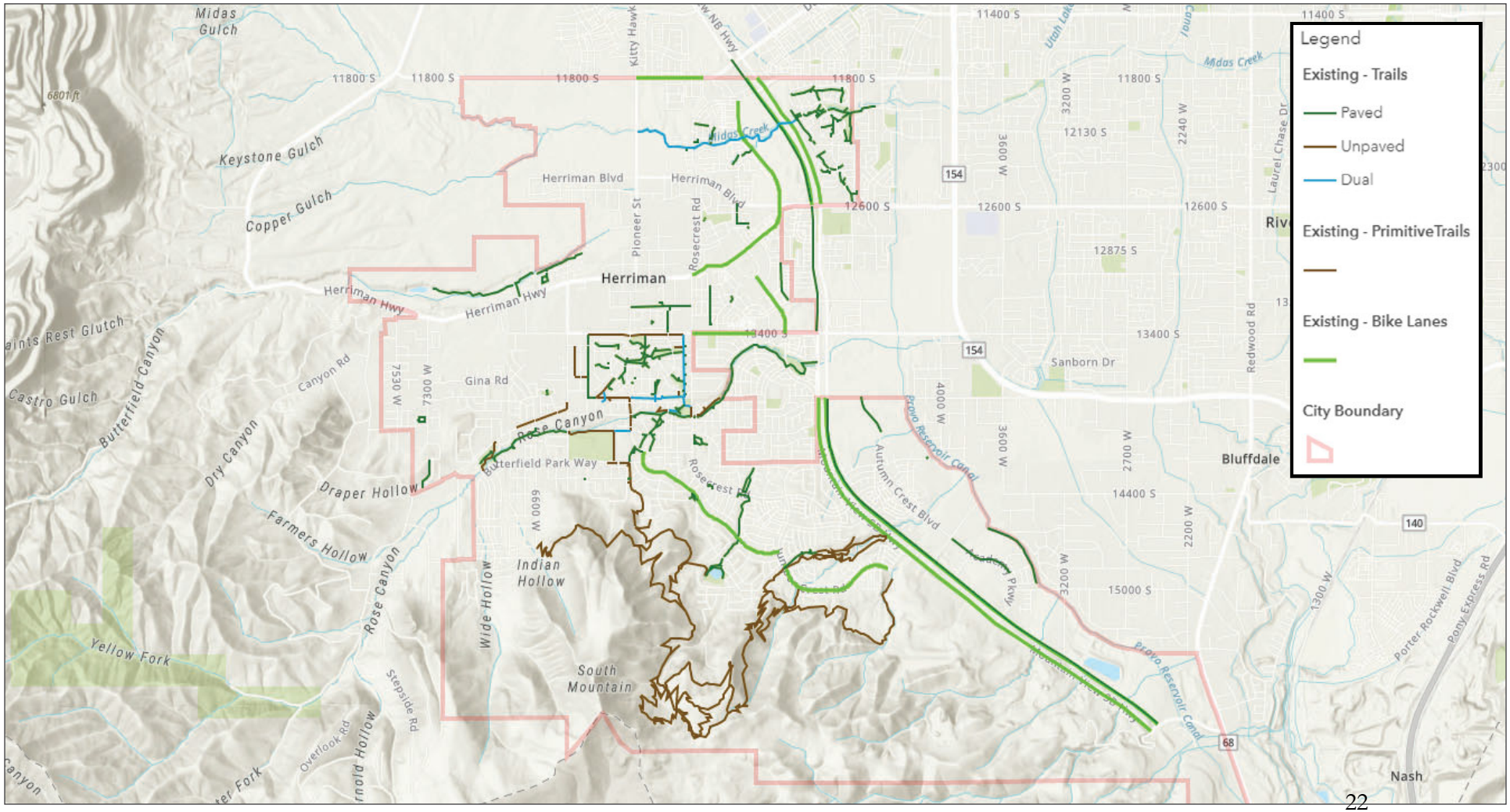


2.5. PEDESTRIAN AND BICYCLE FACILITIES

Herriman is starting with an already robust paved path and sidewalk network. Over recent years Herriman has built a paved path network which connects many neighborhoods and key destinations through the City. In addition to paved paths, Herriman also has a strong network of equestrian, hiking, and mountain biking trails. All of this combined already make Herriman a great community for utilizing active transportation within many neighborhoods.Within Herriman there are currently approximately 13 miles of bike lanes, 32 miles of paved paths, and 388 miles of sidewalks, paved paths, bike lanes, and primitive trails are shown below in Figure 14. For more details on existing and future active transportation facilities please see the 2021 Active Transportation Plan.

Figure 14 shows the existing bicycle facilities within Herriman. The most significant bicycle infrastructure which services the City are the bicycle lanes and multi-use pathways along Mountain View Corridor. There are a few bicycle lanes on collector and arterial streets throughout the City and a multi-use pathway which connects the Mountain View Corridor system to trails in the foothills.

Figure 14: Existing Bicycle Facilities



2.6. PUBLIC TRANSPORTATION

Utah Transit Authority (UTA) currently operates in partnership with Via to provide an on-demand, smart, shared transportation system. The system is intended to enhance connectivity to TRAX and FrontRunner lines and to key destinations in the community. Using the Via app or by telephone, riders can hail a shuttle directly from their smartphone to a nearby pick-up location. The technology provided by Via then matches multiple riders headed in a similar direction into a single vehicle, with routing that prioritizes quick and efficient trips without relying on a fixed route schedule. The regular one-way fare is $2.50, wheelchair accessible options are available for those who need it.

2.7. SAFETY ANALYSIS

A safety analysis was performed for all roadways within Herriman City. The most recent 5 full years of available crash data (2017 to 2021) from UDOT Traffic & Safety were used to perform a safety analysis. Historic crash patterns were analyzed within Herriman City to develop project and policy recommendations.

In total there were 1,798 crashes reported within Herriman City between 2017 and 2021. Crashes have been generally increasing in Herriman City over the past 5 years. This is somewhat expected as population has increased significantly over that time. Additionally, as expected most crashes occur at intersections with the highest traffic volumes.

Table 5. 2017 to 2021 Crash Trends

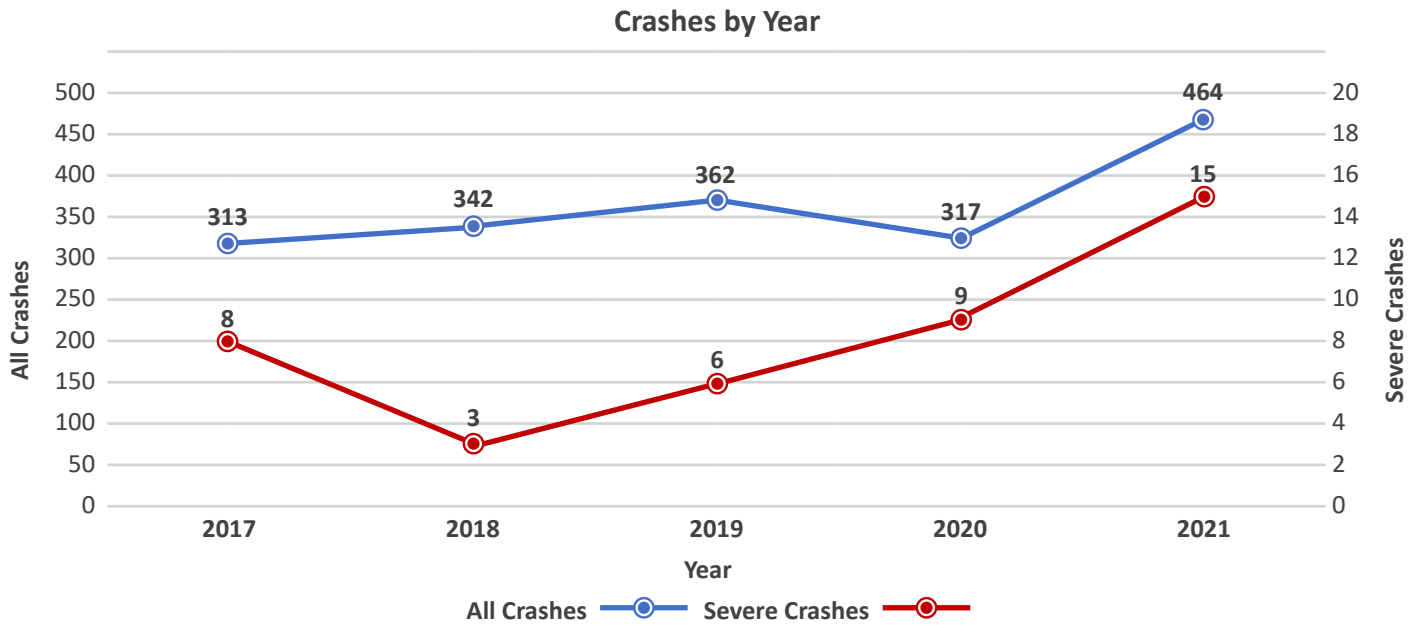
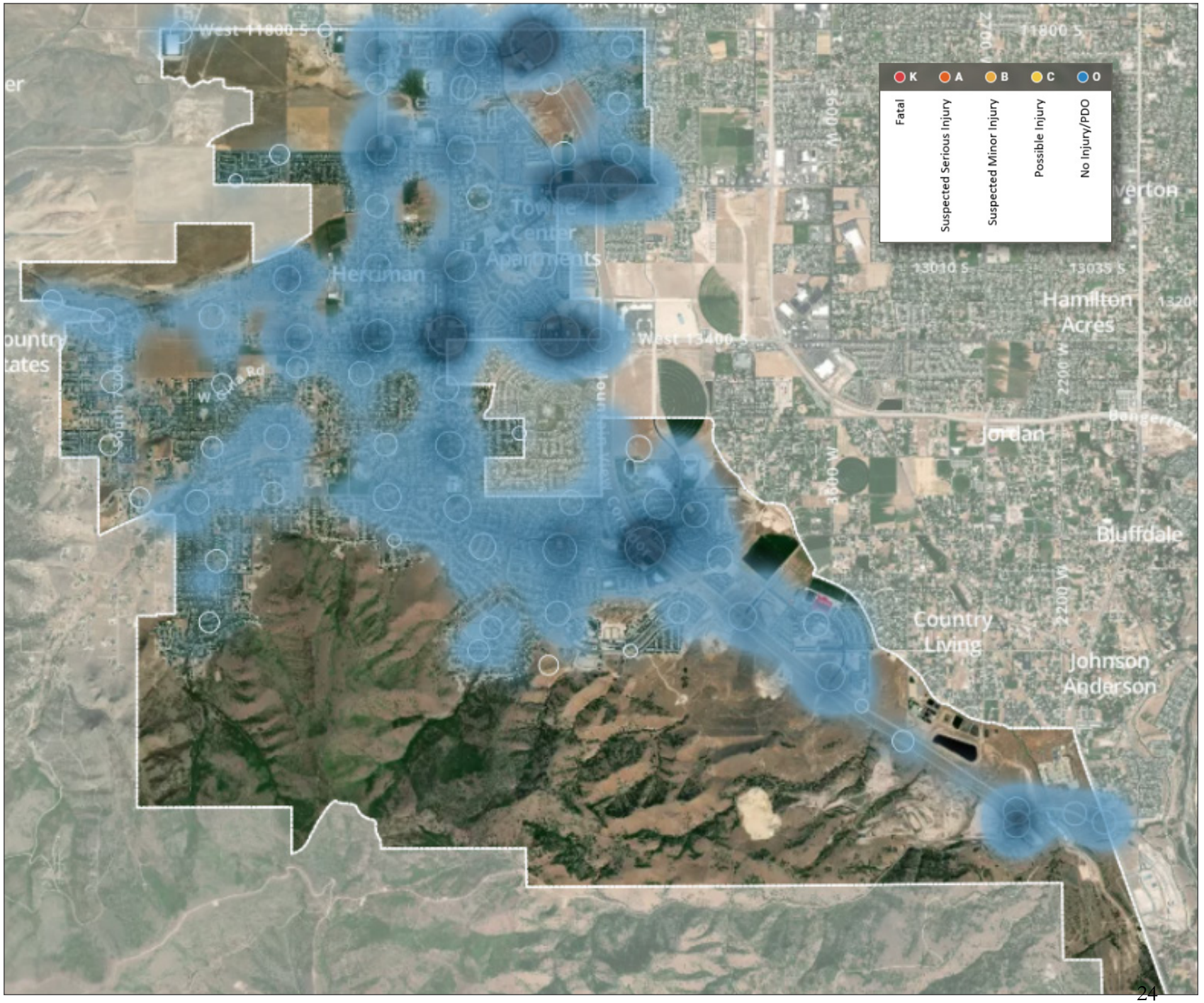


Figure 15: 2016-2018 Crash Frequency Summary



Crash severity is reported according to a five-category scale ranging from no injury to fatality. UDOT, like many other places, has taken on the goal of Zero Fatalities[1]. This zero fatalities approach is guided by the Safe System framework. The Safe System approach consists of the following five elements[2].

Given these goals, and the very significant cost of severe crashes (both fatal and serious injury), these crash types are the focus of the analysis.



Safe Road Users

The Safe System approach addresses the safety of all road users, including those who walk, bike, drive, ride transit, and travel by other modes.



Safe Vehicles

Vehicles are designed and regulated to minimize the occurrence and severity of collisions using safety measures that incorporate the latest technology.



Safe Speeds

Humans are unlikely to survive high-speed crashes. Reducing speeds can accommodate human injury tolerances in three ways; reducing impact forces, providing additional time for drivers to stop, and improving visibility.



Safe Roads

Designing to accommodate human mistakes and injury tolerances can greatly reduce the severity of crashes that do occur. Examples include physically separating people traveling at different speeds, providing dedicated times for different users to move through a space, and alerting users to hazards and other road users.



Post-Crash Care

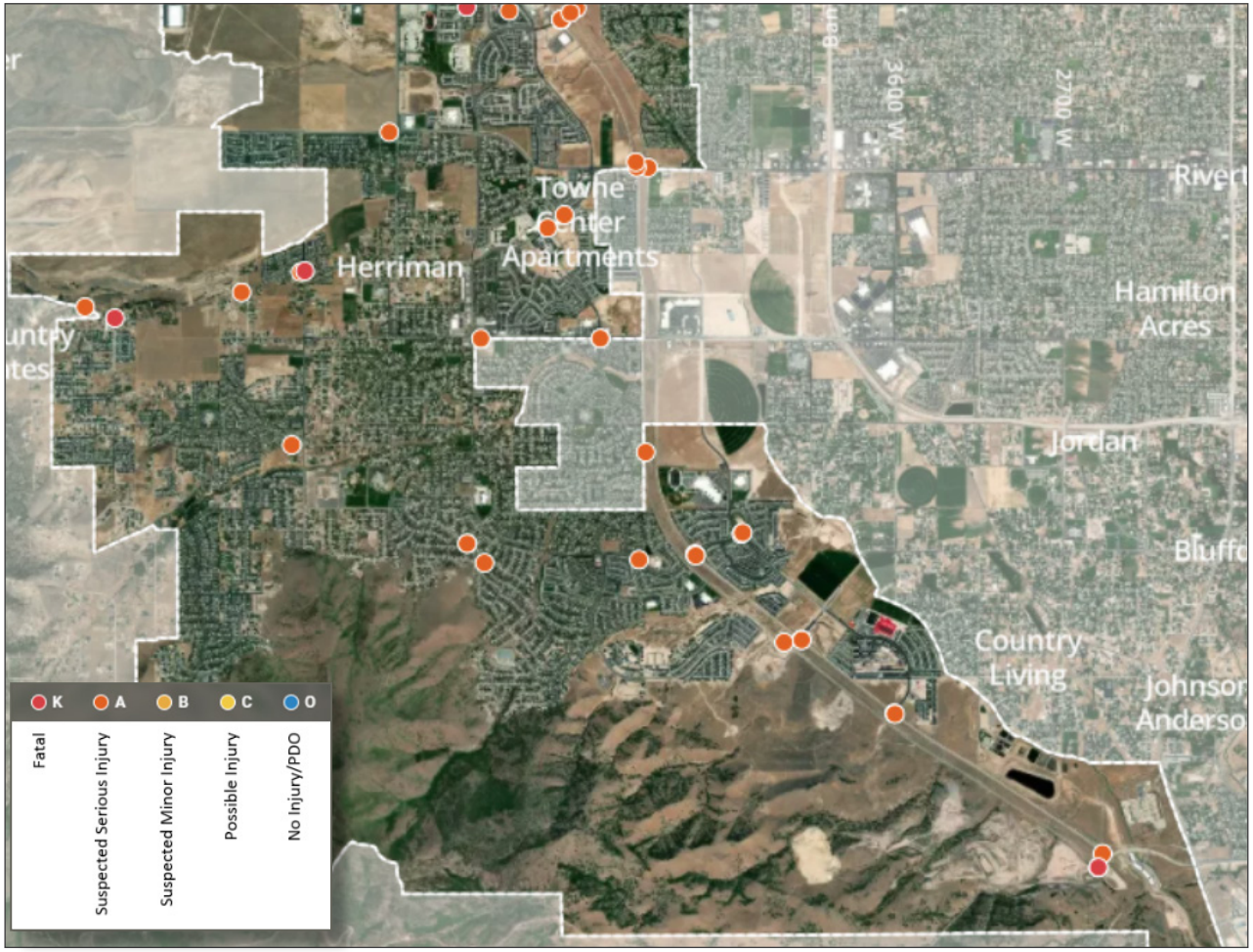
When a person is injured in a collision, they rely on emergency first responders to quickly locate them, stabilize their injury, and transport them to medical facilities. Post-crash care also includes forensic analysis at the crash site, traffic incident management, and other activities.

Figure 16 illustrates the fatal and serious injury crashes in Herriman City. For the analysis period, there were 6 crashes with a fatality and 35 serious injury crashes. The number of fatal and serious injury crashes in Herriman City as a percentage of total crashes is 2.2 percent, which is just above the Salt Lake County average of 1.9 percent during the same timeframe. This above average crash severity is due to Mountain View Corridor (SR-85). Of the 41 severe crashes with Herriman more than half were located at intersections with Mountain View Corridor (21 out of 41 severe crashes). This corridor has well known safety issues, and UDOT has taken steps to improve safety at intersections with Mountain View Corridor.

1 https://zerofatalities.com/

2 https://safety.fhwa.dot.gov/zerodeaths/docs/FHWA_SafeSystem_Brochure_V9_508_200717.pdf

Figure 16: 2017 to 2021 Severe Crashes



Crash narratives were reviewed for all severe crashes within Herriman City. Based on this review, along with a review of themes within non-severe crashes, the following recommendations are made:

- **Real Vista Drive & Mountain View Corridor (SR-85):** Two severe crashes involving vehicles running the stop signs along Real Vista Drive have been reported within the study period. Herriman City should work with UDOT on getting a signal installed at this location as soon as possible. Until a signal can be installed, Herriman City should work with UDOT on ways to improve stop sign visibility (oversized signs, gate posted, flashing sign border, MUTCD sign W4-4p "CROSS TRAFFIC DOES NOT STOP").
- **Signalized Intersections & Mountain View Corridor (SR-85):** While UDOT has taken actions to improve safety at these intersections, severe crashes are still occurring. Thus, Herriman City should continue to monitor these locations, and follow up with UDOT when issues arise.
- **Citywide Electric Scooter Crashes:** Two severe electric scooter have occurred along Emmeline Drive. From reviewing the crash narrative, both crashes

appear somewhat random, and not representing a larger trend. However, with the popularity of electric scooters increasing, the city should continue to monitor these crash types.

- **Pioneer Street & Autumn Glow Cove:** A severe pedestrian crash occurred at this location. A child coming from the elementary school crossed here instead of using a crosswalk at 13200 South or 13400 South. Given that these crosswalks are 0.3 miles apart, Herriman City should consider another crossing location in between to provide direct access between the elementary school and the neighborhoods to the east.
- **Herriman Highway:** A general theme of reckless and high-speed driving has resulted in several severe crashes along this roadway. As this roadway continues to be built out with curb and gutter, Herriman should consider UDOT Speed Management measures[3].
- **12600 South & Herriman Main Street:** A severe crash involving a westbound left-turning vehicle occurred in early 2022. From a review of non-severe crashes at this intersection, it was found that there is a theme of westbound left-turning vehicles failing to yield to eastbound through vehicles. Thus, Herriman City should consider converting the westbound left-turn to protected only left-turn phasing.

3 https://drive.google.com/file/d/1n4NBMyx6nxL6ZnKPJxdUu5mNp7m1VCo5/view



3. FUTURE CONDITIONS

This section discusses the projected population growth and future transportation needs of Herriman and draws on the existing conditions analysis provided in the previous section.

3.1. LAND USE

Herriman City officials project that the City population will grow to 93,864 by 2030 and to 145,149 by 2050, with an ultimate build-out population of approximately 151,000. Population projections are based on the technical memorandum prepared by Bowen Collins on December 14, 2020 titled "Growth Projections for Herriman City Planning Documents" The build-out population includes the potential annexation areas. This number is higher than region-wide population estimates made by WFRC. WFRC constrains growth to regional totals, which is useful when considering the large-scale population growth but less reliable when looking at smaller geographies. To account for this issue, this plan uses population numbers provided by Herriman to show projections with TAZ-level demographic information. Employment projections were developed with Herriman staff. It's projected that Herriman remains more of a residential community than employment center, but that as the city grows out commercial nodes, and smaller employment centers will be constructed. Additionally, through discussions with city staff it was assumed that the average household size dipped to approximately 3.57 by 2020, and that it remains constant through 2050. While households sizes are likely to decrease as the city ages, this accounts for potential newly constructed ADUs on existing single family lots. Table 6 shows projections for population, households, and employment from WFRC and Herriman.

Table 6. Demographic Projections

	WFRC Current Model	Herriman Revisions	WFRC Projections		Herriman Projections	
	2020	2020	2030	2050	2030	2050
Population	42,661	55,144	59,534	86,350	93,824	145,149
Households	12,781	15,466	19,652	31,357	26,281	40,658
Employment	5,414	4,212	24,532	33,608	12,757	35, 358

The number of total projected households by TAZ for 2030 and 2050 is shown in Figure 17 and Figure 18 respectively. The projected growth of the number of households is particularly high in undeveloped areas where terrain is suitable for development.

Figure 17: Projected 2030 Households by TAZ

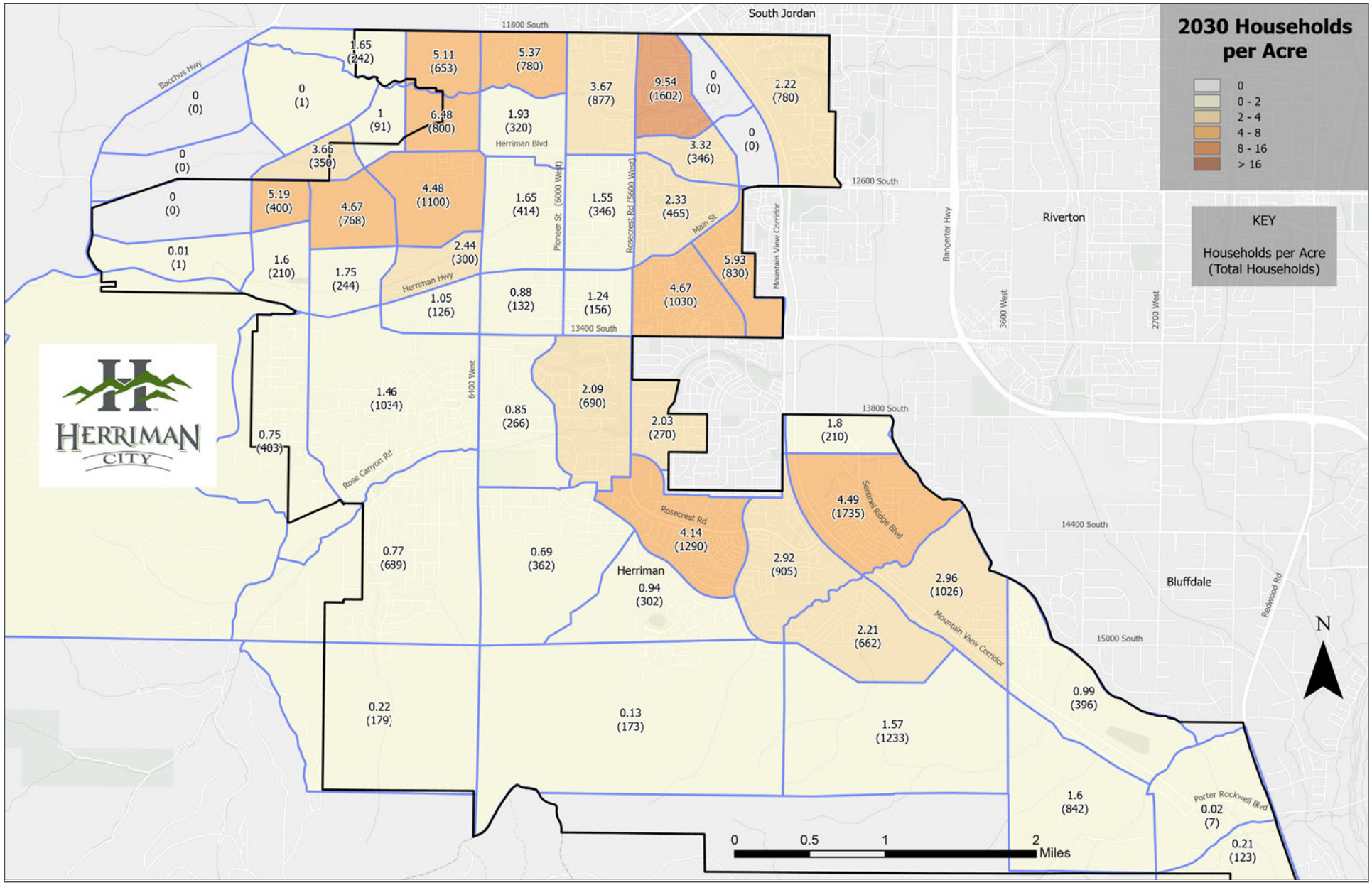
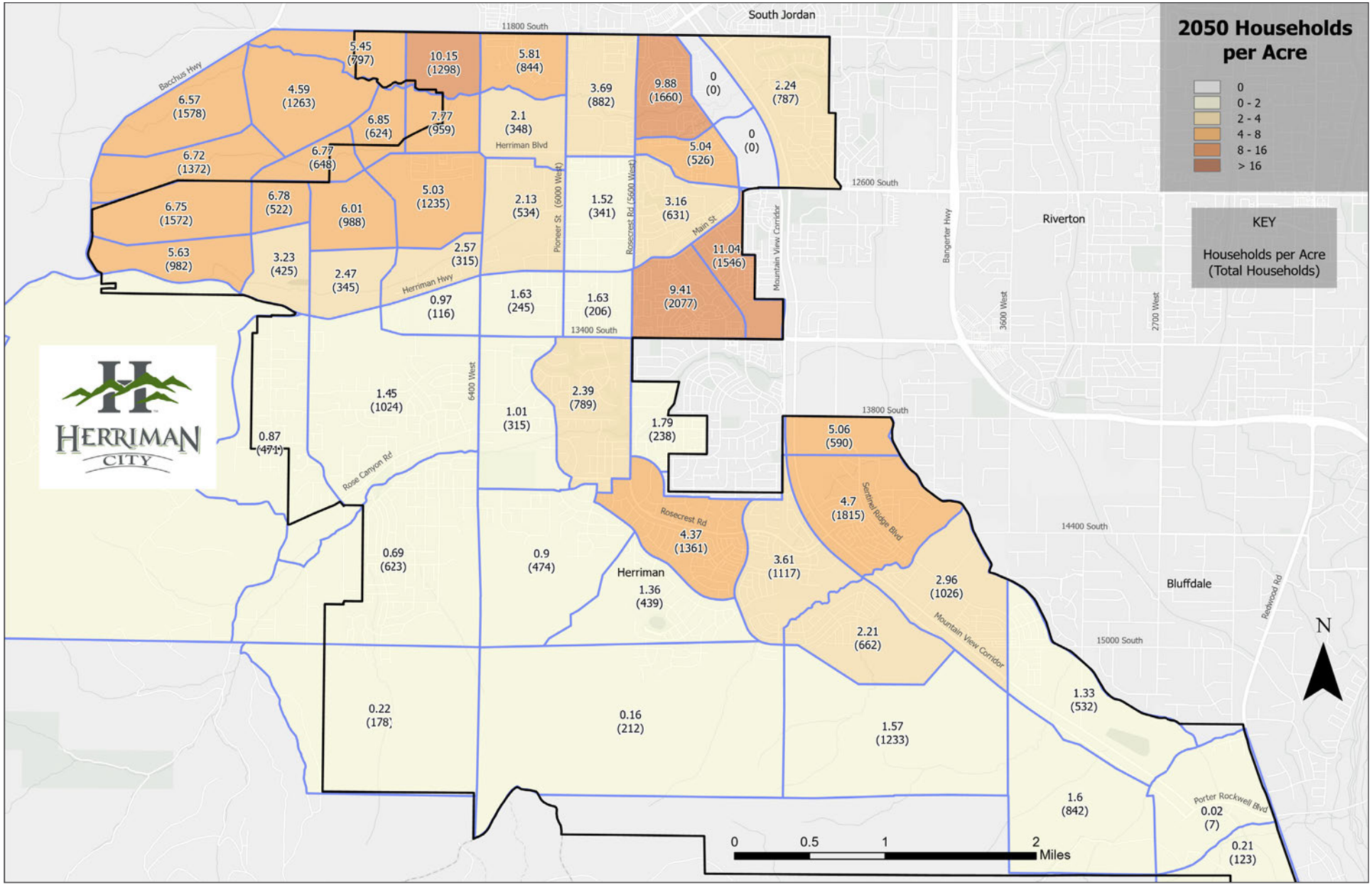


Figure 18: Projected 2050 Households by TAZ



Similarly, the growth in the number of employees is projected to occur in the currently undeveloped northwest, southeast, and the Herriman Towne Center. Figure 19 and Figure 20 show the number of employees in each TAZ for 2030 and 2050 respectively.

Figure 19: Projected 2030 Employment by TAZ

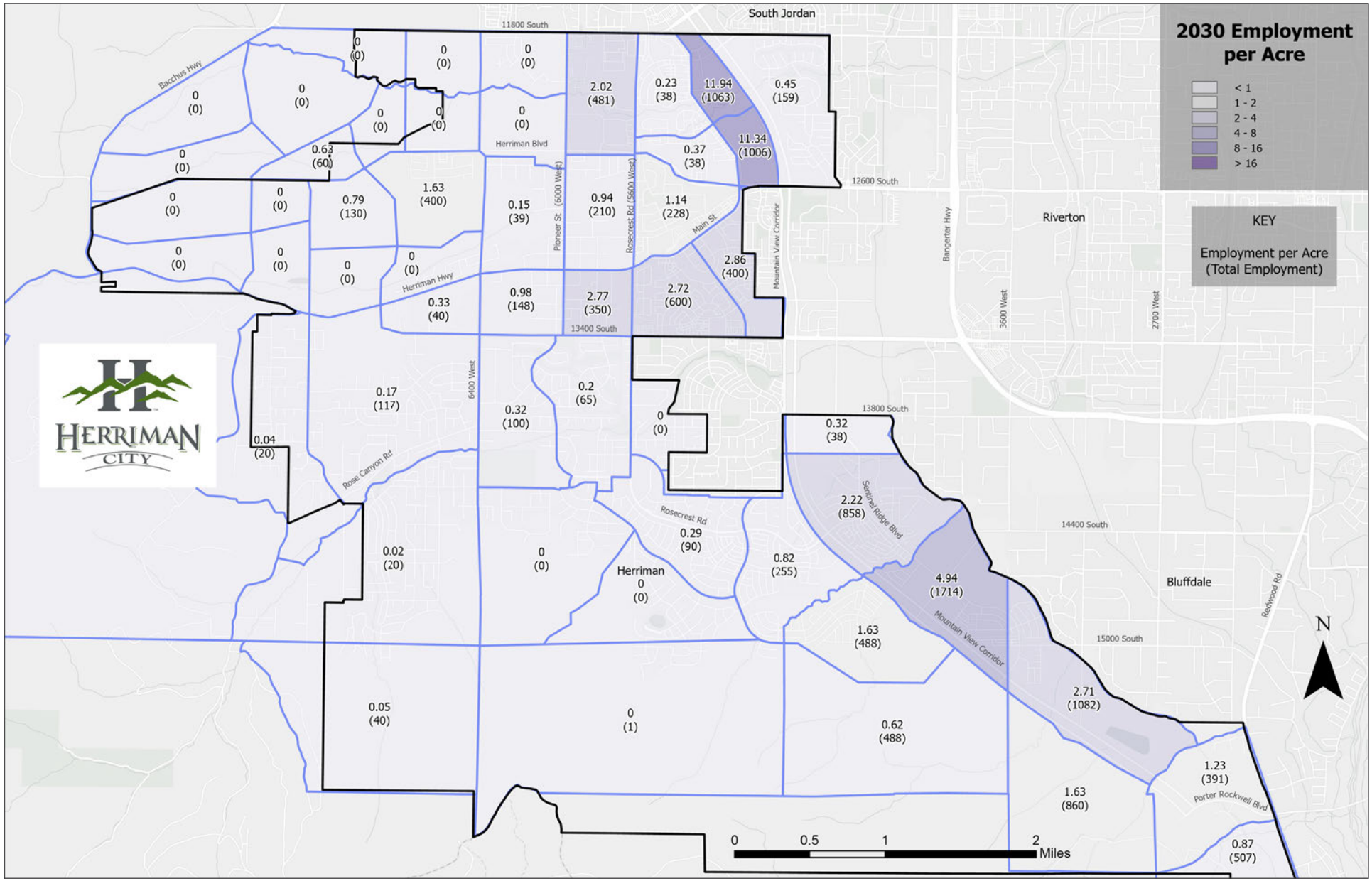
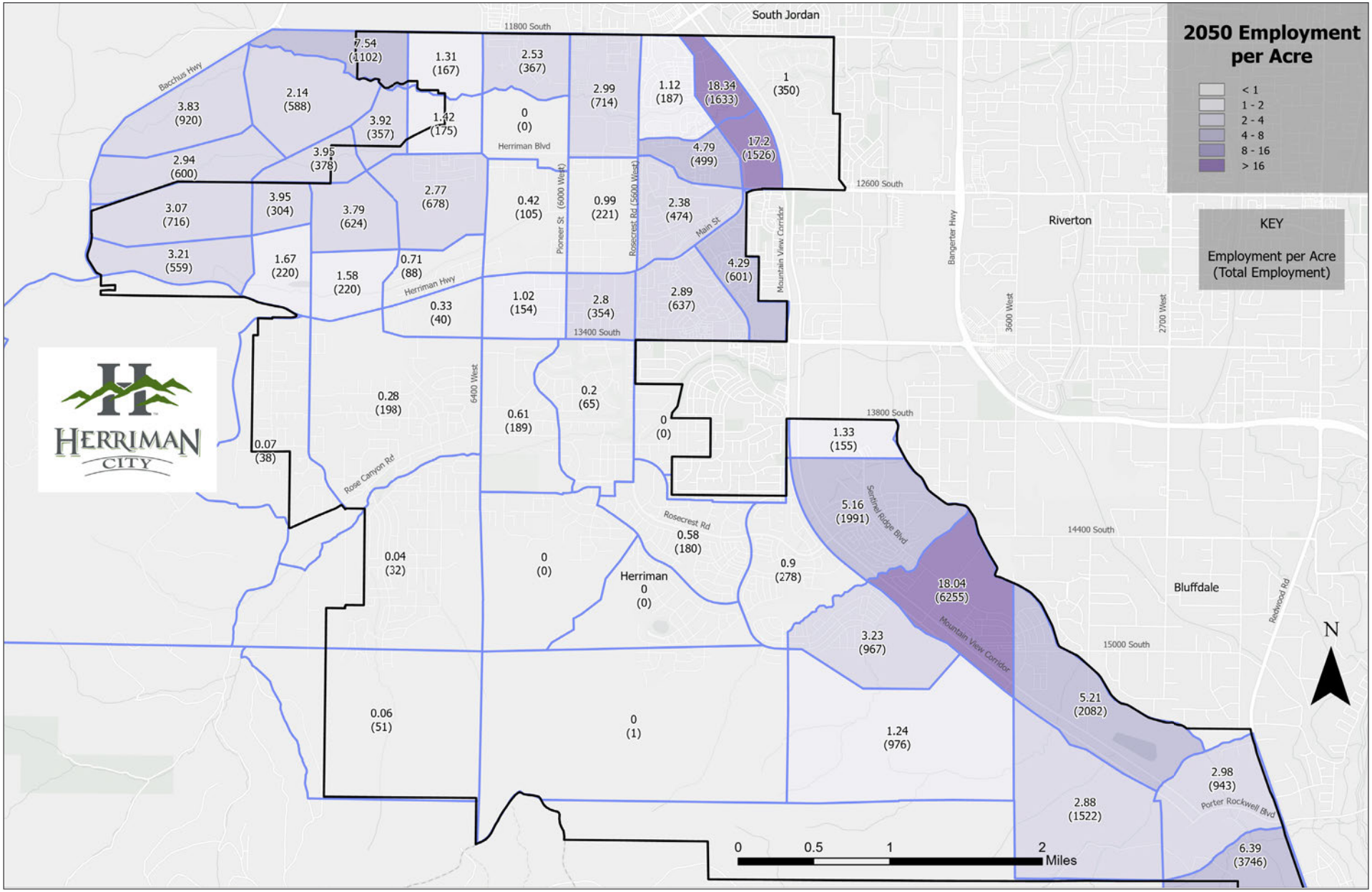
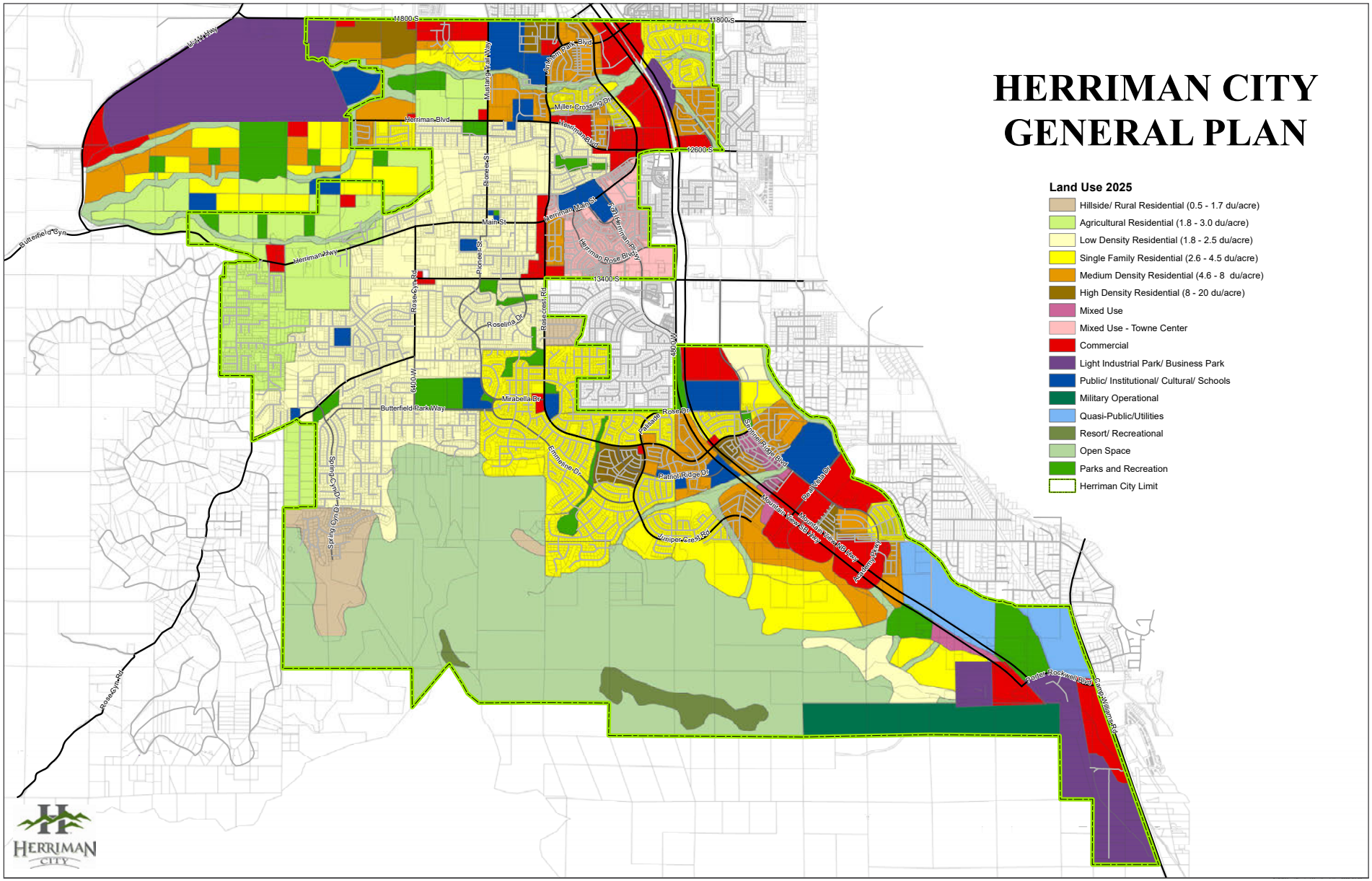


Figure 20: Projected 2050 Employment by TAZ



Herriman City's 2025 Land Use Plan is similar to current zoning. The most notable differences are the conversion of a large portion of the agricultural zones to low density single family zones, inclusion of the unincorporated land to the west of the City, and the Towne Center plan. Figure 21 shows the Herriman City 2025 Land Use Plan.

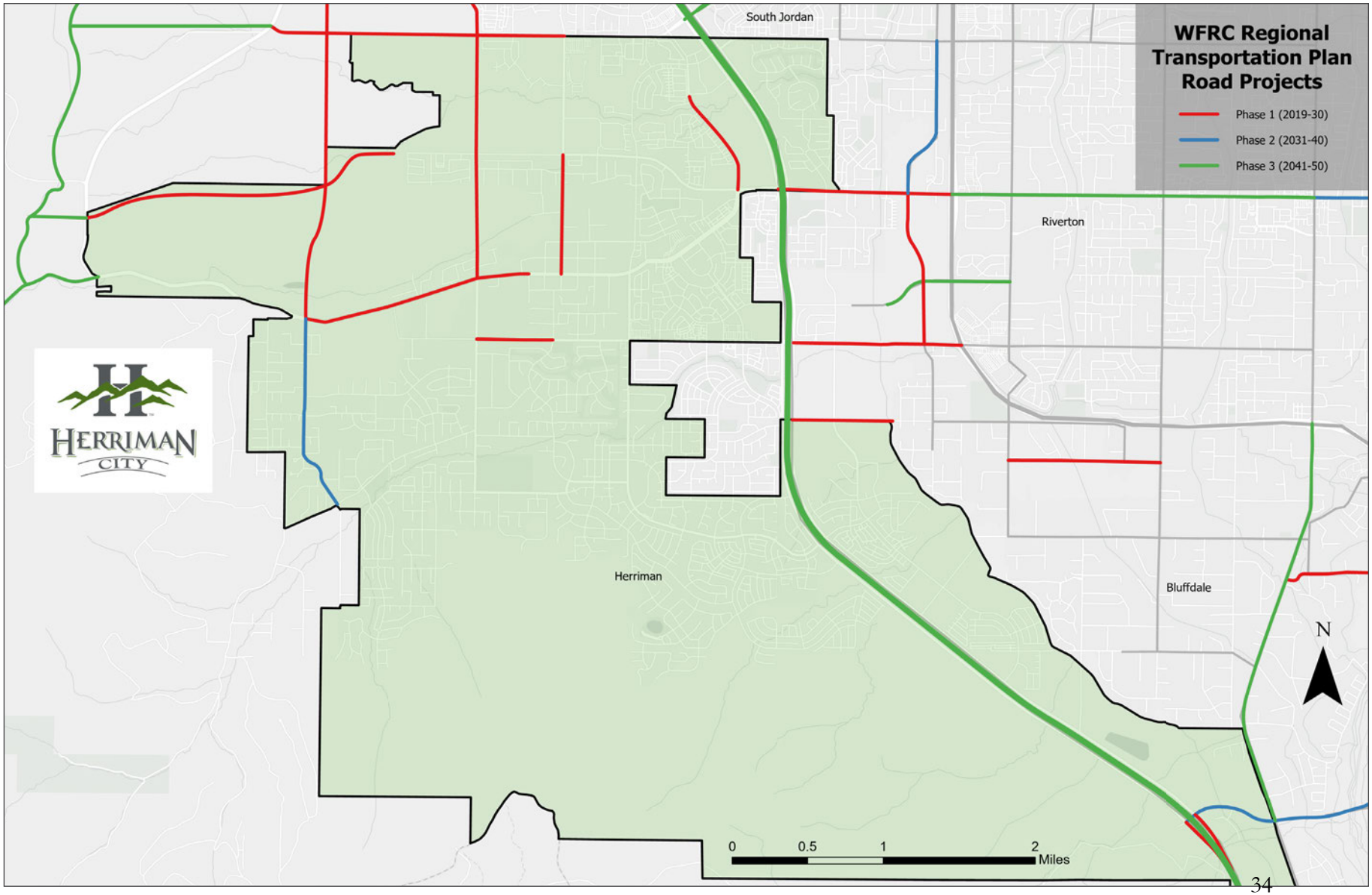
Figure 21: Future (2025) Land Use Plan



3.2. REGIONAL PLANS

The forecasting and planning undertaken by Herriman is complimented by regional planning performed by WFRC, UDOT, and UTA. WFRC's Regional Transportation Plan (RTP) includes roadway, transit, and active transportation projects for each of the previously stated agencies in three funded stages through the year 2050. Figure 22 shows the recommended RTP roadway projects in or near Herriman. These planned regional projects are consistent with the proposed local projects outlined in this master plan.

Figure 22: Regional Transportation Plan Projects in Herriman



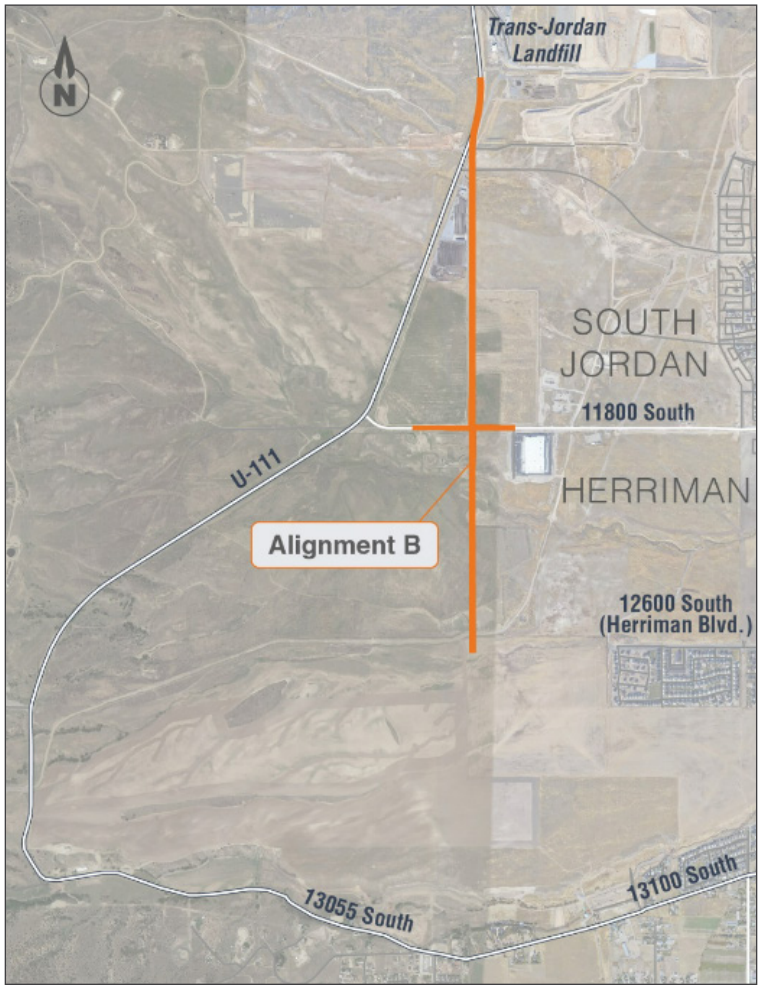
3.2.1. UDOT U-111 STATE ENVIRONMENTAL STUDY

The Utah Department of Transportation (UDOT) is conducting a state environmental study (SES) of U-111 between 11800 South and Herriman Boulevard to address the current and future growth in southwestern Salt Lake County and the surrounding areas. This study is expected to:

- Determine whether to extend U-111
- Evaluate potential alignments for a possible roadway extension
- Identify any corresponding impacts
- Determine whether a no-build alternative is feasible

Currently (as of November 2022) a final alternative has not been selected, but Alignment B (shown below) is being advanced into further analysis and design. The final draft of the state environmental study (SES) is expected to be complete in March 2023.

Figure 23: U-111 State Environmental Study – Alignment B



3.3. TRAFFIC CONDITIONS

The traffic volumes in Herriman are generally modest, with average daily traffic (ADT) only rising above 30,000 on a couple of major arterial roadways. Overall, Herriman's roadways have a level of service (LOS) well within the typical LOS D standard typical of urbanized areas. Figure 24 depicts the level of service progression from A "free flow" to F "forced flow."

For application in Herriman, LOS D roadway capacities were adjusted to daily maximums based on various factors consistent with the Highway Capacity Manual. Table 7 summarizes the daily maximum capacities used to define capacity deficiencies as part of this study. Figure 25 shows existing traffic volumes, and Figure 26 shows the existing LOS for arterial roads and major and minor collectors.

Figure 24: Level of Service Diagram

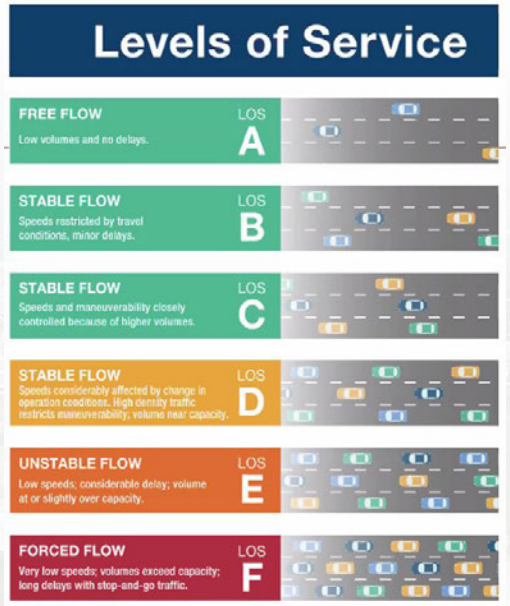


Table 7. LOS D Daily Maximum Capacities (Two Way Daily Trips)

Lanes	Major Arterial	Minor Arterial	Major Collector	Minor Collector
2	12,500	11,300	11,200	9,800
3	19,100	16,000	17,500	13,500
4	38,300	32,500	30,900	22,700
5	41,000	35,000	37,200	31,000
6	52,800	46,000	-	-
7	57,000	50,000	-	-

Figure 25: Existing (2020) Traffic Volumes (Two Way Daily Trips)

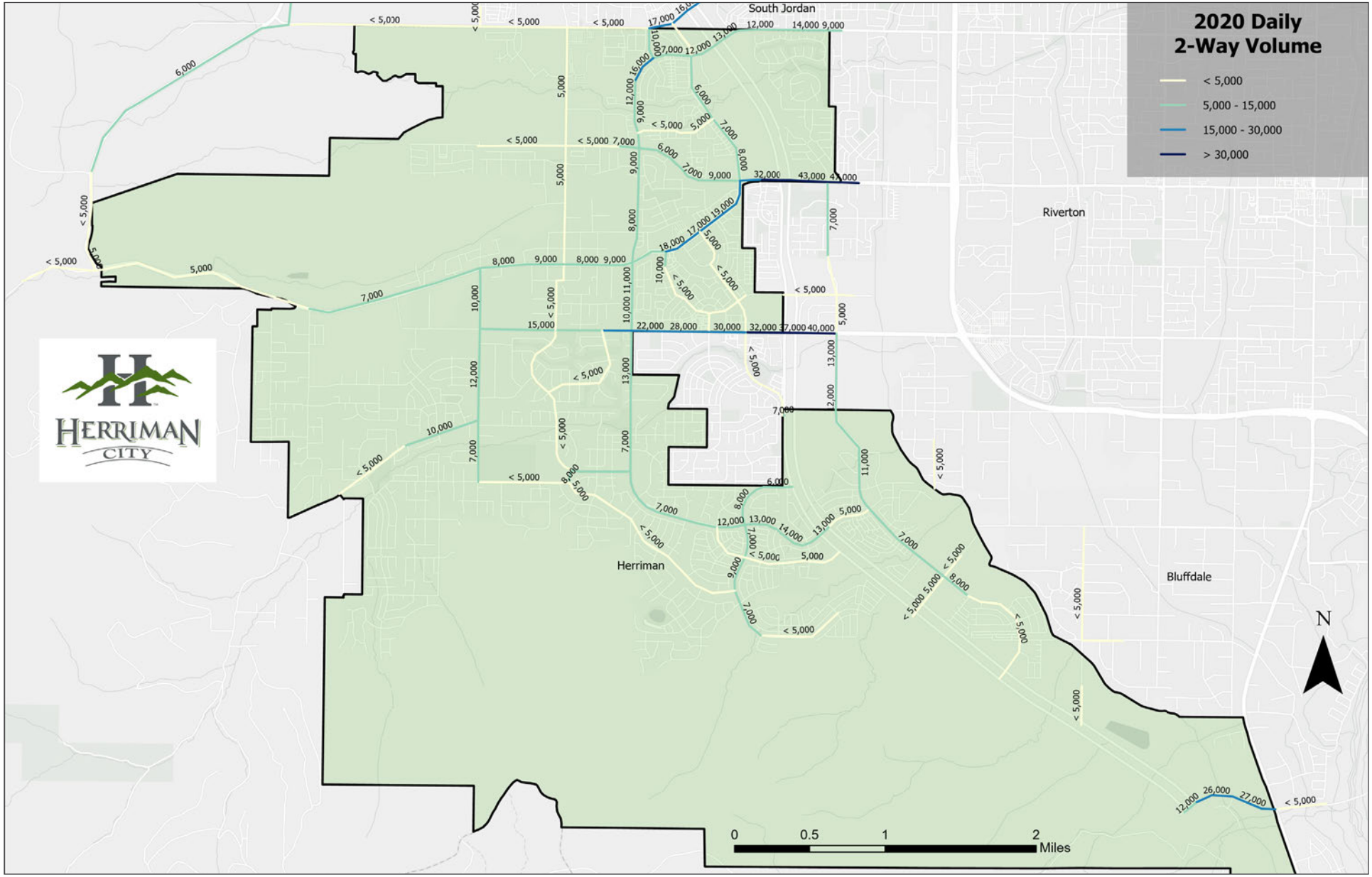
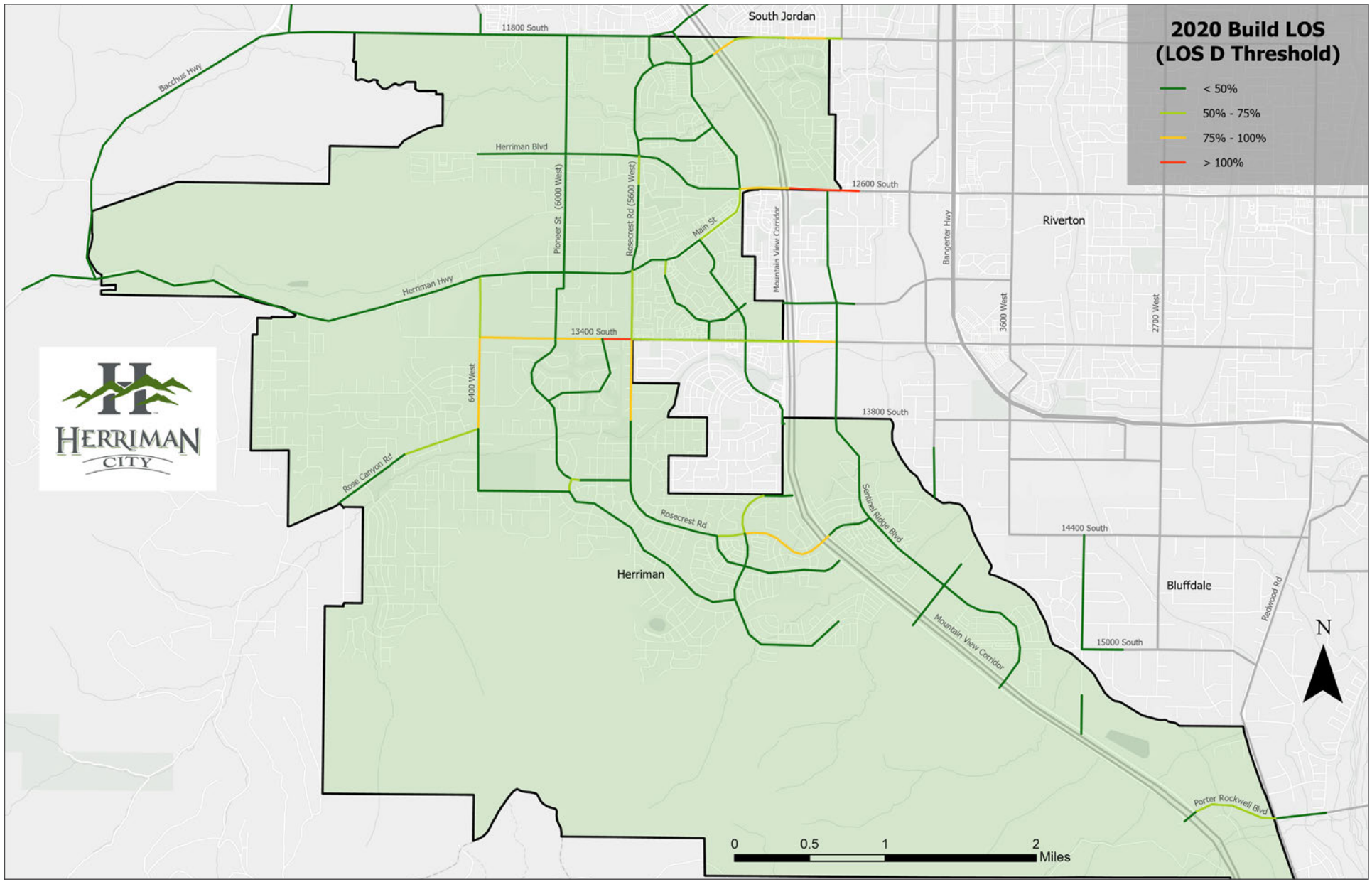


Figure 26: Existing (2020) Level of Service of Major Roads



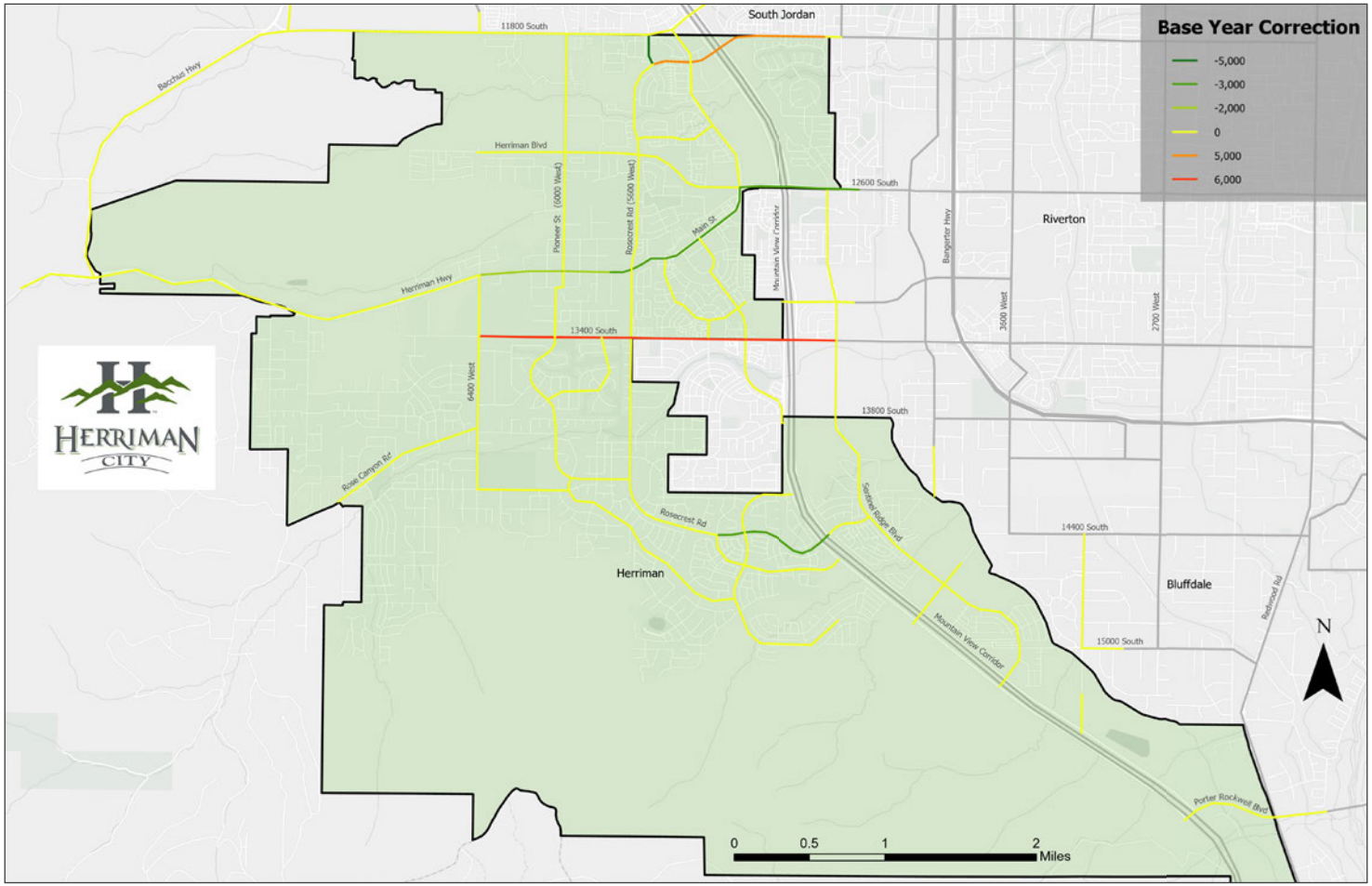
3.4. TRAVEL DEMAND MODELING

Future traffic conditions were forecasted using the WFRC – Mountainland Association of Governments (MAG) regional travel demand computer model (version 8.3.1, dated August 17, 2020). The model base year was 2020 and future conditions were forecasted for 2030 and 2050. The base year and future year socioeconomic data for Herriman were updated as part of the model calibration process for this transportation master plan.

3.4.1. BASE YEAR MODEL CALIBRATION

The base WFRC-MAG model network was updated to reflect existing conditions more accurately. Changes included modifying roadway functional types, creating new roadway links, and updating the underlying socioeconomic data. Additionally, a base year correction was developed from the difference between the 2020 modeled traffic and actual traffic counts provided by the City. This base year correction was then applied to the 2030 and 2050 modeled traffic to produce forecasts which account for any inherent tendencies of the model. Figure 27 shows a summary of the corrections to the 2020 model.

Figure 27: Summary of Corrections to 2020 Model



3.4.2. FUTURE VOLUMES

Once the base model was calibrated to reflect current conditions, future population, household, and employment data along with future roadway networks were used to model projected 2030 and 2050 travel volumes on a future Herriman network.

Figure 28 depicts projected 2030 daily travel volumes. Model results indicate that daily volumes within the City generally stay below 30,000, with the exception of 12600 South (Herriman Boulevard) and 13400 South near the Mountain View Corridor crossings where daily volumes exceed 50,000.

Figure 29 shows the projected 2030 LOS in the Minimal Build condition. Level of service in 2030 Minimal Build is projected to remain within the LOS D threshold in on most corridors. However, without widening the following segments of roadway are projected to exceed the LOS threshold.

- 11800 South: Mountain View Corridor to 4600 West (Ticaboo Mine Road)
- Herriman Boulevard: 6400 West to 6000 West and Herriman Main Street to the city boundary
- 13400 South: 6400 West to 5600 West

Figure 30 shows the projected 2030 LOS with widening projects (Build). In this scenario there are two roadways that still exceed the LOS threshold. Explanations on these roadways being projected to exceed the LOS threshold are provided below.

- **11800 South: Mountain View Corridor to 4600 West (Ticaboo Mine Road)**

  11800 South through the Mountain View Corridor interchange is a phase 1 project, thus improving LOS through the most significant bottleneck on this corridor. East of Mountain View Corridor, the roadway does not drastically exceed the capacity of a 3-lane cross section in 2030. Thus, this project will be delayed to Phase 2 (2031-2040) to correspond with the South Jordan City TMP schedule, as South Jordan owns the northern half of this roadway.

- **Herriman Boulevard: 4570 West to the city boundary**

  Even with a 7-lane cross section this roadway is projected to still exceed the LOS threshold. UDOT is currently performing a study for this corridor examining solutions such as grade separation and innovative intersections.

MINIMAL BUILD

Represents a network where all new roadways are built but no widening projects occur.

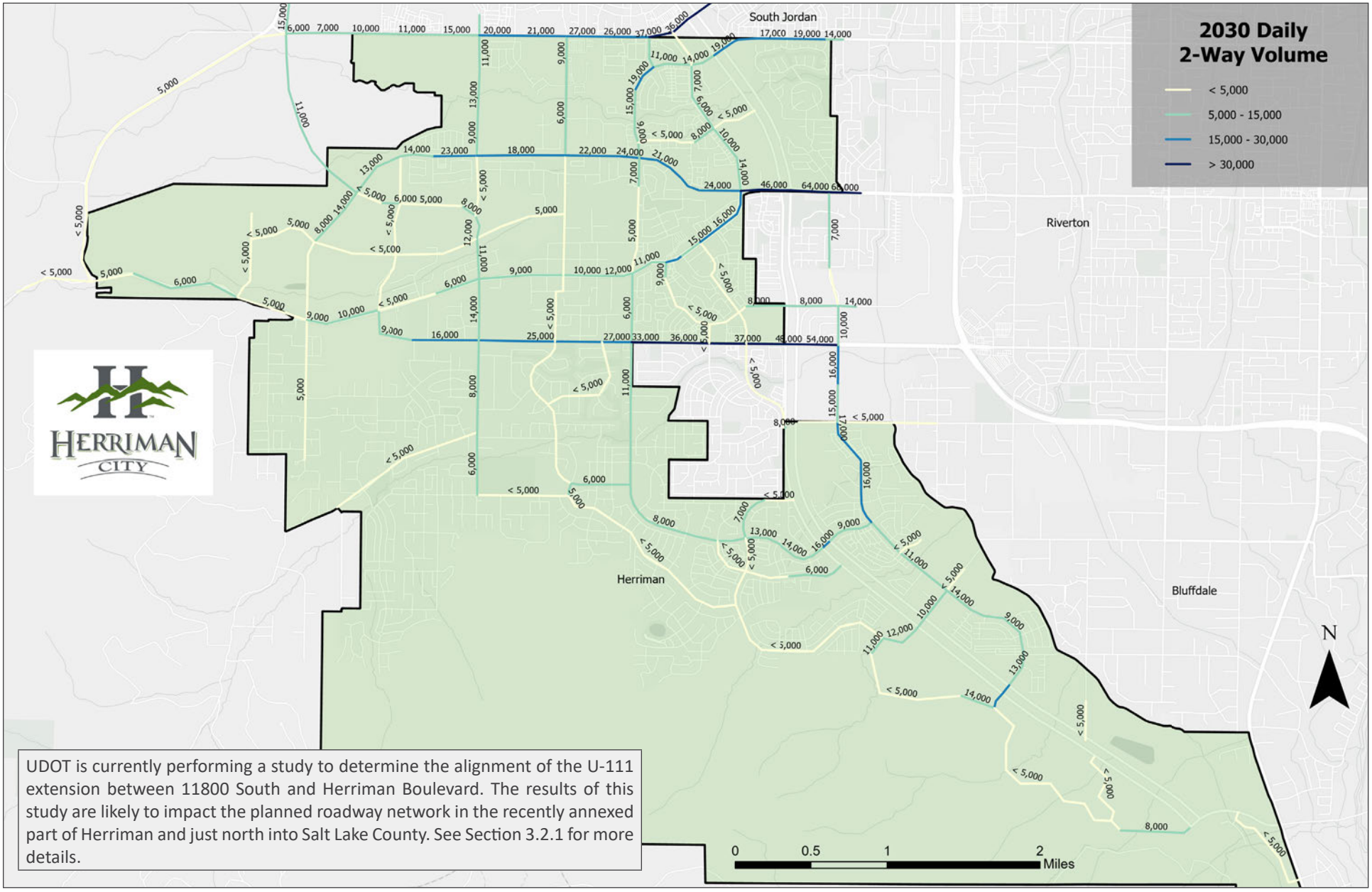
(It is assumed that for new development to access the existing roadway network these new roadways will need to be constructed. Thus, there is no rationale in running a "No Build" scenario that still assumes significant household and employment growth since that could never realistically occur.)

BUILD

Represents all corresponding phase projects from the Street Facilities Plan being constructed

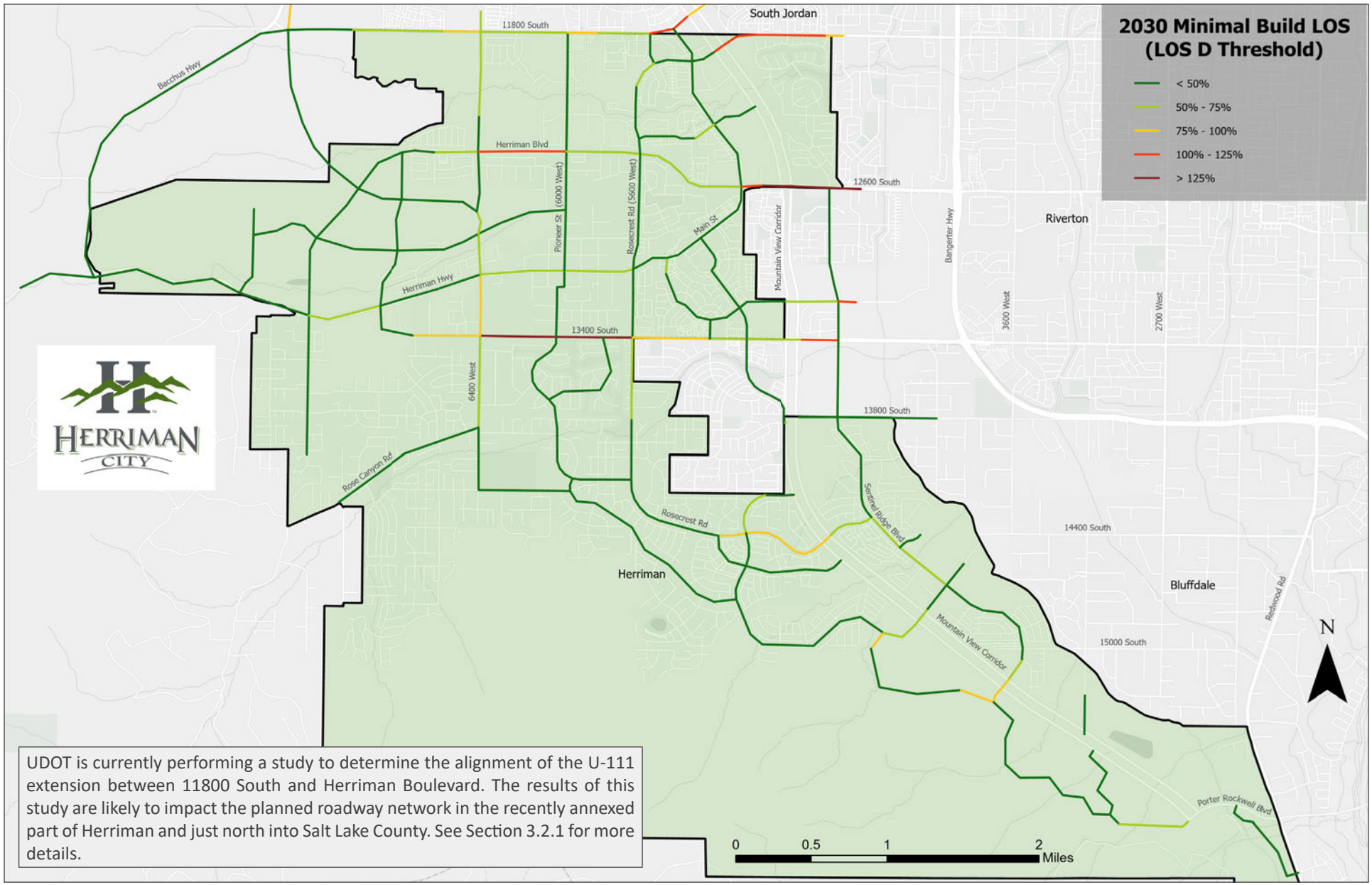
(For example: the 2030 Build condition will include all Phase 1 projects)

Figure 28: Projected 2030 Daily Traffic Volumes



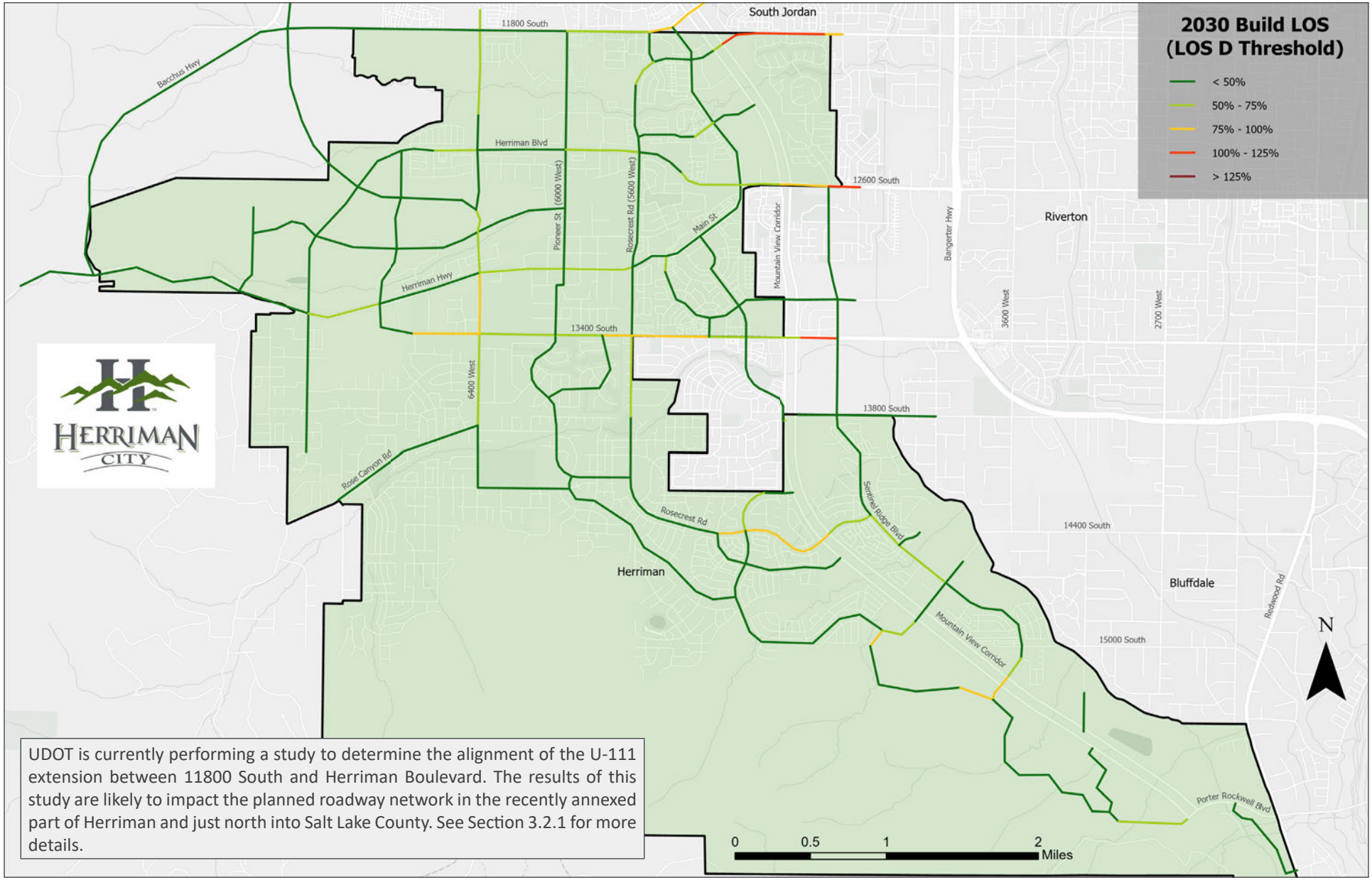
UDOT is currently performing a study to determine the alignment of the U-111 extension between 11800 South and Herriman Boulevard. The results of this study are likely to impact the planned roadway network in the recently annexed part of Herriman and just north into Salt Lake County. See Section 3.2.1 for more details.

Figure 29: Projected 2030 Level of Service – Minimal Build



UDOT is currently performing a study to determine the alignment of the U-111 extension between 11800 South and Herriman Boulevard. The results of this study are likely to impact the planned roadway network in the recently annexed part of Herriman and just north into Salt Lake County. See Section 3.2.1 for more details.

Figure 30: Projected 2030 Level of Service – Build



UDOT is currently performing a study to determine the alignment of the U-111 extension between 11800 South and Herriman Boulevard. The results of this study are likely to impact the planned roadway network in the recently annexed part of Herriman and just north into Salt Lake County. See Section 3.2.1 for more details.

Figure 31 depicts projected 2050 daily travel volumes. Model results indicate that daily volumes are still fairly low on many city roadways. However, given Herriman's location in the southwest corner of the valley high volumes are projected proximate to all Mountain View Corridor interchanges. Roadways such as 11800 South, 12600 South, Herriman Main Street, and 13400 South have significant volumes accessing and through the Mountain View Corridor interchanges. By 2050 the new SR-111 alignment is projected to have over 20,000 daily vehicles.

Figure 32 shows the projected 2050 LOS in the Minimal Build condition. Level of service in 2050 Minimal Build is projected to remain within the LOS D threshold in on most corridors. However, without widening the following segments of roadway are projected to exceed the LOS threshold (segments that already failed in 2030 are not listed again).

- **Bacchus Highway:** Just southwest of 7900 West and just west of 7600 West to the new SR-111.
- **11800 South:** entire roadway within Herriman
- **New Roadway:** just west of SR-111 to current city boundary
- **Herriman Highway:** Dansie Boulevard to 7900 West
- **13400 South:** 6740 West to Moorfield Road
- **6400 West:** 13400 South to Herriman Highway
- **Rosecrest Road:** At Mountain View Corridor interchange
- **Juniper Crest Road:** At Mountain View Corridor interchange
- **Academy Parkway:** At Mountain View Corridor interchange

Figure 33 shows the projected 2050 LOS with widening projects (Build). In this scenario there are five roadways that still exceed the LOS threshold. Explanations on these roadways being projected to exceed the LOS threshold are provided below.

Herriman Boulevard: Mountain View Corridor to the city boundary

Even with a 7-lane cross section this roadway is projected to still exceed the LOS threshold. UDOT is currently performing a study for this corridor examining solutions such as grade separation and innovative intersections.

New Roadway: just west of SR-111 to current city boundary

The model indicates that this roadway will warrant a 5-lane cross-section in 2050. However, the growth dictating this need is highly speculative and outside of current Herriman City borders. Additionally, 7300 West is planned to be a 5-lane roadway and have the bulk of commercial uses adjacent to it, and has excess capacity. Thus, it is likely much of this traffic will utilize that roadway instead. However, the model does indicate a potential high traffic volume corridor here, thus the ROW should be reserved for a potential 5-lane cross section, but the roadway should only be built to 3-lanes.

Herriman Highway: Dansie Boulevard to 7900 West

The city is currently planning for all of Herriman Highway to be a 3-lane cross-section west of 5600 West. This segment of Herriman Highway barely exceeds the LOS threshold for a 3-lane roadway and the additional growth dictating the need for a 5-lane roadway is high speculative.

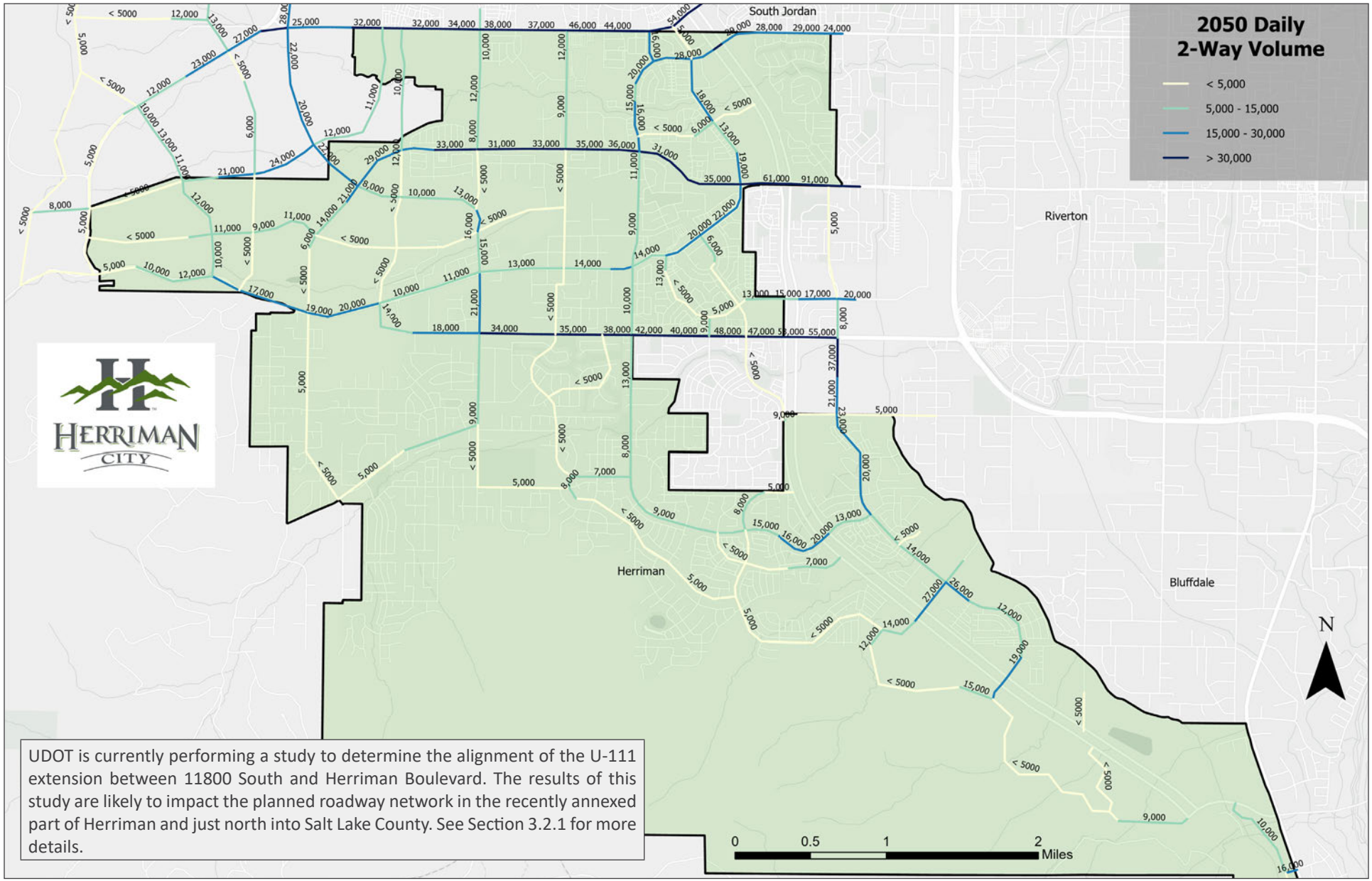
13400 South: 6740 West to 6400 West

This roadway is planned to be widened to a 3-lane cross-section in phase 1. There are ROW constraints that make widening to 5-lanes not feasible.

6400 West: 13400 South to Herriman Highway

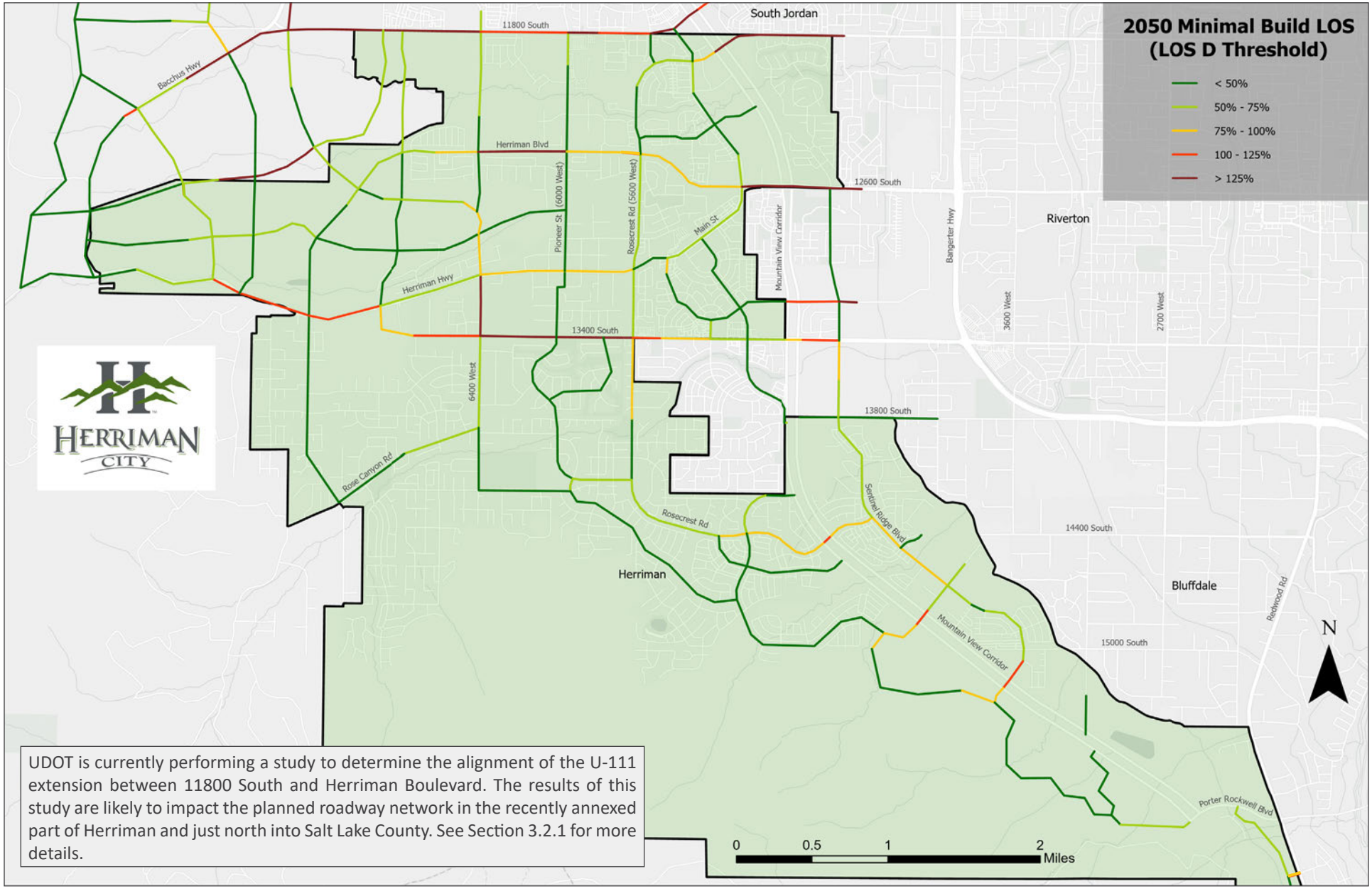
This roadway is planned to be widened to a 3-lane cross-section in phase 1. There are ROW constraints that make widening to 5-lanes not feasible.

Figure 31: Projected 2050 Daily Traffic Volumes



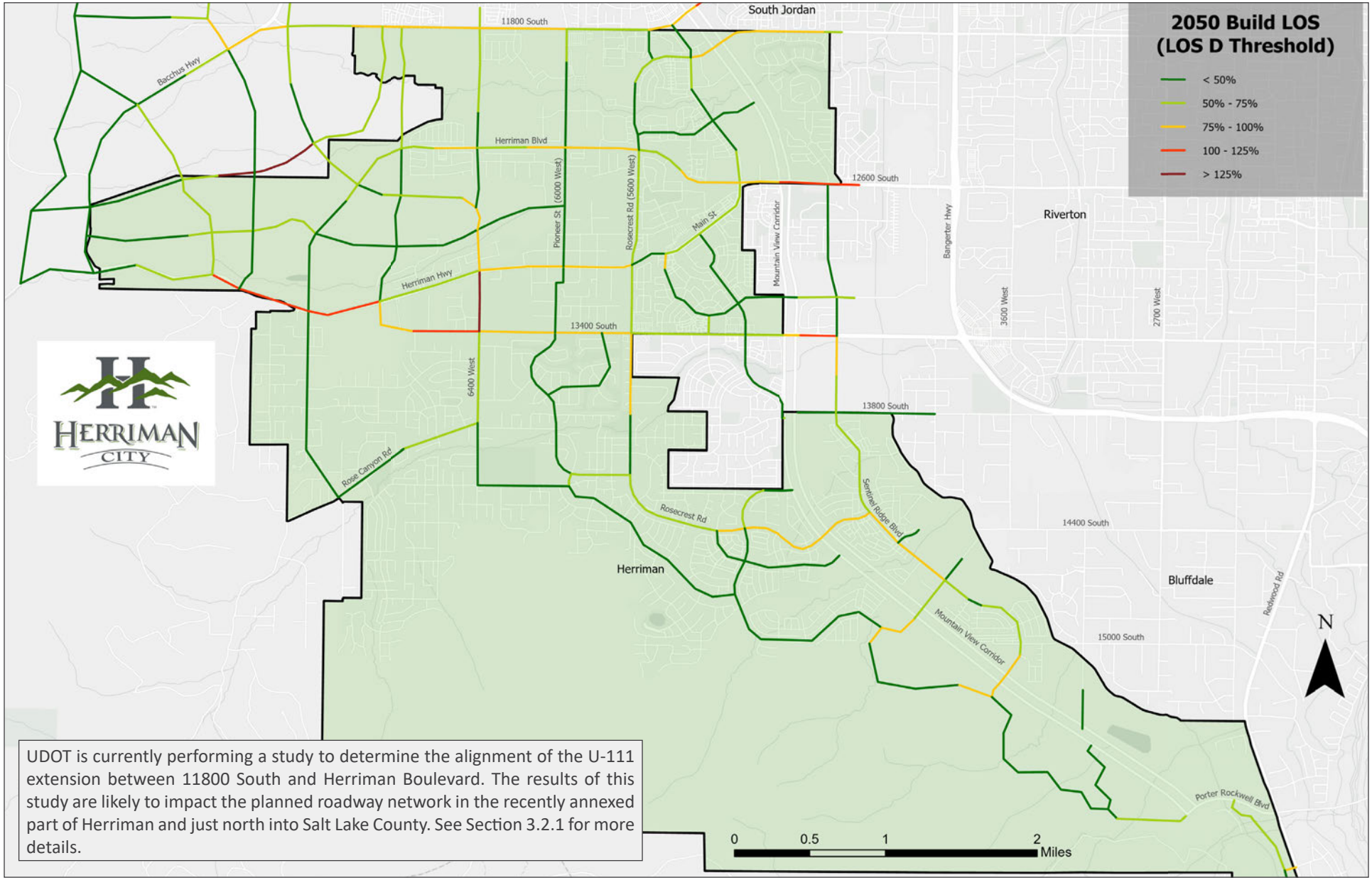
UDOT is currently performing a study to determine the alignment of the U-111 extension between 11800 South and Herriman Boulevard. The results of this study are likely to impact the planned roadway network in the recently annexed part of Herriman and just north into Salt Lake County. See Section 3.2.1 for more details.

Figure 32: Projected 2050 Level of Service – Minimal Build



UDOT is currently performing a study to determine the alignment of the U-111 extension between 11800 South and Herriman Boulevard. The results of this study are likely to impact the planned roadway network in the recently annexed part of Herriman and just north into Salt Lake County. See Section 3.2.1 for more details.

Figure 33: Projected 2050 Level of Service – Build



UDOT is currently performing a study to determine the alignment of the U-111 extension between 11800 South and Herriman Boulevard. The results of this study are likely to impact the planned roadway network in the recently annexed part of Herriman and just north into Salt Lake County. See Section 3.2.1 for more details.



4. PLAN RECOMMENDATIONS

As Herriman continues to grow, transportation system improvements will need to be made to maintain acceptable LOS on city streets and intersection. This section outlines these roadway projects and details of specific cross sections and other roadway details.Additionally, expanding the active transportation network in unison is necessary and is outlined in this section.

4.1. FUNCTIONAL CLASSIFICATION

A functional classification of streets is used to group roadways into classes according to the volume of traffic the roadways are intended to serve. The classes are based upon the degree of mobility (speed and trip length) and land access that they are designed to serve. Roadway functional classifications are generally comprised of a mix of arterials, collectors, and local streets. Arterials are designed to serve higher volumes of traffic at higher speeds, while collectors are designed to balance land access with traffic speeds and traffic capacity. Local streets are intended to provide low-speed access to individual properties. Figure 34 summarizes the hierarchy of the functional classification of streets based upon mobility and access.

Figure 34: Mobility Vs Access

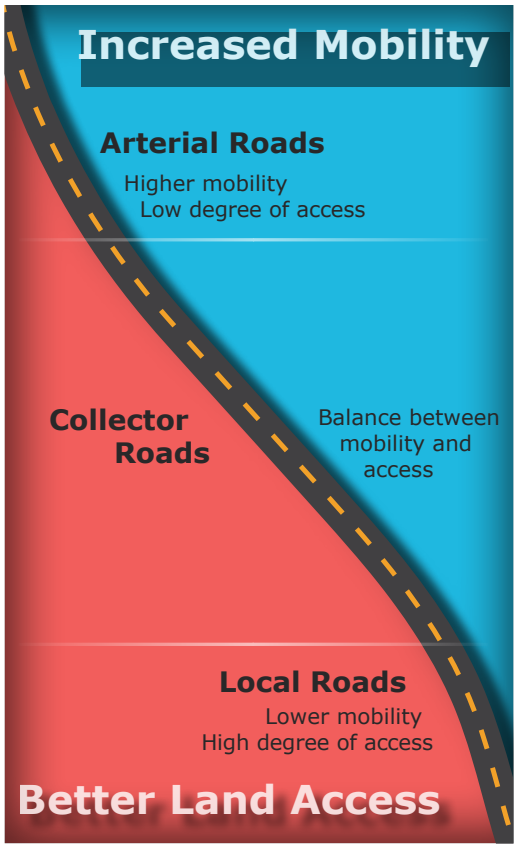


Table 9 provides general characteristics for the traffic operations of each functional classification. The definitions outlined include speed, average trip length, crash rate, and access control. Access control refers to the number of intersections, driveways, etc., interrupting the roadway.

Table 8. Street Functional Classification Summary

Street Functional Group	ROW Width (ft)	Speed (mph)	Average Trip Length (miles)	Expected Crash Rate (accidents per million vehicle miles)	Access Control
Arterial	>90	45+	3-15	3-5	Significant
Collector/Minor Collector	66 - 90	25-45	1-5	2-4	Moderate
Local and Minor Local	<66	<30	<0.5	Varies	None

4.1.1. LOCAL AND MINOR LOCAL STREETS

Local streets are designed to provide access from residences to the roadway network. They serve many driveways and provide a collection point to collector or arterial roadways. Local streets should be designed to minimize speed and reduce cut-through traffic while meeting the requirements of emergency vehicles. Local streets are typically placed with driveways on both sides and have posted speed limits of 25 miles per hour. Generally, no striping is proposed on local streets. However, the city engineer may recommend roadway striping as needed as a traffic-calming measure. Parking may be restricted on local streets near intersections, in high density or commercial areas, where snow removal or storage issues arise, or at other locations deemed necessary by the city engineer. Herriman plans to approve two construction standards for local and minor streets: one for a 53-foot right-of-way (ROW), shown in Figure 35; and one for a 60-foot ROW, shown in Figure 36. The 53-foot minor local cross section roads are best limited to single family residential access, whereas the wider 60-foot local cross section can accommodate higher density residential, neighborhood commercial, schools, churches and institutional land uses. Developers are responsible for the full cost of design and constructing local and minor local streets including the drainage facilities (storm drain pipes, inlets, manholes, etc.). For private roadways, emphasis needs to be placed on inclusion of sidewalks on both sides of the roadway and connectivity to the larger public sidewalk network. Requirements for private roadways should also include minimum lane widths to accommodate two-way traffic in a setting such as alleys for rear-loaded residential units.

Figure 35: Minor Local Street Standard – 53 Foot ROW

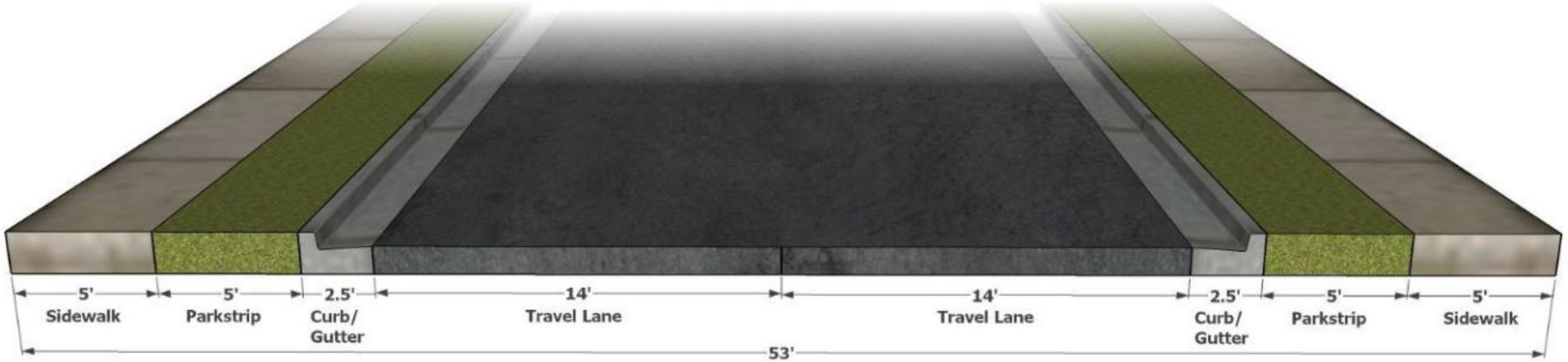
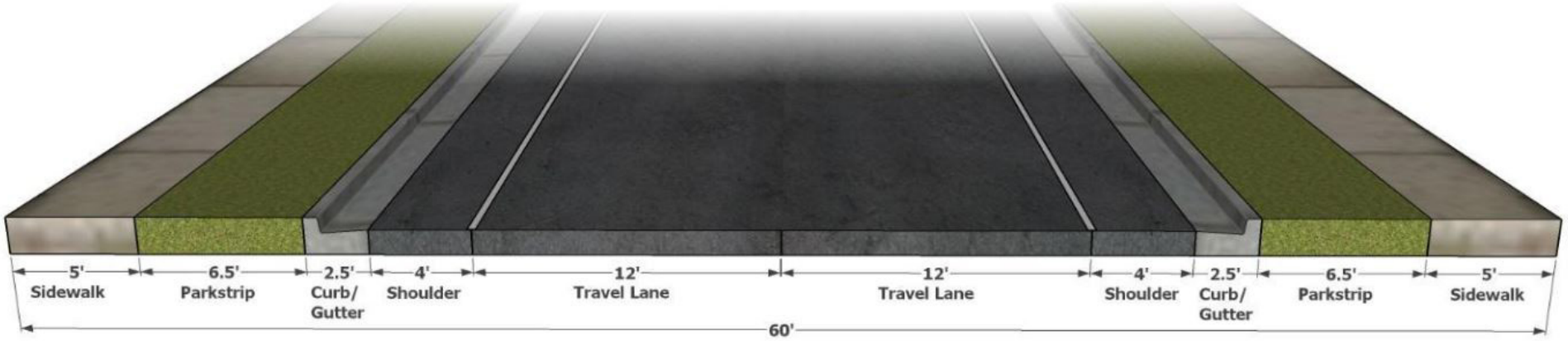


Figure 36: Local Street Standard – 60 Foot ROW

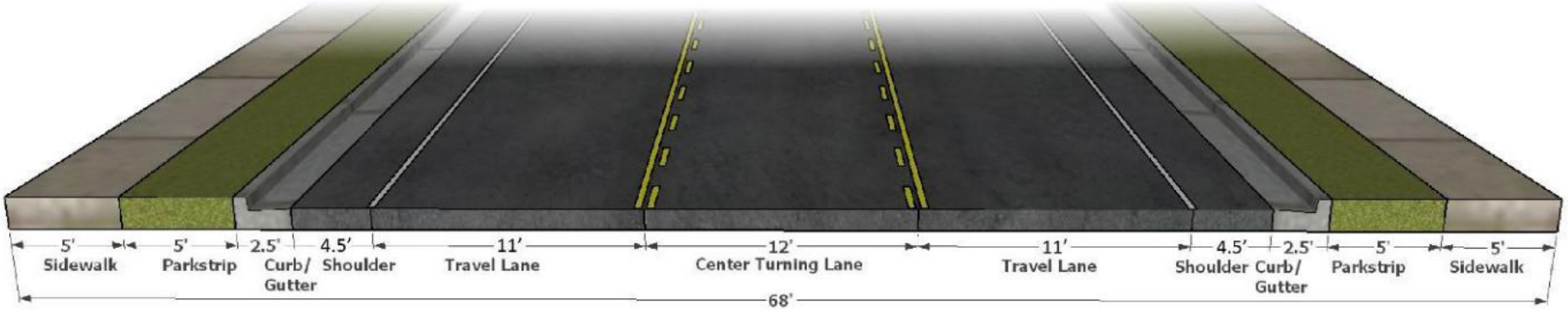


4.1.2. MINOR COLLECTOR STREETS

Minor collector streets within Herriman serve local trips and provide local access. Minor collectors have one through travel lane in each direction, a center turn lane, curb and gutter on both sides, sidewalk on both sides, and park strips on both sides within a 68-foot ROW. The center turn lane may be eliminated to allow for the addition of a bike lane in each direction. Additional details about roadway access spacing standards can be found in section 4.3.2 of this plan. The typical design cross section for a minor collector is shown in Figure 37.

In areas where a minor collector street is required, a developer will pay to design the new street and construct and install all improvements associated with local street standards with a 60-ft ROW as shown in Figure 36. The City will generally be responsible for paying for the costs associated with constructing the additional (about 11 feet) of pavement between the gutter lips to meet the minor collector street standard and the striping associated with the center turn lane.

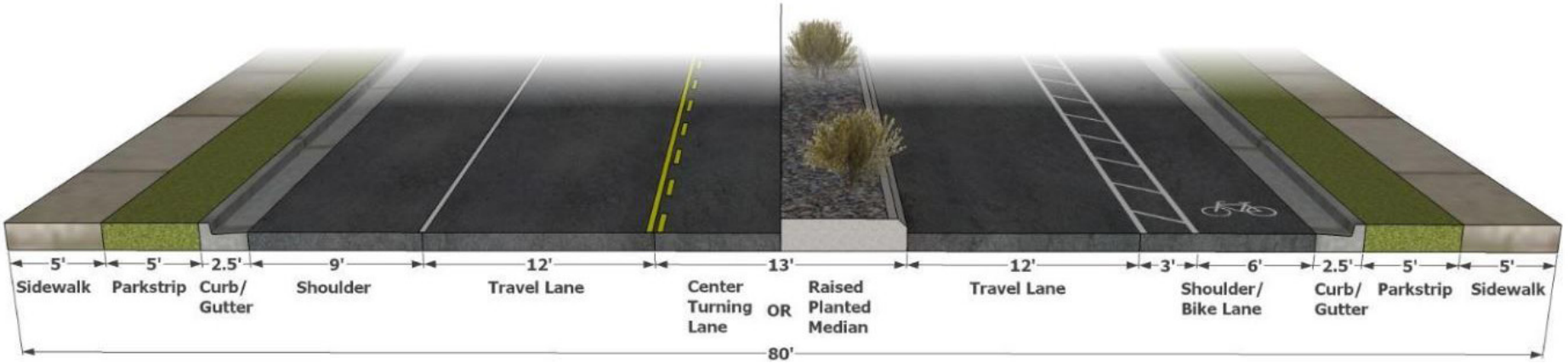
Figure 37: Minor Collector Streets Standard



4.1.3. MAJOR COLLECTOR STREETS

Major collector streets, like minor collectors, have one through travel lane in each direction and a center turn lane, as well as a wide shoulder on each side. The recommended collector cross section has 12-foot travel lanes in each direction, a 13-foot center turn lane, and 9-foot shoulders within an 80-foot ROW. The shoulders are intended to have bike lanes, but could be striped for parking if needed as shown in Figure 38. The 80-foot ROW is wide enough that if increased capacity is needed, two travel lanes in each direction could be accommodated with the elimination of the center turn lane and/or reduction of the lane and shoulder widths. At major intersections, the shoulder and travel lane can be modified to 10-foot lanes to accommodate right-turn lanes, provided motorists are cautioned to share the road with bicyclists (when a bicycle lane is marked in the shoulder area). In areas where a major collector street is required, a developer will pay to design the new street and construct and install all of the improvements associated with local street standards with a 60-ft ROW as shown in Figure 36. The City will be responsible for paying for the costs associated with constructing the pavement width in excess of 37 feet, any raised median, and additional striping associated with the center turn lane and a bike lane.

Figure 38: Major Collector Street Standard

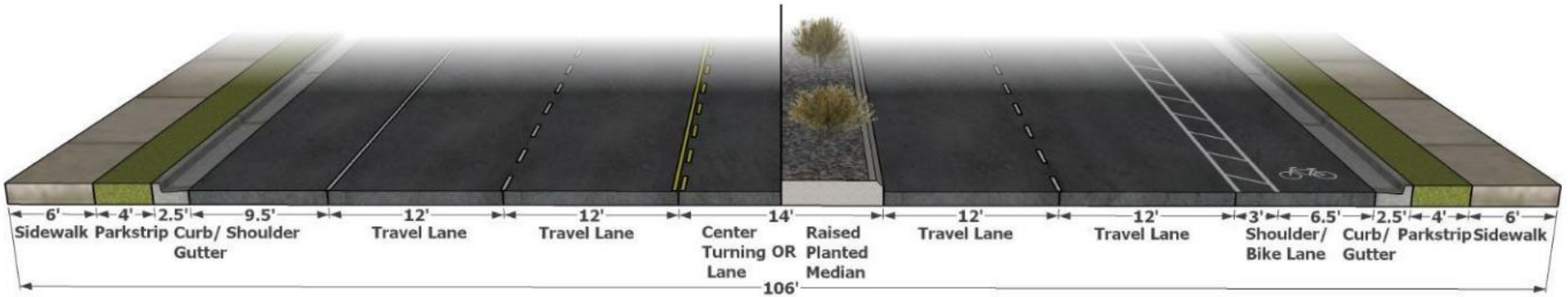


4.1.4. MINOR ARTERIAL STREETS

Minor arterial streets balance regional travel and local access. Minor arterials have two through travel lanes, a center turn lane, and wide shoulders within a 106-foot ROW. The shoulders are intended to have bike lanes but could be striped for parking if needed. The 106-foot ROW is wide enough that if increased capacity is needed, three travel lanes in each direction could be accommodated with the elimination of the center turn lane and/or a reduction of the lane and shoulder widths. Figure 39 shows the standard 106-foot arterial cross section.

The City is responsible for the costs associated with designing and constructing the full minor arterial street cross-section.

Figure 39: Minor Arterial Standard

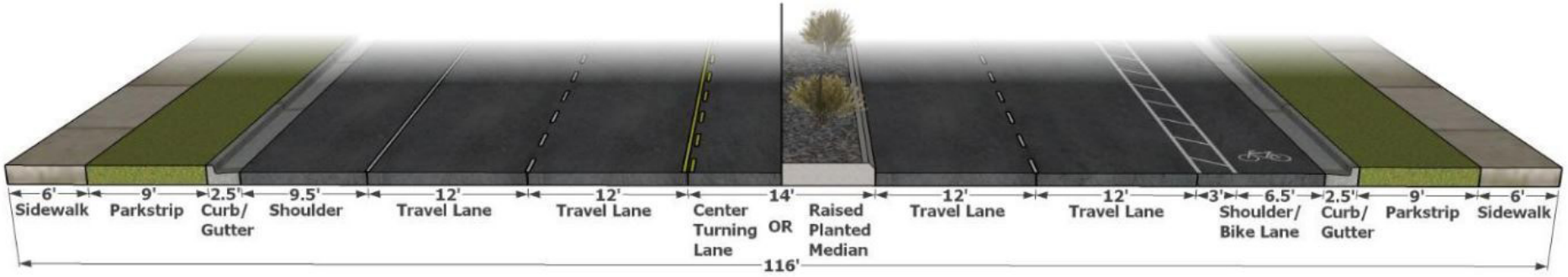


4.1.5. MAJOR ARTERIAL

Similar to minor arterials, major arterial streets balance regional travel and local access. Major arterials have two through travel lanes, a center turn lane, and wide shoulders within a 116-foot ROW. The shoulders are intended to have bike lanes but could be striped for parking if needed. The 116-foot ROW is wide enough that if increased capacity is needed, three travel lanes in each direction could be accommodated with the elimination of the center turn lane and/or a reduction of the lane and shoulder widths. The recommended typical design cross section of an arterial street with a 116-ft ROW is shown in Figure 40.

The City is responsible for the costs associated with designing and constructing the full major arterial street cross-section.

Figure 40: Major Arterial Street Standard

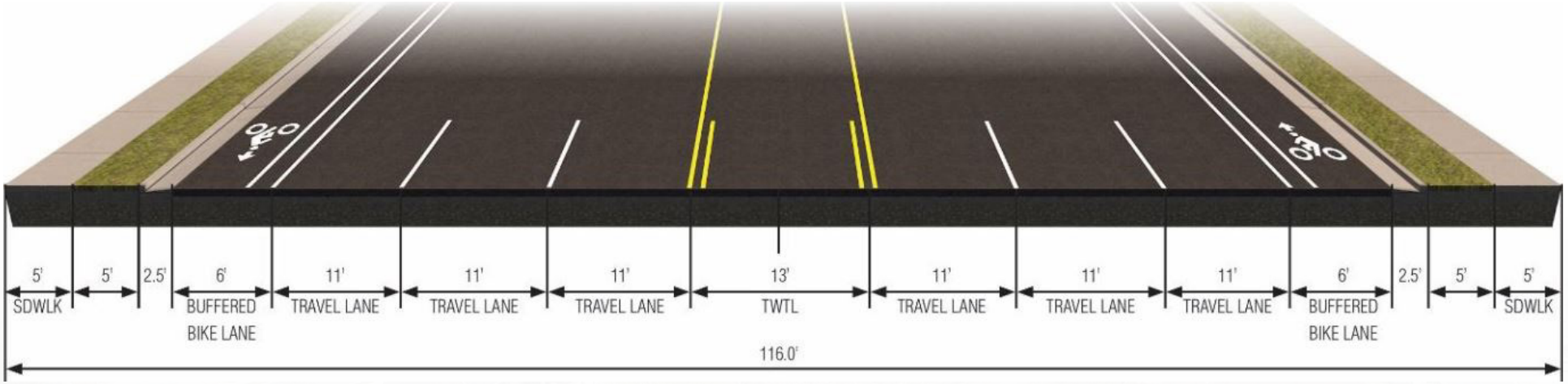


4.1.6. PRINCIPAL ARTERIAL

Similar to major arterials, principal arterial streets have a 116-foot ROW, but have a more focused approach on vehicle throughput. The principal arterial cross section has narrower lanes (11' vs. 12') and narrower park strips to allow for 3 travel lanes in each direction while still providing a 6' buffered bike lane or shoulder. The recommended typical design cross section of an arterial street with a 116-ft ROW is shown in Figure 41.

The City is responsible for the costs associated with designing and constructing the full major arterial street cross-section.

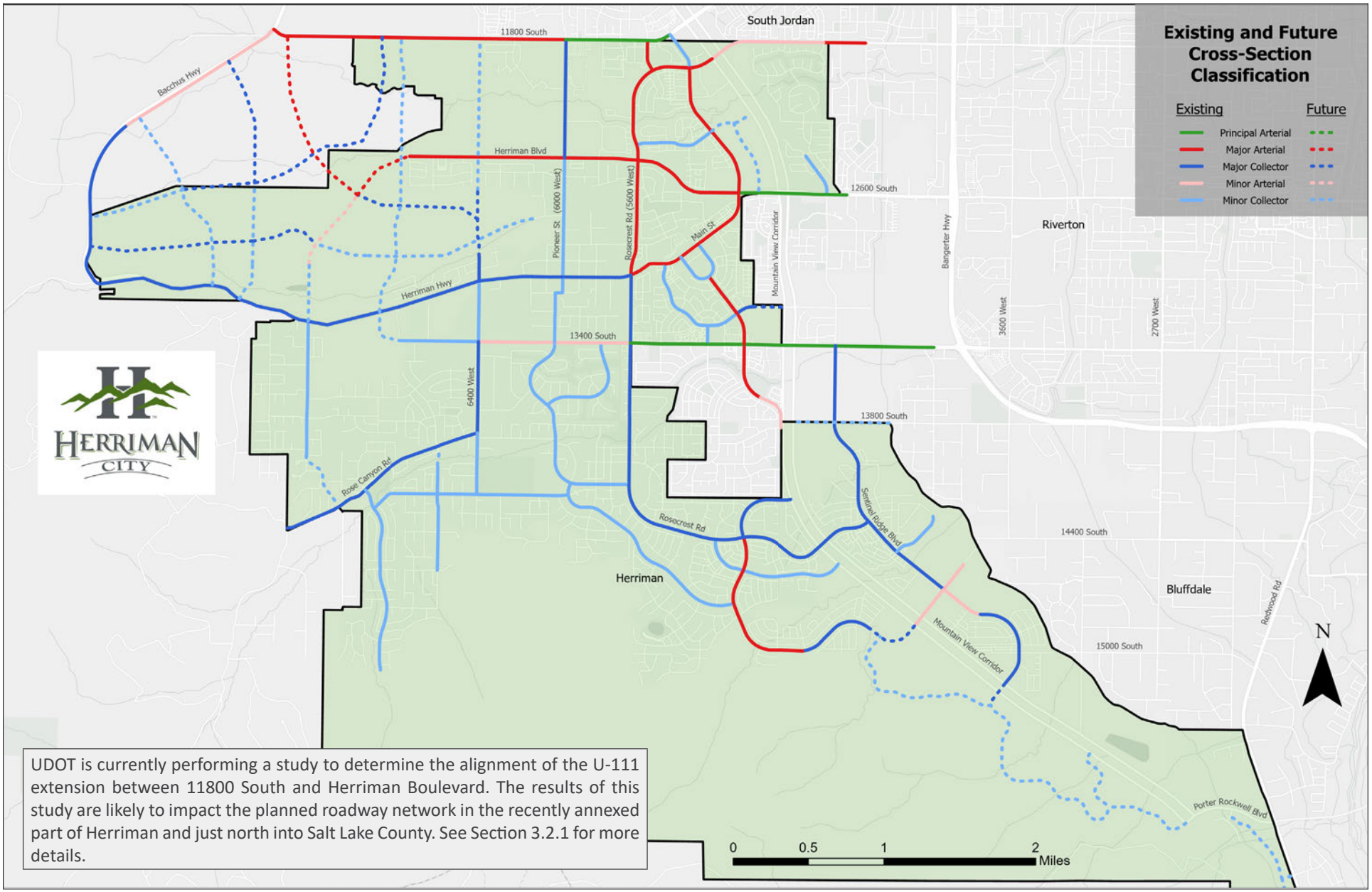
Figure 41: Principal Arterial Street Standard



4.2. PROPOSED FUTURE NETWORK

The existing and recommended future network of arterial, collector, and minor collector streets is shown in Figure 42.

Figure 42: Existing and Recommended Major Street Network



UDOT is currently performing a study to determine the alignment of the U-111 extension between 11800 South and Herriman Boulevard. The results of this study are likely to impact the planned roadway network in the recently annexed part of Herriman and just north into Salt Lake County. See Section 3.2.1 for more details.

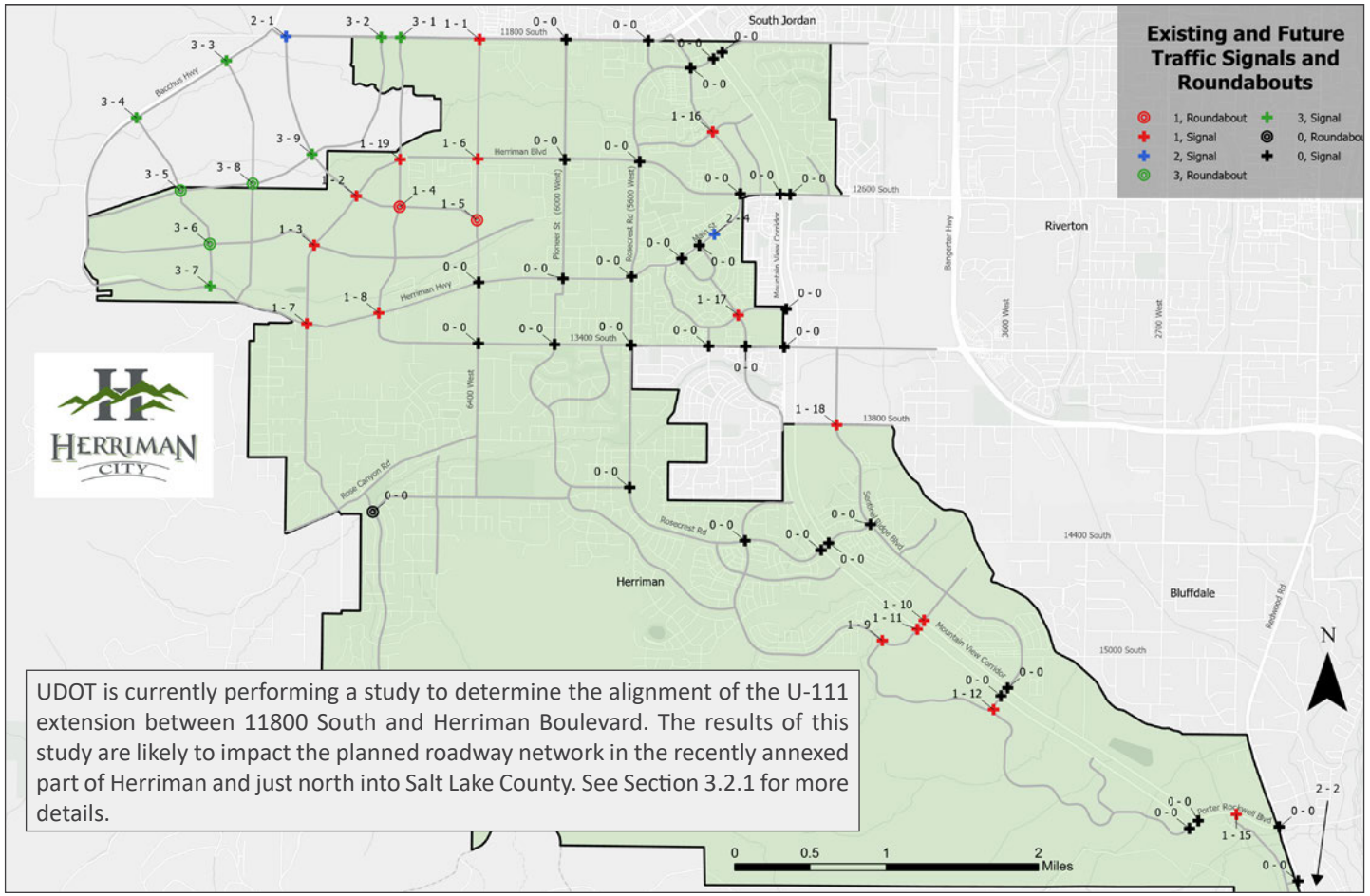
4.3. TRANSPORTATION STANDARDS

4.3.1. TRAFFIC CONTROL

The need for traffic signals will increase as traffic volumes and road networks throughout Herriman continue to grow. The Manual on Uniform Traffic Control Devices (MUTCD) states that "an engineering study of traffic conditions, pedestrian characteristics, and physical characteristics of the location shall be performed to determine whether installation of a traffic control signal is justified at a particular location." The MUTCD indicates that eight different traffic signal warrants should be considered when investigating the need for a traffic control signal. These warrants look at vehicular volumes, pedestrian volumes, school crossings, signal coordination, vehicular crashes, and the adjacent road network. Before installation of a signal the City should consider the feasibility of a roundabout. Roundabouts are generally safer than signals and offer significant traffic calming advantages.

Recommended traffic control improvements shown below are separated into Phase 1 (0 to 10 years), Phase 2 (11 to 20 years), and Phase 3 (21 to 30 years). Anticipated traffic control needs by phase are shown in Figure 43. Locations for roundabouts were determined based on discussions with city staff, traffic volumes, and available right-of-way. All locations tagged with "0 - 0" are existing.

Figure 43: Locations of Existing and Recommended Future Traffic Control



UDOT is currently performing a study to determine the alignment of the U-111 extension between 11800 South and Herriman Boulevard. The results of this study are likely to impact the planned roadway network in the recently annexed part of Herriman and just north into Salt Lake County. See Section 3.2.1 for more details.

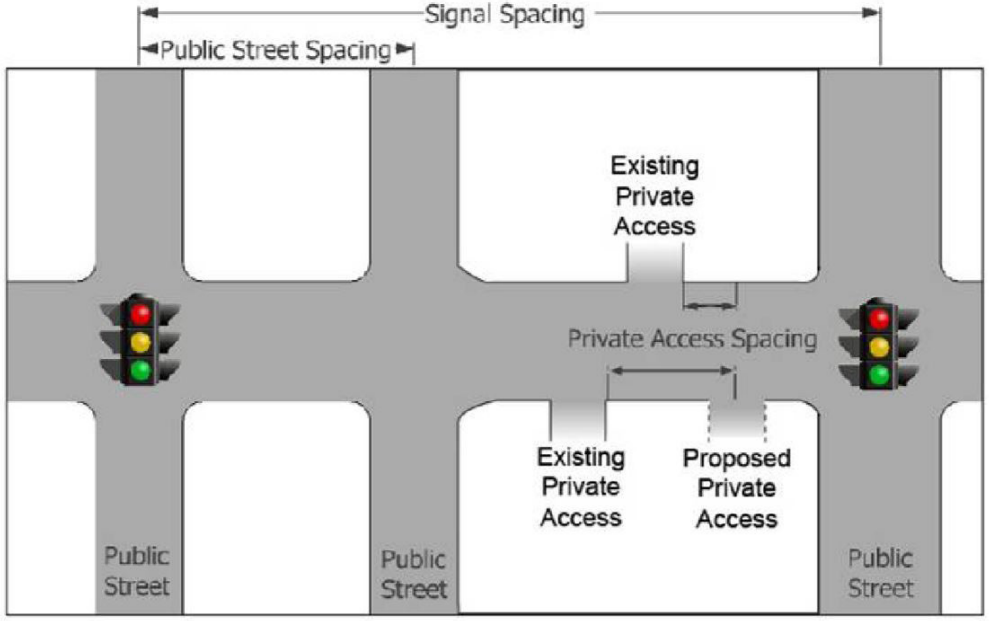
4.3.2. ACCESS SPACING

This transportation master plan incorporates the access spacing and related permit requirements on state highways based on UDOT Administrative Rule R930-6 by reference. This plan also summarizes the allowable access spacing for all City streets in Herriman. On non-state routes, access spacing may be adjusted by the city engineer based on localized conditions. Requests to decrease access spacing standards may be granted by the city engineer or city council provided a traffic impact study is prepared by the developer documenting the preservation of safety, capacity, and speed with reduced access spacing. Table 9 lists the Herriman access spacing standards for signals, public streets, and private areas. Figure 44 illustrates spacing categories.

Table 9. Summary of Minimum Spacing Requirements

	Minimum Signal Spacing (feet)	Minimum Public Street Spacing (feet)	Minimum Private Access Spacing (feet)
Arterial Streets	2,640	660	250
Collector Streets	1,320	300	150
Local Streets	N.A.	150	No Minimum

Figure 44: Spacing Illustration



Access spacing, also referred to as driveway spacing, is measured from the closest edge (perpendicular tangent section) of the nearest driveway to the center of the proposed driveway. Access spacing standards allow drivers to process one decision at a time. Through proper spacing, drivers may monitor upcoming points of conflict with other vehicles and react accordingly to each conflict.

4.3.3. CORNER RADII

The dimensions of curb radii directly affect the speed of turning motor vehicles. Large radii are needed to accommodate large trucks and busses, but also allow cars to make high-speed turns and create increased crossing distances for pedestrians. A network of intersections with short curb radii would create the most welcoming pedestrian environment but would hinder fire truck movement, creating a potentially hazardous situation. Therefore, curb radii standards are needed to ensure that all user types are accommodated in the roadway design. Recommended back of curb corner radii for each street classification are presented in Table 10.

Table 10. Recommended Back of Curb Radii for Street Intersections

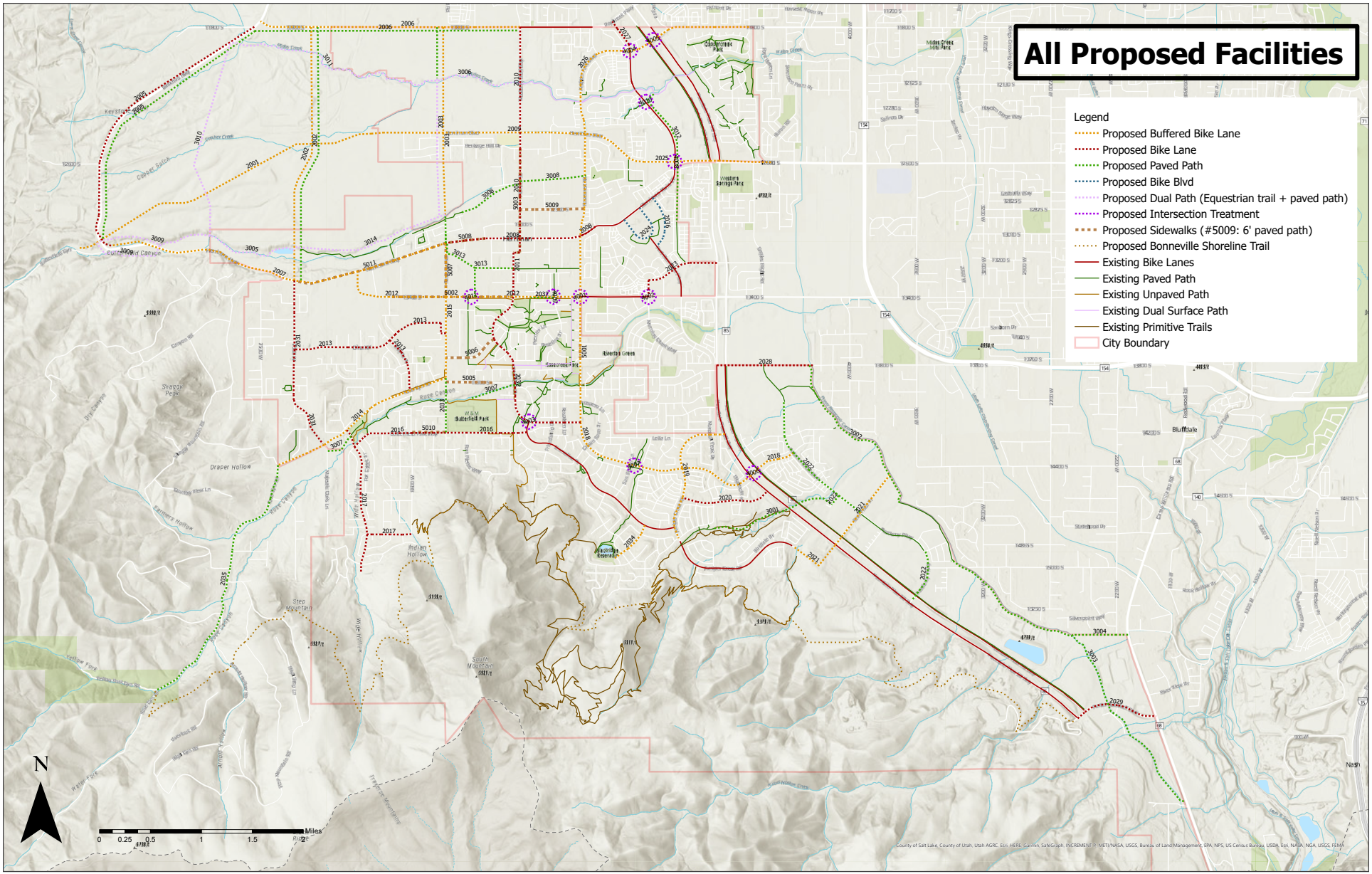
Type of Intersection Street	Type of Through Street			
	Local	Minor Collector	Major Collector	Arterial
Local	25 ft	25 ft	30 ft	30 ft
Minor Collector	25 ft	30 ft	30 ft	30 ft
Major Collector	30 ft	30 ft	40 ft	40 ft
Arterial	30 ft	30 ft	40 ft	40 ft

The recommended radii listed in Table 10 may be adjusted based on traffic volumes, scale of large vehicle uses, and the needs of specific lane uses/truck routing. Changes to curb radii are subject to the approvals from the city engineer and fire marshal.

4.4. FUTURE BICYCLE INFRASTRUCTURE

Herriman recognizes the need for an extensive and cohesive bicycle path network to accommodate all modes of travel. To accommodate bicycle paths, transportation standards for collector and arterial streets were developed to incorporate wide shoulders and allow for bicycle lane striping. Figure 45 shows the existing bicycle path network as well as future multi-use pathways, trails, and bicycle lanes. This map also accounts for bicycle facilities on new collector and arterial streets. This network is comprehensive and it would allow for greater bicycle access throughout the City for commuter and recreational cyclists.

Figure 45: Future Bicycle Network

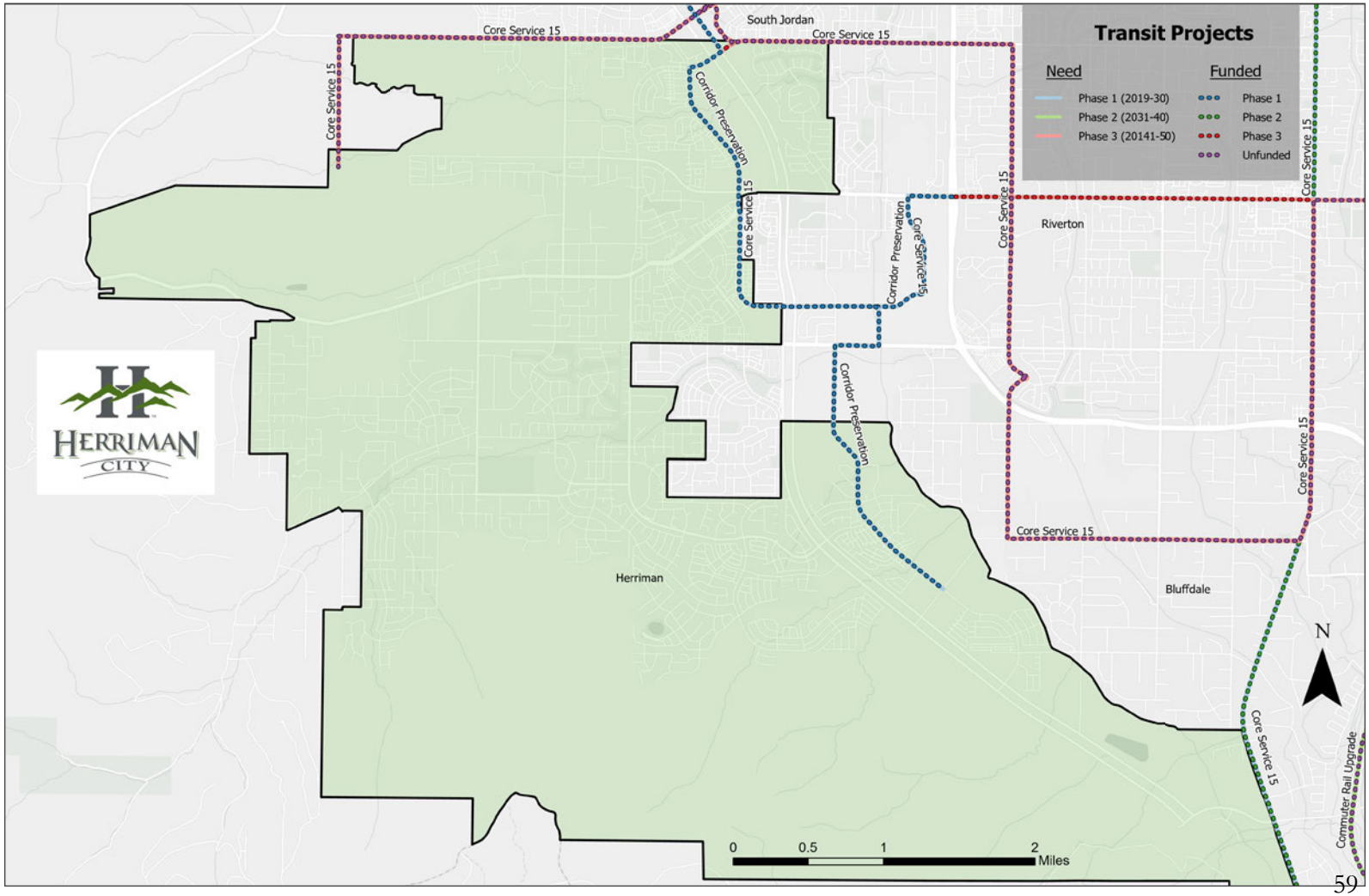


4.5. FUTURE TRANSIT

As Herriman grows, population densities will increase, more business and job opportunities will be created, and the transit system will need to be upgraded to meet the City's needs. Currently, Herriman is only served by on-demand transit which provides connections to Trax, FrontRunner, and other key destinations. Expanding to fixed routes should be considered as demand dictates. Beyond this, new routes should be explored. Figure 46 shows the WFRC's planned RTP transit projects.

Two future transit projects will impact Herriman. The first is a Phase 3 (2041-2050) project for a new transit route extending south from the Daybreak TRAX Station through northern Herriman, then west through Riverton, and into Draper. The second is a corridor preservation project for future transit. The corridor follows the same route as the new bus line, but also has an alternative which runs further south to Real Vista Drive. Through the WFRC Transportation and Land Use Connection (TLC) program a transit corridor and land use study will be performed in late 2022. This will likely determine the future of this corridor and what, if any, additional transit service is provided through Herriman.

Figure 46: Existing and Planned Transit Projects



The anticipated expansion of the UTA TRAX Red Line into Herriman will likely be the biggest change to the existing transit service. Extending from its existing terminus in the Daybreak development, a potential future line would continue on Daybreak Parkway and turn south on the future extension of Main Street. A future TRAX station within central Herriman would provide excellent transit service to residents and excellent connections to destinations across the valley.

Figures 467hrough 49 illustrate examples of road design cross sections for a future Main Street that includes TRAX light rail.

Figure 47: Main Street with TRAX – 60-foot ROW

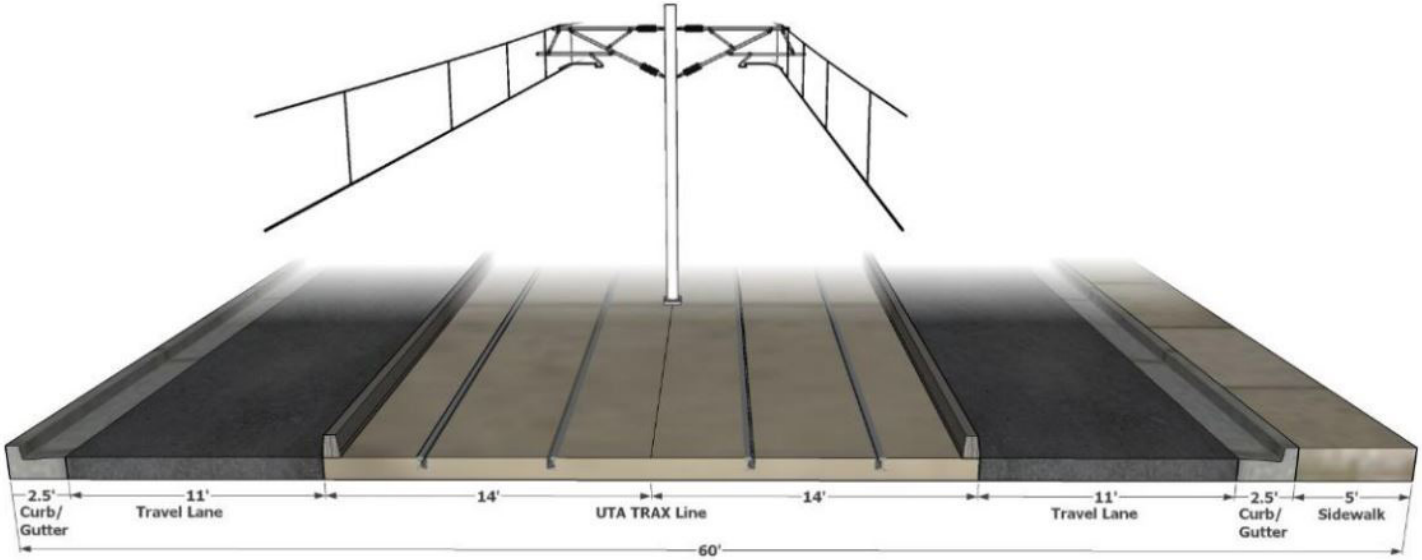


Figure 48: Main Street with TRAX – 121-foot ROW

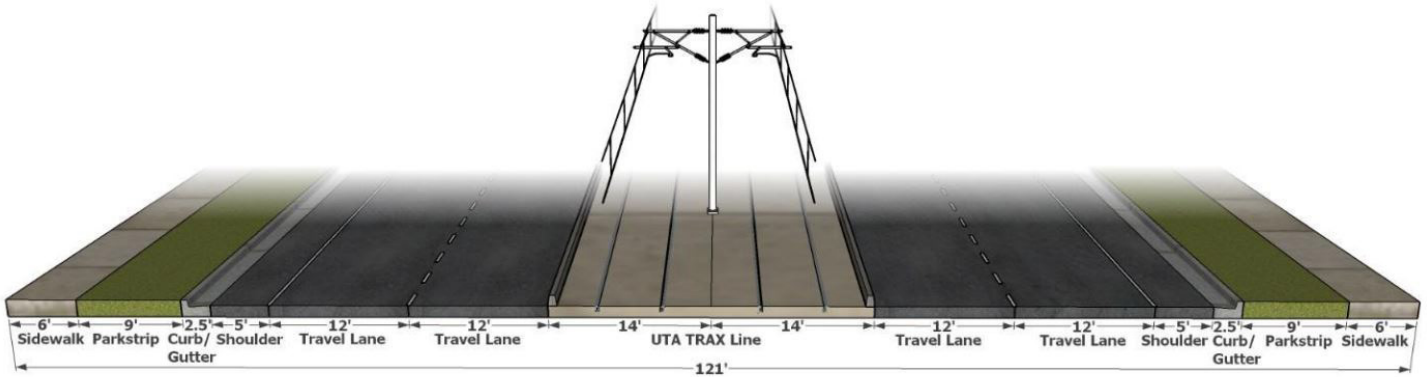
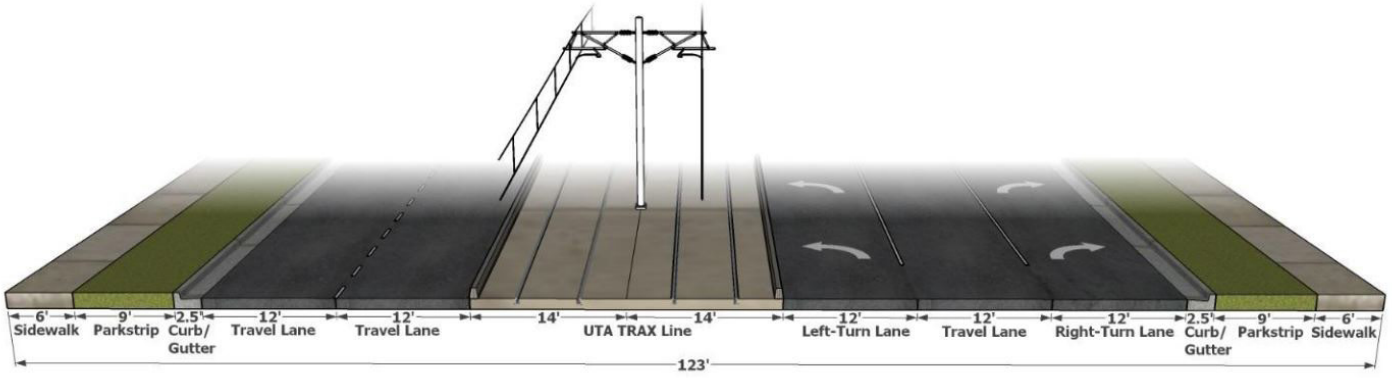


Figure 49: Main Street with TRAX Intersection – 123-foot ROW





5. Street Facilities Plan

The following street facilities plan presents the projected phasing and estimated construction costs of the recommended major street improvement projects.

5.1. STREET FACILITIES PLAN

The street facilities plan (SFP) identifies recommended transportation project needs by priority and includes a conceptual planning level cost estimate (2022 dollars) for each improvement. The recommended improvements are separated into Phase 1 (0 to 10 years), Phase 2 (11 to 20 years), and Phase 3 (21 to 30 years). The recommended projects only include collector and arterial streets and projects that increase the capacity of the road network.

Figure 50: Recommended Street Improvements by Phase - Roadways

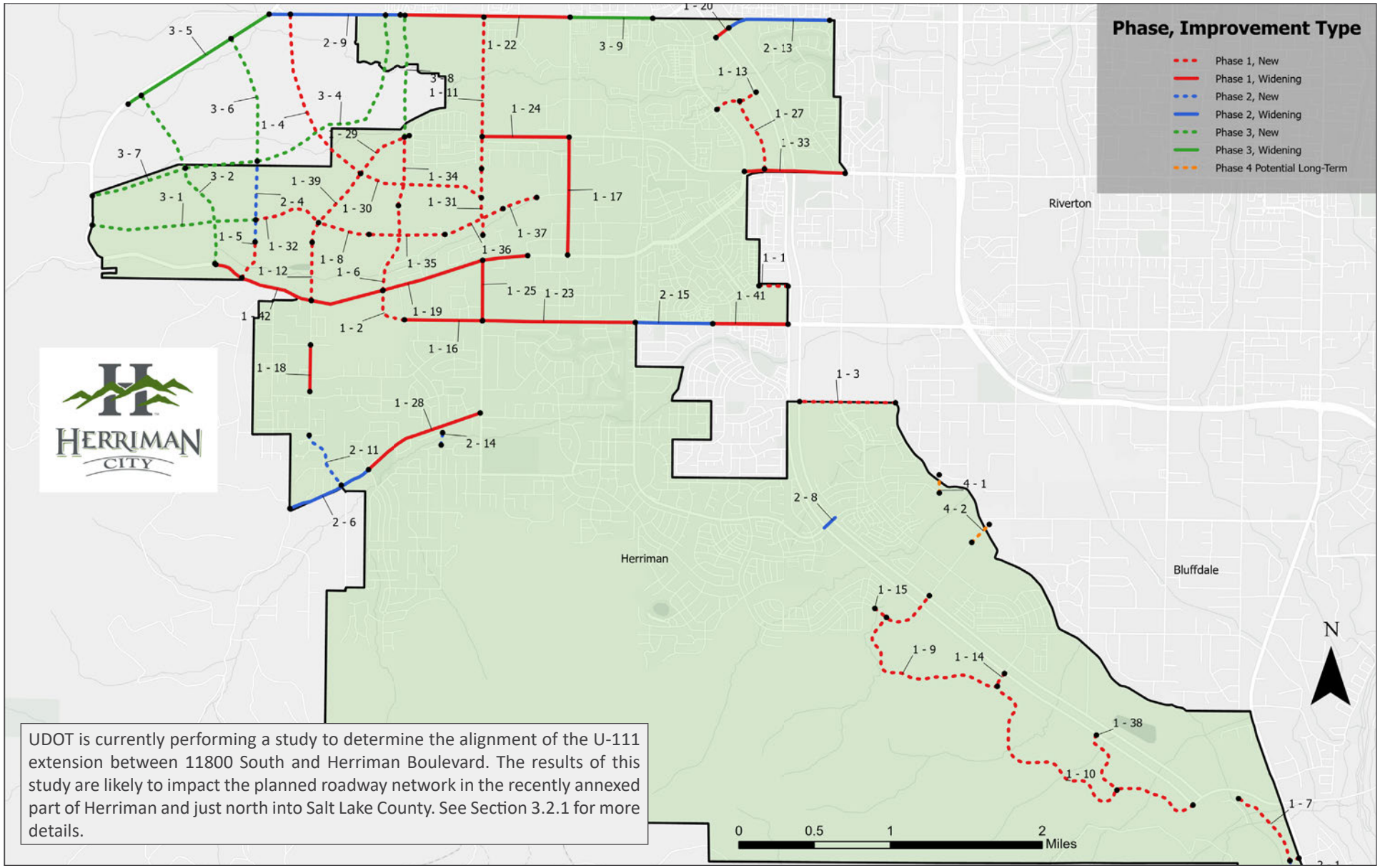


Figure 50 and Figure 51 shows the locations of recommended street improvements by phase. Note that some of the Phase 2 and Phase 3 projects are outside the current city corporate limit. Those projects will only be needed if the City annexes and expands its municipal boundary.

Figure 51: Recommended Street Improvements by Phase - Intersections

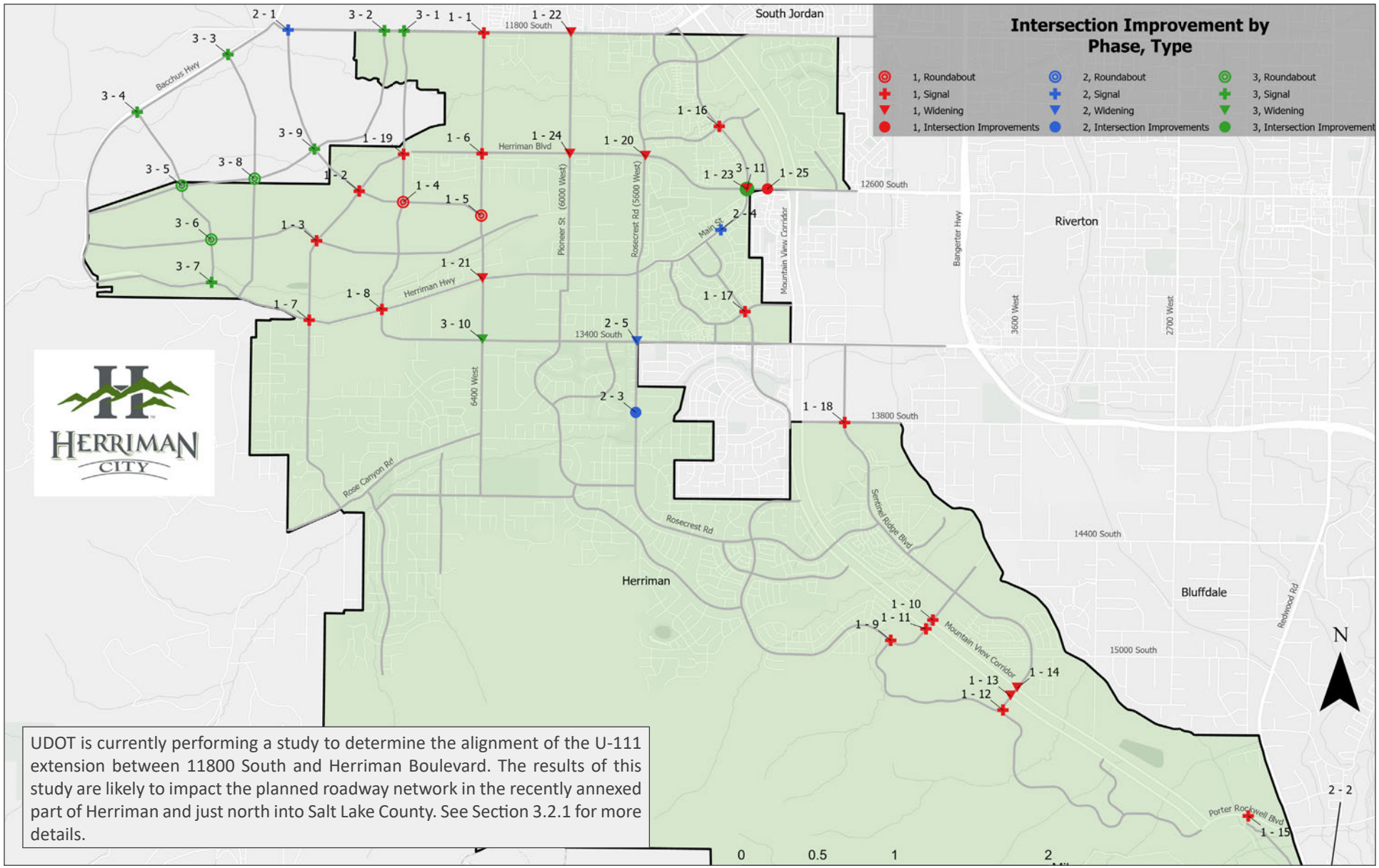


Table 11 and Table 12 list the recommended SFP projects by phase. The SFP project costs include street improvements from back-of-curb to back-of-curb, sidewalks, park strips, and drainage. Cross-section cost details can be found in Appendix B.

Table 11. Recommended Phased Facilities Plan - Roadways

Phase 1 (2022 - 2030)						
#	Roadway	From	To	Type	Functional Class	Cost
1-1	Herriman Rose Boulevard	Herriman Rose Dead End	MVC Frontage Road	New	Major Collector	$2,600,000
1-2	Dansie Blvd	Herriman Highway	13400 South Existing	New	Minor Collector	$3,300,000
1-3	13800 South	Mountain View Corridor	13800 South Bluffdale	New	Minor Collector	$7,100,000
1-4	SR-111	11800 South	Herriman Parkway	New	Major Arterial	$21,900,000
1-5	7600 West	Olympia Property Boundary	Herriman Highway	New	Minor Collector	$2,800,000
1-6	6800 West	Olympia Property Boundary	Herriman Highway	New	Minor Collector	$7,500,000
1-7	Mcdougall Road	Porter Rockwell Blvd	Redwood Road	New	Minor Collector	$6,800,000
1-8	Silver Sky Drive	7300 West	Olympia Property Boundary	New	Minor Collector	$3,600,000
1-9	Soleil Hills Drive	Juniper Crest Road	Academy Pkwy	New	Minor Collector	$12,600,000
1-10	Soleil Hills Drive	Academy Pkwy	Porter Rockwell Blvd	New	Minor Collector	$21,400,000
1-11	6400 West	11800 South @ Prosperity Drive	Olympia Property Boundary	New	Minor Collector	$12,500,000
1-12	7300 West	Olympia Property Boundary	Herriman Highway	New	Minor Collector	$4,000,000
1-13	Miller Crossing Drive	Herriman Main Street	MVC Frontage Road	New	Minor Collector	$3,100,000
1-14	Academy Parkway	Juniper Crest Road	Mountain View Corridor	New	Major Collector	$700,000
1-15	Juniper Crest Road	Juniper Crest Road Dead End	Mountain View Corridor	New	Major Collector	$3,600,000
1-16	13400 South	6800 West	6000 West	Widening	Minor Collector	$3,500,000
1-17	6000 West	Herriman Parkway	Herriman Main Street	Widening	Minor Collector	$5,800,000
1-18	7300 West	Herriman Highway	Hawthorn Leaf Drive	Widening	Minor Collector	$2,500,000
1-19	Herriman Main St	7300 West	6225 West	Widening	Major Collector	$16,000,000
1-20	11800 South	MVC Southbound	MVC Northbound	Widening	Minor Arterial	$1,500,000
1-22	11800 South	6900 West	6000 West	Widening	Major Arterial	$6,900,000
1-23	13400 South	6400 West	Rosecrest Road	Widening	Minor Arterial	$9,400,000
1-24	Herriman Parkway	6400 West	6000 West	Widening	Major Arterial	$3,900,000
1-25	6400 West	Herriman Main Street	13400 South	Widening	Minor Collector	$3,200,000
1-27	Auto Row Drive	12600 South	Miller Cross Drive	New	Minor Collector	$5,800,000
1-28	Rose Canyon Road	Spring Canyon Drive	6400 West	Widening	Major Collector	$1,200,000
1-29	Herriman Blvd	6800 West	U-111	New	Major Arterial	$7,200,000
1-30	Olympia Main Street	Herriman Blvd	6400 West	New	Major Collector	$9,600,000
1-31	6400 West	6400 West Existing	Olympia Property Boundary	New	Major Collector	$5,200,000
1-32	Silver Sky Drive	7300 West	7600 West	New	Major Collector	$5,400,000
1-33	12600 South	City Boundary	Herriman Main Street	Widening	Principal Arterial	$1,900,000
1-34	6800 West	Herriman Blvd	Olympia Property Boundary	New	Minor Collector	$4,500,000
1-35	Silver Sky Drive	Olympia Property Boundary	Olympia Property Boundary	New	Minor Collector	$5,000,000

#	Roadway	From	To	Type	Functional Class	Cost
1-36	Silver Sky Drive	Olympia Property Boundary	Olympia Property Boundary	New	Minor Collector	$4,100,000
1-37	Silver Sky Drive	Olympia Property Boundary	Silver Sky Existing/6000 West	New	Minor Collector	$2,300,000
1-38	Soleil Hills Blvd	Soleil Hills Drive	Mountain View Corridor	New	Minor Collector	$5,100,000
1-39	7300 West	U-111	Olympia Property Boundary	New	Minor Arterial	$7,200,000
1-41	13400 South	Rosecrest Road	Mountain View Corridor	Widening	Principal Arterial	$2,900,000
1-42	Herriman Main St	7300 West	City Boundary	Widening	Major Collector	$5,800,000
Phase 2 (2031 - 2040)						
#	**Roadway**	**From**	**To**	**Type**	**Functional Class**	**Cost**
2-1	Mcdougall Road	McDougall Road Existing	Dead End	New	Minor Collector	$13,200,000
2-4	7600 West	New Roadway	Olympia Property Boundary	New	Minor Collector	$5,600,000
2-6	Rose Canyon Road	Rose Canyon Road SB	Spring Canyon Drive	Widening	Major Collector	$3,900,000
2-8	Rosecrest Road	MVC South	MVC North	Widening	Major Collector	$1,300,000
2-9	11800 South	Bacchus Highway	6900 West	Widening	Major Arterial	$7,700,000
2-11	7300 West	7300 West	Rose Canyon Road	New	Minor Collector	$4,300,000
2-13	Anthem Park Blvd	Mountain View Corridor	City Boundary	Widening	Minor Arterial	$5,500,000
2-14	6600 West	Desert Lily Circle	Desert Wash Way	New	Minor Collector	$1,200,000
2-15	13400 South	Rosecrest Road	Mountain View Corridor	Widening	Principal Arterial	$2,900,000
Phase 3 (2041 - 2050)						
#	**Roadway**	**From**	**To**	**Type**	**Functional Class**	**Cost**
3-1	Silver Sky Drive	7600 West	Bacchus Hwy	New	Major Collector	$13,700,000
3-2	7900 West	Bacchus Highway	Herriman Highway	New	Minor Collector	$16,100,000
3-4	New Roadway	11800 South @ Bingham Rim Road	7900 West	New	Major Collector	$25,000,000
3-5	Bacchus Hwy	11800 South	New Roadway	Widening	Minor Arterial	$9,100,000
3-6	7600 West	New Roadway	Bacchus Hwy	New	Major Collector	$13,400,000
3-7	New Roadway	7900 West	Bacchus Hwy	New	Minor Collector	$8,400,000
3-8	6800 West	11800 South	Herriman Highway	New	Minor Collector	$8,500,000
3-9	11800 South	6000 West	Freedom Park Drive	Widening	Principal Arterial	$5,800,000
Potential Long-term						
#	**Roadway**	**From**	**To**	**Type**	**Functional Class**	**Cost**
4-1	Bruin View Drive	4000 West Dead End	4000 West Bluffdale	New	Minor Collector	$1,600,000
4-2	Real Vista Drive	Current end of Real Vista Drive	Bluffdale	New	Major Collector	$3,000,000

Table 12. Recommended Phased Facilities Plan - Intersections

Phase 1 (2022 - 2030)				
#	**Intersection**	**Improvement**	**Improvement Details**	**Cost**
1-1	11800 South & 6400 West	Signal	Left and right turn pockets	$420,000
1-2	U-111 & Herriman Blvd	Signal	Dual left (SB) and right turn pockets (all)	$460,000
1-3	7300 West & Silver Sky Drive	Signal	Left and right turn pockets	$420,000
1-4	6800 West & Olympia Main Street	Roundabout	Single lane roundabout	$870,000
1-5	Herriman Main Street & 6400 West	Roundabout	Single lane roundabout	$870,000
1-6	Herriman Blvd & 6400 West	Signal	Left and right turn pockets	$480,000
1-7	Herriman Hwy & 7300 West	Signal	Left and right turn pockets	$330,000
1-8	Herriman Hwy & Dansie Blvd	Signal	Left turn pockets (all), right turn pockets (EB)	$390,000
1-9	Juniper Crest Road & Soleil Hills Drive	Signal	Left and right turn pockets	$450,000
1-10	Real Vista Drive & MVC NB	Signal	Left and right turn pockets	$610,000
1-11	Real Vista Drive & MVC SB	Signal	Left and right turn pockets	$1,160,000
1-12	Academy Pkwy & Soleil Hills Drive	Signal	Left and right turn pockets	$450,000
1-13	Academy Pkwy & MVC SB	Widening	Left and right turn pockets	$950,000
1-14	Academy Pkwy & MVC NB	Widening	Left and right turn pockets	$260,000
1-15	Porter Rockwell Blvd & Mcdougall Road	Signal	Left and right turn pockets	$490,000
1-16	Herriman Main Street & Miller Crossing Drive	Signal	Signal only	$430,000
1-17	Herriman Rose Blvd & Fort Herriman Pkwy	Signal	Signal only	$460,000
1-18	Sentinel Ridge Blvd & 13800 South	Signal	Left and right turn pockets	$1,070,000
1-19	Herriman Blvd & 6800 West	Signal	Left and right turn pockets	$450,000
1-20	Herriman Blvd & 5600 West	Widening	EB dual left, EB/WB right-turn lanes	$850,000
1-21	Herriman Hwy & 6400 West	Widening	Right turn pockets (EB, WB, NB)	$100,000
1-22	11800 South & 6000 West	Widening	Extend WBL storage	$50,000
1-23	Herriman Blvd & Herriman Main Street	Widening	Free NBR and WBL dual lefts	$880,000
1-24	Herriman Blvd & 6000 West	Widening	WB right turn lane	$110,000
1-25	Herriman Blvd & Auto Row Drive	Intersection Improvements	To-be-determined	$840,000
Phase 2 (2031 - 2040)				
#	**Intersection**	**Improvement**	**Improvement Details**	**Cost**
2-1	U-111 & 11800 South	Signal	Dual lefts (EB/WB) and right turn pockets (SB/NB)	$470,000
2-2	Redwood Road & Mcdougall Road	Signal	Left and right turn pockets	$1,070,000
2-3	5600 West & Rocky Point Drive	Intersection Improvements	Signal or single lane roundabout	$1,120,000
2-4	Herriman Main Street & Brundisi Way	Signal	Signal only	$520,000
2-5	13400 South & 5600 West	Widening	SB/WB dual lefts	$990,000

Phase 3 (2041 - 2050)				
#	Intersection	Improvement	Improvement Details	Cost
3-1	11800 South & 6800 West	Signal	Left and right turn pockets	$240,000
3-2	11800 South & 6900 West	Signal	Left and right turn pockets	$240,000
3-3	Bacchus Hwy & 7600 West	Signal	Left and right turn pockets	$240,000
3-4	Bacchus Hwy & 7900 West	Signal	Left and right turn pockets	$240,000
3-5	7900 West & New Road	Roundabout	Hybrid roundabout	$770,000
3-6	7900 West & Silver Sky Drive	Roundabout	Single lane roundabout	$770,000
3-7	7900 West & Herriman Hwy	Signal	Left and right turn pockets	$1,020,000
3-8	7600 West & New Road	Roundabout	Two-lane roundabout	$770,000
3-9	U-111 & New Road	Signal	Left turn lane (all), right turn lane (EB/WB)	$520,000
3-10	13400 South & 6400 West	Widening	Left and right turn pockets and WB dual left	$980,000
3-11	12600 South & Herriman Main Street	Intersection Improvements	Innovative Intersection or Fly-overs	$5,000,000





HERRIMAN CITY 2022
IMPACT FEE FACILITIES PLAN

HERRIMAN CITY

WCG WALL CONSULTANT GROUP

December 2022

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I. INTRODUCTION

A. OVERVIEW

The purpose of the Herriman City Transportation Impact Fee Facilities Plan (IFFP) is to identify public roadway improvements that are needed to accommodate anticipated development and to evaluate the amount that is impact fee eligible. Utah law requires cities to prepare an IFFP prior to preparing an impact fee analysis (IFA) and establishing an impact fee. According to Utah State Code Title 11, Chapter 36a, Section 302, the IFFP is required to accomplish the following:

- Identify the existing level of service (LOS)
- Establish a proposed LOS
- Identify any excess capacity to accommodate future growth at the proposed LOS
- Identify demands placed upon existing public facilities by new development activity at the proposed LOS
- Identify the means by which the political entity will meet those growth demands
- Include a general consideration of all potential revenue sources to finance system improvements

This analysis incorporates information from the 2022 update to the Herriman Transportation Master Plan (TMP), which was updated by Wall Consultant Group (WCG). The TMP includes information regarding the existing and future demands on the transportation infrastructure and the proposed improvements to provide acceptable levels of service. The TMP provides additional detail regarding the methodology used to determine future travel demand.

This document focuses on the improvements that will be needed over the next six years. Utah law requires that any impact fees collected for these improvements be spent within six years of being collected. Only capital improvements are included in this plan; all other maintenance and operation costs are assumed to be covered through the City's General Fund as tax revenues increase due to additional development. The city council may choose to adopt a fee lower than the maximum impact fee identified, but not higher.

B. SERVICE AREA

The service area for the transportation impact fee is the entire city of Herriman. Figure 1 shows the current municipal boundaries of Herriman City, which function as the service area for the impact fee analysis.

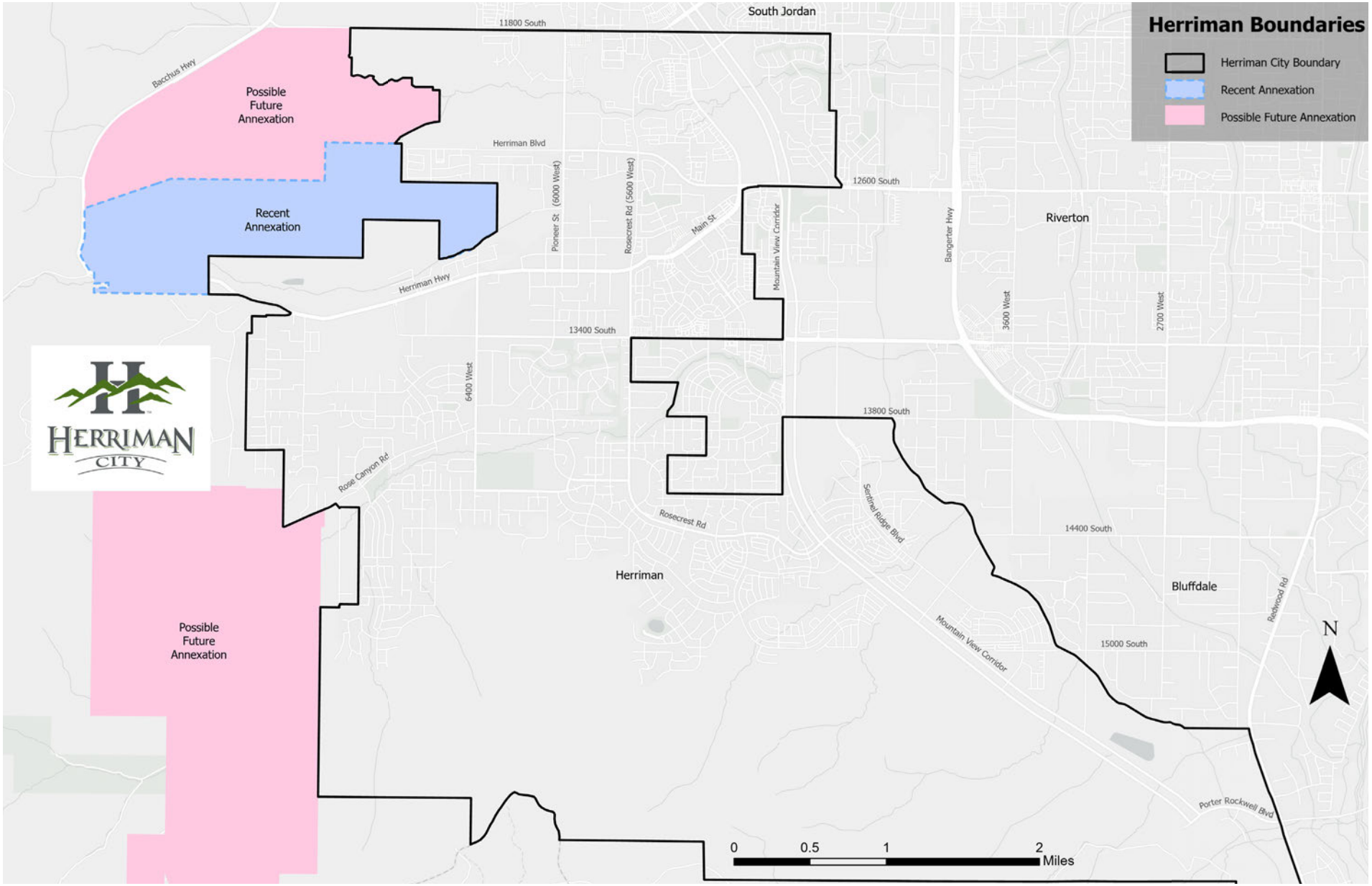


Figure 1: Service Area – Herriman City

II. ANALYSIS METHODOLOGY

A. PURPOSE

The purpose of this chapter is to discuss the Level of Service (LOS) methodology and the proposed LOS threshold for Herriman City roadways. According to Utah State Code Title 11, Chapter 36a, Section 102, LOS is defined as "the defined performance standard or unit of demand for each capital component of a public facility within a service area." The LOS of a roadway segment or intersection is used to determine if capacity improvements are necessary. LOS is measured on a roadway segment using its daily traffic volume and at an intersection based on a high level analysis of the intersection.

B. PROPOSED LOS

Level of Service (LOS) is a term that describes the operating performance of an intersection or roadway. LOS is measured quantitatively and reported on a scale from A to F, with A representing the best performance and F the worst. A visual representation of each LOS is shown in Figure 2.

The Highway Capacity Manual (HCM), 7th ed. (2022) methodology was used in this analysis to remain consistent with "state of the practice" professional standards. The capacity of roadway segments is determined based on the number of lanes and/or functional classification of the roadway. The roadway LOS is then determined by comparing the actual traffic volumes with the capacity. Industry standard is that LOS A through LOS D is acceptable for roadway segments. Table 1 summarizes the maximum acceptable daily capacities (LOS D) for roadway segments used in the Herriman TMP (2022).



LEVEL OF SERVICES

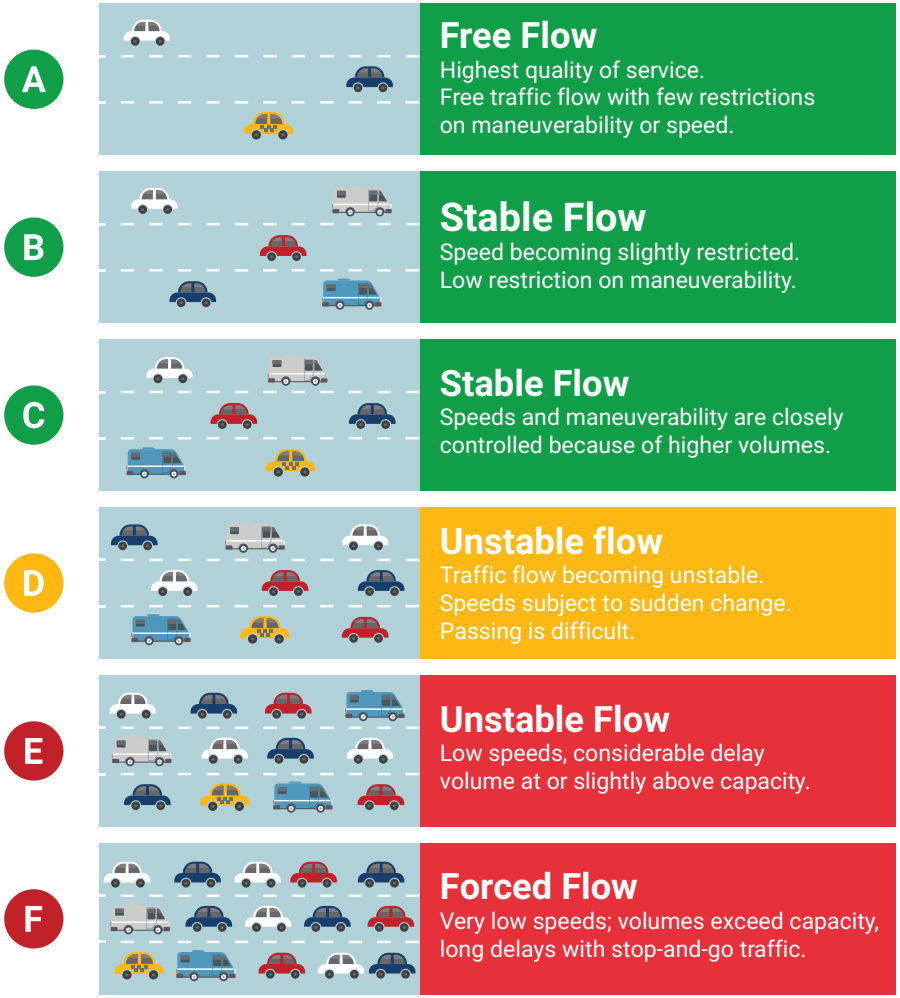
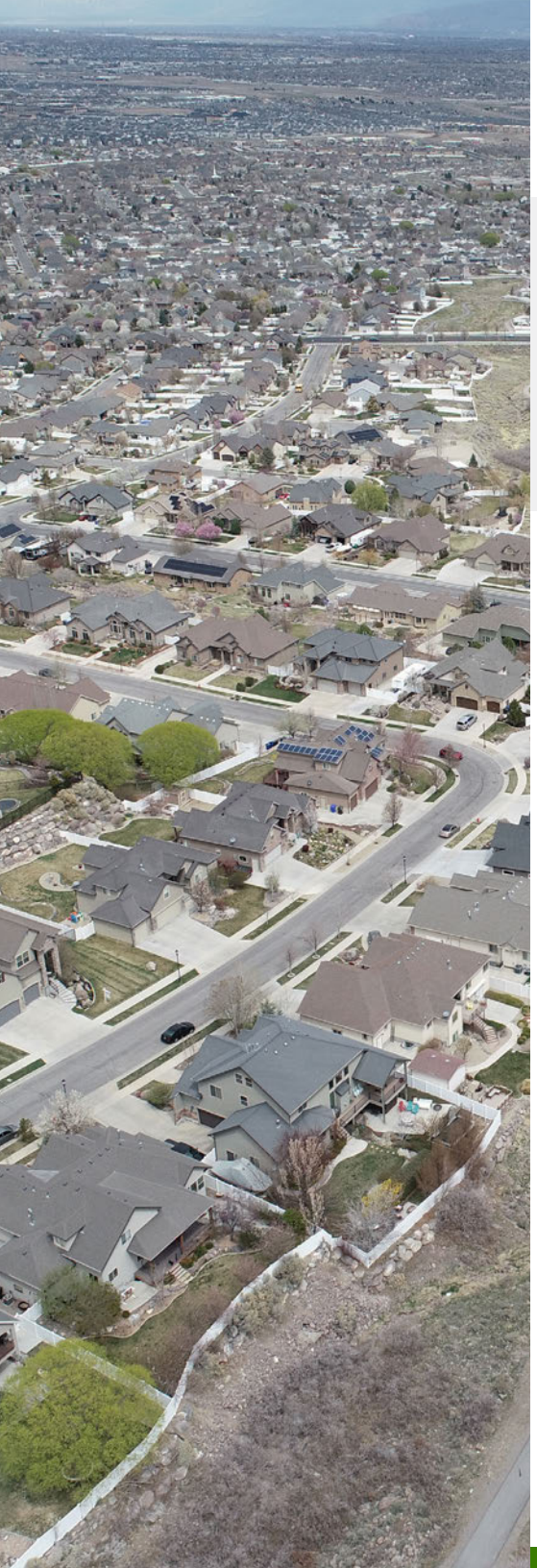


Figure 2: Level of Service (LOS) categories

Table 1: LOS D Daily Maximum Capacities (Two Way Daily Trips)

Lanes	Major Arterial	Minor Arterial	Major Collector	Minor Collector
2	12,500	11,300	11,200	9,800
3	19,100	16,000	17,500	13,500
4	38,300	32,500	30,900	22,700
5	41,000	35,000	37,200	31,000
6	52,800	46,000	-	-
7	57,000	50,000	-	-



The proposed LOS provides a standard of evaluation for roadway conditions. This standard will determine whether or not a roadway will need improvements. According to Utah State Code Title 11, Chapter 36a, Section 302:

> (b) A proposed level of service may diminish or equal the existing level of service.
>
> (c) A proposed level of service may:
>
> (i) exceed the existing level of service if, independent of the use of impact fees, the political subdivision or private entity provides, implements, and maintains the means to increase the existing level of service for existing demand within six years of the date on which new growth is charged for the proposed level of service; or
>
> (ii) establish a new public facility if, independent of the use of impact fees, the political subdivision or private entity provides, implements, and maintains the means to increase the existing level of service for existing demand within six years of the date on which new growth is charged for the proposed level of service.

As noted in the Herriman TMP (2022), the proposed LOS threshold for Herriman is LOS D. Therefore, improvements are recommended and eligible for impact fees for roadways that are projected to operate at LOS E or F in the future.

C. EXCESS CAPACITY

An important element of the IFFP is the determination of excess capacity on the roadway network. Excess capacity is defined as the amount of available capacity on any given street in the roadway network under existing conditions. This capacity is available for new development in the City before additional infrastructure will be needed. This represents a buy-in component from the City if the existing residents and businesses have already paid for these improvements.

New roads do not have any excess capacity, and roads that are not under city jurisdiction have their capacity information removed from the calculations. The excess capacity for roadways that are identified as needing improvements in the IFFP was calculated and accounted for in the impact fee calculations.

D. TRIPS

The unit of demand for transportation impact is the vehicle trip. A vehicle trip is defined by the Institute of Transportation Engineers (ITE) as a "single or one-direction vehicle movement with either the origin or the destination (exiting or entering) inside a study site". The total traffic impact of a new development can be determined by the sum of the total number of vehicle trips generated by a development in a typical weekday. This trip generation number or impact can be estimated for an individual development using the ITE Trip Generation Manual, 11th ed. (2021). ITE's trip data is based on data collection at numerous sites over several decades.

An additional consideration is that certain developments generate pass-by trips. Pass-by trips are trips taken on the way from one development to another. An example of this is someone stopping at a gas station on the way home from work. The pass-by trip is still counted at the gas station access. However, the pass-by trip was completed by a vehicle already on the road due to other developments.

Pass-by trips do not add traffic to the roadway and, therefore, do not create additional impact. Many land-use types in the ITE Trip Generation Manual have a suggested reduction for pass-by trips where applicable. In each case, the trip reduction rate will be applied to the trip generation rate used in the IFA.



E. CUT-THROUGH TRIPS

Trips that do not have an origin or destination within Herriman City need to be removed from the impact fee calculation. For example, if a vehicle starts a trip in West Jordan, travels through Herriman, and ends that trip in Lehi, this trip adds traffic to a Herriman City roadway. However, the cost of the incremental congestion it adds to Herriman City roadways cannot be recovered through impact fees. The details behind these calculations are described in Chapter 4 of this document.

The travel demand model developed specifically for the Herriman Transportation Master Plan was utilized to determine cut-through percentages on Herriman City roadways. A "select link" analysis was performed to determine cut-through percentages. This analysis examines a specific roadway link and traces the origins and destinations of every vehicle trip on that link. All vehicle trips that had both an origin and destination outside of Herriman City were totaled, then divided by the total link volume to obtain the cut-through percentage. This analysis was performed on all major roadways within Herriman City that had the potential for cut-through vehicle trips.

Given Herriman's location in the southwest corner of Salt Lake County cut-through trips are generally minimal. Most roadways with Herriman City were found to have cut-through rates of 5% or less, with many roadways have no cut-through vehicles. Roadways that border adjacent municipalities, such as the proposed 13800 South roadway, had much higher cut-through rates due to their location on the edge of Herriman City.

F. INTERSECTION PROJECTS

If trips resulting from new growth require an intersection to be upgrade, the full cost of the intersection is impact fee eligible. Thus, existing reroute and excess capacity are not accounted for with intersection projects.

G. REROUTED EXISTING TRIPS

New roadways may result in existing trips being re-routed from existing roadways to the new road. Therefore, the future volume on the roadway may not represent only trips from new development. Therefore, the amount of existing trips that will be re-routed to the new road is estimated and accounted for in the impact fee eligible calculations. These trips are removed from the new capacity used calculation, thus reducing the percent of the project cost that is impact fee eligible.

H. SYSTEM AND PROJECT IMPROVEMENT

There are three primary classifications of roads defined in the Herriman TMP: local and minor local streets, collector and minor collector streets, and arterials. Some of these classifications have sub-categories defined by minor, major and principal. These are defined in the roadway classification map in the Herriman TMP.

Improvements made to collectors and arterials are considered system improvements as defined in the Utah Impact Fee Law, as these streets serve users from multiple developments. All intersection improvements on existing and future collectors and arterials are also considered system improvements. System improvements may include anything within the roadway, such as curb and gutter, asphalt, road base, sidewalks/trails, lighting, and signing for collectors and arterials. These projects are eligible to be funded with impact fees and are included in this IFFP.



III. TRANSPORTATION DEMANDS

A. PURPOSE

The purpose of this chapter is to identify the existing and future transportation demands on Herriman roadway facilities. Future transportation demands are based on new development in the City. Once defined, the transportation demands help identify roadways that have excess capacity and those that require additional capacity due to high transportation demands.

B. EXISTING ROADWAY CONDITIONS

Existing roadway conditions were determined by collecting traffic data on major roadways in the City, as well as from a variety of traffic data sources. These additional sources include data collected by Herriman City, the Utah Department of Transportation (UDOT), and the previous TMP. The traffic volumes were compared with each roadway capacity to identify the LOS of each segment.

The existing LOS of major roadways in Herriman City is shown in Figure 2. As shown, all of the major City roadways are currently operating at an acceptable LOS (D or better).

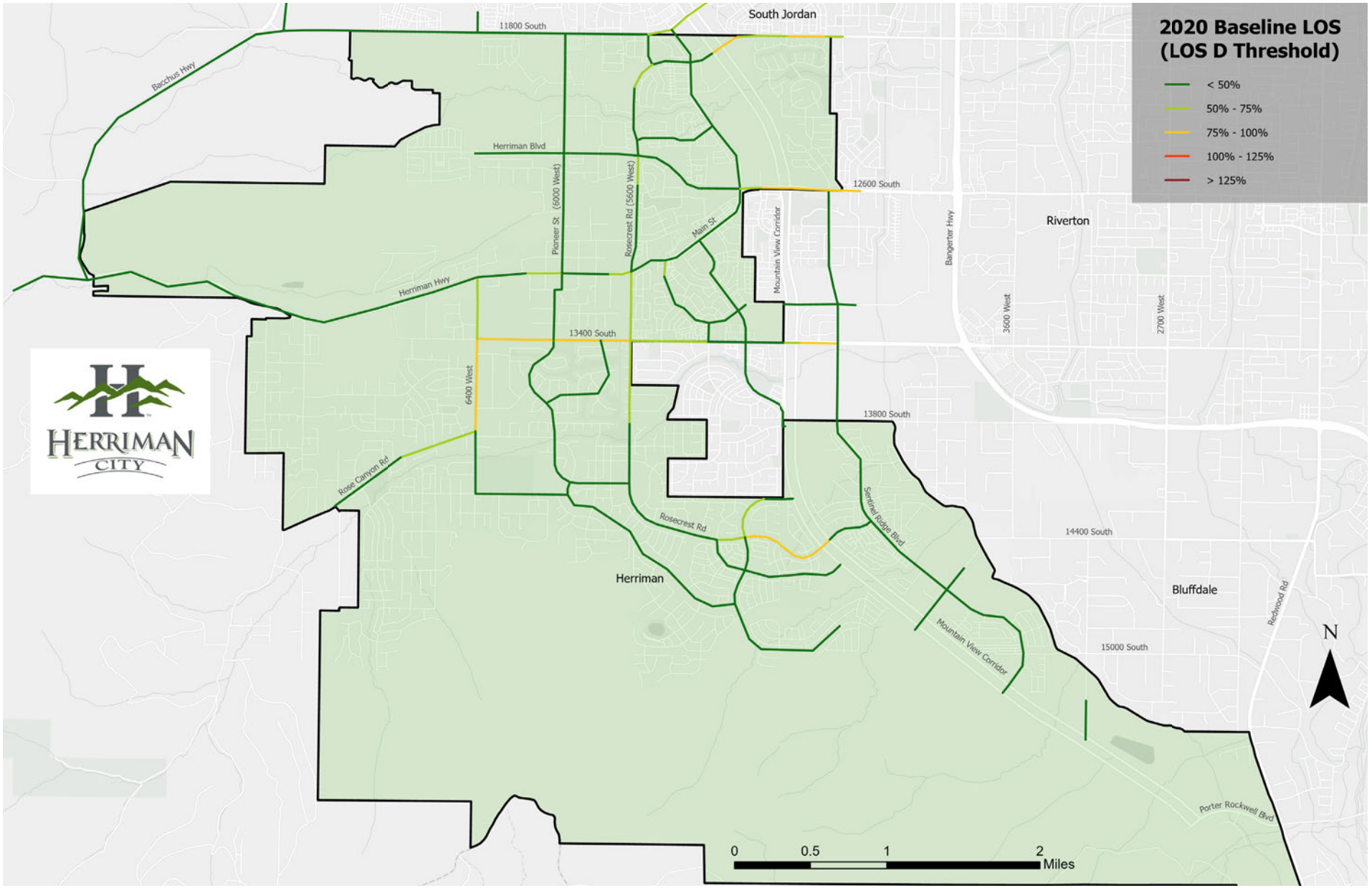


Figure 2: Existing (2020) Level of Service of Major Roads



C. FUTURE ROADWAY CONDITIONS

Future traffic volumes were projected using the travel demand model. WCG used the latest model from Wasatch Front Regional Council (WFRC), which is the local metropolitan planning organization (MPO), and refined it to better reflect conditions in Herriman and the surrounding areas. The existing traffic volumes and data from planned developments and land uses were used to adjust the model to estimate future traffic volumes. The model was developed to estimate future volumes in 2030, assuming a minimal build condition, meaning that that no City widening projects were assumed, but new roadways were included. A minimal build scenario is intended to show what the roadway network would be like in the future if no widening action is taken to improve the City roadway network.[1] The future (2030) minimal build LOS is shown in Figure 3. As shown, there are a number of roadways that are anticipated to deteriorate to LOS E or F.

Based on the analysis in the Herriman TMP, the anticipated growth resulting from new development in Herriman City from 2020 to 2030 is 170,612 daily trips.

1 It is assumed that for new development to access the existing roadway network these new roadways will need to be constructed. Thus, there is no rationale in running a "No Build" scenario that still assumes significant household and employment growth since that could never realistically occur.

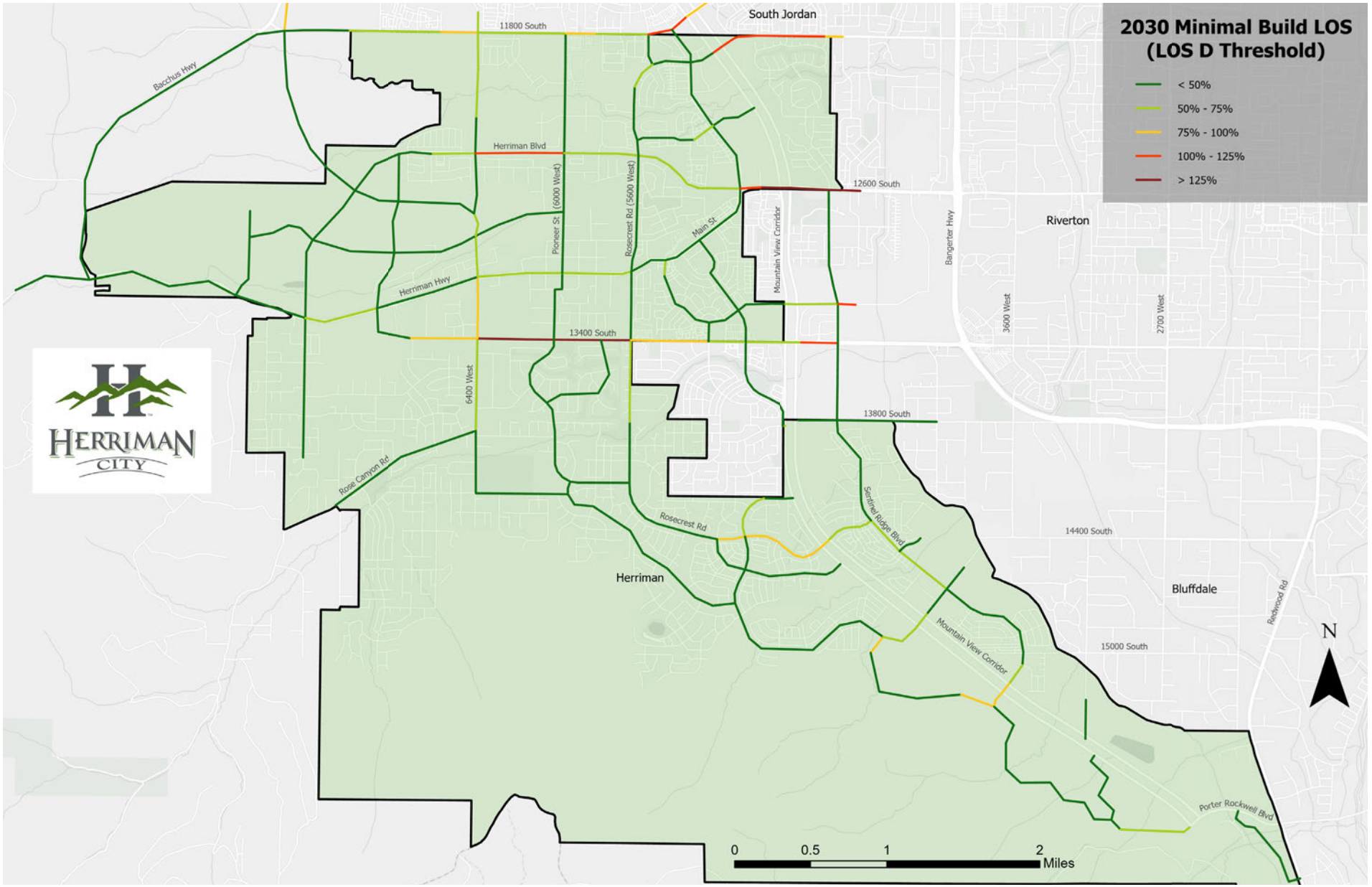


Figure 3: Future 2030 Minimal Build LOS



IV. MITIGATION PROJECTS

A. PURPOSE

The purpose of this chapter is to discuss the recommended improvements and new roadways that will mitigate capacity deficiencies on City roadways, as well as the cost of those improvements. The cost of the recommended improvements is critical in the calculation of the impact fees.

B. FUTURE PROJECTS

Poor levels of service on roadways are generally mitigated by building new roads or adding travel lanes. In some cases, additional lanes can be gained by re-striping the existing pavement width. This can be accomplished by eliminating on-street parking, creating narrower travel lanes, or adding two-way left-turn lanes where they don't currently exist. Improvements can also be made at intersections to improve LOS by adding turn lanes or by changing the intersection type or the intersection control. At signalized intersections, methods to improve intersection LOS include additional left- and right-turn lanes and signal-timing improvements.

The existing and future (2030) no-build scenarios were used as a basis to predict the necessary projects to include in the IFFP. For the purposes of this IFFP, only projects that are planned to be completed by 2030 will be considered. Table 2 shows all City projects expected to be constructed by 2030 to meet the demands placed on the roadway network by new development. These projects are included in the IFFP analysis. UDOT projects will be funded entirely with state funds and are therefore not eligible for impact fee expenditure and are not included in this analysis.

The Impact Fees Act allows for the inclusion of a time price differential to ensure the future value of costs incurred at a later date are accurately calculated to include the costs of construction inflation. This analysis includes an inflation component to reflect the future cost of facilities. The impact fee analysis should be updated regularly to account for changes in cost estimates over time.



C. PROJECT COSTS ATTRIBUTABLE TO FUTURE GROWTH

Table 2 represents all projects expected to be constructed by 2030 based on the analysis in the TMP. The total cost for all projects is estimated to be $253,250,000. Only a portion of the total cost is impact fee eligible. Some projects are expected to be fully funded by developers. For example, Olympia is expected to pay for all roadways and intersections within their project area and a predetermined percentage for projects outside, but adjacent to, the Olympia property. The City will need to find funding to cover the portion of the projects that are not impact fee eligible, and are not fully funded by developers. The cost due to future growth can be shared by new development through the assessment of transportation impact fees.

The amount of each project to be funded by impact fees varies depending on the cut-through traffic, rerouting existing traffic, projected traffic volumes, and capacity of each roadway. A vehicle trip is considered cut-through when the origin and the destination for a specific trip occurs outside the city limits. A cut-through traffic analysis was completed on key roadways where projects are planned in the city using a select-link analysis within the travel demand model. Specific cut-through values were assigned to each project roadway based on this analysis. The select-link analysis is described in the cut-through section in Chapter 2.

The impact fee eligibility of each roadway project was calculated by dividing the total new development-related traffic volume of the future (2030) traffic volume by roadway capacity added by the proposed project. Then cut-through traffic and existing rerouted traffic were removed to get the % Impact Fee Eligible. This eligibility percentage was then multiplied by the project cost to calculate the impact fee eligible cost for each project.

$$\text{2030 ADT in Excess of 2020 Capacity} = \text{2030 ADT}^{1} - \text{2020 Capacity}$$

1. If 2030 ADT is greater than 2030 capacity, then use 2030 capacity

$$\text{\% Impact Fee Eligible} = \frac{\text{2030 ADT in Excess of 2020 Capacity}}{\text{New Capacity}} \times (1 - \text{\% cut through} - \text{\% existing reroute})$$

$$\text{Impact Fee Eligble Cost} = \text{\% Impact Fee Eliglbe} \times \text{Total Project Cost}$$

For intersection projects the calculations are similar, however only the percent cut-through is used for calculating the percent impact fee eligible.

Funding for regional projects can also come through other sources, such as the local metropolitan planning organization or the County.

A summary of the costs and impact fee eligibility of each project is shown in Table 2 and Table 3. As shown, the total impact fee eligible cost for planned Herriman City projects expected to be completed by 2030 is $66,320,789.

#	Roadway	From	To	Type	Functional Class	Cost	Cost Share Olympia	Other Outside Funding Sources[1]	'30 ADT in Excess of '20 Capacity	New Capacity	% Cut-through	% Existing Reroute	% Impact Fee Eligible (until 2030)	Impact Fees Beyond 2030	Impact Fee Eligible Cost (Until 2030)
Phase 1 (2022 - 2030)															
1-1	Herriman Rose Boulevard	Herriman Rose Dead End	MVC Frontage Road	New	Major Collector	$ 2,628,508	$ -	$ -	8,000	17,500	0%	50%	23%	27%	$ 604,557
1-2	Dansie Blvd	Herriman Highway	13400 South Existing	New	Minor Collector	$ 3,279,482	$ -	$ -	8,000	13,500	1%	20%	47%	32%	$ 1,541,357
1-3	13800 South	Mountain View Corridor	13800 South Bluffdale	New	Minor Collector	$ 7,100,432	$ -	$ 3,550,216	2,000	13,500	29%	30%	6%	35%	$ 213,013
1-4	SR-111	11800 South	Herriman Parkway	New	Major Arterial	$ 21,880,202	$ -	$21,880,202				Funded by UDOT			$ -
1-5	7600 West	Olympia Property Boundary	Herriman Highway	New	Minor Collector	$ 2,800,000	$ -	$ -	3,000	13,500	0%	0%	22%	78%	$ 616,000
1-6	6800 West	Olympia Property Boundary	Herriman Highway	New	Minor Collector	$ 7,496,854	$ -	$ -	4,000	13,500	1%	0%	29%	70%	$ 2,174,088
1-7	Mcdougall Road	Porter Rockwell Blvd	Redwood Road	New	Minor Collector	$ 6,832,500	$ -	$ -	3,000	13,500	0%	0%	22%	78%	$ 1,503,150
1-8	Silver Sky Drive	7300 West	Olympia Property Boundary	New	Minor Collector	$ 3,603,542	$ 3,603,542	$ -				Built by Olympia			$ -
1-9	Soleil Hills Drive	Juniper Crest Road	Academy Pkwy	New	Minor Collector	$ 12,595,592	$ -	$ -	10,000	13,500	0%	0%	74%	26%	$ 9,320,738
1-10	Soleil Hills Drive	Academy Pkwy	Porter Rockwell Blvd	New	Minor Collector	$ 21,409,763	$ -	$ -	8,000	13,500	0%	0%	59%	41%	$12,631,760
1-11	6400 West	11800 South @ Prosperity Drive	Olympia Property Boundary	New	Minor Collector	$ 12,491,534	$ -	$ -	10,000	13,500	1%	5%	70%	24%	$ 8,744,074
1-12	7300 West	Olympia Property Boundary	Herriman Highway	New	Minor Collector	$ 3,992,173	$ -	$ -	2,000	13,500	0%	0%	15%	85%	$ 598,826
1-13	Miller Crossing Drive	Herriman Main Street	MVC Frontage Road	New	Minor Collector	$ 3,094,744	$ -	$ 3,094,744				Built by Developer			$ -
1-14	Academy Parkway	Juniper Crest Road	Mountain View Corridor	New	Major Collector	$ 686,836	$ -	$ -	16,000	17,500	0%	0%	91%	9%	$ 625,021
1-15	Juniper Crest Road	Juniper Crest Road Dead End	Mountain View Corridor	New	Major Collector	$ 3,608,363	$ -	$ -	12,000	17,500	0%	30%	48%	22%	$ 1,732,014
1-16	13400 South	6800 West	6000 West	Widening[2]	Minor Collector	$ 3,479,029	$ -	$ -	5,200	3,700	0%	0%	100%	0%	$ 3,479,029
1-17	6000 West	Herriman Parkway	Herriman Main Street	Widening[2]	Minor Collector	$ 5,779,879	$ -	$ -	-4,800	3,700	0%	0%	0%	100%	$ -
1-18	7300 West	Herriman Highway	Hawthorn Leaf Drive	Widening[2]	Minor Collector	$ 2,530,813	$ -	$ -	-5,800	3,700	0%	0%	0%	100%	$ -
1-19	Herriman Main St	7300 West	6225 West	Widening[2]	Major Collector	$ 16,000,000	$ -	$10,000,000	1,200	7,700	0%	0%	16%	84%	$ 960,000
1-20	11800 South	MVC Southbound	MVC Northbound	Widening[2]	Minor Arterial	$ 1,532,644	$ -	$ -	5,500	17,500	5%	0%	30%	65%	$ 459,793
1-22	11800 South	6900 West	6000 West	Widening[2]	Major Arterial	$ 6,925,191	$ -	$ 3,462,596	4,800	29,800	0%	0%	16%	84%	$ 554,015
1-23	13400 South	6400 West	Rosecrest Road	Widening[2]	Minor Arterial	$ 9,443,745	$ -	$ -	8,000	19,000	4%	0%	40%	56%	$ 3,777,498
1-24	Herriman Parkway	6400 West	6000 West	Widening[2]	Major Arterial	$ 3,860,220	$ -	$ -	6,800	29,800	5%	0%	22%	73%	$ 849,248
1-25	6400 West	Herriman Main Street	13400 South	Widening[2]	Minor Collector	$ 3,233,126	$ -	$ -	4,200	3,700	3%	0%	97%	0%	$ 3,136,132
1-27	Auto Row Drive	12600 South	Miller Cross Drive	New	Minor Collector	$ 5,831,663	$ -	$ 5,831,663				Built by Developer			$ -
1-28	Rose Canyon Road	Spring Canyon Drive	6400 West	Widening[2]	Major Collector	$ 1,248,313	$ -	$ -	-3,200	6,300	10%	0%	0%	90%	$ -
1-29	Herriman Blvd	6800 West	U-111	New	Major Arterial	$ 7,168,154	$ 7,168,154	$ -				Built by Olympia			$ -
1-30	Olympia Main Street	Herriman Blvd	6400 West	New	Major Collector	$ 9,561,036	$ 9,561,036	$ -				Built by Olympia			$ -
1-31	6400 West	6400 West Existing	Olympia Property Boundary	New	Major Collector	$ 5,206,537	$ 5,206,537	$ -				Built by Olympia			$ -
1-32	Silver Sky Drive	7300 West	7600 West	New	Major Collector	$ 5,350,284	$ 5,350,284	$ -				Built by Olympia			$ -
1-33	12600 South	City Boundary	Herriman Main Street	Widening[2]	Principal Arterial	$ 1,888,978	$ -	$ -	16,000	16,000	2%	0%	98%	0%	$ 1,851,198
1-34	6800 West	Herriman Blvd	Olympia Property Boundary	New	Minor Collector	$ 4,507,727	$ 4,507,727	$ -				Built by Olympia			$ -
1-35	Silver Sky Drive	Olympia Property Boundary	Olympia Property Boundary	New	Minor Collector	$ 4,990,384	$ -	$ -	3,000	13,500	0%	0%	22%	78%	$ 1,097,884
1-36	Silver Sky Drive	Olympia Property Boundary	Olympia Property Boundary	New	Minor Collector	$ 4,141,622	$ 4,141,622	$ -				Built by Olympia			$ -
1-37	Silver Sky Drive	Olympia Property Boundary	Silver Sky Existing/6000 West	New	Minor Collector	$ 2,346,120	$ -	$ -	3,000	13,500	0%	0%	22%	78%	$ 516,146
1-38	Soleil Hills Blvd	Soleil Hills Drive	Mountain View Corridor	New	Minor Collector	$ 5,128,208	$ -	$ -	2,000	13,500	0%	0%	15%	85%	$ 769,231
1-39	7300 West	U-111	Olympia Property Boundary	New	Minor Arterial	$ 7,226,719	$ 7,226,719	$ -				Built by Olympia			$ -
1-41	13400 South	Rosecrest Road	Mountain View Corridor	Widening[2]	Principal Arterial	$ 2,917,755	$ -	$ -	-19,000	0		Not Eligible (no added capacity)			$ -
1-42	Herriman Main St	7300 West	City Boundary	Widening[2]	Major Collector	$ 5,820,202	$ -	$ -	-8,200	6,300	0%	0%	0%	100%	$ -
						TOTAL	**$ 239,618,874**	**$46,765,621**	**$47,819,421**						**$57,754,774**

1. WFRC STIP (State Transportation Improvement Program), UDOT, adjacent cities, or other external funding sources

2. Widening costs estimates represent the cost of widening for new growth.

Table 2: Potential Impact Fee Eligible Roadway Segment Projects

#	Intersection	Improvement	Improvement Details	Cost	Percentage Olympia	Cost Share Olympia	Other Outside Funding Sources[1]	% Cut-through	% Impact Fee Eligible	Impact Fee Eligible Cost
Phase 1 (2022 - 2030)										
1-1	11800 South & 6400 West	Signal	Left and right turn pockets	$ 421,278	10%	$ 42,128	$ 210,639	0%	100%	$ 168,511
1-2	U-111 & Herriman Blvd	Signal	Dual left (SB) and right turn pockets (all)	$ 455,532	52%	$ 236,877	$ -	5%	95%	$ 207,723
1-3	7300 West & Silver Sky Drive	Signal	Left and right turn pockets	$ 420,314	100%	$ 420,314	$ -	Funded by Olympia		$ -
1-4	6800 West & Olympia Main Street	Roundabout	Single lane roundabout	$ 874,474	100%	$ 874,474	$ -	Funded by Olympia		$ -
1-5	Herriman Main Street & 6400 West	Roundabout	Single lane roundabout	$ 874,474	100%	$ 874,474	$ -	Funded by Olympia		$ -
1-6	Herriman Blvd & 6400 West	Signal	Left and right turn pockets	$ 476,884	56%	$ 267,055	$ -	5%	95%	$ 199,338
1-7	Herriman Hwy & 7300 West	Signal	Left and right turn pockets	$ 330,994	14%	$ 46,339	$ -	0%	100%	$ 284,655
1-8	Herriman Hwy & Dansie Blvd	Signal	Left turn pockets (all), right turn pockets (EB)	$ 394,284	26%	$ 102,514	$ -	1%	99%	$ 288,852
1-9	Juniper Crest Road & Soleil Hills Drive	Signal	Left and right turn pockets	$ 445,962	0%	$ -	$ -	0%	100%	$ 445,962
1-10	Real Vista Drive & MVC NB	Signal	Left and right turn pockets	$ 614,602	0%	$ -	$ -	5%	95%	$ 583,872
1-11	Real Vista Drive & MVC SB	Signal	Left and right turn pockets	$ 1,164,324	0%	$ -	$ -	5%	95%	$ 1,106,108
1-12	Academy Pkwy & Soleil Hills Drive	Signal	Left and right turn pockets	$ 445,962	0%	$ -	$ -	0%	100%	$ 445,962
1-13	Academy Pkwy & MVC SB	Widening	Left and right turn pockets	$ 947,425	0%	$ -	$ -	5%	95%	$ 900,053
1-14	Academy Pkwy & MVC NB	Widening	Left and right turn pockets	$ 255,840	0%	$ -	$ -	5%	95%	$ 243,048
1-15	Porter Rockwell Blvd & Mcdougall Road	Signal	Left and right turn pockets	$ 488,013	0%	$ -	$ 488,013	Funded by UDOT		$ -
1-16	Herriman Main Street & Miller Crossing Drive	Signal	Signal only	$ 426,000	0%	$ -	$ -	0%	100%	$ 426,000
1-17	Herriman Rose Blvd & Fort Herriman Pkwy	Signal	Signal only	$ 460,962	0%	$ -	$ -	0%	100%	$ 460,962
1-18	Sentinel Ridge Blvd & 13800 South	Signal	Left and right turn pockets	$ 1,071,235	0%	$ -	$ 535,618	29%	71%	$ 380,288
1-19	Herriman Blvd & 6800 West	Signal	Left and right turn pockets	$ 454,384	69%	$ 313,525	$ -	5%	95%	$ 133,816
1-20	Herriman Blvd & 5600 West	Widening	EB dual left, EB/WB right-turn lanes	$ 852,154	23%	$ 195,995	$ -	5%	95%	$ 623,351
1-21	Herriman Hwy & 6400 West	Widening	Right turn pockets (EB, WB, NB)	$ 104,075	20%	$ 20,815	$ -	0%	100%	$ 83,260
1-22	11800 South & 6000 West	Widening	Extend WBL storage	$ 45,808	9%	$ 4,123	$ 22,904	0%	100%	$ 18,781
1-23	Herriman Blvd & Herriman Main Street	Widening	Free NBR and WBL dual lefts	$ 882,802	16%	$ 141,248	$ -	5%	95%	$ 704,476
1-24	Herriman Blvd & 6000 West	Widening	WB right turn lane	$ 108,641	37%	$ 40,197	$ -	5%	95%	$ 65,022
1-25	Herriman Blvd & Auto Row Drive	Intersection Improvements	To-be-determined	$ 837,870	0%	$ -	$ -	5%	95%	$ 795,977
			TOTAL	**$ 13,854,292**		**$ 3,580,078**	**$ 1,257,174**			**$ 8,566,016**

1. WFRC STIP (State Transportation Improvement Program), UDOT, adjacent cities, or other external funding sources

Table 3: Potential Impact Fee Eligible Intersection Projects



V. FUNDING SOURCES

A. PURPOSE

The purpose of this chapter is to identify the funding sources that are available for roadway improvement projects. All possible revenue sources have been considered as a means of financing transportation capital improvements needed as a result of new growth. Funding sources for transportation are essential to enable the recommended improvements in Herriman City to be built. This chapter discusses the potential revenue sources that could be used to fund transportation needs.

Transportation routes often span multiple jurisdictions and provide regional significance to the transportation network. As a result, other government jurisdictions or agencies often help pay for such regional benefits. Those jurisdictions and agencies could include the Federal Government, the State (UDOT), the County, and the local MPO (WFRC). The City will need to continue to partner and work with these other jurisdictions to ensure adequate funds are available for the specific improvements necessary to maintain an acceptable LOS. The City will also need to partner with adjacent communities to ensure corridor continuity across jurisdictional boundaries (i.e., arterials connect with arterials, collectors connect with collectors, etc.).

B. FEDERAL FUNDING

Federal money is available to cities and counties through the federal-aid program. In Utah, UDOT administers these funds. To be eligible, a project must be listed on the five-year Statewide Transportation Improvement Program (STIP).

The Surface Transportation Program (STP) funds projects for any roadway with a functional classification of a collector street or higher as established on the Statewide Functional Classification Map. STP funds can be used for both rehabilitation and new construction. The Joint Highway Committee programs a portion of the STP funds for projects around the state in urban areas. Another portion of the STP funds can be used for projects in any area of the state at the discretion of the State Transportation Commission. Transportation Enhancement funds are allocated based on a competitive application process. The Transportation Enhancement Committee reviews all applications and then a portion of the applications are passed to the State Transportation Commission. Transportation enhancements include twelve categories ranging from historic preservation, bicycle and pedestrian facilities, and water runoff mitigation.

WFRC accepts applications for federal funds from local and regional government jurisdictions. The WFRC Technical Advisory and Regional Planning Committees select projects for funding every two years. The selected projects form the Transportation Improvement Program (TIP). In order to receive funding, projects should include one or more of the following aspects:

- Congestion relief – spot improvement and corridor improvement projects intended to improve levels of service and/or reduce average delay along those corridors identified in the Regional Transportation Plan as high-congestion areas
- Mode choice – projects improving the diversity and/or usefulness of travel modes other than single-occupant vehicles
- Air quality improvements – projects showing demonstrable air quality benefits
- Safety – improvements to vehicular, pedestrian, and bicyclist safety

C. STATE/COUNTY FUNDING

The distribution of State Class B and C program funds is established by State Legislation and is administered by UDOT. Revenues for the program are derived from State fuel taxes, registration fees, driver license fees, inspection fees, and transportation permits. Seventy-five percent of these funds are kept by UDOT for their construction and maintenance programs. The rest is made available to counties and cities. As some of the roads in Herriman fall under UDOT jurisdiction, it is in the interest of the City that staff are aware of the procedures used by UDOT to allocate those funds and to be active in requesting the funds be made available for UDOT-owned roadways in the City.

Class B and C funds are allocated to each city and county based on the following formula: 50 percent based on the percentage that the population of the county or municipality bears to the total population of the state, and 50 percent based on the percentage that the B and C road weighted mileage of the county or municipality bears to the total Class B and Class C road total weighted mileage. Class B and C funds can be used for maintenance and construction projects.

Utah State Code Title 72, Chapter 2, Section 117 allows Salt Lake County to levy a $10 vehicle registration fee, $3 of which is then placed into the Salt Lake County Local Corridor Preservation Fund. The Local Highway and Transportation Corridor Preservation Fund is used to preserve right-of-way for a highway or public transit corridor. Corridor preservation may include transportation projects, provided they are associated with a road. Additional detail on corridor preservation funds in Salt Lake County can be found **here**.

D. CITY FUNDING

Some cities utilize general fund revenues for their transportation programs. Another option for transportation funding is to create special improvement districts. These districts are organized for the purpose of funding a single specific project that benefits an identifiable group of properties. Another source of funding used by cities is revenue bonding for projects intended to benefit the entire community.

Private interests often provide resources for transportation improvements. Developers construct the local streets within subdivisions and often dedicate right-of-way and participate in the construction of collector/arterial streets adjacent to their developments. Developers can also be considered a possible source of funds for projects through the use of impact fees. These fees are assessed as a result of the impacts a particular development will have on the surrounding roadway system, such as the need for traffic signals or street widening.

General fund revenues are typically reserved for operation and maintenance purposes as they relate to transportation. However, general funds can be used, if available, to fund the expansion or introduction of specific services. Providing a line item in the City budgeted general funds to address roadway improvements that are not impact fee eligible is a recommended practice to fund transportation projects, should other funding options fall short of the needed amount.

General obligation bonds are debt paid for or backed by the City's taxing power. In general, facilities paid for through this revenue stream are in high demand amongst the community. Typically, general obligation bonds are not used to fund facilities that are needed as a result of new growth because existing residents would be paying for the impacts of new growth. As a result, general obligation bonds are not considered a fair means of financing future facilities needed as a result of new growth. They may be considered as a reasonable method to address existing deficiencies.

Certain areas might have different needs or require different methods of funding than traditional revenue sources. A Special Assessment Area (SAA) can be created for infrastructure needs that benefit or encompass specific areas of the City. The municipality can create an SAA through a resolution declaring that public health, convenience, and necessity require the creation of an SAA. The boundaries and services provided by the district must be specified and a public hearing must be held before the SAA is created. Once the SAA is created, funding can be obtained from tax levies, bonds, and fees when approved by the majority of the qualified electors of the SAA. These funding mechanisms allow the costs to be spread out over time. Through the SAA, tax levies and bonding can apply to specific areas in the City needing to benefit from the improvements.



E. INTERFUND LOANS

Since infrastructure generally must be built ahead of growth, it is sometimes funded before expected impact fees are collected. Bonds are the solution to this problem in some cases. In other cases, funds from existing user rate revenue will be loaned to the impact fee fund to complete initial construction of the project. As impact fees are received, they will be reimbursed. Consideration of these loans will be included in the impact fee analysis and should be considered in subsequent accounting of impact fee expenditures.

F. DEVELOPER DEDICATIONS AND EXACTIONS

Developer dedications and exactions can both be credited against the developer's impact fee analysis. If the value of the developer dedications and/or extractions are less than the developer's impact fee liability, the developer will owe the balance of the liability to the City. If the dedications and/or extractions of the developer are greater than the impact fee liability, the City may reimburse the developer the difference.

G. DEVELOPER IMPACT FEES

Impact fees are a way for a community to obtain funds to assist in the construction of infrastructure improvements resulting from and needed to serve new growth. The premise behind impact fees is that if no new development occurred, the existing infrastructure would be adequate. Therefore, new development should pay for the portion of required improvements that result from new growth. Impact fees are assessed for many types of infrastructure and facilities that are provided by a community, such as roadways. According to state law, impact fees can only be used to fund growth-related system improvements.

According to State statute, impact fees must only be used to fund projects that will serve needs caused by future development. They are not to be used to address present deficiencies. Only project costs that address future needs are included in this IFFP. This ensures a fair fee since developers will not be expected to address present deficiencies.

Legislation requires that impact fees should be spent or encumbered within six years after each impact fee is paid. Impact fees collected in the next six years should be spent on those projects outlined in the IFFP as growth related costs to maintain the City established LOS. Impact fees collected as buy-in to existing facilities can be allocated to the General Fund to repay the City for historic investment.

VI. IMPACT FEE CERTIFICATION

A. OVERVIEW

This report has been prepared in accordance with Utah Code Title 11, Chapter 36a, "Impact Fees Act." This report (including its results and projections) relies upon the planning, engineering, land use, and other source data provided in the Herriman City TMP Update (2022).

In accordance with Utah Code Annotate, 11-36a-306(1), WCG certifies that this impact fee facilities plan:

1. Includes only the cost of public facilities that are:
    a. Allowed under the Impact Fees Act; and
    b. Actually incurred; or
    c. Are projected to be incurred or encumbered within six years of the day on which each impact fee is paid;
2. Does not include:
    a. Costs of operation and maintenance of public facilities; or
    b. Costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the LOS supported by existing residents; and
3. Complies in each and every relevant respect with the Impact Fees Act.

This certification is made with the following limitations:

- All of the recommendations for implementing this IFFP and IFA are followed in their entirety by the City.
- If any portion of the IFFP is modified or amended in any way, this certification is no longer valid.

All information presented and used in the creation of this IFFP is assumed to be complete and correct, including any information received from the City or other outside sources.



Herriman City



DRAFT Transportation Impact Fee Analysis



Zions Public Finance, Inc.
January 2023

Transportation Impact Fee Analysis

Summary

This Impact Fee Analysis (IFA) is based on the information provided in the Herriman Transportation Impact Fee Facilities Plan ("IFFP") dated December 2022 and prepared by Wall Consultant Group (WCG).

Projected Growth. The IFFP projects that new development in Herriman will grow by 170,612 average daily trips (ADTs) between 2020 and 2030 – from 188,467 ADTs in 2020 to 359,079 ADTs in 2030 (IFFP, p. 9). This growth will require the construction of new transportation improvements in order to maintain the existing levels of service.

Service Levels. The IFFP states that the acceptable level of service (LOS) is LOS D (IFFP, p. 3).

Service Areas. Herriman ("City") includes one roadway service area that corresponds to existing City boundaries.

Excess Capacity. The IFFP identifies 13 projects with a total actual cost of $32,110,842. New development over the time period of this study period will consume 29.1 percent, or $9,357,043 of the existing, excess capacity.

New Construction. The IFFP identifies a total of 39 projects at a total cost of $239,618,874. However, new development is not responsible for the portion of these projects that are paid for through other sources, that will benefit existing development or that provide capacity for pass-through traffic. Therefore, the total cost attributable to new development between 2020 and 2030 is $57,754,774. Intersection improvements add another $8,566,016 to costs attributable to new development.

Other Costs. Other eligible costs include the cost of preparing the Transportation IFFP and IFA.

Credits for Existing Deficiencies. The IFFP identifies five of the new construction projects, at a total cost of $4,742,301 that will benefit existing development. Therefore, a credit must be made so that new development does not pay twice – once in the form of impact fees and then again through higher taxes over time to pay for the portion of the roads that benefit existing development.

Credits for Outstanding Bonds. Credits must be made for the portion of outstanding bonds that benefit new development. Based on information provided by WCG, approximately 21.7 percent of outstanding bonds are paying for capacity that serves existing development.

Proportionate Share Analysis. A summary of the proportionate share analysis for 2023 is as follows:

TABLE 1: PROPORTIONATE SHARE ANALYSIS

Summary of Cost per Trip	Cost per ADT
Existing Excess Capacity	$54.84
New Construction	$388.72
Consultant Costs	$0.21

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Summary of Cost per Trip	Cost per ADT
Impact Fee Fund Balance	($12.99)
GROSS FEE before Credits	**$430.78**
Credits for Deficiencies	($13.35)
Credits for Outstanding Bonds	($9.30)
Total Cost per ADT	**$408.13**

The cost per ADT in 2023 is $408.13. The cost per trip is then applied to standards set by the Institute of Transportation Engineers (ITE) to evaluate the number of ADTs per development type. Table 2 below shows basic categories from the ITE manual, 11th edition for which the City can charge impact fees and illustrates how fees are calculated based on the number of trips generated by land use type and trips per unit. For a land use type that does not fit easily into the categories in Table 2, the City may choose, at its discretion, to refer to additional land use categories as found in the ITE manual, 11th edition.

TABLE 2: RECOMMENDED MAXIMUM TRANSPORTATION IMPACT FEES INTO MAJOR GROUPINGS

ITE Code	Land Use	Unit	ITE Trips	Pass-By	Adjusted Trip Rate	Max 2023 Fee
130	Industrial Park 130	1000 Sq. Feet Gross Floor Area	3.37	0%	3.37	$1,375
151	Mini-Warehouse	Storage Units (100s)	17.96	0%	17.96	$7,330
210	Single-Family Detached Housing	Dwelling Unit	9.43	0%	9.43	$3,849
215	Single-Family Attached Housing (shared wall with adjoining unit)	Dwelling Unit	7.20	0%	7.20	$2,939
220	Multifamily Housing (Low-Rise) - Not Close to Rail Transit	Dwelling Unit	6.74	0%	6.74	$2,751
310	Hotel	Room	7.99	0%	7.99	$3,261
520	Elementary School	Students	2.27	0%	2.27	$926
522	Middle School / Junior High School	Students	2.10	0%	2.10	$857
525	High School	Students	1.94	0%	1.94	$792
560	Church	1000 Sq. Feet Gross Floor Area	31.46	0%	31.46	$12,840
610	Hospital	1000 Sq. Feet Gross Floor Area	10.77	0%	10.77	$4,396
710	General Office Building	1000 Sq. Feet Gross Floor Area	10.84	0%	10.84	$4,424
822	Retail Strip Mall	1000 Sq. Feet Gross Leasable Area	54.45	40%	32.67	$13,334
912	Drive-In Bank	1000 Sq. Feet Gross Floor Area	100.35	35%	65.23	$26,621
947	Self Service Car Wash	Wash Stall	108.00	0%	108.00	$44,078

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Utah Code Legal Requirements

Utah law requires that communities prepare an Impact Fee Analysis (IFA) before enacting an impact fee. Utah law also requires that communities give notice of their intent to prepare and adopt an IFA. This IFA follows all legal requirements as outlined below. The City has retained Zions Public Finance Inc., to prepare this Impact Fee Analysis in accordance with legal requirements.

Notice of Intent to Prepare Impact Fee Analysis

A local political subdivision must provide written notice of its intent to prepare an IFA before preparing the Plan (Utah Code §11-36a-503). This notice must be posted on the Utah Public Notice website. The City has complied with this noticing requirement for the IFA.

Preparation of Impact Fee Analysis

Utah Code requires that each local political subdivision, before imposing an impact fee, prepare an impact fee analysis. (Utah Code 11-36a-304).

Section 11-36a-304 of the Utah Code outlines the requirements of an impact fee analysis as follows:

(1) An impact fee analysis shall:

- (a) identify the anticipated impact on or consumption of any existing capacity of a public facility by the anticipated development activity;
- (b) identify the anticipated impact on system improvements required by the anticipated development activity to maintain the established level of service for each public facility;
- (c) demonstrate how the anticipated impacts described in Subsections (1)(a) and (b) are reasonably related to the anticipated development activity;
- (d) estimate the proportionate share of:
  - (i) the costs for existing capacity that will be recouped; and
  - (ii) the costs of impacts on system improvements that are reasonably related to the new development activity; and
- (e) identify how the impact fee was calculated.

(2) In analyzing whether or not the proportionate share of the costs of public facilities are reasonably related to the new development activity, the local political subdivision or private entity, as the case may be, shall identify, if applicable:

- (a) the cost of each existing public facility that has excess capacity to serve the anticipated development resulting from the new development activity;
- (b) the cost of system improvements for each public facility;

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(c) other than impact fees, the manner of financing for each public facility, such as user charges, special assessments, bonded indebtedness, general taxes, or federal grants;

(d) the relative extent to which development activity will contribute to financing the excess capacity of and system improvements for each existing public facility, by such means as user charges, special assessments, or payment from the proceeds of general taxes;

(e) the relative extent to which development activity will contribute to the cost of existing public facilities and system improvements in the future;

(f) the extent to which the development activity is entitled to a credit against impact fees because the development activity will dedicate system improvements or public facilities that will offset the demand for system improvements, inside or outside the proposed development;

(g) extraordinary costs, if any, in servicing the newly-developed properties; and

(h) the time-price differential inherent in fair comparisons of amounts paid at different times.

Certification of Impact Fee Analysis

Utah Code states that an Impact Fee Analysis shall include a written certification from the person or entity that prepares the Impact Fee Analysis. This certification is included at the conclusion of this analysis.

Anticipated Impact on or Consumption of Any Existing Capacity of a Public Facility by the Anticipated Development Activity

Utah Code 11-36a-304(1)(a)

Consumption of Existing Capacity

Development activity in Herriman is based on both residential and nonresidential growth. Growth projections are then used by the City's engineers as inputs in the WFRC Travel Demand Model to forecast trip generation. Growth projections are as follows:

TABLE 3: GROWTH PROJECTIONS – ADTS

	ADTs
ADTs 2020	188,467
ADTs 2030	359,079
Growth in Trips, 2020-2030	**170,612**

Source: Herriman City Transportation Impact Fee Facilities Plan

The engineers have identified excess capacity in the existing City-owned roads for which impact fees should be charged as a "buy-in" component.

TABLE 4: PROJECTS WITH EXISTING EXCESS CAPACITY

Project Description	Actual Cost	% Pass-through	% Existing	% Impact Fee Eligible	Impact Fees Beyond 2030	Impact Fee Eligible Cost	Costs Serving Existing Capacity
Construction of Autumn Crest Drive (15000 South to Mountain View Corridor)	$1,450,567	0%	29%	46%	25%	$667,261	$414,448
Street improvement along Silver Sky Dr (approx. 6100 W to 6000 W)	$292,174	0%	4%	48%	48%	$140,244	$10,821
Construction of 4000 West beginning at Autumn Crest Blvd	$222,279	0%	4%	11%	85%	$24,451	$8,233
Half road ROW improvements along Herriman Blvd & 11800 S from 6000 W to 6400 W	$2,600,000	5%	12%	32%	51%	$832,000	$317,073
25,587 sq ft of street improvements at 7274 W Rose Canyon Rd	$94,406	10%	11%	1%	78%	$944	$10,789
2,756 square feet of real property deeded to the City (7300 West)	$5,566	0%	15%	22%	63%	$1,225	$825
18,905 sq ft of street improvements at 7300 W Rose Canyon Rd	$82,841	5%	11%	1%	83%	$828	$9,468
Reimbursement for portion of Porter Rockwell Blvd and Rockwell Park Ln	$331,614	0%	7%	15%	78%	$49,742	$24,564
Additional paving and striping at 6400 W 13400 S	$45,365	4%	57%	22%	17%	$9,980	$25,923
Herriman Blvd from 6000 W to 6400 W	$1,902,045	5%	5%	37%	53%	$703,757	$92,783
Refinance bond for Herriman Blvd roadwork east of 6000 West	$6,540,675	5%	12%	42%	41%	$2,747,084	$797,643
U-Road and traffic signals at Black Locust and Fort Herriman at Main Street	$8,543,310	0%	15%	22%	63%	$1,879,528	$1,265,676
Future construction of Main Street from 6250 West to 7300 West	$10,000,000	0%	40%	23%	37%	$2,300,000	$4,000,000
TOTAL	$32,110,842					$9,357,043	$6,978,245

Source: Herriman City Transportation Impact Fee Facilities Plan

Identify the Anticipated Impact on System Improvements Required by the Anticipated Development Activity to Maintain the Established Level of Service for Each Public Facility and Demonstrate How the Anticipated Impacts are Reasonably Related to the New Development Activity

Utah Code 11-36a-304(1)(b)(c)

In order to maintain a LOS D, Herriman's IFFP identifies a total of 39 roadway projects and 25 intersection improvements necessitated by new development. Total roadway costs attributable to new development are nearly $58 million, plus an additional $8.6 million for intersection improvements.

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A portion of the new roadway projects will benefit existing development. Therefore, over $4.7 million in costs will need to be credited in the impact fee calculations so that new development does not pay twice.

TABLE 5: ROADWAY NEW CONSTRUCTION COSTS

#	Project Description	Actual Cost	Other Funding Sources Including Olympia	% Existing Capacity	% Impact Fee Eligible thru 2030	Cost to Existing Development	Cost to New Development
1-1	Herriman Rose Boulevard	$2,628,508	$0	50%	23%	$1,314,254	$604,557
1-2	Dansie Blvd	$3,279,482	$0	20%	47%	$655,896	$1,541,357
1-3	13800 South	$7,100,432	$3,550,216	30%	6%	$1,065,065	$213,013
1-4	SR-111	$21,880,202	$21,880,202			$0	$0
1-5	7600 West	$2,800,000	$0	0%	22%	$0	$616,000
1-6	6800 West	$7,496,854	$0	0%	29%	$0	$2,174,088
1-7	Mcdougall Road	$6,832,500	$0	0%	22%	$0	$1,503,150
1-8	Silver Sky Drive	$3,603,542	$3,603,542			$0	$0
1-9	Soleil Hills Drive	$12,595,592	$0	0%	74%	$0	$9,320,738
1-10	Soleil Hills Drive	$21,409,763	$0	0%	59%	$0	$12,631,760
1-11	6400 West	$12,491,534	$0	5%	70%	$624,577	$8,744,074
1-12	7300 West	$3,992,173	$0	0%	15%	$0	$598,826
1-13	Miller Crossing Drive	$3,094,744	$0			$0	$0
1-14	Academy Parkway	$686,836	$0	0%	91%	$0	$625,021
1-15	Juniper Crest Road	$3,608,363	$0	30%	48%	$1,082,509	$1,732,014
1-16	13400 South	$3,479,029	$0	0%	100%	$0	$3,479,029
1-17	6000 West	$5,779,879	$0	0%	0%	$0	$0
1-18	7300 West	$2,530,813	$0	0%	0%	$0	$0
1-19	Herriman Main St	$16,000,000	$10,000,000	0%	16%	$0	$960,000
1-20	11800 South	$1,532,644	$0	0%	30%	$0	$459,793
1-22	11800 South	$6,925,191	$3,462,596	0%	16%	$0	$554,015
1-23	13400 South	$9,443,745	$0	0%	40%	$0	$3,777,498
1-24	Herriman Parkway	$3,860,220	$0	0%	22%	$0	$849,248
1-25	6400 West	$3,233,126	$0	0%	97%	$0	$3,136,132
1-27	Auto Row Drive	$5,831,663	$5,831,663			$0	$0
1-28	Rose Canyon Road	$1,248,313	$0	0%	0%	$0	$0
1-29	Herriman Blvd	$7,168,154	$7,168,154			$0	$0
1-30	Olympia Main Street	$9,561,036	$9,561,036			$0	$0
1-31	6400 West	$5,206,537	$5,206,537			$0	$0
1-32	Silver Sky Drive	$5,350,284	$5,350,284			$0	$0
1-33	12600 South	$1,888,978	$0	0%	98%	$0	$1,851,198
1-34	6800 West	$4,507,727	$4,507,727			$0	$0
1-35	Silver Sky Drive	$4,990,384	$0	0%	22%	$0	$1,097,884
1-36	Silver Sky Drive	$4,141,622	$4,141,622			$0	$0
1-37	Silver Sky Drive	$2,346,120	$0	0%	22%	$0	$516,146
1-38	Soleil Hills Blvd	$5,128,208	$0	0%	15%	$0	$769,231
1-39	7300 West	$7,226,719	$7,226,719			$0	$0
1-41	13400 South	$2,917,755	$0			$0	$0
1-42	Herriman Main St	$5,820,202	$0	0%	0%	$0	$0
TOTAL		**$239,618,874**	**$91,490,298**			**$4,742,301**	**$57,754,774**

Source: Herriman City Transportation Impact Fee Facilities Plan

TABLE 6: INTERSECTION NEW CONSTRUCTION PROJECTS

Project #	Intersection Description	Other Funding Sources	Impact Fee Eligible Costs through 2030
1-1	11800 South & 6400 West	$252,767	$168,511
1-2	U-111 & Herriman Blvd	$236,877	$207,723
1-3	7300 West & Silver Sky Drive	$420,314	$0
1-4	6800 West & Olympia Main Street	$874,474	$0

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Project #	Intersection Description	Other Funding Sources	Impact Fee Eligible Costs through 2030
1-5	Herriman Main Street & 6400 West	$874,474	$0
1-6	Herriman Blvd & 6400 West	$267,055	$199,338
1-7	Herriman Hwy & 7300 West	$46,339	$284,655
1-8	Herriman Hwy & Dansie Blvd	$102,514	$288,852
1-9	Juniper Crest Road & Soleil Hills Drive	$0	$445,962
1-10	Real Vista Drive & MVC NB	$0	$583,872
1-11	Real Vista Drive & MVC SB	$0	$1,106,108
1-12	Academy Pkwy & Soleil Hills Drive	$0	$445,962
1-13	Academy Pkwy & MVC SB	$0	$900,053
1-14	Academy Pkwy & MVC NB	$0	$243,048
1-15	Porter Rockwell Blvd & McDougall Road	$488,013	$0
1-16	Herriman Main Street & Miller Crossing Drive	$0	$426,000
1-17	Herriman Rose Blvd & Fort Herriman Pkwy	$0	$460,962
1-18	Sentinel Ridge Blvd & 13800 South	$535,618	$380,288
1-19	Herriman Blvd & 6800 West	$313,525	$133,816
1-20	Herriman Blvd & 5600 West	$195,995	$623,351
1-21	Herriman Hwy & 6400 West	$20,815	$83,260
1-22	11800 South & 6000 West	$27,027	$18,781
1-23	Herriman Blvd & Herriman Main Street	$141,248	$704,476
1-24	Herriman Blvd & 6000 West	$40,197	$65,022
1-25	Herriman Blvd & Auto Row Drive	$0	$795,977
TOTAL		**$4,837,252**	**$8,566,016**

Source: Herriman City Transportation Impact Fee Facilities Plan

The total cost of $66.3 million attributable to new development between 2020 and 2030 or roadway and intersection improvements must be shared proportionately between the additional ADTs projected for that time period. ADTs citywide are projected to grow from 188,467 ADTs in 2020 to 359,079 ADTs in 2030 – an increase of 170,612 ADTs over the 10-year period. While volume on some existing roads may actually decrease, volume will increase on new roads constructed. Therefore, the increased volume and capacity impacts need to be viewed as part of an overall system of roads.

Estimate the Proportionate Share of (i) the Costs for Existing Capacity That Will Be Recouped; and (ii) The Costs of Impacts on System Improvements That Are Reasonably Related to the New Development Activity; and Identify How the Impact Fee was Calculated

Utah Code 11-36a-304(1)(d)(e)

The proportionate share analysis can legally include the proportionate share of any buy-in costs associated with the excess capacity in the existing system that will be consumed as a result of new development activity, as well as the proportionate share of new construction costs necessitated by new development.

Excess Capacity Cost Calculation

Existing excess capacity is found in the projects shown in Table 4. Of the total existing, excess capacity of $32.1 million, nearly $9.4 million will be consumed by the additional ADTs in Herriman between 2020 and 2030.

TABLE 7: EXCESS CAPACITY COST CALCULATION

Excess Capacity – Buy-In Calculation	Amount
Total Excess Capacity	$32,110,842
Cost to New Development, 2020-2030	$9,357,043
Growth in Trips, 2020-2030	170,612
Cost per Trip	**$54.84**

New Construction Cost Calculation

In order to maintain a LOS D, Herriman will need to construct additional facilities, as identified previously in tables 5 and 6. New construction costs per ADT are calculated as shown in Table 8.

TABLE 8: PROPORTIONATE SHARE CALCULATION – NEW CONSTRUCTED COST

New Construction	Amount
New Construction - Roads	$57,754,774
New Construction - Intersections	$8,566,016
Growth in Trips, 2020-2030	170,612
Cost per ADT	**$388.72**

Other Cost Calculations

Utah law allows for the cost of developing the Impact Fee Facility Plan and Impact Fee Analysis to be included in the calculation of impact fees. These costs are then shared proportionately among the additional trips generated between 2020 and 2030.

TABLE 9: PROPORTIONATE SHARE CALCULATION – CONSULTING COSTS

Description	Amount
Total Consultant Costs	$35,000
Growth in ADTs, 2020-2030	170,612
Cost per ADT	**$0.21**

Herriman has a balance of $2,217,044 in its transportation impact fee fund.[1] Therefore, the following credit needs to be made against the impact fee fund balance as these funds can be used to pay for some of the capital costs identified in the IFFP.

[1] Source: Herriman City September 2022

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TABLE 10: IMPACT FEE FUND BALANCE CALCULATION

Description	Amount
Fund Balance	$2,217,044
Growth in ADTs, 2020-2030	170,612
Credit per ADT	**($12.99)**

Calculation of Credits

Credits need to be made for: 1) outstanding bonds that the City has issued to pay for roadway costs; and the portion of new projects that will benefit existing development (i.e., "deficiencies"). Capacity that benefits existing development represents 21.7 percent of the costs.[2]

TABLE 11: CREDIT FOR OUTSTANDING BONDS

	2015A Sales Tax Revenue	2015B Sales Tax Revenue Bonds	2016 Bonds	Total Bond Pmts	Amount Benefitting Existing	Trips	Pmt per Trip	NPV*
2022	$136,055	$544,150	$854,675	$1,534,880	$333,556.12	214,401	$1.56	$10.34
2023	$136,300	$546,050	$854,033	$1,536,383	$333,882.64	228,677	$1.46	$9.30
2024	$136,040	$542,450	$854,243	$1,532,733	$333,089.43	243,903	$1.37	$8.30
2025	$136,305	$543,350	$854,570	$1,534,225	$333,413.67	260,143	$1.28	$7.35
2026	$136,005	$543,650	$853,970	$1,533,625	$333,283.28	277,465	$1.20	$6.44
2027	$136,430	$548,250	$854,377	$1,539,057	$334,463.85	295,940	$1.13	$5.56
2028	$136,120	$547,150	$854,652	$1,537,922	$334,217.20	315,645	$1.06	$4.71
2029	$135,610	$545,450	$854,660	$1,535,720	$333,738.56	336,662	$0.99	$3.88
2030	$135,920	$543,150	$854,250	$1,533,320	$333,217.00	359,079	$0.93	$3.08
2031	$135,980	$550,050	$853,873	$1,539,903	$334,647.60	376,140	$0.89	$2.31
2032	$135,295	$543,750	$854,686	$1,533,731	$333,306.31	393,201	$0.85	$1.54
2033	$135,460	$544,125	$0	$679,585	$147,685.64	410,263	$0.36	$0.77
2034	$135,340	$543,250	$0	$678,590	$147,469.41	427,324	$0.35	$0.44
2035	$135,913	$0	$0	$135,913	$29,536.15	444,385	$0.07	$0.12
2036	$135,328	$0	$0	$135,328	$29,409.02	461,446	$0.06	$0.06

*NPV = net present value discounted at 5 percent

The IFFP identifies 5 of the new improvement projects as partially benefitting new development. Therefore, a credit must be made for these projects so that new development does not pay twice – once through the collection of an impact fee and then again later through increased taxes to offset the portion benefitting existing development. The total amount of projects benefitting existing development is $4,742,301 as shown in Table 5. These costs are spread across 10 years in the following analysis so that credits can be made.

[2] Calculated by dividing the $6,978,245 of costs attributed to capacity serving existing development by the total actual cost of $32,110,842 as shown in Table 4.

TABLE 12: CREDIT CALCULATION FOR EXISTING DEFICIENCIES

Year	Trips	Pmt	Pmt per Trip	NPV*
2023	214,401	$474,230.08	$2.21	$13.35
2024	228,677	$474,230.08	$2.07	$11.80
2025	243,903	$474,230.08	$1.94	$10.32
2026	260,143	$474,230.08	$1.82	$8.89
2027	277,465	$474,230.08	$1.71	$7.51
2028	295,940	$474,230.08	$1.60	$6.18
2029	315,645	$474,230.08	$1.50	$4.89
2030	336,662	$474,230.08	$1.41	$3.63
2031	359,079	$474,230.08	$1.32	$2.40
2032	376,140	$474,230.08	$1.26	$1.20

*NPV = net present value discounted at 5 percent

Summary of Impact Fees

TABLE 13: SUMMARY OF COST PER TRIP - 2023

Summary of Cost per Trip - 2023	Cost per ADT
Existing Excess Capacity	$54.84
New Construction	$388.72
Consultant Costs	$0.21
Impact Fee Fund Balance	($12.99)
Subtotal for Credits	**$430.78**
Credits for Deficiencies	($13.35)
Credits for Outstanding Bonds	($9.30)
Total Cost per ADT - 2023	**$408.13**

The cost per ADT is $408.13 in 2023. The cost per trip changes each year as shown in the table below to account for the credits due from the remaining bond payments or deficiency amounts.

TABLE 14: CREDIT CALCULATION FOR EXISTING DEFICIENCIES

Year	Gross Cost per Trip	Credits for Deficiencies	Credits for Outstanding Bonds	Total Max Cost per Trip
2023	$430.78	($13.35)	($9.30)	$408.13
2024	$430.78	($11.80)	($8.30)	$410.67
2025	$430.78	($10.32)	($7.35)	$413.11
2026	$430.78	($8.89)	($6.44)	$415.45
2027	$430.78	($7.51)	($5.56)	$417.71
2028	$430.78	($6.18)	($4.71)	$419.89
2029	$430.78	($4.89)	($3.88)	$422.01
2030	$430.78	($3.63)	($3.08)	$424.06
2031	$430.78	($2.40)	($2.31)	$426.07
2032	$430.78	($1.20)	($1.54)	$428.04

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The cost per trip is then applied to standards set by the Institute of Transportation Engineers (ITE) to evaluate the number ADTs per development type. Table 15 below shows basic categories from the ITE manual, 11th edition for which the City can charge impact fees and illustrates how fees are calculated based on the number of trips generated by land use type and trips per unit. For a land use type that does not fit easily into the categories in Table 12, the City may choose, at its discretion, to refer to additional land use categories as found in the ITE manual, 11th edition.

TABLE 15: SUMMARY OF MAXIMUM ALLOWABLE IMPACT FEES

ITE Code	Land Use	Unit	ITE Trips	Pass-By	Adjusted Trip Rate	Max 2023 Fee
130	Industrial Park 130	1000 Sq. Feet Gross Floor Area	3.37	0%	3.37	$1,375
151	Mini-Warehouse	Storage Units (100s)	17.96	0%	17.96	$7,330
210	Single-Family Detached Housing	Dwelling Unit	9.43	0%	9.43	$3,849
215	Single-Family Attached Housing (shared wall with adjoining unit)	Dwelling Unit	7.20	0%	7.20	$2,939
220	Multifamily Housing (Low-Rise) - Not Close to Rail Transit	Dwelling Unit	6.74	0%	6.74	$2,751
310	Hotel	Room	7.99	0%	7.99	$3,261
520	Elementary School	Students	2.27	0%	2.27	$926
522	Middle School / Junior High School	Students	2.10	0%	2.10	$857
525	High School	Students	1.94	0%	1.94	$792
560	Church	1000 Sq. Feet Gross Floor Area	31.46	0%	31.46	$12,840
610	Hospital	1000 Sq. Feet Gross Floor Area	10.77	0%	10.77	$4,396
710	General Office Building	1000 Sq. Feet Gross Floor Area	10.84	0%	10.84	$4,424
822	Retail Strip Mall	1000 Sq. Feet Gross Leasable Area	54.45	40%	32.67	$13,334
912	Drive-In Bank	1000 Sq. Feet Gross Floor Area	100.35	35%	65.23	$26,621
947	Self Service Car Wash	Wash Stall	108.00	0%	108.00	$44,078

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Certification

Zions Public Finance, Inc. certifies that the attached impact fee analysis:

1. Includes only the costs of public facilities that are:
    a. allowed under the Impact Fees Act; and
    b. actually incurred; or
    c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;

2. Does not include:
    a. costs of operation and maintenance of public facilities;
    b. costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents; or
    c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement;

3. Offsets costs with grants or other alternate sources of payment; and

4. Complies in each and every relevant respect with the Impact Fees Act.

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HERRIMAN CITY

STAFF REPORT

DATE: 12/29/2022

TO: The Honorable Mayor and City Council

FROM: Blake Thomas, Community Development Director

SUBJECT: **Discussion Regarding a Proposed Amendment to the Olympia Master Development Agreement**

RECOMMENDATION:

Provide feedback to staff and the applicant regarding the proposed amendments to the Olympia Master Development Agreement (MDA).

ISSUE BEFORE COMMISSION:

Should the City Council approve of the proposed amendments to the Olympia MDA?

BACKGROUND/SUMMARY:

The Olympia Master Development Agreement was recorded November 16, 2021. The project encompasses 933 acres and, including 80 acres, (with 20 additional acres under contract for a total of 100 acres) owned by the Jordan School District (JSD), who is identified as the Special Owner in the MDA. Currently, all amendments to the MDA require approval from the JSD.

Section 2.18 of the MDA requires the Master Developer to install secondary water infrastructure for all areas of the development within water pressure zones 3 and 4.

Section 2.10 of the MDA contemplates two scenarios regarding the location of the future intersection of 12600 South and U-111, each of which provides guidance on commercial development requirements within the development.

DISCUSSION:

The Master Developer proposes to make 4 adjustments to the MDA, as follows:

1. Remove the requirement for providing dry secondary water lines in Olympia.

2. It is possible that Olympia will only end up including a portion of the intersection on the 12600 South and U-111. This is a scenario that was not contemplated in the current agreement and needs to be included so that the commercial requirements under this new possible scenario are identified.
3. The Master Developer is exploring different financing options for the PID in addition to the one-time contract fee. This amendment will allow the City Council to consider other funding sources for public infrastructure.
4. The Master Developer would like to build in a provision that doesn't require every amendment to go the JSD for approval if it doesn't involve them. This will allow future amendments that are unrelated to their school sites to move forward without a full board approval. (The JSD Board approved this change at the December 13th Board Meeting).

This item was discussed with the Planning Commission at the December 15th Planning Commission meeting. There was some brief discussion regarding the removal of secondary water infrastructure from the development but no significant concerns were brought to the attention of the staff.

ALTERNATIVES:

The City Council will receive a recommendation from the Planning Commission regarding the proposed amendment to the Master Development Agreement. Clear direction from the City Council for each of the proposed changed to the MDA is necessary for the staff and the developer to continue working to finalize the MDA amendment so that it can be prepared and reviewed by the Planning Commission and City Council.

ATTACHMENTS:

1) MDA Amendment Application
2) Draft MDA Amendment
3) Redline draft of Amended and Restated Olympia PID Governing Document

Master Development Agreement Application

PROPERTY INFORMATION			
Request: TO AMEND THE OLYMPIA MDA			
Property Address: 13000 S. 6400 W.			
Parcel Numbers: 26342260030000 + OTHERS			
Acres: 933			
APPLICANT INFORMATION			
Name of Applicant: OLYMPIA LAND, LLC			
Address of Applicant: 527 E. PIONEER ROAD ST. 200 DRAPER, UT 84020			
Email of Applicant: [redacted]		Phone: [redacted]	
Applicants Affiliation with the Subject Property: ☒ Owner ☐ Engineer ☐ Architect ☐ Other			
Attorney: BRUCE BAIRD			
Email of Attorney: [redacted]		Phone of Attorney: [redacted]	
Engineer: (if not listed above) ENSIGN ENGINEERING			
Email of Engineer: [redacted]		Phone of Engineer: [redacted]	
Property Owner: (if not listed above)			
Email of Owner:		Phone of Owner:	
OFFICE USE ONLY			
Date Received:	Received By:	File Number:	Fee:
	Assigned Staff:		Receipt #

AMENDED AND RESTATED GOVERNING DOCUMENT
FOR

OLYMPIA PUBLIC INFRASTRUCTURE DISTRICT NOS. 1 THROUGH 7

HERRIMAN, UTAH

Prepared

by

Gilmore & Bell, P.C.
~~15 West South Temple, Suite 1450~~
Salt Lake City, Utah ~~84101~~

_____, ~~2021~~2023

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EXHIBIT B Herriman City Vicinity Map

EXHIBIT C Initial District and Annexation Boundaries Map

EXHIBIT D Interlocal Agreement between the District and Herriman City

I. INTRODUCTION

A. Purpose and Intent.

The Districts are independent units of local government, separate and distinct from the City, and, except as may otherwise be provided for by State or local law or this Governing Document, their activities are subject to review by the City only insofar as they may deviate in a material matter from the requirements of the Governing Document. It is intended that the Districts will provide a part or all of the Public Improvements for the use and benefit of all anticipated inhabitants and taxpayers of the Districts. The primary purpose of the Districts will be to finance the construction of these Public Improvements ~~through the imposition of fees.~~. The Districts are not being created to provide any ongoing operations and maintenance services.

B. Need for the Districts.

There are currently no other governmental entities, including the City, located in the immediate vicinity of the Districts that consider it desirable, feasible or practical to undertake the planning, design, acquisition, construction installation, relocation, redevelopment, and financing of the Public Improvements needed for the Project. Formation of the Districts are therefore necessary in order for the Public Improvements required for the Project to be provided in the most economic manner possible.

C. Objective of the City Regarding Districts' Governing Document.

This Governing Document amends and restates the Governing Document for the City approved on September 29, 2021 in its entirety.

The City's objective in approving the Governing Document for the Districts is to authorize the Districts to provide for the planning, design, acquisition, construction, installation, relocation and redevelopment of the Public Improvements from the proceeds of Debt to be issued by one or both of the Districts (or interlocal entity formed by the Districts). All Debt is expected to be repaid by ~~fees~~taxes imposed and collected for no longer than the Maximum Debt Mill Levy Imposition Term and at a tax mill levy no higher than the Maximum Debt Mill Levy, and/or fees and Assessments. Debt which is issued within these parameters will ~~ensure there are no ongoing~~insulate property owners from excessive tax burdens to support the servicing of the Debt and will result in a timely and reasonable discharge of the Debt.

This Governing Document is intended to establish a limited purpose for the Districts and explicit financial constraints that are not to be violated under any circumstances. The primary purpose is to provide for the Public Improvements associated with development and regional needs. Operational activities are allowed, but only through an Interlocal Agreement with the City or other relevant public entity with written consent of the City.

It is the intent of the Districts to dissolve upon payment or defeasance of all Debt incurred or upon a determination that adequate provision has been made for the payment of all Debt of such District, collected or assigned all Fees payable to such District, disbursed of all

assets of such District, and if the District has authorized operating functions under an Interlocal Agreement, to retain only the power necessary to impose and collect Fees to pay for these costs.

The Districts shall be authorized to finance the Public Improvements that can be funded from Debt to be repaid from Assessments or ~~Fees~~from tax revenues collected from a mill levy which shall not exceed the Maximum Debt Mill Levy on ~~District~~taxable properties~~.~~ and which shall not exceed the Maximum Debt Mill Levy Imposition Term on taxable properties (or repaid from a combination of Fees, Assessments or a mill levy). It is the intent of this Governing Document that ~~no property taxes are levied by the Districts and that~~ Fees be paid at or before the issuance of a building permit by the ~~city~~City and to assure to the extent possible that no taxable property bear an economic burden that is greater than that associated with the Maximum Debt Mill Levy in amount and that no taxable property bear an economic burden that is greater than that associated with the Maximum Debt Mill Levy Imposition Term in duration even under bankruptcy or other unusual situations. Generally, the cost of Public Improvements that cannot be funded within these parameters are not costs to be paid by the Districts.

II. DEFINITIONS

In this Governing Document, the following terms shall have the meanings indicated below, unless the context hereof clearly requires otherwise:

Annexation Area Boundaries: means the boundaries of the area described in the Annexation Area Boundary Map which have been approved by the City for annexation into or withdrawal from any of the District upon the meeting of certain requirements.

Annexation Area Boundary Map: means the map attached hereto as **Exhibit C**, describing the property proposed for annexation into or withdrawal from any of the Districts.

Assessment: means (i) the levy of an assessment secured by a lien on property within a District to pay for the costs of Public Improvements benefitting such property or (2) an assessment by a District levied on private property within such District to cover the costs of an energy efficient upgrade, a renewable energy system, or an electric vehicle charging infrastructure, each as may be levied pursuant to the Assessment Act.

Assessment Act: means collectively, (i) Title 11, Chapter 42, Utah Code ~~and Title 11, Chapter 42a, Utah Code, as each~~as may be amended from time to time and (ii) the C-PACE Act.

Board: means the board of trustees of one District or the boards of trustees of all Districts, in the aggregate.

Bond, Bonds or Debt: means bonds or other obligations, including loans of any property owner, for the payment of which any District has promised to impose ~~Fees~~an ad valorem property tax mill levy, impose Fees, and/or collect Assessments.

C-PACE Act: means title 11, Chapter 42a of the Utah Code, as amended from time to time.

C-PACE Bonds: means bonds, loans, notes, or other structures and obligations of the District issued pursuant to the C-PACE Act, including refunding C-PACE Bonds.

C-PACE Assessments: means assessments levied under the C-PACE Act.

City: means Herriman, Utah.

City Code: means the City Code of Herriman, Utah.

County Council: means the City Council of Herriman, Utah.

District: means any one of the Olympia Public Infrastructure District Nos. 1 through 7.

District Act: means the Local District Act and the PID Act.

District No. 1: means the Olympia Public Infrastructure District No. 1.

District No. 2: means the Olympia Public Infrastructure District No. 2.

District No. 3: means the Olympia Public Infrastructure District No. 3.

District No. 4: means the Olympia Public Infrastructure District No. 4.

District No. 5: means the Olympia Public Infrastructure District No. 5.

District No. 6: means the Olympia Public Infrastructure District No. 6.

District No. 7: means the Olympia Public Infrastructure District No. 7.

Districts: means District No. 1, District No. 2, District No. 3, District No. 4, District No. 5, District No. 6, and District No. 7.

District Area: means the property within the Initial District Boundary Map and the Annexation Area Boundary Map.

End User: means any owner, or tenant of any owner, of any improvement within the Districts, who is intended to become the ultimate user of such improvement. By way of illustration, a resident homeowner, renter, commercial property owner, or commercial tenant is an End User. The business entity that constructs homes or commercial structures is not an End User.

Fees: means one or more fees imposed by any District for the payment of costs of administering the Districts, acquiring, improving, constructing, enlarging, or extending improvements, facilities, or property or issuing bonds and paying debt service on district bonds pursuant to Section 17D-4-302 of the PID Act or Section 17B-1-103(j) of the Local District Act.

Financial Plan: means the Financial Plan described in Section VIII which describes (i) the potential means whereby the Public Improvements may be financed; (ii) how the

Debt is expected to be incurred; and (iii) the estimated operating revenue derived from property taxes or Fees for the first budget year.

General Obligation Debt: means a Debt that is directly payable from and secured by ad valorem property taxes that are levied by a District and does not include Limited Tax Debt.

Governing Document: means this Governing Document for the Districts approved by the City Council.

Governing Document Amendment: means an amendment to the Governing Document approved by the City Council in accordance with the City's ordinance and the applicable state law and approved by the Boards in accordance with applicable state law.

Initial District Boundaries: means the boundaries of the area described in the Initial District Boundary Map.

Initial District Boundary Map: means the map attached hereto as **Exhibit C**, describing the initial boundaries of the Districts.

Limited Tax Debt: means a debt that is directly payable from and secured by ad valorem property taxes that are levied by ~~a~~the District which may not exceed the Maximum Debt Mill Levy.

Local District Act: means Title 17B of the Utah Code, as amended from time to time.

Maximum ~~Bond~~Debt Mill Levy: means the maximum mill levy the District is permitted to impose for payment of Debt as set forth in Section VIII.C below.

Maximum Debt Mill Levy Imposition Term: means the maximum term for imposition of a mill levy for any given series of bonds as set forth in Section VIII.D below.

Municipal Advisor: means a consultant that: (i) advises Utah governmental entities on matters relating to the issuance of securities by Utah governmental entities, including matters such as the pricing, sales and marketing of such securities and the procuring of bond ratings, credit enhancement and insurance in respect of such securities; (ii) shall be an underwriter, investment banker, or individual listed as a public finance advisor in the Bond Buyer's Municipal Market Place; and (iii) is not an officer or employee of the District and has not been otherwise engaged to provide services in connection with the transaction related to the applicable Debt.

Project: means the development or property commonly referred to as Olympia.

PID Act: means Title 17D, Chapter 4 of the Utah Code, as amended from time to time and any successor statute thereto.

Public Improvements: means a part or all of the improvements authorized to be planned, designed, acquired, constructed, installed, relocated, redeveloped and financed as

generally described in the Local District Act to serve the future property owners and inhabitants of the District Area as determined by the Board.

Regional Improvements: means Public Improvements and facilities that benefit the District Area and which are to be financed pursuant to Section VII below.

State: means the State of Utah.

Taxable Property: means real or personal property within the District Area subject to ad valorem taxes imposed by the District.

Trustee: means a member of the Board.

Utah Code: means the Utah Code Annotated 1953, as amended.

III. BOUNDARIES

The area of the Initial District Boundaries includes approximately 0.537 acres, comprised of 0.111 acres for District No. 1 and 0.071 acres for District Nos. 2 through 7. The Annexation Area Boundaries includes approximately 939.283 acres and includes the Initial District Boundaries. A legal description of the Initial District Boundaries and the Annexation Area Boundaries is attached hereto as **Exhibit A**. A vicinity map is attached hereto as **Exhibit B**. A map of the Initial District Boundaries and Annexation Area Boundaries is attached hereto as **Exhibit C**. It is anticipated that the District's boundaries may change from time to time as it undergoes annexations and withdrawals pursuant to Section 17B-4-201, Utah Code, subject to Article V below.

IV. PROPOSED LAND USE

The District Area consists of approximately 939 acres of undeveloped land. Approval of this Governing Document by the City does not imply approval of the development of a specific area within the Districts, nor does it imply approval of the number of residential units or the total site/floor area of commercial or industrial buildings identified in this Governing Document or any of the exhibits attached thereto, unless the same is separately approved by the City in accordance with the City Code.

V. DESCRIPTION OF PROPOSED POWERS, IMPROVEMENTS AND SERVICES

A. Powers of the Districts and Governing Document Amendment.

The Districts shall have the power and authority to provide the Public Improvements within and without the boundaries of the Districts as such power and authority is described in the District Act, and other applicable statutes, common law and the Constitution, subject to the limitations set forth herein.

1. Operations and Maintenance Limitation. The purpose of the Districts is to plan for, design, acquire, construct, install, relocate, redevelop and finance the Public Improvements. The Districts shall dedicate the Public Improvements to the City or

other appropriate public entity or owners association in a manner consistent with the development agreement and other rules and regulations of the City and applicable provisions of the City Code. The Districts shall be authorized, but not obligated, to own, operate and maintain Public Improvements not otherwise required to be dedicated to the City or other public entity.

~~Prohibition on Ad Valorem Property Taxes. The Districts are not permitted under any circumstance to issue General Obligation Debt, Limited Tax Debt, or any other debt that is payable from or secured by ad valorem property taxes of a District. In addition, the Districts are not permitted to impose any ad valorem property taxes for any purpose.~~

2. Reserved.

3. Construction Standards Limitation. The Districts will ensure that the Public Improvements are designed and constructed in accordance with the standards and specifications of the City and of other governmental entities having proper jurisdiction. The Districts will obtain the City's approval of civil engineering plans and will obtain applicable permits for construction and installation of Public Improvements prior to performing such work. Public Improvements shall be subject to the ordinary inspection and approval procedures of the City and other governmental entities having proper jurisdiction.

4. Procurement. The Districts shall be subject to the Utah Procurement Code, Title 63G, Chapter 6a. Notwithstanding this requirement, the Districts may acquire completed or partially completed improvements for fair market value as reasonably determined by any one of a surveyor or engineer that such District employs or engages to perform the necessary engineering services for and to supervise the construction or installation of the improvements.

5. Privately Placed Debt Limitation. Prior to the issuance of any privately placed Debt, a District shall obtain the certification of a Municipal Advisor substantially as follows:

> We are [I am] a Municipal Advisor within the meaning of the District's Governing Document.
>
> We [I] certify that (1) the net effective interest rate to be borne by [insert the designation of the Debt] does not exceed a reasonable current [tax-exempt] [taxable] interest rate, using criteria deemed appropriate by us [me] and based upon our [my] analysis of comparable high yield securities; and (2) the structure of [insert designation of the Debt], including maturities and early redemption provisions, is reasonable considering the financial circumstances of the District.

6. Annexation and Withdrawal.

(a) The Districts shall not include within any of their boundaries any property outside the District Area without the prior written consent of the City. The City, by

approval of this Governing Document, has consented to the annexation of any area within the Annexation Area Boundaries into any of the Districts. Such area may only be annexed upon such District obtaining consent of all property owners and registered voters, if any, within the area proposed to be annexed and the passage of a resolution of such District's Board approving such annexation.

(b) The City, by approval of this Governing Document, has consented to the withdrawal of any area within the District Boundaries from any of the Districts. Such area may only be withdrawn upon such District obtaining consent of all property owners and registered voters, if any, within the area proposed to be withdrawn and the passage of a resolution of such District's Board approving such annexation.

(c) Any annexation or withdrawal shall be in accordance with the requirements of the PID Act.

(d) Upon any annexation or withdrawal, such District shall provide the City a description of the revised District Boundaries.

(e) Annexation or withdrawal of any area in accordance with V.A.6(a) and (b) shall not constitute an amendment of this Governing Document.

7. Overlap Limitation. ~~The boundaries of the Districts may overlap.~~

The boundaries of the Districts shall not overlap unless the aggregate mill levy for payment of Debt of the overlapping Districts will not at any time exceed the Maximum Debt Mill Levy of the Districts. Additionally the Districts shall not consent to the organization of any other public infrastructure district organized under the PID Act within the District Area which will overlap the boundaries of the Districts unless the aggregate mill levy for payment of Debt of such proposed districts will not at any time exceed the Maximum Debt Mill Levy of the Districts.

8. Initial Debt. Upon the issuance of a certificate of creation of a District issued by the Office of the Lieutenant Governor of the State of Utah, such District shall be permitted to: (a) issue Debt and/or (b) impose a mill levy for the payment of Debt and collect Fees and Assessments for the purpose of repayment of Debt.

9. No Debt Issuance Limitation. So long as Debt is issued in accordance with the provisions of this Governing Document, there is no limit to the amount of Debt that may be issued by any District.

10. Bankruptcy Limitation. All of the limitations contained in ~~this~~the Governing Document, including, but not limited to, those pertaining to the Maximum ~~Bond~~Debt Mill Levy, Maximum Debt Mill Levy Imposition Term and the Fees have been established under the authority of the City to approve a Governing Document with conditions pursuant to Section 17D-4-201(5), Utah Code. It is expressly intended that such limitations:

(a) Shall not be subject to set-aside for any reason or by any court of competent jurisdiction, absent a Governing Document Amendment; and

(b) Are, together with all other requirements of Utah law, included in the "political or governmental powers" reserved to the State under the U.S. Bankruptcy Code (11 U.S.C.) Section 903, and are also included in the "regulatory or electoral approval necessary under applicable nonbankruptcy law" as required for confirmation of a Chapter 9 Bankruptcy Plan under Bankruptcy Code Section 943(b)(6).

Any Debt, issued with a pledge or which results in a pledge, that exceeds the Maximum ~~Bond~~Debt Mill Levy and the Maximum Debt Mill Levy Imposition Term, shall be deemed a material modification of this Governing Document and shall not be an authorized issuance of Debt unless and until such material modification has been approved by the City as part of a Governing Document Amendment.

11. Governing Document Amendment Requirement.

(a) This Governing Document has been designed with sufficient flexibility to enable the Districts to provide required facilities under evolving circumstances without the need for numerous amendments. Actions of the Districts which violate the limitations set forth in V.A.1-9 above or in VIII.B-G. shall be deemed to be material modifications to this Governing Document and the City shall be entitled to all remedies available under State and local law to enjoin such actions of the Districts.

(b) Subject to the limitations and exceptions contained herein, this Governing Document may be amended by passage of a resolutions of the City and the Districts approving such amendment.

B. Preliminary Engineering Survey.

The Districts shall have authority to provide for the planning, design, acquisition, construction, installation, relocation, redevelopment, maintenance, and financing of the Public Improvements within and without the boundaries of the Districts, as specified application materials relating to the Districts and as may be further defined in a development agreement. An estimate of the costs of the Public Improvements which may be planned for, designed, acquired, constructed, installed, relocated, redeveloped, maintained or financed was prepared based upon a preliminary engineering survey and estimates derived from the zoning on the property in the District Area and is approximately Three Hundred Ninety-Six Million Dollars ($396,000,000).

All of the Public Improvements will be designed in such a way as to assure that the Public Improvements standards will be compatible with those of the City and/or any other applicable public entity. All construction cost estimates are based on the assumption that construction conforms to applicable local, State or Federal requirements.

C. Multiple District Structure.

It is anticipated that the Districts, collectively, will undertake the financing and construction of the Public Improvements. The nature of the functions and services to be provided by each District ~~shall~~may be clarified in an interlocal agreement between and among the Districts. All such agreements will be designed to help assure the orderly development of the

Public Improvements and essential services in accordance with the requirements of this Governing Document. ~~Implementation of such interlocal agreement is essential to the orderly implementation of this Governing Document. Accordingly, any determination of any Board to set aside said interlocal agreement without the consent of all of the Districts shall be a material modification of the Governing Document.~~ Said interlocal agreement may be amended by mutual agreement of the Districts without the need to amend this Governing Document.

VI. THE BOARD OF TRUSTEES

A. Board Composition. Each Board shall be composed of 3 Trustees who shall be appointed by the City Council pursuant to the PID Act. All Trustees shall be at large seats. Trustee terms for each District shall be staggered with initial terms as follows: Trustee 2 shall serve an initial term of 4 years; Trustees 1 and 3 shall serve an initial term of 6 years. All terms shall commence on the date of issuance of a certificate of creation by the Office of the Lieutenant Governor of the State of Utah. In accordance with the PID Act, appointed Trustees shall not be required to be residents of such District.

B. Future Board Composition.

1. Districts without Registered Voters. So long as there are no registered voters within a District, the respective board seats for such District shall continue to be appointed by the City from the candidates recommended by owners of land within such District and comprised of owners of land or their agents and officers who are registered voters at their principal residence.

2. Districts with Registered Voters: Prior to the issuance of Bonds by a District anticipated to have Registered Voters, such District shall estimate the number of certificates of occupancy to be issued by the City within such District (the "Estimated COO"). Upon attainment of the Estimated COO, the respective board seats for such District's Board shall transition from appointed to elected seats following the expiration of the then current term for such Board member. Seats on the Board may transition prior to attainment of the Estimated COO if approved in a resolution adopted by such Board.

C. Reelection and Reappointment. Upon the expiration of a Trustee's respective term, any seat which has not transitioned to an elected seat shall be appointed by the City Council pursuant to the PID Act and any seat which has transitioned to an elected seat shall be elected pursuant to an election held for such purpose. In the event that no qualified candidate files to be considered for appointment or files a declaration of candidacy for a seat, such seat may be filled in accordance with the Local District Act.

D. Vacancy. Any vacancy on the Board shall be filled pursuant to the Local District Act.

E. Compensation. Unless otherwise permitted by the PID Act, only Trustees who are residents of the District may be compensated for services as Trustee. Such compensation shall be in accordance with State Law.

F. Conflicts of Interest. Trustees shall disclose all conflicts of interest. Any Trustee who discloses such conflicts in accordance with 17D-4-202 and 67-16-9, Utah Code, shall be entitled to vote on such matters.

VII. REGIONAL IMPROVEMENTS

The Districts shall be authorized to provide for the planning, design, acquisition, construction, installation, relocation and/or redevelopment and a contribution to the funding of the Regional Improvements and fund the administration and overhead costs related to the provisions of the Regional Improvements.

VIII. FINANCIAL PLAN

A. General.

The Districts shall be authorized to provide for the planning, design, acquisition, construction, installation, relocation and/or redevelopment of the Public Improvements from their revenues and by and through the proceeds of Debt to be issued by ~~the Districts.~~such District. In addition, the Districts shall be permitted to finance the prepayment of impact fees for the Project. The Financial Plan for the Districts shall be to issue such Debt as the Districts can reasonably pay within the Maximum ~~Bond~~Debt Mill Levy Imposition Term from revenues derived from the ~~Fees~~Maximum Debt Mill Levy, Assessments, or both, and other legally available revenues. So long as Debt is issued in accordance with the provisions of this Governing Document, there is no limit to the amount of Debt that may be issued by any District. ~~All~~ The total Debt shall be permitted to be issued on a schedule and in such year or years as the Districts determine shall meet the needs of the Financial Plan referenced above and phased to serve development as it occurs. All bonds and other Debt issued by the Districts may be payable from any and all legally available revenues of the Districts, including general ad valorem taxes to be imposed upon all Taxable Property within the District, Fees, and Assessments. The ~~Districts are not permitted to impose any ad valorem property taxes for the payment of Debt or any other purpose. The Districts will~~District may also rely upon various other revenue sources authorized by law. These will include the power to assess Fees, penalties, or charges, including as provided in Section 17D-4-304, Utah Code, as amended from time to time.

B. Maximum Voted Interest Rate and Maximum Underwriting Discount.

The interest rate on any Debt is expected to be the market rate at the time the Debt is issued. In the event of a default, the proposed maximum interest rate on any Debt is not expected to exceed eighteen percent (18%). The proposed maximum underwriting discount will be five percent (5%). Debt, when issued, will comply with all relevant requirements of this Governing Document, State law and Federal law as then applicable to the issuance of public securities.

C. Limitations on Fees and Assessments.

(a) All Fees and Assessments (other than C-PACE Assessments ~~under Title 11, Chapter 42a, Utah Code~~) imposed by any District on a parcel shall be payable at or

before the issuance of a building permit by the City with respect to such Parcel. So long as Fees are not passed on to End Users, there is no maximum amount of Fees that may be imposed by a District, provided that all such fees shall be related to administrative expenses of the District, the provision of Public Improvements, and debt service on Bonds relating thereto.

(b) Any Assessments issued under the C-PACE Act may be repayable in accordance with the provisions of such statute.

(c) The City agrees to collect Fees and remit such Fees to the Districts on at least a monthly basis and further agrees that any building permit issued within the boundaries of a District will require proof of payment of Fees and sign off by such District. Additional procedures regarding the collection and remittance of Fees may be established by interlocal agreement between the City and such District(s).

D. ~~Title 11, Chapter 42a,~~Maximum Debt Mill Levy.

~~(a)~~ The "Maximum Debt Mill Levy" shall be the maximum mill levy the Districts are permitted to impose upon the taxable property within the District for payment of Limited Tax Debt shall be 0.004 per dollar of taxable value of taxable property in the District; provided that such levy shall be subject to adjustment as provided in Section 17D-4-301(8), Utah Code~~ may be repayable in accordance with the provisions of such statute.~~

~~(b) The City agrees to collect Fees and remit such Fees to the Districts on at least a monthly basis and further agrees that any building permit issued within the boundaries of a District will require proof of payment of Fees and sign off by such District. Additional procedures regarding the collection and remittance of Fees may be established by interlocal agreement between the City and such District(s).~~

(a) ~~Maximum Bond~~.

(b) Such Maximum Debt Mill Levy may only be amended pursuant to a Governing Document Amendment and as provided in Section 17D-4-202, Utah Code.

~~D.~~E. Maximum Debt Mill Levy Imposition Term. Each bond issued by the ~~Districts~~District shall mature within ~~thirty-one~~Thirty-One (31) years from the date of issuance of such bond~~; in~~. In addition, no mill levy may be imposed for the repayment of a series of bonds ~~of a District repayable~~after a period exceeding Forty (40) years from ~~Fees shall be deemed discharged at such time as there is no longer any Fees outstanding relating to~~ the first date of imposition of the mill levy for such ~~bonds~~bond (the "Maximum ~~Bond~~Debt Mill Levy Imposition Term").

~~E.~~F. Debt Repayment Sources.

~~F.~~G. ~~Debt Repayment Sources.~~

The Districts may impose ~~Fees and Assessments as a primary source of revenue for repayment of debt service, at rates to be determined by each District. The Districts may also rely upon various other revenue sources authorized by law. At the Districts' discretion, these may include the power to assess Assessments, penalties, or charges, including as provided in Section 17D-4-304, Utah Code, as amended from time to time. The Districts may not impose~~ a mill levy on taxable property within ~~their~~its boundaries and Fees as ~~a source~~primary sources of revenue for repayment of debt service. The District may also rely upon various other revenue sources authorized by law. At the Districts' discretion, these may include the power to assess Assessments, penalties, or charges, including as provided in Section 17D-4-304, Utah Code, as amended from time to time. Except as described in Section VIII.C(a), the debt service mill levy in the Districts shall not exceed the Maximum Debt Mill Levy or, the Maximum Debt Mill Levy Imposition Term, except for repayment of General Obligation Debt.

The ~~District~~Districts shall not be permitted to charge an End User the costs of any portion of a Public Improvement for which such End User has already paid or is presently obligated to pay through any combination of mill levy, Fees, Assessment, or impact fee. This provision shall not prohibit the division of costs between mill levies, Fees, Assessments, or impact fees, but is intended to prevent double charging of End Users for the costs of Public Improvements.

~~G.~~H. Debt Instrument Disclosure Requirement.

In the text of each Bond and any other instrument representing and constituting Debt, the Districts shall set forth a statement in substantially the following form:

> By acceptance of this instrument, the owner of this Bond agrees and consents to all of the limitations in respect of the payment of the principal of and interest on this Bond contained herein, in the resolution of the District authorizing the issuance of this Bond and in the Governing Document for creation of the District.

Similar language describing the limitations in respect of the payment of the principal of and interest on Debt set forth in this Governing Document shall be included in any document used for the offering of the Debt for sale to persons, including, but not limited to, a developer of property within the boundaries of the Districts.

~~H.~~I. Security for Debt.

The Districts shall not pledge any revenue or property of the City as security for the indebtedness set forth in this Governing Document. Approval of this Governing Document shall not be construed as a guarantee by the City of payment of any of the Districts' obligations; nor shall anything in the Governing Document be construed so as to create any responsibility or liability on the part of the City in the event of default by the Districts in the payment of any such obligation.

~~I.~~J. Districts' Operating Costs.

The estimated cost of acquiring land, engineering services, legal services and administrative services, together with the estimated costs of the Districts' organization and initial operations, are anticipated to be [Two Hundred Fifty Thousand Dollars ($250,000)], which will be eligible for reimbursement from Debt proceeds.

In addition to the capital costs of the Public Improvements, the Districts will require operating funds for administration and to plan and cause the Public Improvements to be constructed. The first year's operating budget is estimated to be approximately [Fifty Thousand Dollars ($50,000)] which is anticipated to be derived from property taxes and other revenues.

~~J.~~K. Bond and Disclosure Counsel.

It is the intent of the City that the Districts shall use competent and nationally recognized bond and disclosure counsel with respect to District Bonds to ensure proper issuance and compliance with this Governing Document. The Districts have agreed to utilize the City's counsel, Gilmore & Bell, P.C., as bond and disclosure counsel with respect to District Bonds.

IX. ANNUAL REPORT

A. General.

Each of the District shall be responsible for submitting an annual report to the City Manager's Office no later than 210 days following the end of such District's fiscal year, beginning with fiscal year ~~2022~~2023.

B. Reporting of Significant Events.

The annual report shall include information as to any of the following:

1. Boundary changes made or proposed to the District's boundary as of the last day of the prior fiscal year, if changed.

2. List of current interlocal agreements, if changed (to be delivered to the Creating Entity upon request);

3. Names and terms of Board members and officers; the Estimated COO for such District, if changed; and progress towards milestones required for transition to elected Board;

4. District office contact information, if changed;

5. Rules and regulations of the District regarding bidding, conflict of interest, contracting, and other governance matters, if changed;

6. A summary of any litigation which involves the District Public Improvements as of the last day of the prior fiscal year, if any;

7. Status of the District's construction of the Public Improvements as of December 31 of the prior year and listing all facilities and improvements constructed by the District that have been dedicated to and accepted by the City as of the last day of the prior fiscal year;

8. A list or table of all Fees or Assessments imposed by the District, if changed;

9. A table summarizing total debt issued by the District as well as any presently planned debt issuances;

10. Official statements of current outstanding bonded indebtedness, if not previously provided to the City;

11. Current year budget including a description of the Public Improvements to be constructed in such year;

12. Financial statements of the District for the most recent completed fiscal year (such statements shall be audited if required by bond documents or statute);

13. Notice of any uncured events of default by the District, which continue beyond a ninety (90) day period, under any Debt instrument; and

14. Any inability of the District to pay its obligations as they come due, in accordance with the terms of such obligations, which continue beyond a ninety (90) day period.

X. DISSOLUTION

Upon an independent determination of each District Board that the purposes for which such District was created have been accomplished, the District shall file petitions for dissolution, pursuant to the applicable State statutes. In no event shall a dissolution occur until such District has provided for the payment or discharge of all of their outstanding indebtedness and other financial obligations as required pursuant to State statutes, collected or assigned all Fees payable to such District, and disbursed of all assets of such District.

XI. DISCLOSURE TO PURCHASERS

Within thirty (30) days of the Office of the Lieutenant Governor of the State of Utah issuing a certificate of creation, each Board shall record a notice with the recorder of Herriman City. Such notice shall (a) contain a description of the boundaries of the District~~,~~; (b) state that a copy of this Governing Document is on file at the office of the City~~, and~~; (c) state that the District may finance and repay infrastructure and other improvements through the ~~imposition~~levy of ~~Fees and Assessments; and~~a property tax; (d) state the Maximum Debt Mill Levy of the District; and (e) if applicable, state that the ~~District is not authorized~~debt may convert to ~~impose any property taxes.~~general obligation debt and outline the provisions relating to conversion. Such notice shall further be ~~filled~~filed with the City.

In addition, the Applicant and the Board shall ensure that the Applicant, commercial developers, and commercial lessors, as applicable, disclose the following information to End Users:

(1) All of the information in the first paragraph of this XI;

(2) A disclosure outlining the impact of any applicable property tax, in substantially the following form:

"Under the maximum property tax rate of the District, **for every $100,000 of taxable value**, there would be an **additional annual property tax of $400** for the duration of the District's Bonds."

(3) Such disclosures shall be contained on a separate-colored page of the applicable closing or lease documents and shall require a signature of such end user acknowledging the foregoing.

XII. INTERLOCAL AGREEMENT

The form of the Interlocal Agreement required by the City Code, relating to the limitations imposed on the Districts' activities, is attached hereto as **Exhibit D**. The Districts shall approve the Interlocal Agreement in the form attached as **Exhibit D** at their first Board meeting after its creation. Failure of the District to execute the Interlocal Agreement as required herein shall constitute a material modification and shall require a Governing Document Amendment. The City Council shall approve the Interlocal Agreement in the form attached as **Exhibit D** at the public hearing approving the Governing Document.

EXHIBIT A

Legal Descriptions

Olympia Public Infrastructure District No. 1
Beginning at a point being South 00°24’18” West 1,004.67 feet along the section line and West 2,949.22 feet from the Northeast Section of 32, Township 3 South, Range 2 West, Salt Lake Base and Meridian; and running

thence South 18°46'09" East 100.00 feet;
thence South 71°13'51" West 65.40 feet to the Northeast Right-of-Way Line of State Route-111 (SR-111), also known as Bacchus Highway;
thence North 00°09'20" East 105.71 feet along said Northeast Right-of-Way Line of SR-111;
thence North 71°13'51" East 31.11 feet to the point of beginning.

Contains 4,826 Square Feet or 0.111 Acres

Olympia Public Infrastructure District No. 2
Beginning at a point being South 00°24’18” West 994.66 feet along the section line and West 2,919.83 feet from the Northeast Section of 32, Township 3 South, Range 2 West, Salt Lake Base and Meridian; and running

thence South 18°46'09" East 100.00 feet;
thence South 71°13'51" West 31.11 feet;
thence North 18°46'09" West 100.00 feet;
thence North 71°13'51" East 31.11 feet to the point of beginning.

Contains 3,111 Square Feet or 0.071 Acres

Olympia Public Infrastructure District No. 3
Beginning at a point being South 00°24’18” West 984.64 feet along the section line and West 2,890.44 feet from the Northeast Section of 32, Township 3 South, Range 2 West, Salt Lake Base and Meridian; and running

thence South 18°46'09" East 100.00 feet;
thence South 71°13'51" West 31.11 feet;
thence North 18°46'09" West 100.00 feet;
thence North 71°13'51" East 31.11 feet to the point of beginning.

Contains 3,111 Square Feet or 0.071 Acres

Olympia Public Infrastructure District No. 4
Beginning at a point being South 00°24’18” West 974.63 feet along the section line and West 2,861.05 feet from the Northeast Section of 32, Township 3 South, Range 2 West, Salt Lake Base and Meridian; and running

thence South 18°46'09" East 100.00 feet;
thence South 71°13'51" West 31.11 feet;
thence North 18°46'09" West 100.00 feet;
thence North 71°13'51" East 31.11 feet to the point of beginning.

Contains 3,111 Square Feet or 0.071 Acres

Olympia Public Infrastructure District No. 5
Beginning at a point being South 00°24’18” West 964.62 feet along the section line and West 2,831.67 feet from the Northeast Section of 32, Township 3 South, Range 2 West, Salt Lake Base and Meridian; and running

thence South 18°46'09" East 100.00 feet;
thence South 71°13'51" West 31.11 feet;
thence North 18°46'09" West 100.00 feet;
thence North 71°13'51" East 31.11 feet to the point of beginning.

Contains 3,111 Square Feet or 0.071 Acres

Olympia Public Infrastructure District No. 6
Beginning at a point being South 00°24’18” West 954.61 feet along the section line and West 2,802.28 feet from the Northeast Section of 32, Township 3 South, Range 2 West, Salt Lake Base and Meridian; and running

thence South 18°46'09" East 100.00 feet;
thence South 71°13'51" West 31.11 feet;
thence North 18°46'09" West 100.00 feet;
thence North 71°13'51" East 31.11 feet to the point of beginning.

Contains 3,111 Square Feet or 0.071 Acres

Olympia Public Infrastructure District No. 7
Beginning at a point being South 00°24’18” West 944.60 feet along the section line and West 2,772.89 feet from the Northeast Section of 32, Township 3 South, Range 2 West, Salt Lake Base and Meridian; and running

thence South 18°46'09" East 100.00 feet;
thence South 71°13'51" West 31.11 feet;
thence North 18°46'09" West 100.00 feet;
thence North 71°13'51" East 31.11 feet to the point of beginning.

Contains 3,111 Square Feet or 0.071 Acres

Annexation Area

Olympia Property – Overall Parcel

A parcel of land, situate in parts of Sections 27, 32, 33 and 34, Township 3 South, Range 2 West, Salt Lake Base and Meridian, U.S. Survey, more particularly described as follows:

Beginning at the Northeast Corner of Section 33, Township 3 South, Range 2 West, Salt Lake Base and Meridian; and running

thence North 00°41'26" East 1,324.02 feet along the section line to the Northeast Corner of the Southwest Quarter of the Southwest Quarter of Section 27, Township 3 South, Range 2 West, Salt Lake Base and Meridian;

thence South 89°30'42" East 2,657.98 feet along the 1/16 section line to the Northeast Corner of the Southeast Quarter of the Southwest Quarter of said Section 27;

thence South 00°28'09" West 1,324.47 feet along the quarter section line to the South Quarter Corner of said Section 27;

thence South 89°30'06" East 2,664.00 feet along the section line to the Southeast Corner of said Section 27;

thence South 89°48'53" East 641.53 feet along the section line;

thence South 00°30'22" East 1,659.00 feet to the extension of the Northerly Boundary Line of Blackhawk Estates Plat "C", recorded as Entry No. 11719743 in Book 2013P at Page 178 in the Office of the Salt Lake County Recorder;

thence along the extension of and said Northerly Boundary Line of Blackhawk Estates Plat "C" the following nine (9) courses:

(1) South 56°51'10" West 333.22 feet;

(2) South 68°38'27" West 95.94 feet;

(3) South 56°30'13" West 98.90 feet;

(4) South 51°26'05" West 67.14 feet;

(5) South 41°54'31" West 111.54 feet;

(6) South 48°31'38" West 142.42 feet;

(7) South 54°24'10" West 87.46 feet;

(8) South 44°19'04" West 94.58 feet;

(9) South 72°52'33" West 99.94 feet to the Northerly Boundary Line of Blackhawk Estates Plat "B", recorded as Entry No. 11386427 in Book 2012P at Page 53 in the Office of the Salt Lake County Recorder;

thence along said Northerly Boundary Line of Blackhawk Estates Plat "B" the following six (6) courses:

(1) South 72°52'34" West 12.55 feet;

(2) South 82°11'10" West 94.89 feet;

(3) South 86°16'00" West 83.86 feet;

(4) South 66°09'21" West 95.83 feet;

(5) South 58°13'58" West 137.09 feet;

(6) South 78°13'01" West 40.13 feet along said Northerly Boundary Line of Blackhawk Estates Plat "B" to the Northwest Corner of said Blackhawk Estates Plat "B";

thence South 12°44'34" East 10.64 feet along said Westerly Boundary Line of Blackhawk Estates Plat "B" to the Northerly Boundary Line of Western Creek PUD Plat A, recorded as Entry No. 10946923 in Book 2010P at Page 76 in the Office of the Salt Lake County Recorder;

thence along said Northerly Boundary Line of said Western Creek PUD Plat A the following three (3) courses:

(1) South 78°07'21" West 16.66 feet;

(2) South 57°11'41" West 95.42 feet;

(3) South 73°50'10" West 172.86 feet along said Northerly Boundary Line of Western Creek PUD Plat A to the Northerly Boundary Line of Western Creek Plat B, recorded as Entry No. 11429199 in Book 2012P at Page 92 in the Office of the Salt Lake County Recorder;

thence along said Northerly Boundary Line of Western Creek Plat B the following two (2) courses:

(1) South 73°27'12" West 291.53 feet;

(2) South 80°15'09" West 106.84 feet to the 1/16 section line;

thence North 00°10'31" East 1,342.34 feet along the 1/16 section line to the Southeast Corner of the Northwest Quarter of the Northeast Quarter of said Section 34, monumented with a rebar and cap stamped "5251295";

thence North 89°31'41" West 2,661.50 feet along the 1/16 section line to the Southwest Corner of the Northeast Quarter of the Northwest Quarter of said Section 34, monumented with a Salt Lake County monument;

thence South 00°02'54" West 1,325.66 feet along the 1/16 section line to the quarter section line;

thence North 89°35'51" West 1,329.44 feet along the quarter section line to the East Quarter Corner of said Section 33, monumented with a Salt Lake County monument;

thence North 89°38'37" West 3,990.98 feet along the quarter section line to the Southwest Corner of the Southeast Quarter of the Northwest Quarter, monumented with a rebar and cap stamped "5251295";

thence South 00°20'42" East 1,323.10 feet along the 1/16 section line to the Southeast Corner of the Northwest Quarter of the Southwest Quarter of said Section 33, monumented with a rebar and cap stamped "5251295";

thence North 89°38'31" West 1,327.74 feet along the 1/16 section line to the Southeast Corner of the Northeast Quarter of the Southeast Quarter of Section 32, Township 3 South, Range 2 West, Salt Lake Base and Meridian;

thence North 89°29'26" West 2,641.53 feet along the 1/16 section line to the Southwest Corner of the Northwest Quarter of the Southeast Quarter of said Section 32;

thence North 00°09'01" East 149.81 feet along the 1/16 section line;

thence North 86°15'53" East 292.00 feet;

thence South 88°11'07" East 207.61 feet;

thence North 00°09'01" East 185.12 feet;

thence South 86°15'53" West 500.00 feet to the 1/16 section line;

thence North 00°09'01" East 405.38 feet along the 1/16 section line to the Northeast Right-of-Way Line of State Route-111 (SR-111), also known as Bacchus Highway;

thence Northwesterly and Northerly along said Northeasterly said right of way line of State Route-111 (SR-111) the following seven (7) courses:

(1) Northwesterly 246.50 feet along the arc of a 268.31 foot radius curve to the right (center bears North 05°49'12" East and the chord bears North 57°51'41" West 237.92 feet with a central angle of 52°38'15");

(2) North 31°32'34" West 437.23 feet;

(3) Northwesterly 288.95 feet along the arc of a 331.97 foot radius curve to the right (center bears North 58°27'27" East and the chord bears North 06°36'27" West 279.91 feet with a central angle of 49°52'13");

(4) North 18°19'39" East 201.90 feet;

(5) Northeasterly 470.16 feet along the arc of a 1,482.39 foot radius curve to the left (center bears North 71°40'21" West and the chord bears North 09°14'30" East 468.19 feet with a central angle of 18°10'19");

(6) North 89°50'40" West 17.00 feet;

(7) North 00°09'20" East 792.30 feet;

thence North 71°13'51" East 3,153.48 feet to the Northwest Corner of said Section 33, monumented with a Salt Lake County monument;

thence South 89°35'41" East 5,303.20 feet along the section line to the point of beginning.

Contains 40,915,169 Square Feet or 939.283 Acres

EXHIBIT B

Herriman City Vicinity Map

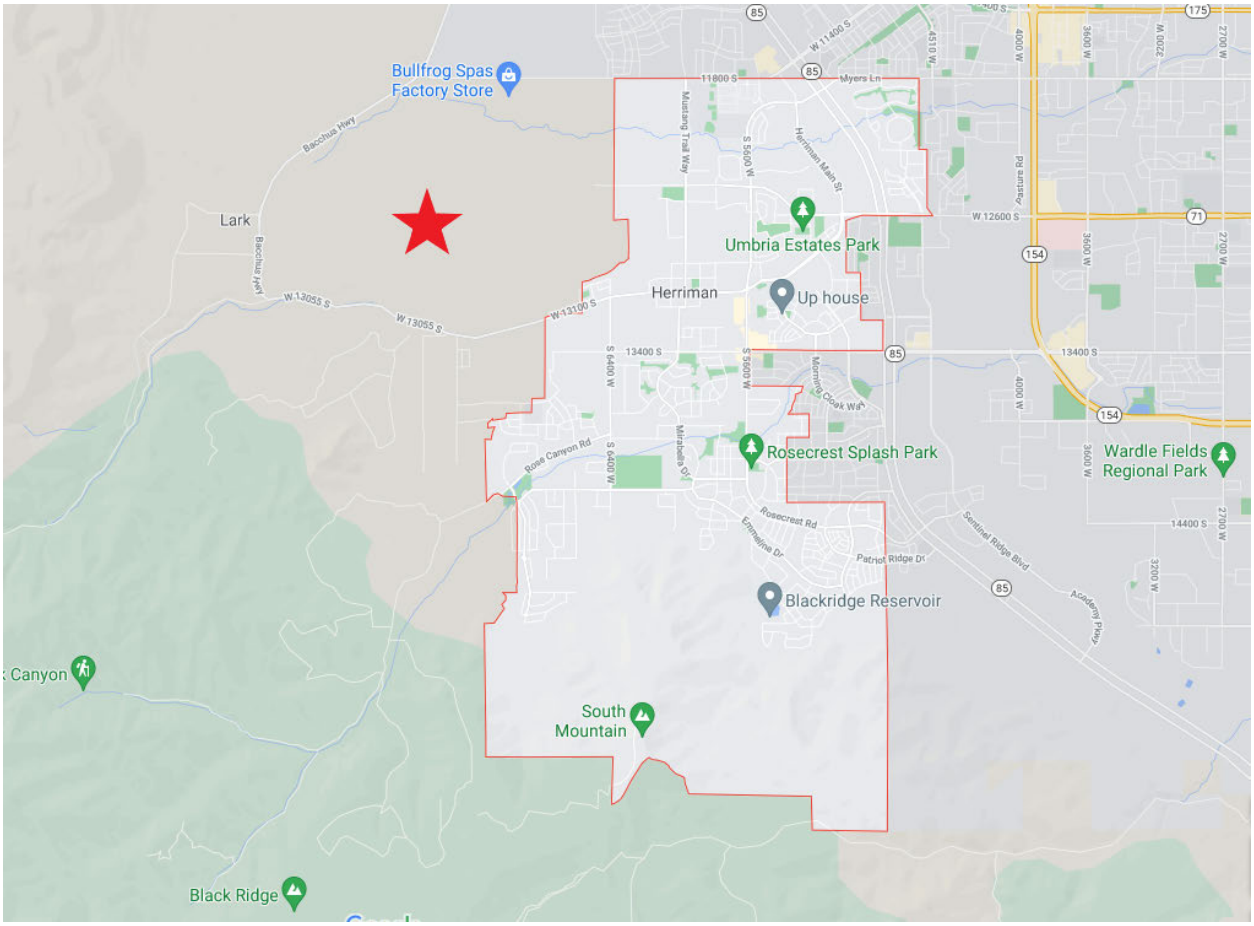


EXHIBIT C

Initial District and Annexation Area Boundaries Map

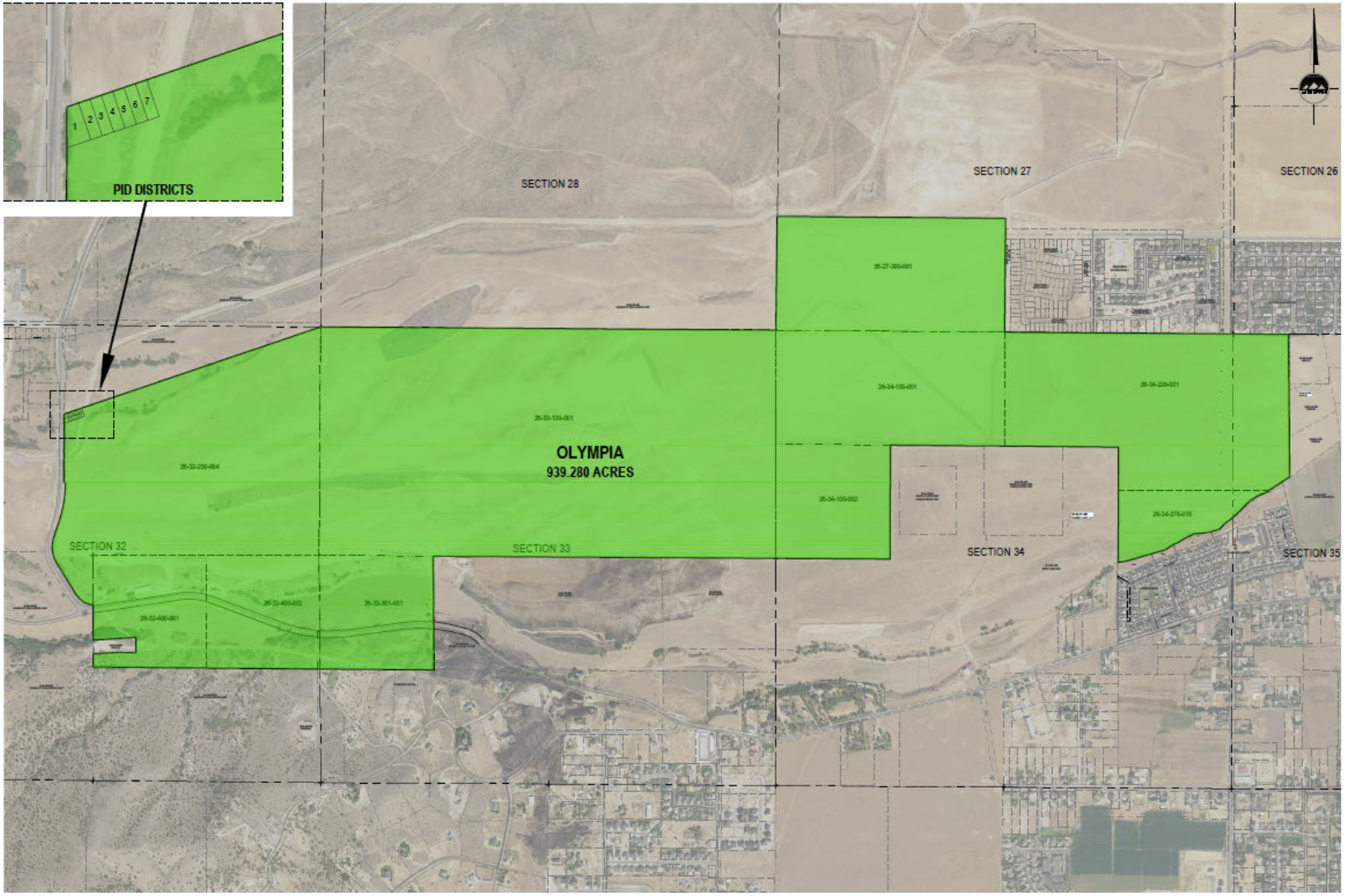


EXHIBIT D

Interlocal Agreement between the Districts and Herriman City

AMENDED AND RESTATED INTERLOCAL AGREEMENT BETWEEN

~~THE~~ HERRIMAN CITY, UTAH
AND
OLYMPIA PUBLIC INFRASTRUCTURE DISTRICT NO. 1
AND
OLYMPIA PUBLIC INFRASTRUCTURE DISTRICT NO. 2
AND
OLYMPIA PUBLIC INFRASTRUCTURE DISTRICT NO. 3
AND
OLYMPIA PUBLIC INFRASTRUCTURE DISTRICT NO. 4
AND
OLYMPIA PUBLIC INFRASTRUCTURE DISTRICT NO. 5
AND
OLYMPIA PUBLIC INFRASTRUCTURE DISTRICT NO. 6
AND
OLYMPIA PUBLIC INFRASTRUCTURE DISTRICT NO. 7

THIS AGREEMENT is made and entered into as of this ___ day of _____, ~~2021~~2023, by and between ~~the~~ HERRIMAN CITY, a political subdivision of the State of Utah ("City"), OLYMPIA PUBLIC INFRASTRUCTURE DISTRICT NO. 1, a political subdivision of the State of Utah ("District No. 1"), and OLYMPIA PUBLIC INFRASTRUCTURE DISTRICT NO. 2, a political subdivision of the State of Utah ("District No. 2" and together with District No. 1, the "Districts"). The City and the Districts are collectively referred to as the Parties.

RECITALS

WHEREAS, the Districts were organized to provide to exercise powers as are more specifically set forth in the Districts' Amended and Restated Governing Document approved by the City on _____, ~~2021~~2023 ("Governing Document"); and

WHEREAS, the Governing Document makes reference to the execution of an Interlocal Agreement between the City and the Districts; and

WHEREAS, the City and the Districts have determined it to be in the best interests of their respective taxpayers, residents and property owners to enter into this Interlocal Agreement ("Agreement").

NOW, THEREFORE, in consideration of the covenants and mutual agreements herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto agree as follows:

COVENANTS AND AGREEMENTS

1. Operations and Maintenance. The purpose of the Districts is to plan for, design, acquire, construct, install, relocate, redevelop and finance the Public Improvements. The

Districts shall dedicate the Public Improvements (as defined in the Governing Document) to the City or other appropriate public entity or owners association in a manner consistent with the rules and regulations of the City and applicable provisions of the City Code and any development agreement. The Districts shall be authorized, but not obligated, to own, operate and maintain Public Improvements not otherwise required to be dedicated to the City or other public entity.

~~2. Prohibition on Ad Valorem Property Taxes. The Districts are not permitted under any circumstance to issue General Obligation Debt, Limited Tax Debt, or any other debt that is payable from or secured by ad valorem property taxes of a District. In addition, the Districts are not permitted to impose any ad valorem property taxes for any purpose.~~

2. Reserved.

3. Construction Standards. The Districts will ensure that the Public Improvements are designed and constructed in accordance with the standards and specifications of the City and of other governmental entities having proper jurisdiction, as applicable. The Districts will obtain the City's approval of civil engineering plans and will obtain applicable permits for construction and installation of Public Improvements prior to performing such work. Public Improvements shall be subject to the ordinary inspection and approval procedures of the City and other governmental entities having proper jurisdiction.

4. Issuance of Privately Placed Debt. Prior to the issuance of any privately placed Debt, the Districts shall obtain the certification of a Municipal Advisor substantially as follows:

> We are [I am] a Municipal Advisor within the meaning of the District's Governing Document.
>
> We [I] certify that (1) the net effective interest rate to be borne by [insert the designation of the Debt] does not exceed a reasonable current [tax-exempt] [taxable] interest rate, using criteria deemed appropriate by us [me] and based upon our [my] analysis of comparable high yield securities; and (2) the structure of [insert designation of the Debt], including maturities and early redemption provisions, is reasonable considering the financial circumstances of the District.

5. Inclusion Limitation. The Districts shall not include or withdrawal into or from their boundaries any property outside the District Area without the prior written consent of the City. By the Governing Document, the City has consented to the annexation or withdrawal of any area within the Annexation Area Boundaries into or from any of the Districts. The Districts shall not include within any of its boundaries any property inside the inclusion area boundaries without the prior written consent of the City except upon petition of the surface property owners of 100 percent of such property and/or 100 percent of registered voters within the area to be included, as applicable, as provided in Section 17D-4-201(3), Utah Code.

6. Overlap Limitation. ~~The boundaries of the Districts may overlap.~~ The boundaries of the Districts shall not overlap unless the aggregate mill levy for payment of Debt of the

overlapping Districts will not at any time exceed the Maximum Debt Mill Levy of the Districts. Additionally, the Districts shall not consent to the organization of any other public infrastructure district organized under the PID Act within the District Area which will overlap the boundaries of the Districts unless the aggregate mill levy for payment of Debt of such proposed districts will not at any time exceed the Maximum Debt Mill Levy of the Districts.

7. Initial Debt. Upon the issuance of a certificate of creation of a District issued by the Office of the Lieutenant Governor of the State of Utah, such District shall be permitted to: (a) issue Debt and/or (b) impose a mill levy for the payment of Debt and collect Fees and Assessments for the purpose of repayment of Debt.

8. No Debt Issuance Limitation. So long as Debt is issued in accordance with the provisions of this Governing Document, there is no limit to the amount of Debt that may be issued by any District.

9. Bankruptcy. All of the limitations contained in the Governing Document, including, but not limited to, those pertaining to the Maximum ~~Bond Term~~Debt Mill Levy, Maximum Debt Mill Levy Imposition Term and the Fees have been established under the authority of the City to approve a Governing Document with conditions pursuant to Section 17D-4-201(4), Utah Code. It is expressly intended that such limitations:

(a) Shall not be subject to set-aside for any reason or by any court of competent jurisdiction, absent a Governing Document Amendment; and

(b) Are, together with all other requirements of Utah law, included in the "political or governmental powers" reserved to the State under the U.S. Bankruptcy Code (11 U.S.C.) Section 903, and are also included in the "regulatory or electoral approval necessary under applicable nonbankruptcy law" as required for confirmation of a Chapter 9 Bankruptcy Plan under Bankruptcy Code Section 943(b)(6).

Any Debt, issued with a pledge or which results in a pledge, that exceeds the Maximum Debt Mill Levy and the Maximum ~~Bond~~Debt Mill Levy Imposition Term, shall be deemed a material modification of the Governing Document and shall not be an authorized issuance of Debt unless and until such material modification has been approved by the City as part of a Governing Document Amendment.

10. Dissolution. Upon an independent determination of each District Board that the purposes for which such District was created have been accomplished, the District shall file petitions for dissolution, pursuant to the applicable State statutes. In no event shall a dissolution occur until such District has provided for the payment or discharge of all of their outstanding indebtedness and other financial obligations as required pursuant to State statutes, collected or assigned all Fees payable to such District, and disbursed of all assets of such District.

11. Disclosure to Purchasers. Within thirty (30) days of the Office of the Lieutenant Governor of the State of Utah issuing a certificate of creation, each Board shall record a notice with the recorder of Herriman City. Such notice shall (a) contain a description of the boundaries of the District~~,~~; (b) state that a copy of this Governing Document is on file at the office of the City~~,~~; (c) state that the District may finance and repay infrastructure and other improvements

through the levy of a property tax; ~~and~~ (d) state the Maximum Debt Mill Levy of the District; and (e) if applicable, state that the ~~District is not authorized~~debt may convert to ~~impose any property taxes.~~general obligation debt and outline the provisions relating to conversion. Such notice shall further be ~~filled~~filed with the City.

In addition, the Applicant and the Board shall ensure that the Applicant, commercial developers, and commercial lessors, as applicable, disclose the following information to End Users:

(1) All of the information in the first paragraph of Section XI of the Governing Document;

(2) A disclosure outlining the impact of any applicable property tax, in substantially the following form:

"Under the maximum property tax rate of the District, **for every $100,000 of taxable value**, there would be an **additional annual property tax of $400** for the duration of the District's Bonds."

(3) Such disclosures shall be contained on a separate-colored page of the applicable closing or lease documents and shall require a signature of such end user acknowledging the foregoing.

12. Governing Document Amendment Requirement. Actions of the Districts which violate the limitations set forth in V.A.1-9 or VIII.B-G of the Governing Document shall be deemed to be material modifications to the Governing Document and the City shall be entitled to all remedies available under State and local law to enjoin such actions of the Districts. Additionally, subject to the limitations and exceptions contained in the Governing Document, the Governing Document may be amended by passage of a resolutions of the City and the Districts approving such amendment.

13. Annual Report. Each District shall be responsible for submitting an annual report to the City Manager's Office no later than 210 days after the close of the District's fiscal year, commencing fiscal year ~~2022~~2023, containing the information set forth in Section IX of the Governing Document.

14. Regional Improvements. The Districts shall be authorized to provide for the planning, design, acquisition, construction, installation, relocation and/or redevelopment and a contribution to the funding of the Regional Improvements and fund the administration and overhead costs related to the provisions of the Regional Improvements.

15. Limitations on Fees and Assessments.

(a) All Fees and Assessments (other than C-PACE Assessments ~~under Title 11, Chapter 42a, Utah Code~~) imposed by any District on a parcel shall be payable at or before the issuance of a building permit by the City with respect to such Parcel. So long as Fees are not passed on to End Users, there is no maximum amount of Fees that may be imposed by a District,

provided that all such fees shall be related to administrative expenses of the District, the provision of Public Improvements, and debt service on Bonds relating thereto.

(b) Any Assessments issued under the C-PACE Act may be repayable in accordance with the provisions of such statute.

(c) The City agrees to collect Fees and remit such Fees to the Districts on at least a monthly basis and further agrees that any building permit issued within the boundaries of a District will require proof of payment of Fees and sign off by such District. Additional procedures regarding the collection and remittance of Fees may be established by interlocal agreement between the City and such District(s).

~~(a) Title 11, Chapter 42a, Utah Code may be repayable in accordance with the provisions of such statute.~~

~~(b) The City agrees to collect Fees and remit such Fees to the Districts on at least a monthly basis and further agrees that any building permit issued within the boundaries of a District will require proof of payment of Fees and sign off by such District. Additional procedures regarding the collection and remittance of Fees may be established by interlocal agreement between the City and such District(s).~~

16. Maximum ~~Bond~~Debt Mill Levy Imposition Term. Each bond issued by the ~~Districts~~District shall mature within ~~thirty-one~~Thirty-One (31) years from the date of issuance of such bond~~; in~~. In addition, no mill levy may be imposed for the repayment of a series of bonds ~~of a District repayable~~after a period exceeding Forty (40) years from ~~Fees shall be deemed discharged at~~the first date of imposition of the mill levy for such ~~time as there is no longer any Fees outstanding relating to such bonds~~bond (the "Maximum ~~Bond~~Debt Mill Levy Imposition Term").

17. Notices. All notices, demands, requests or other communications to be sent by one party to the other hereunder or required by law shall be in writing and shall be deemed to have been validly given or served by delivery of same in person to the address or by courier delivery, via United Parcel Service or other nationally recognized overnight air courier service, or by depositing same in the United States mail, postage prepaid, addressed as follows:

To the Districts: Olympia Public Infrastructure District Nos. 1-7

Attn:
Phone:

To the City: Herriman City
5355 West Herriman Main Street
Herriman, UT 84096
Attn: Planning and Zoning
Phone: (801) 446-5323

All notices, demands, requests or other communications shall be effective upon such personal delivery or one (1) business day after being deposited with United Parcel Service or other nationally recognized overnight air courier service or three (3) business days after deposit in the United States mail. By giving the other party hereto at least ten (10) days written notice thereof in accordance with the provisions hereof, each of the Parties shall have the right from time to time to change its address.

18. Amendment. This Agreement may be amended, modified, changed, or terminated in whole or in part only by a written agreement duly authorized and executed by the Parties hereto and without amendment to the Governing Document.

19. Assignment. Neither Party hereto shall assign any of its rights nor delegate any of its duties hereunder to any person or entity without having first obtained the prior written consent of the other Party, which consent will not be unreasonably withheld. Any purported assignment or delegation in violation of the provisions hereof shall be void and ineffectual.

20. Default/Remedies. In the event of a breach or default of this Agreement by any Party, the non-defaulting Party shall be entitled to exercise all remedies available at law or in equity, specifically including suits for specific performance and/or monetary damages. In the event of any proceeding to enforce the terms, covenants or conditions hereof, the prevailing Party in such proceeding shall be entitled to obtain as part of its judgment or award its reasonable attorneys' fees.

21. Term. This Agreement shall terminate upon the earlier to occur of dissolution of the Districts or fifty (50) years from the date hereof.

22. Governing Law and Venue. This Agreement shall be governed and construed under the laws of the State of Utah.

23. Inurement. Each of the terms, covenants and conditions hereof shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns.

24. Integration. This Agreement constitutes the entire agreement between the Parties with respect to the matters addressed herein. All prior discussions and negotiations regarding the subject matter hereof are merged herein.

25. Parties Interested Herein. Nothing expressed or implied in this Agreement is intended or shall be construed to confer upon, or to give to, any person other than the District and the City any right, remedy, or claim under or by reason of this Agreement or any covenants, terms, conditions, or provisions thereof, and all the covenants, terms, conditions, and provisions in this Agreement by and on behalf of the Districts and the City shall be for the sole and exclusive benefit of the Districts and the City.

26. Severability. If any covenant, term, condition, or provision under this Agreement shall, for any reason, be held to be invalid or unenforceable, the invalidity or unenforceability of such covenant, term, condition, or provision shall not affect any other provision contained herein, the intention being that such provisions are severable.

27. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall constitute an original and all of which shall constitute one and the same document.

28. Paragraph Headings. Paragraph headings are inserted for convenience of reference only.

29. Defined Terms. Capitalized terms used herein and not otherwise defined shall have the meanings ascribed to them in the Governing Document.

[SIGNATURE PAGE TO INTERLOCAL AGREEMENT]

OLYMPIA PUBLIC INFRASTRUCTURE DISTRICT NO. 1

By: _____
Chair

Attest:

_____
Secretary

APPROVED AS TO FORM: _____

OLYMPIA PUBLIC INFRASTRUCTURE DISTRICT NO. 2

By: _____
Chair

Attest:

_____
Secretary

APPROVED AS TO FORM: _____

OLYMPIA PUBLIC INFRASTRUCTURE DISTRICT NO. 3

By: _____
Chair

Attest:

_____
Secretary

APPROVED AS TO FORM: _____

OLYMPIA PUBLIC INFRASTRUCTURE DISTRICT NO. 4

By: _____
Chair

Attest:

_____
Secretary

APPROVED AS TO FORM: _____

OLYMPIA PUBLIC INFRASTRUCTURE
DISTRICT NO. 5

By: _____
Chair

Attest:

_____
Secretary
APPROVED AS TO FORM: _____

OLYMPIA PUBLIC INFRASTRUCTURE
DISTRICT NO. 6

By: _____
Chair

Attest:

_____
Secretary

APPROVED AS TO FORM: _____

OLYMPIA PUBLIC INFRASTRUCTURE DISTRICT NO. 7

By: _____
Chair

Attest:

_____
Secretary

APPROVED AS TO FORM: _____

Herriman, Utah

By: _____
_____, Mayor

Attest:

By: _____
Its: _____

APPROVED AS TO FORM: _____

WHEN RECORDED, RETURN TO:

Herriman City Recorder
5355 West Herriman Main Street
Herriman, Utah 84096

DRAFT
10/27/22

AMENDMENT #2

MASTER DEVELOPMENT AGREEMENT

FOR

OLYMPIA

Approved: _____

SECOND AMENDMENT
TO
THE MASTER DEVELOPMENT AGREEMENT FOR OLYMPIA

THIS SECOND AMENDMENT TO THE MASTER DEVELOPMENT AGREEMENT FOR OLYMPIA (the "Second Amendment") is made and entered as of the _____ day of _____ 2022, by and between HERRIMAN CITY, a political subdivision of the State of Utah, by and through its City Council, THE LAST HOLDOUT, L.L.C., a Utah limited liability company, JORDAN SCHOOL DISTRICT, a Utah school district, and OLYMPIA LAND, LLC, a Utah limited liability company.

RECITALS

A. The Parties entered into a Master Development Agreement for Olympia which was recorded on November 16, 2021 as Entry No. 13825061 in the official books and records of the Salt Lake County Recorder (the "MDA").

B. The Parties entered into a First Amendment for Olympia which was recorded on September 20, 2022 as Entry No. 14018093 in the official books and records of the Salt Lake County Recorder.

C. The Parties desire to further amend the MDA to account for certain changes that have occurred to the proposed Project since the adoption of the MDA.

D. Specifically, the City desires for certain of the Public Infrastructure to be completed in early phases and one time to save costs and increase efficiencies and the City recognizes that the requirement of secondary water for certain areas of the Project no longer makes any practical sense
.

E. The parties have cooperated in the preparation of this Second Amendment.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the City, Owner and Master Developer and Special Owner hereby agree to the following:

AMENDMENTS

1. **Effect of this Second Amendment.** Other than a specifically amended herein by the First Amendment and this Second Amendment, the MDA shall remain in full force and effect.

2. **Secondary Water.** The provisions of Section 2.18 are hereby deleted. Any reference in the MDA to secondary water is also deemed deleted.

3. **Intersection of 12600 South and U-111 within the Planned Community.** Section 2.10.1 is hereby amended to read:

> 2.10.1 If at least one quarter (1/4) of the intersection of 12600 South and U-111 is located within the Planned Community, then Master Developer shall develop commercial uses, as permitted by the Design Guidelines, as follows:

4. **Public Infrastructure Financing.** Section 5.3.1 is hereby amended to read:

Security for Public Infrastructure Districts. The Parties hereby acknowledge that the collateral for securing public financing through the Public Infrastructure Districts shall be the One-Time Contract Fee and/or such other security as may be provided by the Governing Documents of the Public Infrastructure Districts. The Parties acknowledge that the One-Time Contract fee contemplated hereunder is not being assessed as an "impact fee" as that term is defined in Utah Code Ann § 11-36a-102(9) (2021).

5. **Special Owner Consent to Amendment.** Section 7.2 is hereby added to read as follows:

7.2. **Special Owner Consent Provision.** Special Owner shall not be required to execute any Amendment to this MDA that does not affect the School District Property.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement by and through their respective, duly authorized representatives as of the day and year first herein above written.

[signatures on following pages]

CITY
Herriman City

NATHAN CHERPESKI, City Manager

ATTEST

JACKIE NOSTROM, City Recorder

CHASE A. ANDRIZZI, City Attorney
Approved as to form and legality

STATE OF UTAH)
:ss.
COUNTY OF SALT LAKE)

On the _____day of _____, 2022, NATHAN CHERPESKI personally appeared before me, who being by me duly sworn, did say that they are the City Manager of Herriman City, a political subdivision of the State of Utah, and that the foregoing Master Development Agreement was signed on behalf of the City by authority of its City Council and said City Manager acknowledged to me that the City executed the same for the purposes described therein.

NOTARY PUBLIC

OWNER
The Last Holdout, LLC

Signature: _____

Name: _____

Title: _____

STATE OF UTAH)
:ss.
COUNTY OF SALT LAKE)

On the _____ day of _____, 2022, _____ personally appeared before me, who being by me duly sworn, did say that they are the _____ of The Last Holdout, L.L.C, a Utah limited liability company, and that the foregoing Master Development Agreement was signed on behalf of the Owner by authority of its governing board and acknowledged to me that the Owner executed the same for the purposes described therein.

_____
NOTARY PUBLIC

MASTER DEVELOPER
Olympia Land, LLC

_____
RYAN BUTTON, Manager

STATE OF UTAH)
:ss.
COUNTY OF SALT LAKE)

On the _____ day of _____, 2022, RYAN BUTTON personally appeared before me, who being by me duly sworn, did say that they are the Manager of Olympia Land, LLC, a Utah limited liability company, and that the foregoing Master Development Agreement was signed on behalf of the Master Developer by authority of its governing board and acknowledged to me that the City executed the same for the purposes described therein.

_____
NOTARY PUBLIC

SPECIAL OWNER
Jordan School District

Signature: _____

Name: _____

Title: _____

STATE OF UTAH)
:ss.
COUNTY OF SALT LAKE)

On the _____ day of _____, 2022, _____ personally appeared before me, who being by me duly sworn, did say that they are the _____ of Jordan School District, and that the foregoing Master Development Agreement was signed on behalf of the Owner by authority of its governing board and acknowledged to me that the Owner executed the same for the purposes described therein.

_____
NOTARY PUBLIC

HERRIMAN CITY

STAFF REPORT

DATE: January 04, 2023

TO: The Honorable Mayor and City Council

FROM: Wendy Thomas | Karen Nukaya

SUBJECT: 2023 Proposed Event Calendar

RECOMMENDATION:
Staff recommend that the City Council discuss the 2023 Proposed Event Calendar and provide any suggested changes.

ISSUE BEFORE COUNCIL:
Does the City Council want to make any changes to the 2023 Proposed Event Calendar?

BACKGROUND/SUMMARY:
Herriman City is known for its community events. Over the last year staff have heard comments suggesting changes and/or additions or removal of some events. Staff look forward to a lively discussion surrounding current City events and how we can meet current needs of our residents and guests.

DISCUSSION:
Does the City Council want to make any changes to the 2023 Proposed Event Calendar?

ALTERNATIVES:
Do not discuss the 2023 Proposed Event Calendar.

FISCAL IMPACT:
Depends on the suggested chagnes.

ATTACHMENTS:
2023 Proposed Event Calendar

Herriman City 2023 Proposed Event Calendar

APRIL
1 | Easter Basket Dash
3 | Hungry Herriman Begins

MAY
13 | Safety/Health Fair & Pedal Palooza
29 | Memorial Day Breakfast & Ceremony

JUNE
5 | Good4Life Markets – Farmers Market Begins
2 & 3 | PRCA Rodeo
19 to 24 | Fort Herriman Towne Days

JULY
TBD | MotoX

SEPTEMBER
27 | Community Partners

OCTOBER
9 | Herriman Howl

NOVEMBER
27| Night of Lights

HERRIMAN CITY

STAFF REPORT

DATE: January 17, 2023

TO: The Honorable Mayor and City Council

FROM: Jackie Nostrom

SUBJECT: City Council Boards & Committee Assignment Review – Jackie Nostrom, City Recorder

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RECOMMENDATION:
Staff recommendation is to assign City Council representatives to Herriman and Salt Lake Valley boards and committees.

ISSUE BEFORE COUNCIL:
Would the Council like to make any adjustments to the Herriman and Salt Lake Valley board and commission assignments?

BACKGROUND/SUMMARY:
In accordance with the Herriman City Council Rules of Procedure, City Council shall annually review Council assignments to City committees and external Boards.

DISCUSSION:
Below is a list of board and committees for assignments. Please see the attached documentation notating current Council assignments.
Herriman City Committee:

- · Youth Council Committee

Salt Lake Valley Boards and Committees:

- Conference of Mayor (COM).
- Salt Lake County Regional Transportation Choices Fund Working Group
- Conference of Government (COG)
- Association of Municipal Councils
- Regional Growth Committee
- Transportation Coordinating Committee

- UTA Local Advisory
- Transportation Coordinating Committee
- Wasatch Front Economic Development District
- Wasatch Front Regional Council
- Joint Policy Advisory Committee (JPAC)
- Salt Lake County Zoo, Arts & Parks Tier II Advisory Board
- South Salt Lake Mosquito Abatement District
- South West Mayor's Caucus
- South Valley Sewer District
- ULCT Legislative Policy Committee
- Unified Fire Authority
- Wasatch Front Waste and Recycling District
- Western Growth Coalition

Salt Lake County Board:

- Salt Lake County Zoo, Arts & Parks Tier II Advisory Board
- Salt Lake County Tourism Recreation Cultural and Convention Board

ALTERNATIVES:

The Council may determine who they would like to represent Herriman City on each of the boards and committees.

FISCAL IMPACT:

There is no fiscal impact to the budget associated with board assignments; however, there are a few boards who provide compensation to board members for their service:

- Jordan Valley Water Conservancy District Trustee compensation: $5,000 annually
- Salt Lake Valley Mosquito Abatement District compensation: $65 per meeting
- South Valley Sewer District Board compensation: $5,000 annually

ATTACHMENTS:

2022 Board and Commission assignments

Boards & Committees	Current Assignment	Compensation	Staff Assignment
SL Valley Boards & Committees			
Conference of Mayor (COM)	Lorin Palmer	No	Nathan Cherpeski, Tami Moody
Council of Governments (COG)	Lorin Palmer	No	Nathan Cherpeski, Tami Moody
Joint Policy Advisory Meeting (JPAC)	Lorin Palmer	No	Nathan Cherpeski, Tami Moody
South Salt Lake Mosquito Abatement District (SLCMAD)	Steve Shields	$65.00 per meeting	Justun Edwards
Salt Lake County Regional Transportation Choice Fund Working Group (4th Quarter)	Teddy Hodges (nomination)	No	Tami Moody
South West Mayors Caucus Meeting	Lorin Palmer	No	Nathan Cherpeski, Tami Moody
UTA Advisory Board Meeting	Lorin Palmer (nomination)	No	Tami Moody
COG Public Works Committee		No	Wendy Thomas, Tami Moody
Association of Municipal Councils (AMC)	Steve Shields	No	Tami Moody
Environmental Quality Advisory Commission (EQAC)		No	
Salt Lake County Zoo, Arts and Parks (ZAP)Tier II Advisory Board	Steve Shields	No	Wendy Thomas
South Valley Sewer District	Teddy Hodges	$5,000 divided by 26 pay periods = $192.31	Justun Edwards
Utah League of Cities and Towns (ULCT) Legislative Policy Committee (LPC)	Lorin Palmer, Sherrie Ohrn, Steve Shields	No	Nathan Cherpeski, Wendy Thomas, Tami Moody
Unified Fire Authority (UFA)	Jared Henderson		Nathan Cherpeski
Wasatch Front Waste & Recycling District (WFWRD)	Sherrie Ohrn	No	Justun Edwards
Western Growth Coalition (WGC)	Teddy Hodges	No	Nathan Cherpeski, Tami Moody, Wendy Thomas
Jordan Valley Water Conservancy District (JVWCD) Board Meeting		$5,000 a year	Justun Edwards
Tourism, Recreation, Culture & Convention (TRCC)	Lorin Palmer	No	Wendy Thomas
Wasatch Front Regional Council Meetings (WFRC)			
Wasatch Front Regional Council (WFRC)	Lorin Palmer	No	Nathan Cherpeski, Wendy Thomas, Tami Moody
Regional Growth Committee (RGC)	Lorin Palmer (official appointment), Steve Shields	No	Nathan Cherpeski, Wendy Thomas, Michael Maloy
Transportation Coordinating Committee (Trans Com)	Lorin Palmer	No	Nathan Cherpeski
Active Transportation Committee (ATC)		No	Blake Thomas
Budget Committee		No	Blake Thomas
Wasatch Front Economic Development District (WFEDD)	Sherrie Ohrn	No	Tami Moody
Community Development Block Grant Regional Review Committee (CDBG RRC)		No	Michael Maloy
RGC Technical Advisory Committees (TACs)		No	Michael Maloy
Trans Com Technical Advisory Committees (TACs)		No	Blake Thomas
Herriman Boards & Committees			
Youth Council	Sherrie Ohrn		Destiny Skinner

HERRIMAN CITY

STAFF REPORT

DATE: October 24, 2022

TO: The Honorable Mayor and City Council

FROM: Cody Stromberg

SUBJECT: HPD Badge Presentation

RECOMMENDATION:
None/informational

ISSUE BEFORE COUNCIL:
None

BACKGROUND/SUMMARY:
HPD will conduct an official badge presentation for newly hired and newly promoted members.

DISCUSSION:
None

ALTERNATIVES:
None

FISCAL IMPACT:

ATTACHMENTS:

HERRIMAN CITY

STAFF REPORT

DATE: December 30, 2022

TO: The Honorable Mayor and City Council

FROM: Kyle Maurer

SUBJECT: Presentation of the Audited Financial Statements for Fiscal Year Ended June 30, 2022

RECOMMENDATION:
N/A – Informational Only

ISSUE BEFORE COUNCIL:
Utah state law requires that all local governments publish, within six months of the close of each fiscal year, a complete set of financial statements presented in conformity with Generally Accepted Accounting Principles (GAAP) and audited in accordance with Generally Accepted Auditing Standards by a firm of licensed Certified Public Accountants. Pursuant to that requirement, we hereby issue the Annual Comprehensive Financial Report (ACFR) of Herriman City for the fiscal year ended June 30, 2022.

BACKGROUND/SUMMARY:
An annual financial audit is required of all municipalities with revenues or expenditures of $1,000,000 or more. The audit must be submitted to the Office of the State Auditor by December 31, 2022. The independent auditor is responsible for reporting whether or not the governing body's financial statements are prepared in conformity with Generally Accepted Accounting Principles.

This report will be presented by Mckay Hall, CPA, Audit Partner with the CPA firm HintonBurdick.

DISCUSSION:

The City's Finance Department has prepared an Annual Comprehensive Financial Report (ACFR) for the fiscal year ended June 30, 2022. This is considered a "best practice" and is above the Office of the State Auditor's requirements. This report is broken down into the following sections:

1. Introductory Section – This includes the Letter of Transmittal (the "introduction" to the ACFR), Certificate of Achievement for Excellence in Financial Reporting, organizational chart, and a list of elected/appointed officials and the City's leadership team.
2. Financial Section – This includes the Independent Auditor's Report (page 12), and Management's Discussion and Analysis, which is a narrative overview of the financial performance of the City during the fiscal year.
3. Basic Financial Statements – These are the traditional financial statements you would expect to see in a financial report. They include the government-wide statements (pages 33-34, which are statements presented on a full accrual basis, similar to how a for-profit business presents their financials), fund financial statements (pages 36-43), and the notes to the financial statements (pages 44-82). Fund financial statements focus on the short-term financial position of the City (including the amount of fund balance available in each fund), whereas the government-wide financial statements present a long-term focus. In addition, fund financial statements are broken down into "major" and "nonmajor" funds (each fund is categorized based on its relative size). Funds classified as "nonmajor" are aggregated into one column; the detail can be found on pages 95-96.
4. Required Supplementary Information – This is required information, including budget and actual schedules for the General Fund, Herriman City Safety Enforcement Area, and Herriman City Fire Service Area, along with required disclosures of the City's pensions held by the Utah Retirement Systems (URS).
5. Supplementary Information – This includes fund statements and schedules for the City's nonmajor funds, along with budget and actual information for the debt service fund, Herriman Towne Center CDA/SAA fund, and Capital Projects Fund.
6. Statistical Section – This section includes additional information to gain a greater understanding of the financial statements, note disclosures, and required supplementary information, and provides trends on the performance of the City.
7. Supplemental Reports – This includes the Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards* and Independent Auditors' Report on Compliance and Report on Internal Control Over Compliance as Required by the *State Compliance Audit Guide*. At the time of submission, the City's Single Audit was not completed.

As part of the audit, the Independent Auditors issued a number of findings and recommendations. Below are the findings and my response (as the Finance Director):

1. Year-End Accounting and Financial Statement Controls – A few significant adjustments related to capital assets were required that were not initially identified by the City's internal controls. *City Response* – The previous Finance Director retired in the middle of the audit and had not completed recording fixed assets prior to the beginning of the audit fieldwork. In addition, after his retirement, it was discovered a number of corrections were needed. The City's current fixed asset system is unforgiving and requires the City to contact the software vendor if changes are needed to amounts recorded as fixed assets. The City's Finance Director has already purchased new fixed asset software and will be assigning the Accountant II to perform fixed asset duties. Therefore, the Finance Director will be able to

act as a final review to ensure all fixed assets are correctly and accurately recorded in the financial system.

2. Budgetary Compliance - A number of departments and funds were over budgeted expenditures for the fiscal year, including:

- Public safety department - $309,311
- Herriman City Fire Service Area Fund - $28,610Debt Service Fund - $51,299
- Anthem CRA Fund - $103,972
- Storm Drain Impact Fee Fund - $44,200
- Street Light Fee Fund - $289,407
- Street Sign Fee Fund - $30,140

City Response – The financial budget amendments for the year were completed before the current Finance Director started employment with the City. However, the Public Safety department was over budget due to a personnel budgeting error related to the mid-year salary increases and the Anthem CRA Fund was over budget due to the new Finance Director reconciling all Renewal Area commitments (which resulted in a few additional payments needing to be made). Moving forward, the new Finance Director will do budget amendments quarterly and work with City departments to ensure all necessary budget amendments are included.

The independent auditor also issues a "Other Items Communicated to Management" letter which outlines other items the auditors wish to communicate to management. These items are below, along with my response:

1. Capital Projects Deficit Fund Balance - The Capital Projects Fund ended the fiscal year with a deficit fund balance of $6,469,722. *City Response* - This deficit fund balance is caused by the interfund loan with the Water Fund (Water Rights Fund) which financed the purchase of land. This loan must be repaid by June 30, 2025, and is expected to be paid with proceeds from the sale of land. The Finance Director will propose a transfer from the Water Rights Fund to the Capital Projects Fund to alleviate this issue.
2. Operating Bank Account Reconciliation – Bank reconciliations are being completed on a timely basis; however, there are outstanding checks dated back to January 2020. *City Response* – The Finance Department had already identified the stale check issue prior to the audit, and is following state statute (Unclaimed Property) to remit these funds to the State if they are not claimed by their owner.

ALTERNATIVES:
N/A

FISCAL IMPACT:
N/A

ATTACHMENTS:
Fiscal Year 2022 Annual Comprehensive Financial Report Auditor Findings, Recommendations, and Responses; Other Items Communicated to Management

HERRIMAN CITY, UTAH

SINGLE AUDIT ACT REPORT

FISCAL YEAR ENDED JUNE 30, 2022

HERRIMAN CITY, UTAH

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HINTON BURDICK
CPAs & ADVISORS

Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

The Honorable Mayor and
City Council
Herriman City, Utah

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of Herriman City, Utah, as of and for the year ended June 30, 2022, and the related notes to the financial statements, which collectively comprise Herriman City, Utah's basic financial statements, and have issued our report thereon dated December 27, 2022.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered Herriman City, Utah's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of Herriman City, Utah's internal control. Accordingly, we do not express an opinion on the effectiveness of Herriman City, Utah's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that have not been identified. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. We did identify certain deficiencies in internal control, described in the accompanying schedule of findings and questioned costs that we consider to be a significant deficiency:

2019-001 Year-End Accounting and Financial Statement Controls, Reissued, Reworded

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Herriman City, Utah's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards.*

Herriman City, Utah's Response to Findings

Herriman City, Utah's response to the findings identified in our audit is described in the accompanying corrective action plan. Herriman City's response was not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on it.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

HintonBurdick, PLLC
St. George, Utah
December 27, 2021

HINTON BURDICK
CPAs & ADVISORS

Independent Auditors' Report on Compliance for Each Major Federal Program and Report on Internal Control over Compliance in Accordance with the Uniform Guidance

City Council
Herriman City, Utah
Herriman, Utah

Report on Compliance for Each Major Federal Program

Opinion on Each Major Federal Program

We have audited Herriman City, Utah's (the City) compliance with the types of compliance requirements identified as subject to audit in the OMB *Compliance Supplement* that could have a direct and material effect on each of the City's major federal programs for the year ended June 30, 2022. The City's major federal programs are identified in the summary of auditors' results section of the accompanying schedule of findings and questioned costs.

In our opinion, the City complied, in all material respects, with the compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended June 30, 2022.

Basis for Opinion on Each Major Federal Program

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America (GAAS); the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Our responsibilities under those standards and the Uniform Guidance are further described in the Auditors' Responsibilities for the Audit of Compliance section of our report.

We are required to be independent of the City and to meet our other ethical responsibilities, in accordance with relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion on compliance for each major federal program. Our audit does not provide a legal determination of the City's compliance with the compliance requirements referred to above.

Responsibilities of Management for Compliance

Management is responsible for compliance with the requirements referred to above and for the design, implementation, and maintenance of effective internal control over compliance with the requirements of laws, statutes, regulations, rules and provisions of contracts or grant agreements applicable to the City's federal programs.

Auditors' Responsibilities for the Audit of Compliance

Our objectives are to obtain reasonable assurance about whether material noncompliance with the compliance requirements referred to above occurred, whether due to fraud or error, and express an opinion on the City's compliance based on our audit. Reasonable assurance is a high level of assurance, but is not absolute assurance; and therefore, is not a guarantee that an audit conducted in accordance with GAAS, *Government Auditing Standards*, and the Uniform Guidance will always detect material noncompliance when it exists. The risk of not detecting material noncompliance resulting from fraud is higher than for that resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Noncompliance with the compliance requirements referred to above is considered material, if there is a substantial likelihood that, individually or in the aggregate, it would influence the judgment made by a reasonable user of the report on compliance about the City's compliance with the requirements of each major federal program as a whole.

In performing an audit in accordance with GAAS, *Government Auditing Standards*, and the Uniform Guidance, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material noncompliance, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the City's compliance with the compliance requirements referred to above and performing such other procedures as we considered necessary in the circumstances.
- Obtain an understanding of the City's internal control over compliance relevant to the audit in order to design audit procedures that are appropriate in the circumstances and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control over compliance. Accordingly, no such opinion is expressed.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and any significant deficiencies and material weaknesses in internal control over compliance that we identified during the audit.

Report on Internal Control Over Compliance

A *deficiency in internal control over compliance* exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A *material weakness in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the Auditors' Responsibilities for the Audit of Compliance section above and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies in internal control over compliance. Given these limitations, during our audit we did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses, as defined above. However,

material weaknesses or significant deficiencies in internal control over compliance may exist that were not identified.

Our audit was not designed for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, no such opinion is expressed.

Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance

We have audited the financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of Herriman City, Utah, as of and for the year ended June 30, 2022,and the related notes to the financial statements, which collectively comprise Herriman City, Utah's basic financial statements. We issued our report thereon dated December 27, 2022, which contained unmodified opinions on those financial statements. Our audit was performed for the purpose of forming opinions on the financial statements as a whole. The accompanying schedule of expenditures of federal awards is presented for the purposes of additional analysis as required by Title 2 U.S. *Code of Federal Regulations* (CFR) Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*, and is not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the financial statements as a whole.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

HintonBurdick, PLLC

St. George, Utah
January 17, 2023

HERRIMAN CITY, UTAH
Schedule of Expenditures of Federal Awards
For the Year Ended June 30, 2022

Grantor Agency	Federal CFDA Number	Pass Through Grantor's Number	Expenditures
U.S. Department of Defense			
National Guard Military Operations and Maintenance Projects	12.401		$ 1,250,000
Total U.S. Department of Defense			1,250,000
U.S. Department of the Treasury:			
COVID19 - Coronavirus State and Local Fiscal Recovery Funds (CSLFRF), SLFRF	21.027		21,000
(Passed through State of Utah)			
COVID19 - Coronavirus Relief Fund	21.019	0000002574	842,641
Total U.S. Department of the Treasury			863,641
U.S. Department of Justice:			
(Passed through Utah Office for Victims of Crime)			
Victims of Crime Act (VOCA) Grant	16.575	21/22VOCA32	59,616
Total U.S. Department of Justice			59,616
Total expenditures of federal awards			$ 2,173,257

HERRIMAN CITY, UTAH
Schedule of Findings and Questioned Costs
For the Year Ended June 30, 2021

Section I - Summary of Auditors' Results

Financial Statements

Type of auditor's report issued:	Unmodified
Internal control over financial reporting:	
• Material weakness (es) identified?	____ yes __X__ no
• Significant deficiency (ies) identified that are not considered to be material weaknesses?	__X__ yes ____ none reported
Noncompliance material to financial statements noted?	____ yes __X__ no

Federal Awards

Internal Control over major programs:	
• Material weakness (es) identified?	____ yes __X__ no
• Significant deficiency (ies) identified that are not considered to be material weaknesses?	___ yes __X__ none reported
Type of auditor's report issued on compliance for major programs:	Unmodified
Any audit findings disclosed that are required to be reported in accordance with 2 CFR 200.516(a)?	____ yes __X__ no

Identification of major programs.

CFDA Number(s)	Name of Federal Program or Cluster
21.019	COVID19 – Coronavirus Relief Fund

Dollar threshold used to distinguish between type A and type B programs:	$ 750,000
Auditee qualified as low-risk auditee?	__X__ yes ____no

HERRIMAN CITY, UTAH
Schedule of Findings and Questioned Costs
For the Year Ended June 30, 2021

Section II - Financial Statement Findings

Current Year Findings and Recommendations:

Material Weaknesses:

None noted

Significant Deficiencies:

2019-001 Year End Accounting and Financial Statement Controls – Reissued, Reworded

Criteria: Auditing standards indicate that the identification by the auditor of misstatements in the financial statements may be a significant deficiency in the City's internal controls over financial reporting.

Condition: A few significant adjustments related to capital assets were required that were not initially identified by the City's internal controls.

Cause: The City's process of tracking and updating the capital asset list appear to have been on an annual basis which, given the size and volume of the City's capital assets, has made proper and accurate reporting difficult.

Effect: The City's financial statements would not have been fairly stated in all material respects without the adjustments.

Recommendation: The City has begun making changes in this area, but we recommend management continue to review its internal controls to see what process adjustments are needed to note and record activity and capital assets more regularly throughout the year.

Section II - Financial Statement Findings - Continued

Prior Year Findings and Recommendations:

Material Weaknesses:

None Noted

Significant Deficiencies:

2019-001 Year End Accounting and Financial Statement Controls, Reissued, Reworded

Criteria: Auditing standards indicate that the identification by the auditor of misstatements in the financial statements may be a significant deficiency in the City's internal controls over financial reporting.

Condition: A few significant accruals and other adjustments to the general ledger were required that were not initially identified by the City's internal controls.

Cause: Changes in personnel with the related changes in responsibilities and difficulties encountered due to those changes and continued circumstances related to the COVID pandemic appear to have given rise to the needed adjustments. Procedures for year-end adjustments may also need to be revised or improved in order to properly identify certain adjustments for new accounting standards or other non-routine adjustments.

Effect: The City's financial statements would not have been fairly stated in all material respects without the adjustments.

Recommendation: We recommend management review the audit adjustments to understand each, and review its internal controls to see what process adjustments are needed to note and record similar transactions each year, even with challenges like those faced by the City in 2021.

Status: In process. See 2019-001 in current year findings.

HERRIMAN CITY, UTAH
Schedule of Findings and Questioned Costs
For the Year Ended June 30, 2021

Section III - Federal Award Findings and Questioned Costs

Current Year Findings and Recommendations:

No significant matters were noted.

Prior Year Findings and Recommendations:

No significant matters were noted.

Section IV – Corrective Action Plan

2019-001 Year End Accounting and Financial Statement Controls, Reissued, Reworded

The City has implemented new fixed asset accounting software in fiscal year 2023 and has assigned the Accountant II fixed asset responsibilities. This will allow the Finance Director to review and audit fixed asset entries prior to audit fieldwork.

HERRIMAN CITY, UTAH
Notes to the Schedule of Expenditures of Federal Awards
For the Year Ended June 30, 2021

Reporting Entity:

The accompanying schedule of expenditures of federal awards presents the activity or expenditure of all federal awards programs of Herriman City, Utah for the year ended June 30, 2022. The City's reporting entity is defined in Note 1 of the basic financial statements. All expenditure of federal awards received directly from federal agencies as well as federal awards passed through other government agencies are included in the schedule.

Basis of Accounting:

This accompanying schedule of expenditures of federal awards has been prepared on the modified accrual basis of accounting. The information in this schedule is presented in accordance with the requirements of Title 2 U.S. *Code of Federal Regulations* (CFR) Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*.

Subrecipients:

There are no subrecipients.

Indirect Cost Rate:

The City did not elect to use the 10% de Minimis indirect cost rate for fiscal year 2022. There were no indirect cost allocations made to any of the federal grants as listed in the accompanying schedule of expenditures of federal awards.

Federal Loans Outstanding:

There are no outstanding balances for federal loan or loan guarantee programs at June 30, 2022.

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HINTON BURDICK
CPAs & ADVISORS

Findings, Recommendations and Responses
For the Fiscal Year Ended June 30, 2022

The Honorable Mayor and
City Council
Herriman City, Utah

In planning and performing our audit of the financial statements of Herriman City, Utah (the City), as of and for the year ended June 30, 2022, in accordance with auditing standards generally accepted in the United States of America, and *Government Auditing Standards*, we considered the City's internal control over financial reporting (internal control) as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control. Accordingly, we do not express an opinion on the effectiveness of the City's internal control.

Our consideration of internal control was for the limited purpose described in the preceding paragraph and was not designed to identify all deficiencies in internal control that might be significant deficiencies or material weaknesses and, therefore, material weaknesses or significant deficiencies may exist that were not identified. However, as discussed below, we identified certain deficiencies in internal control that we consider to be a significant deficiency.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or combination of deficiencies in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance. We consider the deficiencies in internal control as listed below to be significant deficiencies.

INTERNAL CONTROL OVER FINANCIAL REPORTING:

Material Weaknesses:

None Noted

Significant Deficiencies:

2019-001 Year End Accounting and Financial Statement Controls – Reissued, Reworded

Criteria: Auditing standards indicate that the identification by the auditor of misstatements in the financial statements may be a significant deficiency in the City's internal controls over financial reporting.

Condition: A few significant adjustments related to capital assets were required that were not initially identified by the City's internal controls.

Cause: The City's process of tracking and updating the capital asset list appear to have been on an annual basis which, given the size and volume of the City's capital assets, has made proper and accurate reporting difficult.

Effect: The City's financial statements would not have been fairly stated in all material respects without the adjustments.

Recommendation: The City has begun making changes in this area, but we recommend management continue to review its internal controls to see what process adjustments are needed to note and record activity and capital assets more regularly throughout the year.

COMPLIANCE AND OTHER MATTERS:

2019-002 Budgetary Compliance – Reissued, Reworded

Criteria: Utah Code Section 10.6.123 states a City may not make or incur expenditures in excess of total appropriations adopted in the budget.

Condition: During fiscal year 2022, the City had the following departments and funds with expenditures in excess of budgeted amounts:

- Public Safety Department by $309,311
- Herriman City Fire Service Area Fund by $28,610
- Debt Service Fund by $51,299
- Anthem CRA Fund by $103,972
- Storm Drain Impact Fee Fund by $44,200
- Street Light Fee Fund by $289,407
- Street Sign Fee Fund by $30,140

Cause: The City did not limit expenditures within authorized limits or amend its budget during the year when events arose causing certain funds to exceed their budget.

Effect: The City is not in compliance with state budgeting requirements.

Recommendation: We recommend the City continue to establish and follow procedures to limit expenditures within authorized limits or amend its budget during the year when events arise causing certain funds to exceed the budget.

It has been a pleasure to be of service to the City this year. We would like to express special thanks to all those who assisted in this year's audit. We invite you to ask questions of us throughout the year as you feel necessary. We look forward to a continued professional relationship.

Sincerely,

HintonBurdick, PLLC
December 27, 2022

HINTON BURDICK
CPAs & ADVISORS

Other Items Communicated to Management
For the Year Ended June 30, 2022

Kyle Maurer
Finance Analyst
Herriman City, Utah

During our audit of the funds of the City of Herriman for the fiscal year ended June 30, 2022, we noted a few other items that we wish to communicate to management. These items have not been included with our findings and recommendations letter since they are only related to suggestions for improvements to accounting functions or they may be deemed to be less significant and/or management is aware of the findings and are working on resolutions.

2022-001 Deficit Fund Balance

Finding/Recommendation

The Capital Projects Fund began the year with a fund deficit of $6,469,722. While the fund ended with a net income and positive fund balance for the year ending June 30, 2022, that was due to proceeds from the bond issued in the current year. If the bond hadn't been issued, the fund deficit would have grown. Once the bond proceeds are spent the Capital Projects Fund will likely be back to a deficit fund balance again. As the Capital Projects Fund has a significant inter-fund loan being repaid over the next few years, the City needs to be mindful of the resources available in the fund and make sure it has the money to repay its loan as that loan comes due.

We recommend the City review the fund balance and activity in the Capital Projects Fund periodically through the year and establish a plan for gathering the resources needed to repay the inter-fund loan and to keep a positive fund balance.

2021-003 Operating Account Bank Reconciliation – Reissued, Reworded

Finding/Recommendation

The bank reconciliation for the general operating account was prepared at year-end timely; however, we noted that there were outstanding checks dating back to January 2020.

We recommend these outstanding items are investigated and resolved by either voiding or reissuing them in fiscal year 2023.

Sincerely,

HintonBurdick, PLLC
December 27, 2022

Annual Comprehensive Financial Report



Herriman City, Utah

Fiscal Year Ended June 30, 2022

HERRIMAN CITY

Herriman City
State of Utah

Annual Comprehensive Financial Report
For the Fiscal Year Ended
June 30, 2022

PREPARED BY THE FINANCE DEPARTMENT

KYLE MAURER, FINANCE DIRECTOR
AMY STANGER, ACCOUNTANT II
TREVOR COBURN, ACCOUNTANT I

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Herriman City

Annual Comprehensive Financial Report
For the Fiscal Year Ended June 30, 2022

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Introductory Section



December 27, 2022

The Honorable Mayor, Members of the City Council, and Citizens of Herriman

RE: Finance Officer's Transmittal Letter and Report on Financial Statements

The Annual Comprehensive Financial Report (ACFR) of Herriman City (the City) for the fiscal year ended June 30, 2022, is hereby submitted as mandated by both local ordinances and state statutes. These ordinances and statutes require the City to issue a report on its financial position and activity, and this report must be annually audited by an independent firm of Certified Public Accountants. We believe the information, as presented, is accurate in all material aspects, and is presented in a manner designed to set forth fairly, in all material respects, the financial position and results of the operations of the City as measured and reported by the financial activity of its various funds; and that all disclosures necessary to enable the reader to gain an understanding of the City's financial affairs have been included.

This ACFR has been prepared by the City's Finance department. Management assumes full responsibility for the completeness and readability of the information contained in this report, based upon a comprehensive framework of internal control established for this purpose. Because the cost of internal control should not exceed anticipated benefits, the objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements.

Generally Accepted Accounting Principles require that management provide a narrative introduction, review, and analysis to accompany the basic financial statements in the form of Management's Discussion and Analysis (MD&A). This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. The City's MD&A can be found immediately following the report of the independent auditors.

The financial reporting entity (the City) includes all of the funds of the primary government (i.e., the City as legally defined), as well as all of its component units and fiduciary funds. Component units are legally separate entities for which the primary government is financially accountable. Blended component units, although legally separate entities, are, in substance, part of the primary government's operation and are included as part of the primary government.

Accordingly, the Community Development and Renewal Agency of Herriman City, Herriman City Safety Enforcement Area, and Herriman City Fire Service Area are reported in this ACFR as special revenue and debt service funds.

GOVERNMENTAL STRUCTURE, LOCAL ECONOMIC CONDITION, AND OUTLOOK

Governmental Structure

Under the City's council-manager form of government, residents elect a governing body consisting of four City Councilmembers and a Mayor. The position of Mayor is an equal part of the four-member City Council and has voting rights, along with being the chairperson of the City Council. The Council works together as the governing body and is responsible for legislative functions such as establishing policy, passing local ordinances, voting appropriations, and developing an overall vision for the City.

The governing body appoints a City Manager to implement policies, oversee the local government's day-to-day operations, and advise the City Council.

Economic Condition and Outlook

Herriman City, incorporated in 1999, is located in the southwest part of the Salt Lake Valley. The City is a rapidly growing suburban community encompassing 21.63 square miles. The City's current population is estimated at 65,272. We anticipate the population in Herriman will continue to increase as the City remains a desirable place to live and as developable land becomes more scarce in Salt Lake County.

The added population has placed increased demands on services, but the City has adopted a conservative approach to the expansion of these services. The general philosophy of the City is that increased revenues from existing taxes and other revenue sources must provide the base for the expansion of public expenditures. As demonstrated over the past several years, the City is committed to this philosophy.

Public safety services (police and fire) are funded primarily through a property tax levy against properties located within Herriman City. Due to the nature of how property tax is levied in the state of Utah, there are no automatic inflationary increases. The only growth that occurs (outside of a property tax increase) is due to new residential, commercial, and industrial properties within the City. If the City desires additional property tax revenue, it must go through a process called "Truth in Taxation," which involves a series of public notices and a public hearing. While police and fire services are currently sufficiently funded, City administration are working on long-term financial models to ensure public safety services are sustainable in the future, given that police and fire costs have increased faster than general inflation.

The City is experiencing a strong local economy. The City continues to see interest in residential and commercial development, as evidenced by a 31 percent increase in building permit revenues as compared to fiscal year 2021. Overall General Fund revenues increased by 14.0 percent, led by sales tax (21.5 percent). The City remains optimistic regarding the local economy with a historically low unemployment rate of 2.3 percent; however, planning has begun for the possibility of a future recession and a decrease in revenue.

MAJOR INITIATIVES

The mission of Herriman City is to provide courteous and efficient service to the public, preserve community identity, and promote a high quality of life. Five primary Vision Objectives provided direction to the City for the fiscal year. These objectives are as follows:

1. Fiscal Responsibility
2. Public Safety and Protection
3. Community Engagement
4. Community Vibrancy
5. Economic Development

Capital Projects. City staff, following specific directives from the City Council and Mayor, have been involved in a variety of projects throughout the year. These projects reflect the City's commitment to ensure the citizens of Herriman are able to live and work in a desirable environment. During fiscal year 2022, the City had several significant new and ongoing projects. Some of the projects, along with the amounts spent or budgeted in fiscal year 2022, are listed below:

1. Property Acquisition - $2,473,568 – The City has been able to secure additional open space through a Federal Army Compatible Use Buffer (ACUB) grant and a grant from the state of Utah. This land is located in the southwest portion of the City and acts as a buffer with Camp Williams to the south.
2. Main Street Widening - $10,593,000 (budget) – The City issued a $10,593,000 bond during the fiscal year to extend Main Street starting at 6200 West. Design is expected to be completed in fiscal year 2023, with construction beginning shortly thereafter.
3. Vehicles and Equipment - $1,619,451 – The City added and replaced several vehicles and equipment during the fiscal year. The City had additional vehicle replacements budgeted, but due to supply chain issues, the vehicles were not received by the end of fiscal year 2022.
4. Juniper Canyon Recreation Area - $1,413,858 – The City continued work on the Juniper Canyon Recreation Area. The City held a ribbon cutting on November 2nd for the first phase of this project.
5. K9 Memorial Dog Park - $777,860 – The City completed the K9 Memorial Dog Park during fiscal year 2022 and held a ribbon cutting on April 14, 2022.

6. Rosecrest Pump Station - $107,307 – Work was completed on the Rosecrest Pump Station in the Water Fund. The City spent a total of $1,388,374 on this project.

Additional information regarding capital projects can be found on page 27 of the MD&A.

Economic Development. The Mayor and City Council recognize the need to develop the City's economic base to provide the necessary services, i.e., roads, parks, public safety, *etc.*, to its citizens. Efforts are being made by the City to attract new businesses and to promote the type of activities that will enhance the quality of life in the community. These businesses include retail, industrial, and office space.

The Community Development and Renewal Agency of Herriman City was established for the purpose of encouraging new development within the City. The Agency currently has two active Community Development Areas (CDA) and two active Community Reinvestment Areas (CRA). Another CRA has been created, but not yet triggered. These areas have been successful in assisting several new retail, industrial, and entertainment businesses within the RDA boundaries.

The City adopted the Herriman North Community Reinvestment Project Area plan and budget in 2019 specifically to encourage the development of an Automall in the northeast quadrant of the City. A Public Infrastructure District (PID) has been established to construct the necessary infrastructure for the area. Construction of the first dealerships is expected to occur in fiscal year 2023 and will provide much needed sales tax revenue to the City.

The City has entered into a number of tax abatement agreements with numerous land owners and developers. The City entered into these agreements to encourage development within the City which would not occur without the agreements. In the long term the City will benefit from additional tax revenue (including property and sales tax), and revenues received will exceed the short-term forgone revenue. Additional information regarding the City's tax abatement agreements can be found in Note 11 on page 79 of this report.

The City's success in recruiting a diverse commercial base demonstrates the City's dedication to the establishment of long-term, sustained economic growth. The City will continue to encourage development using Redevelopment areas.

FINANCIAL INFORMATION

Herriman City's financial statements reflect the rapid growth of the City. As in previous years, the City has been able to maintain reserve funds in excess of the minimum required by State code. From fiscal years 2018 to 2022, the City's governmental funds revenues increased from $40,634,507 to $61,345,875, and expenditures decreased from $52,681,057 to $49,171,108 (mainly due to a reduction in capital outlay). Growth in proprietary funds has also increased

during this period as well. Proprietary Fund operating revenues increased from $9,255,000 to $13,484,816, while operating expenses rose from $11,833,173 to $15,102,253. Much of the increases are due to an increased population.

As a recipient of Federal and State financial assistance, the City is also responsible for ensuring an adequate internal control structure and for documenting compliance with applicable laws and regulations related to these programs. This internal control structure is subject to periodic evaluations. The audit for the fiscal year ended June 30, 2022, disclosed no instances of internal control weaknesses.

The City's budget serves as the foundation for its financial planning and control. The City's Finance Director, under direction of the City Manager and in conjunction with City staff, Mayor, and City Council, prepares a proposed annual budget which is presented to the City Council for review no later than the first Council meeting in May. The Council is required to hold a public hearing on the proposed budget and to adopt the final budget prior to June 30, unless the City proposes a property tax rate in excess of its certified tax rate. In that case, a tentative budget is adopted and is in force until a public hearing is held to approve the increase.

A budget is prepared for each fund, and the General Fund is further divided into departments. Department heads may make transfers of appropriations within a department (upon approval of the Finance Director). Transfers of appropriations between funds or increases in revenues or expenses require the approval of the City Council. Activities of the General Fund, Special Revenue Funds, Debt Service Funds, Capital Project Funds, and Proprietary Funds are included in the annual appropriated budget. The level of budgetary control (i.e., the level where expenditures cannot legally exceed the appropriated amount) is at the department level within the General Fund and the fund level for all other funds.

OTHER INFORMATION

Independent Audit

State statutes require an annual audit by independent Certified Public Accountants. The firm of HintonBurdick was selected by the City to perform this audit. This audit was designed to meet the requirements set forth in Utah state statutes. Generally Accepted Auditing Standards and the standards set forth in the General Accounting Office's *Government Auditing Standards* were used by the auditors in conducting the engagement. The auditor's report on the financial statements is included in the Financial Section of this report.

Awards

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement of Excellence in Financial Reporting to Herriman City for its ACFR for the fiscal year ended June 30, 2021. The Certificate of Achievement is a prestigious national

award recognizing conformance with the highest standards for preparation of state and local government financial reports.

In order to be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized ACFR whose contents conform to program standards. Such a ACFR must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. The City has received a Certificate of Achievement for the past 7 years. We believe our current report continues to meet the Certificate of Achievement Program requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

The City also received from the GFOA an Award for Outstanding Achievement in Popular Financial Reporting for its fiscal year 2020 Popular Annual Financial Report (PAFR) (an application for fiscal year 2021 has been submitted but has not been responded to by the GFOA as of the date of this letter). The PAFR contains information extracted from the City's ACFR and is designed to be readily accessible and easily understandable to the public. This award demonstrates the City's goal of providing information to a wider range of interested parties.

Acknowledgements

We would like to thank the Mayor, City Council, and Audit Committee for their interest and support in planning and conducting the financial operations of the City in a dedicated and responsible manner.

The preparation of the ACFR on a timely basis could not have been accomplished without the efforts and dedication of City staff. We would like to express our appreciation to them and other personnel from various agencies and authorities who assisted in its preparation.

Respectfully submitted,



Kyle Maurer
Finance Director



Nathan Cherpeski
City Manager

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Herriman City
Utah

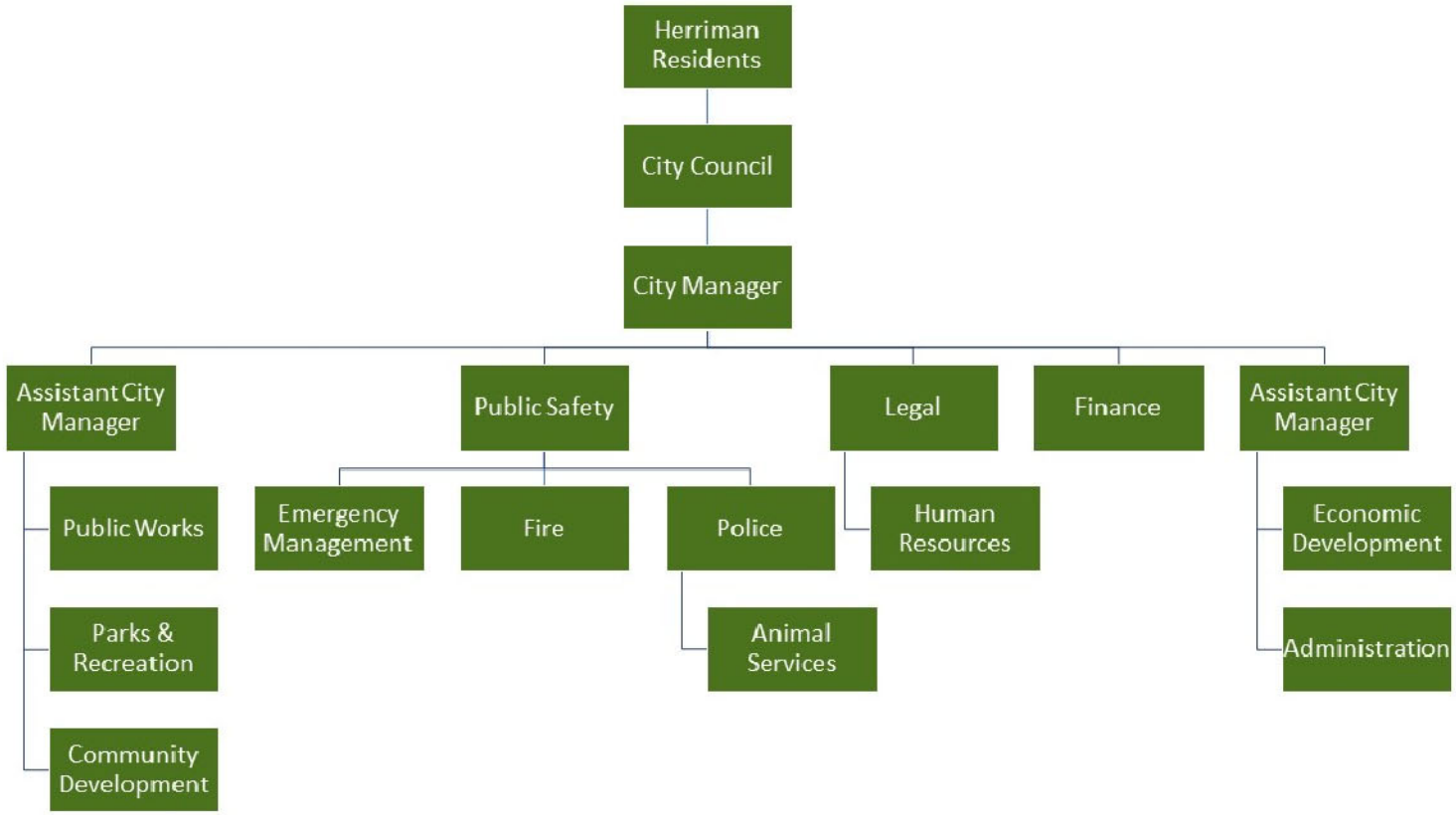
For its Annual Comprehensive
Financial Report
For the Fiscal Year Ended

June 30, 2021



Executive Director/CEO

Herriman City, Utah
Organizational Chart



Herriman City, Utah

List of Elected and Appointed Officials, and Leadership Team
As of June 30, 2022

Elected Officials:







Mayor Lorin Palmer, Councilmember Jared Henderson (District 1),
Councilmember Teddy Hodges (District 2), Councilmember Sherrie Ohrn (District 3),
Councilmember Steven Shields (District 4)

Appointed Officials and Leadership Team:

Nathan Cherpeski ..... City Manager
Tami Moody ..... Assistant City Manager
Wendy Thomas ..... Assistant City Manager
Troy Carr ..... Chief of Police
Blake Thomas ..... Director of Community Development
Justun Edwards ..... Director of Public Works
Monte Johnson ..... Director of Operations
Kyle Maurer ..... Director of Finance
Alan Rae ..... Director of Finance
Leslie Anglin ..... City Treasurer
Jacquelyn Nostrom ..... City Recorder
Todd Sheeran ..... City Attorney
Michael Maloy ..... City Planner
Cathryn Nelson ..... Building Official

Financial Section



Independent Auditor's Report

HINTON BURDICK
CPAs & ADVISORS

Independent Auditors' Report

The Honorable Mayor and
City Council
Herriman City, Utah

Report on the Audit of the Financial Statements

Opinions

We have audited the financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of Herriman City, Utah (the City), as of and for the year ended June 30, 2022, and the related notes to the financial statements, which collectively comprise the City's basic financial statements as listed in the table of contents.

In our opinion the accompanying financial statements present fairly, in all material respects, the respective financial position of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of Herriman City, Utah, as of June 30, 2022, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the City and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Change in Accounting Principle

The City implemented the provisions of GASB Statement No. 87, Leases in fiscal year 2022. Our opinion is not modified with respect to this matter.

Responsibilities of Management for the Financial Statements

The City's management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error. In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the City's ability to continue as a going concern for one year after the date that the financial statements are issued or when applicable, one year after the date that the financial statements are available to be issued.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the City's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control–related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, the schedules of the proportionate share of the net pension liabilities, the schedule of pension contributions, and the budgetary comparison information as listed in the table of contents be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other

knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the City's basic financial statements. The supplementary budgetary comparison schedule for major funds, the nonmajor fund combining statements and budgetary comparison schedules are presented for purposes of additional analysis and are not a required part of the basic financial statements.

Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplementary budgetary comparison schedule for major funds, the nonmajor fund combining statements and budgetary comparison schedules are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Information

Management is responsible for the other information included in the annual report. The other information comprises the introductory section and statistical section but does not include the financial statements and our auditor's report thereon. Our opinions on the financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon. In connection with our audit of the financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated December 27, 2022, on our consideration of the City's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering City's internal control over financial reporting and compliance.

HintonBurdick, PLLC
St. George, Utah
December 27, 2022

HERRIMAN CITY, UTAH
MANAGEMENT'S DISCUSSION AND ANALYSIS

As management of Herriman City, we offer readers of the City's financial statements this narrative overview and analysis of the financial activities of the City for fiscal year ended June 30, 2022. We encourage readers to consider the information presented here in conjunction with additional information that we have furnished in our letter of transmittal, which can be found on page 2 of this report.

FINANCIAL HIGHLIGHTS

- The assets and deferred outflows of resources of the City exceeded its liabilities and deferred inflows of resources at the close of fiscal year 2022 by $553,087,800 (net position). Of this amount, $58,545,952 (unrestricted net position) may be used to meet the government's ongoing obligations to citizens and creditors.

- Total net position of Herriman City increased by $30,647,047. Of this increase, $26,819,860 (87.7 percent) is attributable to governmental activities, mainly from donated capital assets, unspent impact fee collections, and unspent American Rescue Plan Act (ARPA) grant allocations. Business-type activities provided a $3,827,187 increase to the City's net position primarily due to donated infrastructure and assets.

- As of the close of fiscal year 2022, the City's governmental funds reported combined ending fund balances of $39,105,751, an increase of $23,003,158 (142.9 percent). Most of this increase is due to impact fees allocated for future capital projects and developer reimbursements, unspent bond proceeds in the Capital Projects fund, and unspent ARPA grant allocations. Of the total fund balance, $32,608,607 (83.7 percent) is restricted for specific projects.

- At the end of fiscal year 2022, unassigned fund balance of the general fund was $7,869,509, or 30.3 percent of general fund expenditures (excluding other financing uses). Utah state law allows any balance in excess of 5 percent of total revenues to be utilized for budget purposes. The maximum fund balance allowed is 35 percent of unrestricted revenues. The City's general fund unrestricted fund balance (consisting of committed, assigned and unassigned fund balance) is currently at 26.9 percent of actual revenues. It is important to note, however, a number of capital asset purchases were not completed during the fiscal year, and those funds will need to be budgeted in fiscal year 2023 to complete the purchases.

- The City's total long-term obligations (excluding unamortized bond premiums) increased $5,290,425 (7.1 percent). This is largely due to the issuance of $10,593,000 in Sales and

Franchise Revenue Bonds to widen Main Street and $235,392 in Note Payable proceeds to purchase vehicles, along with regularly scheduled debt service payments.

- At the end of fiscal year 2022, the City recognized total net pension assets of $4,620,653 (increase of 100 percent from fiscal year 2021) and total net pension liabilities of $0 (reduction of 100 percent from fiscal year 2021). Much of this decrease is due to investment returns exceeding expectations. More information regarding the City's retirement plans can be found in Note 9 on page 69 and in the Required Supplementary Information beginning on page 83.

REPORT OVERVIEW

This discussion and analysis is intended to serve as an introduction to the City's basic financial statements. The City's basic financial statements are comprised of three components: 1) government-wide financial statements, 2) fund financial statements, and 3) notes to the financial statements. This report also contains other supplementary information in addition to the basic financial statements.

GOVERNMENT-WIDE FINANCIAL STATEMENTS

Government-wide financial statements are designed to provide readers with a broad overview of the City's finances in a manner similar to a private-sector business.

The Statement of Net Position presents information on all of the City's assets, liabilities, and deferred inflows/outflows of resources, with the difference reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the City is improving or deteriorating. However, other non-financial factors should also be considered.

The Statement of Activities presents information showing how the City's net position changed during the fiscal year. All changes in net position are reported when the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. Thus, revenues and expenses are taken into account regardless of when cash is received or paid.

Both of the government-wide financial statements distinguish functions of the City that are principally supported by taxes and intergovernmental revenues (governmental activities) from other functions that are intended to recover all or a significant portion of their costs through user fees and charges (business-type activities). The governmental activities of the City include general government; public works; parks, recreation, and events; community development; public safety; tax increment distributions; and ARPA grant funds. The business-type activities of the City include water and storm water.

The government-wide financial statements can be found on pages 33-34 of this report.

FUND FINANCIAL STATEMENTS

A fund is a grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. The City also uses fund accounting to ensure and demonstrate compliance with finance-related requirements. All of the City's funds can be divided into two categories: governmental funds and proprietary funds.

Governmental Funds – Governmental funds are used to account for the same functions reported as governmental activities in the government-wide financial statements. These fund statements focus on how money flows into and out of these funds and the balances left at year end that are available for spending. Such information may be useful in evaluating a government's near-term financing requirements.

Because the focus of governmental funds is narrower than that of the government-wide financial statements, it is useful to compare information presented for governmental funds with similar information presented for governmental activities in the government-wide financial statements. By doing so, readers may better understand the long-term impact of the government's near-term financing decisions. Both the governmental fund balance sheet and governmental fund statement of revenues, expenditures, and changes in fund balances provide a reconciliation to facilitate this comparison between governmental funds and governmental activities.

Governmental funds report the difference between their assets, deferred outflows of resources, liabilities, and deferred inflows of resources as fund balance, which is divided into nonspendable, restricted, committed, assigned, and unassigned portions. *Nonspendable* balances include inventories and prepaid items that are not expected to be converted to cash. *Restricted* balances include net fund resources of the City that are subject to external constraints due to state or federal laws or externally imposed conditions by grantors or creditors. Restrictions include debt service reserve requirements, grant proceeds, impact fees collected, and renewal agency funds. *Committed* balances reflect the City's self-imposed limitation on the use of otherwise available expendable financial resources in governmental funds. The City currently does not have any balances assigned as committed. *Assigned* balances in the general fund and other governmental funds are those that do not meet the requirements of restricted or committed but are intended to be used for specific purposes. *Unassigned* balances in the general fund are all other available net resources. At June 30, 2022, the City's combined governmental fund balance is $39,105,751 ($137,444 in nonspendable, $32,608,605 in restricted, $5,716,529 in assigned, and $643,173 in unassigned fund balances). Additional detail regarding governmental fund balances can be found on the governmental funds balance sheet located on page 36 of this report.

Governmental funds are reported using an accounting method called modified accrual accounting, which measures cash and other financial assets readily convertible to cash. The governmental fund statements provide a detailed short-term view of the City's general government operations and the basic services it provides. Governmental fund information helps users determine the financial resources that can be spent in the near future to finance the City's programs. The relationship (or differences) between governmental activities and governmental funds is detailed in a reconciliation included with the fund financial statements.

The City maintains the following 16 individual governmental funds:

- General
- Herriman City Safety Enforcement Area
- Herriman City Fire Safety Area
- Debt Service
- Herriman Towne Center CDA/SAA
- Capital Projects
- Herriman Business Center CDA
- Anthem CDA
- Herriman Innovation District CRA
- Park Impact Fee
- Storm Drain Impact Fee
- Road Impact Fee
- Street Light Fee
- Street Sign Fee
- Herriman Towne Center (City Hall) Capital Projects
- Public Works Facility Capital Projects

Information is presented separately in the governmental fund balance sheet and in the governmental fund statement of revenues, expenditures, and changes in fund balances for the general, Herriman City Safety Enforcement Area, Herriman City Fire Safety Area, debt service, Herriman Towne Center CDA/SAA, and capital projects funds, all of which are major funds. Data from the other governmental funds are combined into a single, aggregated presentation. Individual fund data for each of these non-major governmental funds is elsewhere in this report.

The basic governmental fund financial statements can be found on pages 35-39 of this report.

Proprietary Funds – The City maintains one type of proprietary fund, enterprise funds. *Enterprise funds* are used to report the same functions presented as business-type activities in the government-wide financial statements. The City uses enterprise funds to account for its water and storm water functions.

Proprietary fund financial statements provide the same type of information as the government-wide financial statements, only in more detail. The proprietary fund financial statements provide separate information for the water, Hi Country I, Hi Country II, and storm water funds.

The basic proprietary fund financial statements can be found on pages 40-43 of this report.

Notes to the Financial Statements – The notes provide additional information essential to a full understanding of the data provided in the government-wide and fund financial statements. The notes to the financial statements begin on page 44 of this report.

Required Supplementary Information (RSI) – This section contains budget to actual comparison statements for the City's general fund, Herriman City Safety Enforcement Area fund, and Herriman City Fire Safety Area fund. This section also contains required supplementary information for the City's pension program. The RSI section begins on page 83.

Other Information – In addition to the above-mentioned statements and reports, this report also presents other supplementary information and a statistical section which give additional and more detailed information to the reader. The supplemental section includes individual fund financial statements for the City's nonmajor funds as well as budget to actual statements for major funds not reported as RSI. The statistical section gives various financial and demographic data of the City, including trend analysis for certain financial data. The supplementary section begins on page 93, and the statistical section begins on page 111.

GOVERNMENT-WIDE FINANCIAL ANALYSIS

As noted earlier, net position may serve over time as a useful indicator of a government's financial position. In the case of Herriman City, assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by $553,087,800 as of June 30, 2022.

By far the largest portion of the City's position (84.3 percent) reflects its investments in capital assets (e.g., land, water rights, buildings, machinery and equipment, autos and trucks, improvements other than buildings, and construction in progress), less any related debt used to acquire those assets that is still outstanding. The City uses these capital assets to provide services to citizens; consequently, these assets are not available for future spending. Although the City's investments in capital assets is reported net of related debt, it should be noted that the resources needed to repay this debt must be provided from other sources, since the capital assets themselves cannot be used to liquidate these liabilities.

The following table summarizes the City's net position:

HERRIMAN CITY
Summary of Net Position
For the Year Ended June 30, 2022

	Governmental Activities		Business-Type Activities		Total	
	2021	2022	2021	2022	2021	2022
Current Assets	$ 34,007,173	$ 42,460,148	$ 16,036,308	$ 19,654,037	$ 50,043,481	$ 62,114,185
Non-Current Assets	9,823,778	31,332,709	26,375,301	26,665,665	36,199,079	57,998,373
Capital Assets	410,884,977	418,315,847	115,473,276	114,175,137	526,358,253	532,490,984
Total Assets	454,715,928	492,108,703	157,884,885	160,494,839	612,600,813	652,603,542
Deferred Outflows of Resources	4,894,814	4,237,847	855,106	787,706	5,749,920	5,025,553
Current Liabilities	12,456,755	14,491,167	4,900,503	4,127,687	17,357,258	18,618,854
Non-Current Liabilities	42,392,550	46,999,852	33,295,565	31,446,496	75,688,115	78,446,347
Total Liabilities	54,849,305	61,491,019	38,196,068	35,574,183	93,045,373	97,065,201
Deferred Inflows of Resources	3,362,317	6,636,252	390,629	839,842	3,752,946	7,476,094
Net Position						
Net Investment in Capital Assets	367,820,439	368,584,134	80,675,533	97,771,364	448,495,972	466,355,498
Restricted	8,332,432	18,881,503	26,375,301	9,304,846	34,707,733	28,186,350
Unrestricted	25,246,549	40,753,642	13,102,454	17,792,310	38,349,003	58,545,952
Total Net Position	$ 401,399,420	$428,219,280	$120,153,288	$124,868,520	$521,552,708	$ 553,087,800

An additional portion of the City's net position (5.1 percent) represents resources that are subject to external restriction on how they may be used. The remaining balance of unrestricted net position of $58,545,952 may be used to meet the government's ongoing obligations to citizens and creditors.

As of June 30, 2022, the City is able to report positive balances in all three categories of net position for the government as a whole as well as for its separate governmental-type activities. Positive balances for all three categories are also reported for the business-type activities.

Analysis of the City's Operations – The following table provides a summary of the City's operations for the year ended June 30, 2022:

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HERRIMAN CITY

Summary of Changes in Net Position

For the Period Ended June 30, 2022

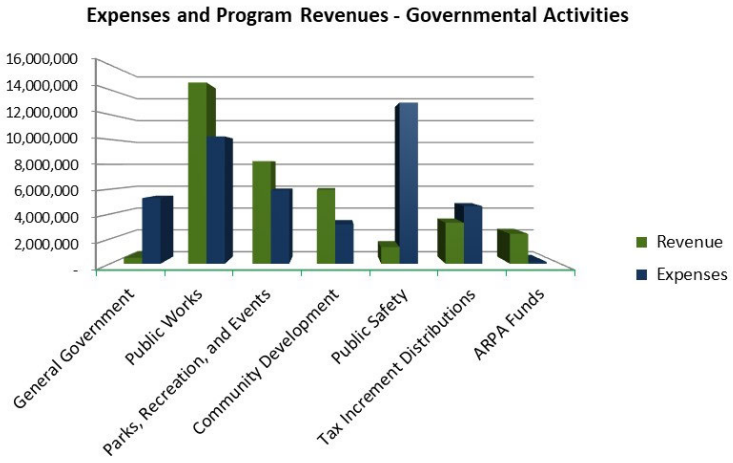
	Governmental Activities		Business-Type Activities		Total	
	2021	2022	2021	2022	2021	2022
Program Revenues						
Charges for Services	$ 19,054,668	$ 8,586,215	$ 14,874,032	$ 13,783,768	$ 33,928,700	$ 22,369,983
Operating Grants and Contributions	$ -	$ 198,501		$ -	-	198,501
Capital Grants and Contributions	60,225,754	27,712,058	11,965,122	5,969,276	72,190,876	33,681,333
General Revenues						
Property Tax	15,155,482	19,905,579	-	-	15,155,482	19,905,579
Sales Tax	9,527,545	11,577,127	-	-	9,527,545	11,577,127
Franchise Tax	2,307,026	2,527,304	-	-	2,307,026	2,527,304
Gain from the Sale of Assets	733,893	-	-	-	733,893	-
Investment Earnings	129,911	239,735	42,054	109,076	171,965	348,812
Total Revenues	107,134,279	70,746,518	26,881,208	19,862,120	134,015,487	90,608,638
Expenses*						
General Government	873,100	5,280,294	-	-	873,100	5,280,294
Administration	5,476,003	-	-	-	5,476,003	-
Finance	1,141,435	-	-	-	1,141,435	-
Operations	12,919,152	10,244,005	-	-	12,919,152	10,244,005
Parks Recreation & Events	5,791,608	5,902,668	-	-	5,791,608	5,902,668
Engineering	1,958,399	-	-	-	1,958,399	-
Community Development	2,137,013	3,165,530	-	-	2,137,013	3,165,530
Public Safety	10,691,941	12,969,841	-		10,691,941	12,969,841
Tax Increment Distributions	-	4,636,089				
ARPA Funds	-	148,421				
Interest on Long Term Debt	1,450,203	1,579,811	-	-	1,450,203	1,579,811
Water	-	-	14,921,392	14,622,486	14,921,392	14,622,486
Storm Water	-	-	1,239,164	1,412,447	1,239,164	1,412,447
Total Expenses	42,438,854	43,926,658	16,160,556	16,034,933	58,599,410	55,177,081
Increase (Decrease) in Net Position	64,695,426	26,819,860	10,720,651	3,827,187	75,416,077	30,647,047
Net Position, Beginning	337,104,130	401,399,420	109,432,636	120,153,287	446,536,766	521,552,707
Prior Period Adjustment	(400,136)	-	-	888,046	(400,136)	888,046
Net Position, Ending	$ 401,399,420	$ 428,219,280	$ 120,153,287	$ 124,868,520	$ 521,552,707	$ 553,087,800

**New functional categories were created in fiscal year 2022 and certain departments were reclassified.*

Governmental Activities – Governmental activities increased the City's net position by $26,819,860. Key elements affecting governmental activities net position are as follows:

- General fund revenues posted $763,796 above expectations during fiscal year 2022 and expenditures were under budget by $5,435,651. Public Works-Streets was under budget by $1,906,674, mainly due to road projects not being completed until fiscal year 2023, and $2,497,046 in ARPA funds were unspent at year end. Overall, general fund balance increased by $7,802,554 due to the reasons given above.
- The City's governmental funds received $7,931,663 in impact fee revenue during the fiscal year. In addition, impact fee fund balances increased by $4,183,520. The City had several impact fee eligible projects and reimbursements in process at the end of the fiscal year. These funds are expected to be paid out in future fiscal years.

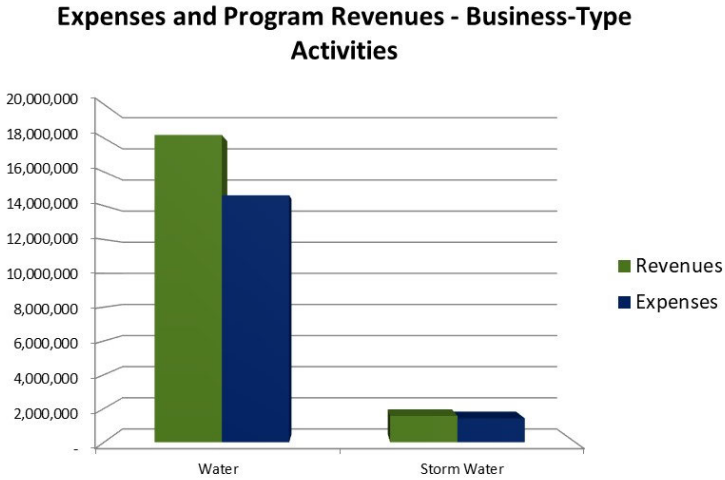
- The capital projects fund saw a fund balance increase of $9,803,460 during the year. This is due to unspent bond proceeds allocated for Main Street. These funds are expected to be drawn down and spent in the next fiscal year.



- The Herriman City Fire Safety Area increased fund balance $1,711,044 during the fiscal year. This increase was planned and will be used to partially fund a rebuild of fire station 103 and future fire stations within the City.
- During fiscal year 2022, the City's governmental funds completed $6,031,626 of capital projects (excluding donated assets). Projects totaling $3,830,816 were in progress at year end. The most significant projects completed during the year include $854,950 in street lights, $777,860 for the K9 park, $985,811 in public safety vehicles and equipment, $648,626 in general vehicles and equipment, and $2,473,568 in property acquisition. Donated (developer contributed) assets totaled $8,026,881.

Business-Type Activities – Business-type activities increased the City's net position by $3,827,187, which represents a decrease of $6,893,464 (64.3 percent) over the previous year's change. Key elements of the change in business-type net position are as follows:

- During fiscal year 2022, the City's business-type activities completed $1,765,842 in capital projects (excluding developer contributed assets), and $2,658,357 of projects were in progress at year end. Notable completed projects include $1,550,437 for the 7300 West Culinary Line and $135,000 in water rights. In addition, $2,232,065 of donated water lines and water infrastructure were capitalized during the fiscal year.



- $3,737,211 of water impact fees were collected during the fiscal year, with $3,042,453 of those fees carried over to future fiscal years. The City had a number of active reimbursement agreements

and capital projects in process at the end of the fiscal year.

- The storm water fund contributed $143,528 to the increase in net position. Much of this increase was due to revenues being above expectations (due to new growth) and expenses coming in under expectations.

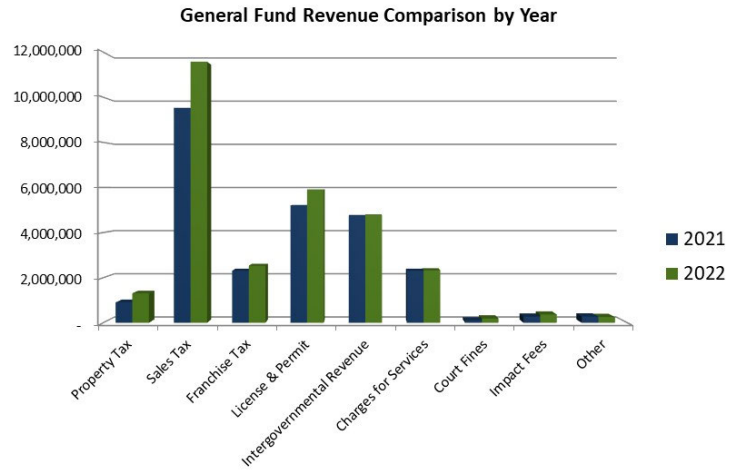
FUND FINANCIAL ANALYSIS

Governmental Funds - The focus of the City's governmental fund statements is to provide information on near-term inflows, outflows, and balances of spendable resources. Such information is useful in assessing the City's financing requirements. In particular, unassigned fund balance may serve as a useful measure of a government's net resources available for spending at the end of the fiscal year.

As of June 30, 2022, The City's governmental funds (general, Herriman City Safety Enforcement Area, Herriman City Fire Safety Area, debt service, Herriman Towne Center CDA/SAA, capital projects, and nonmajor funds) reported combined fund balances of $39,105,751. This represents an increase of $23,003,158 from last year's ending balances. $643,173 (1.6 percent) of the total fund balance constitutes *unassigned fund balance* and is therefore available for spending at the City's discretion. *Assigned fund* balance totals $5,716,529 (14.6 percent), meaning the City intends to use this amount for specific purposes (public safety, debt service, redevelopment, and capital projects). Fund balance of $32,608,607 (83.4 percent) is *restricted* to indicate it is not available for new spending because it has already been committed to pay for capital projects, debt service, and redevelopment. The City also has prepaid items ($137,444) which are classified as *nonspendable* fund balance.

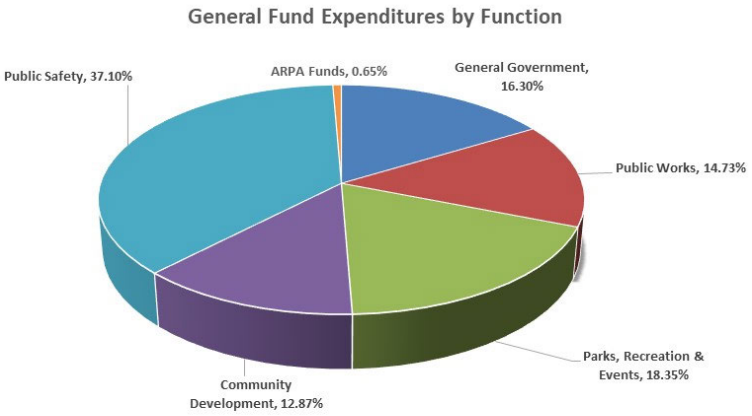
General Fund

The general fund is the chief operating fund of the City. All activities which are not required to be accounted for in separate funds either by state or local ordinance or by a desire to maintain a matching of revenues and expenditures are accounted for in this fund. Revenues exceeded expenditures (including other financing sources and uses) in the general fund by $7,802,554 during the year. Much of this amount is due to revenue exceeding expectations and a number of street projects and equipment purchases not being completed by the end of the fiscal year.



Taxes continue to be the largest source of revenue in the general fund and represent 52.7 percent of total general fund revenues. The largest component of tax revenue is sales tax, which represents 75.1 percent of total tax revenues and 39.6 percent of total general fund

revenues. This compares with 37.1 percent of total general fund revenues in the prior fiscal year ended June 30, 2021.



General fund expenditures decreased during fiscal year 2022, going from $27,006,847 in 2021 to $25,929,481 in 2022. Expenditures decreased largely due to a number of street department projects being completed in fiscal year 2021 and personnel vacancies. The City also funded a 4 percent salary increase. The City experienced increased operating expenditures due to providing services to a larger residential base and inflationary pressures. The increased expenses were mainly offset by an increase in sales tax revenue.

Other Governmental Funds

During fiscal year 2022, tax collections in the Herriman City Safety Enforcement Area increased $539,971 (7.3 percent) due to new properties and businesses in the City. Property tax revenue increased $7,787,228 in the Herriman City Fire Safety Area due to creation of the district and a portion of the City's general property tax rate being dedicated to the City's fire service (a dedicated tax levy for the Fire Service Area will be in effect for calendar year 2022). Fund balance in the Safety Enforcement area increased $48,084, largely due to tax revenue exceeding expectations. The Fire Safety Area saw a fund balance increase of $1,711,044 during the fiscal year, which was planned and will be used for a rebuild of fire station 103 and future fire station needs in the City.

The debt service fund saw a fund balance increase of $1,101,523 during the year. This is mainly due to a reimbursement transfer from the road impact fee fund for prior road impact fee eligible debt service payments. Funds will be used for future debt service payments.

Fund balance for the Herriman Towne Center CDA/SAA fund increased $767,823 during the fiscal year. This is due to a planned fund balance increase (tax increment revenues exceed debt service obligations in the fund) which will be used for future infrastructure projects in the Herriman Towne Center project area.

Fund balance in the capital projects fund increased $9,803,460 from ($6,469,722) to $3,333,738. Of this amount, $10,560,074 represents unspent construction proceeds from the 2021 Sales Tax and Franchise Tax Revenue Bonds which will be used to widen Herriman Main Street. A total of $4,315,295 was spent on capital projects during the fiscal year. City staff have identified $11,564,345 in budgeted fiscal year 2022 capital projects that need to be carried over to fiscal year 2023. The fund currently has negative unassigned fund balance due to an

interfund loan of $10,485,370 between the capital projects fund and the water fund. It is expected this fund will be repaid in fiscal year 2025 with proceeds from the sale of land.

Enterprise Funds - The City's proprietary funds provide the same type of information found in the government-wide financial statements, but in more detail. In summary, unrestricted net position increased from $11,911,090 to $16,249,567 in the water fund; increased from $179,333 to $240,319 in the Hi Country I fund; increased from $655,589 to $788,438 in the Hi Country II fund; and increased from $356,442 to $513,985 in the storm water fund.

Water rates have incrementally increased each of the past 5 years following recommendations outlined in the last water rate study. During fiscal year 2022, a total of $2,466,081 of capital assets was added (not including $246,993 of work in progress added during the fiscal year). Water accounts receivable decreased $509,908 during the fiscal year due to increased collection efforts and continuation of nonpayment disconnections, which were suspended during the COVID-19 pandemic.

The increase in unrestricted net position for the water fund is mainly due to impact fee revenue ($3,703,443). Both Hi Country I and II saw increased net position ending balances due to planned increases to fund future capital projects and maintenance of infrastructure. The storm water fund had a planned contribution to net position of $112,465, and also saw revenue in excess of expectations ($55,975) and expenses under expectations ($159,676). Unrestricted net position will be used for future capital projects.

GENERAL FUND BUDGETARY HIGHLIGHTS

During the fiscal year, general fund budgeted expenditures were amended from an original budget total of $31,070,541 to a final budget total of $31,365,132 (0.9 percent difference). All departments monitor their budgets closely and are required to stay within their allotment. The majority of budget adjustments were due to personnel changes that occurred during the year. It is important to note that the Police Department had mid-year salary increases which were offset by adjustments to other personnel line items.

General fund budgeted revenues were amended from $28,250,142 to $28,458,543 (an increase of $208,401, or 0.7 percent). Highlights of this increase include:

- General property tax increased from $913,237 to $1,300,000. This is due to an increase in delinquent property tax collections.

- Public Safety grants were revised from $200,000 to $170,500 to reflect a Violent Fugitive Apprehension grant budgeted but not awarded.

Note payable proceeds were revised from $2,386,934 to $1,358,118 due to purchasing vehicles outright (due to stronger than anticipated revenues) and supply chain delays relating to vehicle deliveries.

Transfers in were increased from $6,900,000 to $9,550,000 largely due to increasing the transfer from the Herriman Safety Enforcement Area ($900,000), which was used to fund mid-year salary increases for sworn police personnel and a transfer from the Herriman Fire Service Area ($1,750,000) to reimburse the general fund for funding provided prior to the creation of the Service Area.

During the year, actual revenues were greater than budget by $763,796 due to greater than anticipated sales tax collections and Class C Road Funds (allocated from the state of Utah). Actual expenditures were less than budget by $5,435,651 due to capital expenditures not being made prior to year-end due to supply chain issues.

CAPITAL ASSETS AND DEBT ADMINISTRATION

Capital Assets – Herriman City's investment in capital assets for its governmental and business-type activities as of June 30, 2022, amounts to $532,490,984 (net of accumulated depreciation). This investment in capital assets includes land, water rights, buildings, machinery and equipment, autos and trucks, improvements other than building, and construction in progress. The total increase in the City's investment in capital assets for the current year was 1.2 percent (a 1.8 percent increase for governmental activities and a 1.1 percent decrease for business-type activities).

HERRIMAN CITY
Capital Assets, Net of Depreciation
June 30, 2022

	Governmental Activities		Business-Type Activities		Total	
	2021	2022	2021	2022	2021	2022
Land and Water Rights	$ 233,585,054	$ 240,029,352	$ 18,237,052	$ 18,372,652	$ 251,822,106	$ 258,402,004
Construction in Progress	327,567	3,830,816	3,943,191	2,658,357	4,270,758	6,489,173
Buildings	18,406,312	17,725,460	34,796	33,336	18,441,108	17,758,796
Improvements	155,639,183	152,957,942	92,710,527	92,629,782	248,349,710	245,587,724
Automobiles & Trucks	1,766,727	2,435,329	416,019	376,321	2,182,746	2,811,650
Machinery & Equipment	1,160,133	1,336,948	131,691	104,689	1,291,824	1,441,637
Total Capital Assets	$ 410,884,976	$ 418,315,847	$ 115,473,276	$ 114,175,137	$ 526,358,252	$ 532,490,984

Specific projects and detail can be found in the Government-Wide Governmental Activities financial analysis beginning on page 22.

Additional information on the City's capital assets can be found in note 7 beginning on page 63 of this report.

Long-Term Debt - As of June 30, 2022, the City had total long-term debt outstanding of $79,986,413 (excluding bond premium). The entirety of this amount is represented by bonds secured solely by specific revenue sources. The City has no general obligation bonds outstanding.

HERRIMAN CITY
Outstanding Long-Term Debt
June 30, 2022

	Governmental Activities		Business-Type Activities		Total	
	2021	2022	2021	2022	2021	2022
Revenue Bonds	31,754,000	40,507,000	29,993,000	28,473,000	61,747,000	68,980,000
Special Assessment Debt						
With Governmental Commitment	7,236,550	6,504,505	-	-	7,236,550	6,504,505
Notes Payable	4,146,346	2,736,362	-	-	4,146,346	2,736,362
Compensated Absences	1,435,945	1,617,892	130,147	147,654	1,566,092	1,765,546
Total Debt (Excluding Premium)	$ 44,572,841	$ 51,365,759	$ 30,123,147	$ 28,620,654	$ 74,695,988	$ 79,986,413

The City's total debt outstanding (excluding unamortized bond premiums) increased by $5,290,425 during the fiscal year (7.1 percent). This increase is due to the issuance of the 2021 Sales and Franchise Tax Revenue Bonds. The 2021 Sales and Franchise Tax Revenue Bonds will be used to widen Herriman Main Street.

The City currently has no general obligation debt. The most recent bond ratings issued for Herriman City include an "A+" rating for water bonds and an "AA+" for governmental funds, both issued by Standard & Poor's.

State statutes limit the amount of general obligation debt a governmental entity may issue to 12 percent of the "reasonable fair cash value" of property within the City. Of this percent, a maximum of 4 percent may be used for general purposes. The current limitation for the City is $288,904,601, which is significantly in excess of the City's outstanding general obligation debt. The remaining 8 percent and any unused portion of the 4 percent available for general purposes, up to the maximum of 12 percent, may be utilized for water, sewer, and electrical projects. The current limitation for all debt, including that used for water, sewer and electrical projects is thus $866,713,864, which again significantly exceeds the outstanding city-wide debt.

Additional information on the City's long term-debt can be found in note 8 on pages 64-69 of this report.

ECONOMIC FACTORS AND NEXT YEAR'S BUDGET AND RATES

- The June 2022 unemployment rate for Herriman City was 2.3 percent. This compares with a national unemployment rate of 3.6 percent. The 2021 unemployment rate for the City was 3.2 percent. (Source: United States Bureau of Labor Statistics.)

- General fund budgeted revenues for the fiscal year ending June 30, 2023 ($41,055,644) reflect an increase of 4.2 percent over the final budgeted revenues for the fiscal year ended June 30, 2022 ($39,366,661). Most of this increase is due to expected increases in sales tax revenue and franchise taxes due to an increased population. The City continues its approach of budgeting conservatively to avoid revenue shortfalls. General fund expenditures in fiscal year 2023 are budgeted $2,333,344 higher than fiscal year 2022. The majority of this increase is due to personnel merit increases approved with the budget, along with new personnel positions authorized in the budget. The budget also includes a $3.8 million transfer to the capital projects fund.

- A number of fee schedule changes were approved in the 2023 budget, including a 2 percent water rate fee increase and adjustments to development-related fees.

REQUESTS FOR INFORMATION

This financial report is designed to provide a general overview of Herriman City's finances for all those with an interest in the City's finances. Questions concerning any information provided in this report or requests for additional financial information should be addressed to: Herriman City, Finance Department, 5355 W Main St, Herriman, UT 84096 or call (801) 758-7686, or e-mail kmaurer@herriman.org.

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Basic Financial Statements



Government-Wide Financial Statements

HERRIMAN CITY

Statement of Net Position

June 30, 2022

	Governmental Activities	Business-Type Activities	Total
ASSETS			
Current Assets:			
Cash & Cash Equivalents	$ 26,409,865	$ 7,124,734	$ 33,534,599
Receivables			
Property, Franchise and Excise Taxes	19,111,589	-	19,111,589
Special Assessment Receivable	6,504,505	-	6,504,505
Accounts Receivable	782,114	1,603,786	2,385,901
Internal Balances	(10,485,370)	10,485,370	-
Inventory	-	440,147	440,147
Prepaids	137,444	-	137,444
Total Current Assets	42,460,148	19,654,037	62,114,185
Noncurrent Assets:			
Restricted Cash and Cash Equivalents	27,231,126	26,146,595	53,377,720
Net Pension Asset	4,101,583	519,070	4,620,653
Capital Assets Net of Depreciation:			
Land & Water Rights	240,029,352	18,372,652	258,402,004
Construction in Progress	3,830,816	2,658,357	6,489,173
Buildings	17,725,460	33,336	17,758,796
Machinery and Equipment	1,336,948	104,689	1,441,637
Autos & Trucks	2,435,329	376,321	2,811,650
Improvements Other than Buildings	152,957,942	92,629,782	245,587,724
Total Noncurrent Assets	449,648,556	140,840,801	590,489,357
Total Assets	492,108,703	160,494,839	652,603,542
DEFERRED OUTFLOW OF RESOURCES			
Resources Related to Pensions	2,885,125	365,123	3,250,248
Deferred Charge on Refunding	1,352,722	422,583	1,775,305
Total Deferred Outflows	4,237,847	787,706	5,025,553
LIABILITIES			
Current Liabilities:			
Accounts Payable and Accrued Liabilities	3,095,361	1,223,803	4,319,164
Deposits	4,935,089	625,672	5,560,761
Current Portion of Compensated Absences	889,841	147,654	1,037,495
Current Portion of Bonds Payable	3,403,515	1,565,624	4,969,139
Current Portion of Notes Payable	1,409,119	-	1,409,119
Accrued Interest	758,242	564,934	1,323,176
Total Current Liabilities	14,491,167	4,127,687	18,618,854
Noncurrent Liabilities:			
Noncurrent Portion of Compensated Absences	728,051	-	728,051
Noncurrent Portion of Notes Payable	1,327,243	-	1,327,243
Noncurrent Portion of Bonds Payable	44,944,558	31,446,496	76,391,053
Total Noncurrent Liabilities	46,999,852	31,446,496	78,446,347
Total Liabilities	61,491,019	35,574,183	97,065,201
DEFERRED INFLOWS OF RESOURCES			
Resources Related to Pensions	6,636,252	839,842	7,476,094
Total Deferred Inflows	6,636,252	839,842	7,476,094
NET POSITION			
Net Investment in Capital Assets	368,584,134	97,771,364	466,355,498
Restricted for:			
Capital Projects	15,718,602	8,947,852	24,666,454
Debt Service	3,162,902	356,994	3,519,896
Unrestricted	40,753,642	17,792,310	58,545,952
Total Net Position	$ 428,219,280	$ 124,868,520	$ 553,087,800

The notes to the basic financial statements are an integral part of this statement.

HERRIMAN CITY

Statement of Activities

For the Year Ended June 30, 2022

Functions/Programs	Expenses	Program Revenues: Charges for Services	Program Revenues: Operating Grants & Contributions	Program Revenues: Capital Grants & Contributions	Net (Expense) Revenue and Change in Net Position: Primary Government: Governmental Activities	Net (Expense) Revenue and Change in Net Position: Primary Government: Business-Type Activities	Net (Expense) Revenue and Change in Net Position: Primary Government: Total
Primary Government							
General Government	$ 5,280,294	$ 475,665	$ -	$ -	$ (4,804,629)	$ -	$ (4,804,629)
Public Works - Operations	10,244,005	18,250	-	14,567,910	4,342,155	-	4,342,155
Parks, Recreation, and Events	5,902,668	1,740,287	-	6,515,977	2,353,596	-	2,353,596
Community Development	3,165,530	5,945,987	-	-	2,780,457	-	2,780,457
Public Safety	12,969,841	406,026	198,501	926,921	(11,438,393)	-	(11,438,393)
Tax Increment Distributions	4,636,089	-	-	3,299,426	(1,336,662)	-	(1,336,662)
ARPA Funds	148,421	-	-	2,401,824	2,253,403	-	2,253,403
Interest and Fees on Long Term Debt	1,579,811	-	-	-	(1,579,811)	-	(1,579,811)
Total Governmental Activities	43,926,658	8,586,215	198,501	27,712,058	(7,429,885)	-	(7,429,885)
Business-Type Activities							
Water	14,455,049	11,900,290	-	5,935,508	-	3,380,748	3,380,748
High Country I	68,429	129,416	-	-	-	60,986	60,986
High Country II	99,007	198,089	-	33,768	-	132,849	132,849
Storm Water	1,412,447	1,555,975	-	-	-	143,528	143,528
Total Business-Type Activities	16,034,933	13,783,768	-	5,969,276	-	3,718,111	3,718,111
	$ 59,961,591	$ 22,369,983	$ 198,501	$ 33,681,333	(7,429,885)	3,718,111	(3,711,774)
General Revenues:							
Taxes:							
Property Taxes Levied for General Purposes					19,905,579	-	19,905,579
Sales and Use Taxes					11,577,127	-	11,577,127
Franchise Taxes					2,527,304	-	2,527,304
Unrestricted Investment Earnings					239,735	109,076	348,812
Total General Revenues					34,249,745	109,076	34,358,821
Changes in Net Position					26,819,860	3,827,187	30,647,047
Net Position-Beginning					401,399,420	120,153,287	521,552,707
Prior Period Adjustment					-	888,046	888,046
Net Position-Ending					$ 428,219,280	$ 124,868,520	$ 553,087,800

The notes to the basic financial statements are an integral part of this statement.

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GOVERNMENTAL FUND
FINANCIAL STATEMENTS

General Fund

The general fund is used to account for resources traditionally associated with a government which are not required legally or by sound financial management to be accounted for in another fund.

Herriman City Safety Enforcement Area (HCSEA) Fund

The HCSEA is a taxing entity created to provide funds for law enforcement services in Herriman City.

Herriman City Fire Service Area (HCFSA) Fund

The HCFSA is a taxing entity created to provide funding for fire services in Herriman City.

Debt Service Fund

This fund is used to accumulate resources for and payment of bond principal and interest for governmental funds.

Herriman Towne Center CDA/SAA

The Herriman Towne Center CDA/SAA fund was created to account for the Herriman Towne Center CDA project area and associated Special Assessment Area set up for payment of the 2016 Special Assessment Bonds.

Capital Projects Fund

This fund is used to account for financial resources accumulated and used for the acquisition or construction of major capital facilities, other than those financed by proprietary funds.

Nonmajor Funds

Nonmajor governmental funds are presented by fund type beginning on page 94.

HERRIMAN CITY

Balance Sheet
Governmental Funds
June 30, 2022

	General Fund	Herriman City Safety Enforcement Area	Herriman City Fire Safety Area	Debt Service	Herriman Towne Center CDA/SAA	Capital Projects	Other Governmental Funds	Total Governmental Funds
ASSETS								
Cash & Cash Equivalents	$ 11,647,723	$ 1,214,981	$ 1,734,617	$ 1,627,198	$ 3,187,103	$ 3,576,430	$ 3,421,814	$ 26,409,865
Receivables								
Property, Sales, Franchise and Excise Tax	3,718,599	7,699,414	7,693,576	-	-	-	-	19,111,589
Other	202,500	-	-	-	-	29,615	550,000	782,114
Special Assessments		-	-	-	6,504,505	-	-	6,504,505
Prepaid Items	137,444	-	-	-	-	-	-	137,444
Restricted Cash	2,253,904	-	-	751,376	1,839,370	10,560,074	11,826,402	27,231,126
Total Assets	$ 17,960,170	$ 8,914,396	$ 9,428,192	$ 2,378,574	$ 11,530,977	$ 14,166,118	$ 15,798,216	$ 80,176,643
LIABILITIES								
Accounts Payable	397,701	-	-	-	-	347,010	1,656,150	2,400,861
Accrued Liabilities	694,503	-	-	-	-	-	-	694,503
Due to Other Fund	-	-	-	-	-	10,485,370	-	10,485,370
Deposits	4,935,089	-	-	-	-	-	-	4,935,089
Total Liabilities	6,027,293	-	-	-	-	10,832,380	1,656,150	18,515,823
DEFERRED INFLOWS OF RESOURCES								
Deferred Property Taxes	933,756	7,558,404	7,558,404	-	-	-	-	16,050,564
Deferred Assessment	-	-	-	-	6,504,505	-	-	6,504,505
Total Deferred Inflows of Resources	933,756	7,558,404	7,558,404	-	6,504,505	-	-	22,555,069
FUND BALANCES								
Nonspendable	137,444	-	-	-	-	-	-	137,444
Restricted for:								
Debt Service	-	-	-	751,376	1,839,370	-	572,156	3,162,902
Capital Projects	2,992,168	-	716,804	-	-	10,560,074	11,989,555	26,258,602
Redevelopment	-	-	-	-	3,187,103	-	-	3,187,103
Assigned	-	1,355,992	1,152,984	1,627,198	-	-	1,580,354	5,716,529
Unassigned	7,869,509	-	-	-	-	(7,226,336)	-	643,173
Total Fund Balances	10,999,121	1,355,992	1,869,788	2,378,574	5,026,472	3,333,738	14,142,066	39,105,751
Total Liabilities, Deferred Inflows of Resources and Fund Balances	$ 17,960,170	$ 8,914,396	$ 9,428,192	$ 2,378,574	$ 11,530,977	$ 14,166,118	$ 15,798,216	$ 80,176,643

Amounts reported for governmental activities in the Statement of Net Position are different because:	
Capital assets used in governmental activities are not financial resources and, therefore, are not reported in the funds.	418,315,847
Other long-term assets and deferred outflows of resources are not available to pay for current expenditures.	6,986,708
Deferred outflows of resources are not available to pay for current expenditures.	1,352,722
Accrued interest payment is not due and payable in the current period.	(758,242)
Property tax receivable is recorded when measurable and available and is not available to pay for current expenditures.	16,050,570
Special Assessment revenue is recognized when the levy is made and when measurable in the government funds and is not available to pay for current expenditures.	6,504,505
Net pension liabilities and deferred inflows of resources are not due and payable in the current period.	(6,636,252)
Long-Term Liabilities, including Bonds Payable and Notes Payable, are not due and payable in the current period and therefore are not reported in the funds.	(52,702,330)
Net Position in Governmental Activities	$ 428,219,280

The notes to the basic financial statements are an integral part of this statement.

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HERRIMAN CITY

Statement of Revenues, Expenditures, and Changes in Fund Balances
Governmental Funds
For the Year Ended June 30, 2022

	General Fund	Herriman City Safety Enforcement Area	Herriman City Fire Safety Area	Debt Service	Herriman Towne Center CDA/SAA	Capital Projects	Other Governmental Funds	Total Governmental Funds
REVENUES								
Property Taxes	$ 1,305,827	$ 7,848,084	$ 7,939,144	$ -	$ 384,880	$ -	$ 321,837	$ 17,799,772
Sales & Use Taxes	11,577,127	-	-	-	-	-	-	11,577,127
Franchise Taxes	2,527,304	-	-	-	-	-	-	2,527,304
Licenses & Permits	5,917,876	-	-	-	-	-	-	5,917,876
Intergovernmental	4,774,951	-	75,882	800,000	2,195,563	2,451,755	2,385,908	12,684,059
Charges for Services	2,328,221	-	-	-	-	-	-	2,328,221
Fines & Forfeitures	189,970	-	-	-	-	-	-	189,970
Impact Fees	368,523	-	474,629	-	-	-	7,088,511	7,931,663
Interest Earnings	176,696	-	-	19,617	8,198	-	35,224	239,735
Miscellaneous	80,147	-	-	-	-	-	70,000	150,147
Total Revenues	29,246,643	7,848,084	8,489,654	819,617	2,588,641	2,451,755	9,901,481	61,345,875
EXPENDITURES								
General Government								
Legislative	353,045	-	-	-	-	-	-	353,045
Planning Commission	24,308	-	-	-	-	-	-	24,308
Administration	508,649	-	-	-	-	-	-	508,649
Legal	235,125	-	-	-	-	-	-	235,125
Communication	371,025	-	-	-	-	-	-	371,025
Courts	279,606	-	-	-	-	-	-	279,606
Human Resources	371,534	-	-	-	-	-	-	371,534
Recorder	418,312	-	-	-	-	-	-	418,312
Customer Service	131,155	-	-	-	-	-	-	131,155
Economic Development	272,380	-	-	-	-	-	-	272,380
Finance	513,978	-	-	-	-	-	-	513,978
Information Technology	747,060	-	-	-	-	-	-	747,060
Public Works - Operations								
Facilities	747,276	-	44,609	-	-	-	-	791,885
Fleet Management	344,461	-	-	-	-	-	-	344,461
Streets	2,726,654	-	-	-	-	-	503,390	3,230,043
Parks Recreation and Events								
Events	1,211,003	-	-	-	-	-	-	1,211,003
Parks & Cemetery	3,547,483	-	-	-	-	-	78,400	3,625,883
Community Development								
Building Services	1,039,711	-	-	-	-	-	-	1,039,711
Planning	674,249	-	-	-	-	-	-	674,249
Engineering	1,179,975	-	-	-	-	-	123,198	1,303,173
GIS	442,632	-	-	-	-	-	-	442,632
Public Safety								
Emergency Services	54,067	-	-	-	-	-	-	54,067
Police	9,194,596	-	-	-	-	-	-	9,194,596
Fire	-	-	4,984,001	-	-	-	-	4,984,001
Animal Services	371,776	-	-	-	-	-	-	371,776
Tax Increment Distributions	-	-	-	-	-	-	4,636,089	4,636,089
ARPA Funds	169,421	-	-	-	-	-	-	169,421

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HERRIMAN CITY

Statement of Revenues, Expenditures, and Changes in Fund Balances (Continued)
Governmental Funds
For the Year Ended June 30, 2022

	General Fund	Herriman City Safety Enforcement Area	Herriman City Fire Safety Area	Debt Service	Herriman Towne Center CDA/SAA	Capital Projects	Other Governmental Funds	Total Governmental Funds
Capital Outlay	$ -	$ -	$ -	$ -	$ -	$ 4,315,295	$ 3,423,364	$ 7,738,658
Debt Service								
Principal	-	-	-	1,205,000	1,367,245	-	1,000,589	3,572,834
Interest	-	-	-	951,794	413,198	-	92,782	1,457,774
Trustee Fees	-	-	-	10,000	40,375	-	-	50,375
Cost of Issuance	-	-	-	51,300	-	1,000	-	52,300
Total Expenditures	25,929,481	-	5,028,610	2,218,094	1,820,818	4,316,295	9,857,811	49,171,108
Excess (Deficiency) of Revenues Over (Under) Expenditures	3,317,162	7,848,084	3,461,044	(1,398,477)	767,823	(1,864,540)	43,670	12,174,767
OTHER FINANCING SOURCES (USES)								
Note Payable Proceeds	235,392	-	-	-	-	-	-	235,392
Bond Proceeds	-	-	-	-	-	10,593,000	-	10,593,000
Transfers In	9,550,000	-	-	2,500,000	-	2,500,000	3,001,671	17,551,671
Transfers Out	(5,300,000)	(7,800,000)	(1,750,000)	-	-	(1,425,000)	(1,276,671)	(17,551,671)
Total Other Financing Sources (Uses)	4,485,392	(7,800,000)	(1,750,000)	2,500,000	-	11,668,000	1,725,000	10,828,392
Net Change in Fund Balances	7,802,554	48,084	1,711,044	1,101,523	767,823	9,803,460	1,768,670	23,003,158
Fund Balances - July 1	3,196,567	1,307,908	158,744	1,277,051	4,258,649	(6,469,722)	12,373,396	16,102,593
Fund Balances - June 30	$ 10,999,121	$ 1,355,992	$ 1,869,788	$ 2,378,574	$ 5,026,472	$ 3,333,738	$ 14,142,066	$ 39,105,751

The notes to the basic financial statements are an integral part of this statement.

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HERRIMAN CITY

Reconciliation of the Statement of Revenues, Expenditures, and Changes in Fund Balances to the Statement of Activities
Governmental Funds
For the Year Ended June 30, 2022

Amounts Reported for Governmental Activities in the Statement of Activities are Different Because:

Net Changes in Fund Balances - Total Governmental Funds	$ 23,003,158
Governmental funds report capital outlays as expenditures. However, in the Statement of Activities, the costs of those assets are allocated over their estimated useful lives and reported as depreciation expense. This is the amount by which depreciation exceeded capital outlays in the current period.	(596,010)
The issuance of long-term debt (e.g., bonds, notes payable) provides current financial resources to Governmental Funds, but increases long-term liabilities in the Statement of Net Position.	(10,828,392)
Governmental funds do not report contributions of capital assets as revenue unless the assets will be held for sale. However, in the Statement of Activities, the donation of capital assets is reported as revenue.	8,026,881
Repayment of principal on long-term debt is an expenditure in the Governmental Funds, but repayment reduces long-term liabilities in the Statement of Net Position.	4,326,374
Governmental funds report revenues (delinquent property taxes) not collected within sixty days as deferred inflows until subsequently collected. These transactions are recorded as revenues when earned in the Statement of Activities.	2,105,808
Increase of accrued compensated absences increases expenses in the Statement of Activities, but is not an expenditure in the governmental funds.	(181,947)
Special assessments are recognized when levied in the Statement of Activities and are recorded in the fund statement when measurable and available.	(732,045)
Accrued pension costs are not reported as an expenditure for the current period in the Governmental Funds, but are recorded in the Statement of Activities.	1,824,349
Amortization of deferred outflows relating to debt is not recognized in the Governmental Funds, but is recorded in the Statement of Activities.	(165,161)
Accrued interest is not reported as an expenditure for the current period in the governmental funds but is recorded in the Statement of Activities.	36,845
Changes in Net Position of Governmental Activities	$ 26,819,860

The notes to the basic financial statements are an integral part of this statement.

PROPRIETARY FUND
FINANCIAL STATEMENTS

MAJOR FUNDS

Water Fund

The water fund is used to account for the activities of the City's water operations.

Hi Country I Fund

The Hi Country I Fund is used to account for the activities of the City's operation of the Hi Country I water system owned by the Hi Country Estates Homeowners Association.

Hi Country II Fund

The Hi Country II Fund is used to account for the activities of the City's operation of the Hi Country I water system owned by the Hi Country Estates Homeowners Association Phase II.

NONMAJOR FUNDS

Storm Water Fund

The storm water fund is used to account for the activities and operations of the City's storm water system.

HERRIMAN CITY

Statement of Net Position
Proprietary Funds
June 30, 2022

	Water	Hi Country I	Hi Country II	Nonmajor Fund Storm Water	Total
ASSETS					
Current Assets:					
Cash & Cash Equivalents	$ 5,545,660	$ 231,629	$ 772,459	$ 574,985	$ 7,124,734
Receivables (net of allowance)	1,432,067	8,711	15,996	147,012	1,603,786
Due From Another Fund	10,485,370	-	-	-	10,485,370
Inventory	440,147	-	-	-	440,147
Total Current Assets	17,903,245	240,340	788,455	721,997	19,654,037
Noncurrent Assets:					
Restricted Cash & Cash Equivalents	26,146,595	-	-	-	26,146,595
Net Pension Asset	388,629	-	-	130,441	519,070
Capital Assets					
Land & Water Rights	18,372,652	-	-	-	18,372,652
Construction in Progress	2,658,357	-	-	-	2,658,357
Buildings	58,400	-	-	-	58,400
Machinery and Equipment	702,936	-	-	70,085	773,021
Autos and Trucks	1,218,637	-	-	-	1,218,637
Improvements Other than Buildings	131,411,718	-	-	-	131,411,718
Less: Accumulated Depreciation	(40,303,632)	-	-	(14,016)	(40,317,648)
Total Noncurrent Assets	140,654,292	-	-	186,510	140,840,801
Total Assets	158,557,536	240,340	788,455	908,507	160,494,838
DEFERRED OUTFLOWS OF RESOURCES					
Resources Related to Pension	273,368	-	-	91,755	365,123
Deferred Charge on Refunding	422,583	-	-	-	422,583
Total Deferred Outflows of Resources	695,951	-	-	91,755	787,706
LIABILITIES					
Current Liabilities:					
Accounts Payable	995,078	21	17	199,683	1,194,799
Accrued Liabilities	23,459	-	-	5,545	29,004
Accrued Interest	564,934	-	-	-	564,934
Deposits	625,672	-	-	-	625,672
Current Portion of Compensated Absences	133,724		-	13,929	147,654
Current Portion of Bonds Payable	1,565,624	-	-	-	1,565,624
Total Current Liabilities	3,908,492	21	17	219,157	4,127,687
Noncurrent Liabilities:					
Bonds Payable	31,446,496	-	-	-	31,446,496
Net Pension Liability	-	-	-	-	-
Total Noncurrent Liabilities	31,446,496	-	-	-	31,446,496
Total Liabilities	35,354,988	21	17	219,157	35,574,183
DEFERRED INFLOWS OF RESOURCES					
Deferred Inflows of resources related to pensions	628,791	-	-	211,051	839,842
NET POSITION					
Net Investment in Capital Assets	97,715,295	-	-	56,069	97,771,364
Restricted for:					
Capital Projects	8,947,852	-	-	-	8,947,852
Debt Service	356,994	-	-	-	356,994
Unrestricted	16,249,567	240,319	788,438	513,985	17,792,310
Total Net Position	$ 123,269,709	$ 240,319	$ 788,438	$ 570,053	$ 124,868,520

The notes to the basic financial statements are an integral part of this statement.

HERRIMAN CITY

Statement of Revenues, Expenses, and Changes in Net Position
Proprietary Funds
For the Year Ended June 30, 2022

	Water	Hi Country I	Hi Country II	Non Major Fund Storm Water	Total
OPERATING REVENUES					
Charges for Services	$ 11,601,338	$ 129,416	$ 198,089	$ 1,555,975	$ 13,484,816
OPERATING EXPENSES					
Water Purchases	3,501,715	-	-	-	3,501,715
Salaries and Wages	1,507,560	43,354	34,659	501,046	2,086,620
Operating Supplies and Materials	736,579	4,532	15,457	86,150	842,719
Professional and Technical Services	716,949	1,205	23,475	426,683	1,168,313
Conferences and Travel	29,899	-	-	11,826	41,725
Insurance	-	-	-	2,471	2,471
Miscellaneous	8,876	-	-	-	8,876
Utilities	601,832	15,004	17,308	30,219	664,364
Equipment, Repairs & Maintenance	1,840,988	4,334	8,107	340,035	2,193,464
Depreciation	4,577,972	-	-	14,016	4,591,988
Total Operating Expenses	13,522,369	68,429	99,007	1,412,447	15,102,253
Operating Income (Loss)	(1,921,032)	60,986	99,081	143,528	(1,617,437)
NON-OPERATING REVENUES (EXPENSES)					
Interest Income	109,076	-	-	-	109,076
Connection Fees	298,952	-	-	-	298,952
Interest Expense	(932,680)	-	-	-	(932,680)
Total Nonoperating Revenues (Expenses)	(524,651)	-	-	-	(524,651)
Income (Loss) Before Contributions and Transfers	(2,445,683)	60,986	99,081	143,528	(2,142,088)
CONTRIBUTIONS AND TRANSFERS					
Impact Fees	3,703,443	-	33,768	-	3,737,211
Capital Contributions	2,232,065	-	-	-	2,232,065
Total Transfers and Contributions	5,935,508	-	33,768	-	5,969,276
Change in Net Position	3,489,824	60,986	132,849	143,528	3,827,187
Total Net Position, Beginning of Year	118,891,839	179,333	655,589	426,526	120,153,287
Prior Period Adjustment	888,046	-	-	-	888,046
Total Net Position, End of Year	$ 123,269,709	$ 240,319	$ 788,438	$ 570,054	$ 124,868,520

The notes to the basic financial statements are an integral part of this statement.

HERRIMAN CITY

Statement of Cash Flows

Proprietary Funds

For the Year Ended June 30, 2022

	Water	Hi Country I	Hi Country II	Non Major Fund Storm Water	Total
CASH FLOWS FROM OPERATING ACTIVITIES					
Receipts from Customers and Users	$ 12,146,116	$ 131,073	$ 209,314	$ 1,570,939	$ 14,057,442
Payments to Suppliers	(7,540,211)	(29,859)	(64,372)	(290,673)	(7,925,116)
Interfund Services	(519,338)	-	-	(414,475)	(933,813)
Payments to Employees	(1,632,272)	(43,354)	(34,659)	(563,399)	(2,273,684)
Net Cash Flows from Operating Activities	2,454,295	57,859	110,282	302,392	2,924,829
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES					
Loan to Other Fund	(356,143)	-	356,143	-	-
Principal Payments on Long-Term Bonds	(1,520,000)	-	-	-	(1,520,000)
Purchase of Capital Assets	(481,009)	-	-	-	(481,009)
Impact Fees	3,703,443	-	33,768	-	3,737,211
Payment on Interfund Loan	2,014,630	-	-	-	2,014,630
Connection Fees	298,952	-	-	-	298,952
Interest and Fees Paid	(906,289)	-	-	-	(906,289)
Net Cash Flows from Capital and Related Financing Activities	2,753,583	-	389,911	-	3,143,494
CASH FLOWS FROM INVESTING ACTIVITIES					
Interest on Investments	109,076	-	-	-	109,076
Net Increase in Cash and Cash Equivalents	5,316,954	57,859	500,193	302,392	6,177,399
Cash and Cash Equivalents - Beginning of Year	26,375,301	173,770	272,266	272,593	27,093,930
Cash and Cash Equivalents - End of Year	$ 31,692,255	$ 231,629	$ 772,459	$ 574,985	$ 33,271,329
RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED (USED) BY OPERATING ACTIVITIES					
Operating Income (Loss)	$ (1,921,032)	$ 60,986	$ 99,081	$ 143,528	$ (1,617,437)
Adjustments to reconcile operating loss to net cash flows from operating activities					
Depreciation Expense	4,577,972	-	-	14,016	4,591,988
Net Pension Adjustment	(134,670)	-	-	(63,410)	(198,080)
Changes in operating assets and liabilities:					
(Increase) Decrease in Receivables	509,908	1,657	11,224	14,965	537,754
(Increase) Decrease in Inventory	(120,151)	-	-	-	(120,151)
Increase (Decrease) in Accrued Liabilities	(457,732)	(4,784)	(23)	193,295	(269,244)
Net Cash Flows from Operating Activities	$ 2,454,295	$ 57,859	$ 110,282	$ 302,392	$ 2,924,829
NONCASH INVESTING, CAPITAL, AND FINANCING ACTIVITIES					
Capital Contributions from Developers	$ 2,232,065	$ -	$ -	$ -	$ 2,232,065
Bond Premium	265,626	-	-	-	265,626
Bond Discount	(17,140)	-	-	-	(17,140)
Amortization of Deferred Outflow	53,657	-	-	-	53,657
	$ 2,534,208	$ -	$ -	$ -	$ 2,534,208

The notes to the basic financial statements are an integral part of this statement.

Notes to the Financial Statements

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Herriman City's (the City) financial statements are prepared in accordance with Generally Accepted Accounting Principles (GAAP). The Governmental Accounting Standards Board (GASB) is responsible for establishing GAAP for state and local governments through its pronouncements (Statements and Interpretations). The more significant accounting policies established in GAAP and used by the City are discussed below.

A. Reporting Entity

Herriman City is organized under the council-manager form of government, where residents elect a governing body consisting of four City Councilmembers and a Mayor. The position of Mayor is an equal part of the four-member Council and has voting rights, along with being the chairperson of the City Council. The governing body appoints a City Manager to implement policies, oversee the local government's day-to-day operations, and advise the City Council.

The Annual Comprehensive Financial Report of the City includes the financial statements for all activities of the City based upon the criteria set forth in GASB Statement 14, as amended. The primary criterion for including a board or an agency in this report is financial accountability, which determines whether an entity is a component unit of the financial reporting entity. Blended component units, although legally separate entities, are in substance, part of the government's operations, and so data from these units are combined with data of the primary government. Discretely presented component units, if any, are reported in a separate column in the combined financial statements to emphasize they are legally separate from the City.

Blended Component Units

The Community Development and Renewal Agency of Herriman includes five project areas, four of which have been activated and are reported in these financial statements. These project areas are the following:

- Herriman Towne Center CDA/SAA
- Herriman Business Center CDA
- Anthem CRA
- Herriman Innovation District CRA
- Herriman North CRA (not activated)

The project areas collect taxes for the designated areas for not only the City portion of property taxes but also a portion of all other taxing agencies to provide for the construction of infrastructure. The Board of the Community Development and Renewal Agency is made up of all members of the Herriman City Council and functions only on behalf of the City. The budget and operations of the project areas are approved by the Board of the Community Development and Renewal Agency.

The Herriman City Safety Enforcement Area is a taxing entity created in January 2018 to provide funds for law enforcement services in Herriman. The Enforcement Area assesses a property tax on Herriman City residents, which in turn contracts with the Herriman City police department for services. The funds provided by the tax area are transferred to the general fund to pay for services provided. The Board of the Safety Enforcement Area is comprised of Herriman City Councilmembers.

The Herriman City Fire Service Area is a taxing entity created to provide fire services in Herriman. The Fire Service Area contracts with Unified Fire Authority (UFA) to provide fire services to the City. The Service Area was created in January 2021 but will not be able to collect property tax increment until tax year 2022. The Board of the Fire Service Area is comprised of Herriman City Councilmembers.

The Community Development and Renewal Agency of Herriman, Herriman City Safety Enforcement Area, and Herriman City Fire Service Area are all presented as special revenue funds, with the exception of the Towne Center CDA/SAA Fund, which is presented as a Debt Service Fund.

Complete financial statements for each of the individual component units may be obtained at the entity's administrative offices or online at www.herriman.org.

Community Development and Renewal Agency of Herriman
5355 W Main St
Herriman, UT 84096-5836

Herriman City Safety Enforcement Area
5355 W Main St
Herriman, UT 84096-5836

Herriman City Fire Service Area
5355 W Main St
Herriman, UT 84096-5836

B. Government-Wide and Fund Financial Statements

The government-wide financial statements (*i.e.*, the statement of net position and the statement of activities) report information on all activities of the primary government and its component units. For the most part, the effect of interfund activity has been removed from these statements. Governmental activities, which are normally supported by taxes and intergovernmental revenues, are reported separately from business-type activities, which rely to a significant extent on fees and charges for support. Likewise, the primary government is reported separately from certain legally separate component units, if any, for which the primary government is financially accountable.

The statement of activities demonstrates the degree to which the direct expenses of a given function or segment is offset by program revenues. Direct expenses are those that are clearly identifiable with a specific function or segment. Program revenues include 1) charges to customers or applicants who purchase or directly benefit from goods, services, or privileges provided by a given function or segment and 2) grants and contributions that are restricted to meeting the operational or capital requirements of a particular function or segment. Taxes and other items not properly included among program revenues are reported instead as general revenues.

Separate financial statements are provided for governmental funds and proprietary funds. Major individual governmental funds and major individual enterprise funds are reported as separate columns in the fund financial statements.

C. Measurement Focus, Basis of Accounting and Presentation

The government-wide financial statements are reported using the economic resources measurement focus and the accrual basis of accounting, as are the proprietary fund financial statements. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of the related cash flows. Property taxes are recognized in the year for which they are levied. Grants and similar items are recognized as revenue as soon as all eligibility requirements have been met.

Governmental fund financial statements are reported using the current financial resources measurement focus and the modified accrual basis of accounting. Revenues are recognized when susceptible to accrual (*i.e.*, when they are “measurable and available”). “Measurable” means the amount of the transaction can be determined, and “available” means the amount is collectible within the current period or soon enough thereafter to be used to pay liabilities of the current period. The government considers all revenues available if they are collected within 60 days after the year end.

Expenditures are recorded when the related fund liability is incurred, except for unmatured interest on general long-term debt as well as expenditures related to compensated absences, claims, and judgments, which are recorded only when payment is due.

Property taxes, sales taxes, franchise taxes, and earned but unreimbursed state and federal grants associated with the current fiscal period are all considered to be susceptible to accrual and so have been recognized as revenue of the current fiscal period. Only the portion of the special assessments receivable due within the fiscal period is considered susceptible to accrual as revenue of the current period. All other revenue items are considered to be measurable and available only when cash is received by the government.

The government reports the following major governmental funds:

The *General Fund* is the general operating fund of the City. It is used to account for all financial resources except those required to be accounted for in another fund.

The *Herriman City Safety Enforcement Area Fund* is a taxing entity created specifically for public safety. It is a blended component unit of Herriman City. The taxes collected by the Safety Enforcement Area are used to pay for police services provided by the Herriman City Police Department.

The *Herriman City Fire Service Area* Fund is a taxing entity created specifically for public safety. It is a blended component unit of Herriman City. The taxes collected by the Fire Service area are used to pay for fire services provided by Unified Fire Authority.

The *Herriman Towne Center CDA/SAA Fund* accounts for the Special Assessment Area of the Herriman Towne Center project area and tax increment collections of the Herriman Towne Center CDA project area. In addition, the fund accounts for debt service payments on the outstanding Special Assessment debt.

The *Capital Projects Fund* accounts for financial resources to be used for the acquisition or construction of major capital facilities (other than those financed by the proprietary funds).

The *Debt Service Fund* is used to account for the accumulation of resources for, and the payment of, long-term debt principal, interest, and related costs.

The government reports the following major proprietary funds:

The *Water Fund, Hi Country I Fund, and Hi Country II Fund* account for the provision of water services to the customers of the service areas. Activities of the funds include administration, operations, and maintenance of the water system, which includes billing and collection activities. The fund also accounts for the accumulation of resources for, and the payment of, long-term debt and capital improvements. The majority of costs are financed through charges to utility customers and impact fees.

Additionally, the government reports the following fund types:

Special Revenue Funds are used to account for proceeds of specific revenue sources (other than sources for major capital projects) that are legally restricted to expenditures for specified purposes.

As a general rule, the effect of interfund activity has been eliminated from the government-wide financial statements. Exceptions to this general rule are payments to the general fund by the various enterprise funds for providing administrative services for such funds. Elimination of these charges would distort the direct costs and program revenue reported for the various functions concerned.

Proprietary funds distinguish operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's principal ongoing operations.

D. Assets, Liabilities, Deferred Outflows/Inflows of Resources, and Net Position/Fund Balance

1. Deposits and Investments

The City's cash and cash equivalents are considered to be cash on hand, demand deposits, and investments.

Investments consist of amounts deposited with Utah Public Treasurers' Investment Fund. Investments are stated at fair value.

2. Receivables and Payables

Activity between funds that are representative of lending/borrowing arrangements outstanding at the end of the fiscal year are referred to as either "due to or due from other funds".

Legally authorized transfers are treated as interfund transfers and are included in the results of operations in both governmental and proprietary funds.

3. Inventories and Prepaid Items

All inventories are valued at cost using the first-in/first-out (FIFO) method. Inventories of governmental funds are recorded as expenditures when consumed rather than when purchased.

Certain payments to vendors reflect costs applicable to future accounting periods and are recorded as prepaid items in both government-wide and fund financial statements.

4. Restricted Assets/Restricted Net Position

Restricted assets are comprised of cash restricted for future payments of principal and interest on debt service. It is the policy of the City to use restricted assets first and then use unrestricted assets.

Restricted net position represents resources that are subject to external restrictions on how they may be used. Of the $28,186,350 reported as restricted net position in the statement of net position, $16,270,683 is restricted due to enabling legislation.

5. Capital Assets

Capital assets, which include property, plant, equipment, and infrastructure assets (*e.g.*, roads, bridges, sidewalks, and similar items) are reported in the applicable governmental or business-type activities columns in the government-wide financial statements. Capital assets are defined by the government as assets with an initial individual cost of more than $5,000 (amount not rounded) and an estimated useful life in excess of three years. Such assets are recorded at historical cost or estimated historical cost if purchased or constructed. Donated capital assets are recorded at estimated fair value at the date of donation.

The costs of normal maintenance and repairs that do not add to the functionality of the asset or materially extend assets' lives are not capitalized.

Property, plant, and equipment of the primary government are depreciated using the straight line method over the following estimated useful lives:

Assets	Years
Buildings and improvements	30-40
Machinery and equipment	5-10
Autos and Trucks	5-7
Infrastructure	20-40
Parks	15-40

6. Deferred Outflows/Inflows of Resources

In addition to assets, the statement of net position will sometimes report a separate section for deferred outflows of resources. This financial statement element represents a consumption of net position that applies to a future period(s) and so *will not* be recognized as an outflow of resources (expense/expenditure) until then. The City has two items that qualify for reporting in this category – a deferred charge on refunding and resources related to pensions, both of which are reported in the government-wide statement of net position. A deferred charge on refunding results from the difference in the carrying value of refunded debt and its reacquisition price. This amount is deferred and amortized over the shorter of the life of the refunded or refunding debt. Deferred outflows of resources related to pensions results from the difference between projected and actual earnings on pension plan investments.

In addition to liabilities, the statement of financial position will sometimes report a separate section for deferred inflows of resources. This financial statement element represents an acquisition of net position that applies to a future period(s) and so *will not* be recognized as an inflow of resources (revenue) until that time. The City has one item, *deferred revenue,* which qualifies for reporting in this category on both the government-wide statement of net position and governmental funds balance sheet. Both statements report unavailable revenue due to property taxes. In addition, the statement of net position reports *resources related to pensions,* which relates to the differences between expected and actual experience along with changes in assumptions for the City's pensions. These amounts are deferred and recognized as an inflow of resources in the period the amounts become available.

7. Compensated Absences

City employees accrue earned vacation and sick leave throughout the year. They are allowed to carry forward into the next calendar year accrued vacation up to 320 hours and 620 hours of sick leave but are encouraged to take their vacation leave within the calendar year in which it is earned. Upon termination of employment, an employee will be compensated for all unused vacation leave up to 320 hours. Hours above 320 will be paid out on a scale dependent on years of service. Sick leave will be paid out at 25 percent, up to 600 hours, upon termination. Sick leave hours above 600 will be paid out depending on a scale based on years of service.

All vacation pay is accrued when incurred in the government-wide and proprietary fund financial statements. A liability for these amounts is reported in governmental funds only if they have matured, for example, as a result of employee resignations and retirements. For governmental funds, any compensated absence liability has typically been liquidated by the general fund.

8. Taxes

In Utah, county governments assess, levy, collect and disburse two principal types of tax: (1) personal property tax which is assessed on business assets other than real estate, and (2) tax on real estate and improvements. Business personal property and real estate taxes attach as an enforceable lien on property as of January 1st. Taxes are levied on all business personal property on January 1st, and real estate and improvement taxes are levied on January 1st and are payable by November 30th. The real property taxes that are due in November are reported as a receivable from property taxes on the financial statements. Because these taxes are not considered available to liquidate liabilities of the current period, they are offset by a deferred inflow.

The City Council is authorized by state statute to levy a tax against all real and personal property located within its boundaries. The Council must set a tax rate by June 22nd each year. The County Treasurer, acting as a tax collector, must settle and disburse all tax collections to all taxing entities on a routine basis.

9. Long-Term Obligations

In the government-wide financial statements and proprietary fund types in the fund financial statements, long-term debt and other long-term obligations are reported as liabilities in the applicable governmental activities, business-type activities, or proprietary fund type statement of net position. Bond premiums and discounts are

deferred and amortized over the life of the bonds. Bonds payable are reported net of the applicable bond premium or discount.

In the fund financial statements, governmental fund types recognize bond premiums and discounts, as well as bond issuance costs, during the current period. The face amount of debt issued is reported as other financing sources. Premiums received on debt issuances are reported as other financing sources while discounts on debt issuances are reported as other financing uses. Issuance costs, whether or not withheld from the accrual debt proceeds received, are reported as debt service expenditures.

10. Fund Balance

The City implemented GASB Statement 54, *Fund Balance Reporting in Governmental Fund Types Definitions*, in fiscal year 2011. The governmental fund financial statements present fund balances based on a hierarchy that shows, from highest to lowest, the level or form of constraints on fund balance resources and the extent to which the City is bound to honor them. The City first determines and reports nonspendable balances, then restricted, then committed, and so forth. Fund balance classifications are summarized as follows:

- **Nonspendable**. This category includes fund balance amounts that cannot be spent because they are either a) not in spendable form or b) legally or contractually required to be maintained intact. Fund balance amounts related to inventories, prepaid expenditures, and endowments are classified as nonspendable. Nonspendable fund balance represents prepaid expenditures.

- **Restricted.** This category includes net fund resources that are subject to external constraints that have been placed on the use of the resources either a) imposed by creditors (such as through a debt covenant), grantors, contributors, or laws or regulations of other governments or b) imposed by law through constitutional provisions or enabling legislation. Restricted fund balance amounts include debt service, impact fees, and Renewal Agency fund balance.

- **Committed.** This category includes amounts that can only be used for specific purposes established by formal action of the City Council. Fund balance commitments can only be removed or changed by the same type of action (for example, resolution) of the City Council. The City does not have any committed fund balance.

- **Assigned.** This fund balance classification includes all remaining amounts that are reported in governmental funds, other than the general fund, that are not classified as nonspendable, restricted, or committed or in the general fund that are intended to

be used for specific purposes. The City currently has multiple assignments including: Public safety, debt service, street lighting, street signs, and capital projects.

- **Unassigned.** Residual balances in the general fund are classified as unassigned. The general fund is the only fund that reports a positive unassigned fund balance. However, in governmental funds other than the general fund, if expenditures incurred for specific purposes exceed the amounts that are restricted, committed, or assigned, it may be necessary to report a negative unassigned fund balance in that fund. The capital projects fund reports negative unassigned fund balance due to an interfund loan with the water fund, which was used to acquire land.

When an expenditure is incurred for which amounts from both restricted and unrestricted resources could be used, it is the City's policy to use restricted resources first before using unrestricted resources. Further, when components of unrestricted fund balance can be used for the same purpose, committed fund balance is depleted first, then assigned, and finally unassigned.

The City does not have a formal minimum fund balance policy. The City adheres to Utah Code § 10-6-116(4) which requires a minimum fund balance of 5 percent of total revenues to be maintained in the general fund. For fiscal year 2022, this amount is $1,462,332.

11. Use of Estimates

Presenting financial statements in conformity with Generally Accepted Accounting Principles requires management to make certain estimates concerning assets, liabilities, revenues, and expenses. Actual results may vary from these estimates.

12. Pensions

For purposes of measuring net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Utah Retirement Systems Pension Plan (URS) and additions to/deductions from URS' fiduciary net position have been determined on the same basis as they are reported by URS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

NOTE 2 – RECONCILIATION OF GOVERNMENT-WIDE AND FUND FINANICAL STATEMENTS

A. Explanation of Certain Differences Between the Governmental Fund Balance Sheet and the Government-Wide Statement of Net Position

The governmental fund balance sheet includes a reconciliation between *fund balance – total governmental funds* and *net position – governmental activities* as reported in the government-wide statement of net position.

This difference primarily results from the long-term economic focus of the statement of net position versus the current financial resources focus of the governmental fund balance sheets.

Capital related items:

Capital assets used for governmental activities are not financial resources and, therefore, are not reported in the funds.

Cost of capital assets	$ 552,157,478
Accumulated depreciation	(133,841,631)
Net adjustment to increase *fund balance - total governmental funds* to arrive at *net position - governmental activities*	$ 418,315,847

Long-term debt transactions:

Long-term liabilities, including Bonds Payable and Notes Payable, are not due and payable in the current period and therefore are not reported in the funds.

Bonds payable	$ 47,011,505
Bond premium	1,336,568
Notes payable	2,736,365
Compensated absences	1,617,892
Net adjustment to reduce *fund balance – total governmental funds* to arrive at *net position – governmental activities*	$ 52,702,330

Long Term Assets and Deferred Outflows of Resources:

Other long-term assets and deferred outflows of resources are not available to pay for current expenditures.

Net pension asset	$ 4,101,583
Deferred outflows of resources related to pensions	2,885,125
Net adjustment to increase *fund balance – total governmental funds* to arrive at *net position – governmental activities*	$ 6,986,708

B. Explanation of Certain Differences Between the Governmental Fund Statement of Revenues, Expenditures, and Changes in Fund Balances and the Government-Wide Statement of Activities

The governmental fund statement of revenues, expenditures and changes in fund balances includes a reconciliation between *net changes in fund balances – total governmental funds* and *changes in net position of governmental activities* as reported in the government-wide statement of activities. One element of that reconciliation explains that "Governmental funds report capital outlays as expenditures. However, in the statement of activities the cost of those assets is allocated over their estimated useful lives and reported as depreciation expense."

Capital outlay	$9,534,875
Depreciation expense	(10,130,885)
Net adjustment to decrease *net changes in fund balances-total governmental funds* to arrive at *changes in net position of governmental activities*	($ 596,010)

Another element of that reconciliation states that "The issuance of long-term debt (*e.g.*, bonds, leases) provides current financial resources to governmental funds, but increases long-term liabilities in the Statement of Net Position."

Bond proceeds	($10,593,000)
Note payable proceeds	(235,392)

Net adjustments to decrease *net changes in fund balances-total governmental funds* to arrive at *changes in net position of governmental activities*	($10,828,392)

Another element of that reconciliation states that "Repayment of principal on long-term debt is an expenditure in the Governmental Funds, but repayment reduces long-term liabilities in the Statement of Net Position."

Repayment of principal-Bonds	$3,572,834
Repayment of principal-Notes payable	644,587
Bond premium amortization	108,953
Net adjustment to increase *net changes in fund balances – total governmental funds* to arrive at *changes in net position of governmental activities*	$4,326,374

NOTE 3 – BUDGETS AND BUDGETARY ACCOUNTING

Annual budgets are prepared and adopted in accordance with the Uniform Fiscal Procedures Act adopted by the state of Utah. Once a budget has been adopted, it remains in effect until it has been formally revised. Furthermore, in accordance with state law, all appropriations lapse at the end of the budget year. If any obligations are contracted for and are in excess of the adopted budget, they are not a valid or enforceable claim against the City. Budgets are adopted on a basis consistent with Generally Accepted Accounting Principles. All funds of the City have legally adopted budgets.

The City adheres to the following procedures in establishing the budgetary data reflected in the financial statements:

A. On or before the first regularly scheduled meeting of the City Council in May, the Finance Director submits a proposed operating and capital budget. The budgets include proposed expenditures and the means of financing them.

B. A public hearing is held at which time the taxpayers' comments are heard. Notice of the hearing is given at least seven days prior to the hearing. Copies of the proposed budget are made available for public inspection ten days prior to the public hearing.

C. On or before June 30th, a final balanced budget must be adopted through passage of a resolution for the subsequent fiscal year beginning July 1st.

D. Control of budgeted expenditures is exercised, under state law, at the departmental level. The Finance Director has the authority to transfer budget appropriations between line items within any department of any budgetary fund. The City Council, by resolution, has the authority to transfer budget appropriations between the individual departments of any budgetary fund.

E. Budget appropriations for any department may be reduced by resolution.

F. A public hearing as required in B.) above, must be held to increase the total appropriations of any one governmental fund type; however, after the original public hearing, operating and capital budgets of proprietary fund types may be increased by resolution without an additional hearing. However, the City's practice is to hold a public hearing.

G. Encumbrances lapse at year end. Encumbered amounts do not carry over to the following year and are subject to re-appropriation. Therefore, no encumbrances are presented in the financial statements.

During the budget year, the City modified the budget on several occasions using the above procedures.

NOTE 4 – CASH, CASH EQUIVALENTS AND INVESTMENTS

The City maintains a cash and investment pool that is available for use by all funds. At June 30, 2022, the City's cash balance consisted of the following:

	Total Cash from All Fund Types
Deposits	
Cash on Hand	$ 485
Cash in Bank (Checking and Sweep Accounts)	1,335,889
Cash in Bank (Xpress Bill Pay)	270,033
Investments	
Public Treasurers Investment Fund (PTIF) (Bonds)	29,598,243
Public Treasurers Investment Fund (PTIF) (General)	55,707,669
Total Cash and Cash Equivalents	$86,912,319

While the City's carrying amount of deposits was $86,912,319 the balance in the City's bank account and cash on hand was $88,607,745, with the difference being due to outstanding checks and deposits in transit.

A. Custodial Credit Risk

Deposits

Custodial credit risk for deposits is the risk that in the event of a bank failure, the City's deposits may not be recovered. The City's policy for managing custodial credit risk is to adhere to the Utah Money Management Act. The Act requires all deposits of the City to be in a qualified depository, defined as any financial institution whose deposits are insured by an agency of the federal government and which has been certified by the Commissioner of Financial Institutions as meeting the requirements of the Act and adhering to the rules of the Utah Money Management Council. As of June 30, 2022, the deposits are as follows:

Depository Account	Balance June 30, 2022
Checking and Cash on Hand	500,000
Checking and Cash on Hand	1,106,407
Total Deposits	1,606,407

Investments

Custodial credit risk for investments is the risk that in the event of the failure of the counterparty, the City will not be able to recover the value of its investments that are in the possession of an outside party. The City does not have a formal policy for custodial credit risk of investments. The $85,305,912 in City investments is uninsured, unregistered, and held by the counterparty's trust department but not in the City's name and are therefore exposed to custodial credit risk.

B. Credit Risk

Credit risk is the risk that the counterparty to an investment will not fulfill its obligations. The City's policy for limiting the credit risk of investments is to comply with the Utah Money Management Act. The Act requires investment transactions to be conducted only through qualified depositories, certified dealers, or directly with issuers of investment securities. Permitted investments include deposits of qualified depositories; repurchase agreements; commercial paper that is classified as "first-tier" by two nationally recognized statistical rating organizations, as defined in the Act;

bankers acceptances; obligations of the U.S. treasury and U.S. government sponsored enterprise; bonds and notes of political subdivisions of the state of Utah; fixed rate corporate obligations and variable rated securities rated "A" or higher by two nationally recognized statistical rating services as defined in the Act.

The City is authorized to invest in the Utah Public Treasurer's Investment Fund (PTIF), an external pooled investment fund managed by the Utah State Treasurer and subject to the Act and Council requirements. The PTIF is not registered with the Securities and Exchange Commission (SEC) as an investment company, and deposits in the PTIF are not insured or otherwise guaranteed by the state of Utah. The PTIF operates and reports to participants on an amortized cost basis. The income, gains, and losses, net of administration fees, of the PTIF are allocated based upon the participants' average daily balances. The following are the City's investments as of June 30, 2022:

	Investments Maturities (in Years)				
	Less than 1	1-5	6-10	More than 10	Quality Ratings
Investment Type					
Utah Public Treasurers' Investment Fund	$ 85,305,912	$ -	$ -	$ -	Unrated
Total Fair Value	$ 85,305,912	$ -	$ -	$ -	

C. Interest Rate Risk

Interest rate risk is the risk that changes in interest rates of debt investments will adversely affect the fair value of the investment. The City manages its exposure to declines in fair value by adhering to the Money Management Act. The Act requires that the remaining term to maturity of the investments may not exceed the period of availability of the funds to be invested. The Act further limits the remaining term to maturity on all investments in commercial paper, bankers' acceptances, fixed rate negotiable deposits, and fixed rate corporate obligations to between 270 days to 15 months or less.

The Act further limits the remaining term to maturity on all investments in obligations of the United States Treasury; obligations issued by U.S. government sponsored enterprises; and bonds, notes, and other evidence of indebtedness of political subdivisions of the state to five years. In addition, variable rate negotiable deposits and variable rate securities may not have a remaining term to final maturity exceeding three years. Maturities of the City's investments are noted above. The City's policy is to adhere to the Money Management Act.

D. Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of a City's investment in a single issuer. The City's policy to limit this risk is to adhere to the rules of the Money Management Council. The Council's rule 17 limits investments in a single issuer of commercial paper and corporate obligations to between 5 and 10 percent depending on the total dollar amount held in the City's portfolio at the time of purchase. As of June 30, 2022, Herriman City is in compliance with the Council's Rule 17.

E. Fair Value of Investments

The City measures and records its investments using fair value measurement guidelines established by Generally Accepted Accounting Principles (GAAP). These guidelines recognize a three-tiered fair value hierarchy as follows:

- Level 1: Quoted prices for *identical* investments in *active* markets;
- Level 2: Observable inputs other than quoted market prices; and,
- Level 3: Unobservable inputs.

As of June 30, 2022, the City valued the Utah Public Treasurer's Investment Fund totaling $85,305,912 using the application of the June 30, 2022 fair value factor, as calculated by the Utah State Treasurer, to the City's ending balance in the fund (Level 2 inputs).

NOTE 5 – RECEIVABLES

Receivables as of year-end for the government's individual major funds and nonmajor funds in the aggregate, including the applicable allowances for uncollectible accounts, are as follows:

	General	Herriman City Safety Enforcement Area	Herriman City Fire Safety Area	Herriman Towne Center CDA/SAA	Capital Projects	Nonmajor Governmental	Water	Hi Country I	Hi Country II	Nonmajor Enterprise	Total
Receivables:											
Accounts	125,911	-	-	-	29,615	-	1,472,067	15,996	8,711	147,012	1,799,312
Property Tax	936,583	7,699,414	7,693,576	-	-	-	-	-	-	-	16,329,573
Other Taxes	2,782,016	-	-	-	-	-	-	-	-	-	2,782,016
Special Assessments	-	-	-	6,504,505	-	-	-	-	-	-	6,504,505
Intergovernmental	-	-	-	-	-	550,000	-	-	-	-	550,000
Other	76,589	-	-	-	-	-	-	-	-	-	76,589
Less: Allowance for Uncollectible Accounts							(40,000)				(40,000)
	$3,921,099	$ 7,699,414	$ 7,693,576	$ 6,504,505	$29,615	$ 550,000	$1,432,067	$15,996	$ 8,711	$147,012	$ 28,001,995

NOTE 6 – INTERFUND RECEIVABLES, PAYABLES, AND TRANSFERS

Interfund Transfers:

	Transfers To				
Transfer From	General Fund	Debt Service	Capital Projects	Nonmajor Governmental	Total
General Fund	$ -	$ 1,500,000	$ 2,500,000	$ 1,300,000	$ 5,300,000
Herriman City Safety Enforcement Area	7,800,000	-	-	-	7,800,000
Herriman City Fire Safety Area	1,750,000		-	-	1,750,000
Herriman Towne Center CDA/SAA Fund	-	-	-	-	-
Capital Projects Fund	-	-	-	1,425,000	1,425,000
Nonmajor Governmental	-	1,000,000	-	276,671	1,276,671
	$ 9,550,000	**$ 2,500,000**	**$ 2,500,000**	**$ 3,001,671**	**$ 17,551,671**

The City transferred monies between funds to support debt service payments in the debt service fund. Also, the City transferred monies to support related capital expenditures in the capital projects funds, and general operations and public safety in the general fund.

Interfund Receivables / Payables

During fiscal year 2020, the Capital Projects Fund borrowed $12,500,000 from the Water Fund. A Promissory Note was executed between the two funds with an effective date of June 30, 2020. Terms of the loan are as follows:

- Repayment shall be in lump sum on June 30, 2025, with accrued interest at the rate of 1 percent per annum.
- Late payment beyond a 5 day grace period will accrue a 5 percent late fee, and interest shall accrue at 12 percent per annum.

On June 9, 2021, a portion of the land purchased with the interfund loan was sold. The purchase price of $2,014,630 has been applied against the principal balance of the loan, leaving a balance of $10,485,370.

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NOTE 7 – CAPITAL ASSETS

Governmental Activities	Beginning Balance	Additions	Deletions	Ending Balance
Capital Assets, not being Depreciated				
Land	$233,585,054	$ 6,444,298	$ -	$240,029,352
Construction in Progress	327,567	3,503,249	-	3,830,816
Total Capital Assets, not being Depreciated	233,912,621	9,947,547	-	243,860,168
Capital Assets, being Depreciated				
Buildings	22,959,316	-	-	22,959,316
Improvements	267,726,762	5,946,638	-	273,673,400
Autos & Trucks	5,556,774	1,222,308	-	6,779,082
Machinery & Equipment	4,440,249	445,263	-	4,885,512
Total Capital Assets, being Depreciated	300,683,101	7,614,209	-	308,297,310
Less Accumulated Depreciation				
Buildings	(4,553,004)	(680,852)	-	(5,233,856)
Improvements	(112,087,579)	(8,627,879)	-	(120,715,458)
Autos & Trucks	(3,790,047)	(553,706)	-	(4,343,753)
Machinery & Equipment	(3,280,116)	(268,448)	-	(3,548,564)
Total Accumulated Depreciation	(123,710,746)	(10,130,885)	-	(133,841,631)
Total Capital Assets, being Depreciated, net	176,972,355	(2,516,676)	-	174,455,679
Governmental Activities Capital Assets, net	$410,884,976	$ 7,430,871	$ -	$418,315,847

Business-Type Activities	Balance 6/30/2021	Additions	Deletions	Balance 6/30/2022
Capital Assets, not being Depreciated				
Land	$ 3,215,210	$ -	$ -	$ 3,215,210
Water Rights	15,021,842	135,600	-	15,157,442
Construction in Progress	3,943,191	246,993	1,531,826	2,658,357
Total Capital Assets, not being Depreciated	22,180,243	382,593	1,531,826	21,031,010
Capital Assets, being Depreciated				
Buildings	58,400	-	-	58,400
Machinery & Equipment	773,021	-	-	773,021
Autos & Trucks	1,152,258	66,379	-	1,218,637
Distribution System (Beginning Balance as Restated)	127,615,790	3,795,928	-	131,411,718
Total Capital Assets, being Depreciated	129,599,469	3,862,307	-	133,461,776
Less Accumulated Depreciation				
Buildings	(23,604)	(1,460)	-	(25,064)
Machinery & Equipment	(641,330)	(27,002)	-	(668,332)
Autos & Trucks	(736,239)	(106,077)	-	(842,316)
Distribution System	(34,324,488)	(4,457,448)	-	(38,781,936)
Total Accumulated Depreciation	(35,725,661)	(4,591,987)	-	(40,317,648)
Total Capital Assets, being Depreciated, net	93,873,808	(729,680)	-	93,144,128
Business Type Activities Capital Assets, net	$116,054,051	$ (347,087)	$ 1,531,826	$114,175,137

Depreciation expense was charged to functions/programs of the primary government as follows:

Governmental Activities:	
General Government	$ 1,520,923
Public Safety	299,903
Streets	5,409,708
Storm Drain	1,560,123
Parks	1,319,198
Engineering	19,953
Cemetery	1,077
Total Depreciation Expense - Governmental Activities	$ 10,130,885
Business-Type Activities:	
Water	$ 4,577,971
Storm Water	14,016
Total Depreciation Expense - Business-Type Activities	$ 4,591,987

NOTE 8 - LONG-TERM DEBT

Bonds and notes payable at June 30, 2022, are comprised of the following:

Revenue Bonds:

2003 Water Revenue Bonds:
$3,600,000 Water Revenue Bonds due in annual principal and interest payments through January 2024 – Interest rate 1.86%. Proceeds were used to purchase part of the Herriman water system from the Jordan Valley Water Conservancy District. $ 423,000

2015A Sales and Franchise Tax Revenue Bonds:
$21,845,000 Sales Tax Revenue Bonds due in annual principal and semi-annual interest payments through August 2035 – Fixed interest rates ranging from 2.00 to 5.00%. Proceeds were used to construct City Hall and Herriman Boulevard from 6000 West to 6400 West. 16,940,000

2015B Sales and Franchise Tax Revenue Refunding Bonds:
$6,045,000 Sales and Franchise Tax Revenue Refunding Bonds due in annual principal and interest payments through January 2033 -

Fixed interest rates ranging from 4.40 to 5.70%. Proceeds were used to advance refund the 2008 Sales and Franchise Tax Revenue Bonds.	5,065,000
2016 RDA Tax Increment Revenue Bonds:	
$10,969,000 RDA Tax Increment Revenue Bonds due in annual Principal and interest payments through July 2032 –Interest rate is 5%. Proceeds were used to construct the "U" road around City Hall and Crane Park.	7,909,000
2016 Water Revenue Refunding Bonds:	
$7,795,000 Water Revenue Refunding Bonds due in annual principal and semi-annual interest payments through January 2033 – Fixed interest rates ranging from 2.00 to 4.00%.	6,370,000
2021 Water Revenue and Refunding Bonds:	
$22,705,000 Water Revenue and Refunding Bonds due in annual principal and semi-annual interest payments through January 2041 – Fixed Interest rate of 5%. Proceeds were used to refund the outstanding 2015 and 2017 bonds and construct a new water tank.	21,680,000
2021 Sales and Franchise Tax Revenue Bonds:	
$10,593,000 Sales and Franchise Tax Revenue Bonds due in annual principal and semi-annual interest payments through August 2036 – Fixed Interest rates ranging from 0.50 to 2.20%. Proceeds will be used to construct Main Street.	10,593,000

Revenue Bonds

	Governmental		Business-Type	
Fiscal Year	Principal	Interest	Principal	Interest
2023	$ 2,545,000	$ 1,217,569	$ 1,300,000	$ 1,129,868
2024	2,609,000	1,152,013	1,343,000	1,082,362
2025	2,671,000	1,089,455	1,395,000	1,033,200
2026	2,740,000	1,017,980	1,445,000	977,400
2027	2,836,000	929,578	1,500,000	919,600
2028-2032	15,615,000	3,195,812	8,490,000	3,646,100
2033-2037	11,491,000	666,383	7,010,000	2,001,000
2038-2042	-	-	5,990,000	610,600
	$ 40,507,000	$ 9,268,788	$ 28,473,000	$ 11,400,130

Pledged Sources of Revenue Bonds:

The City has pledged sales tax and franchise tax revenue for the 2015A, 2015B, and 2021 Sales and Franchise Tax Revenue Bonds. The remaining principal and interest payments total $40,409,489. For the current year, principal and interest paid and total pledged sales tax revenues were $2,156,794 and $13,133,999, respectively. It is estimated that annual principal and interest payments on the bonds will require 19 percent of pledged revenues.

The City has pledged water revenue for the 2003 Water Revenue Bonds, 2016 Water Revenue Refunding Bonds, and 2021 Water Revenue and Refunding Bonds. For the current year, principal and interest paid and total pledged water revenues were $2,426,253 and $11,601,338, respectively. It is estimated that annual principal and interest payments on the bonds will require 19 percent of pledged revenues.

The City has pledged property tax increment revenue for the 2016 RDA Tax Increment Revenue Bonds. For the current year, principal and interest paid and total pledged tax increment revenues were $854,200 and $2,580,443, respectively. It is estimated that annual principal and interest payments on the bonds will require 31 percent of pledged revenues.

Special Assessment Bonds:

2016 Special Assessment Refunding Bonds:

$10,795,000 Special Assessment Refunding Bonds due in annual principal and interest payments through October 2029 – Interest rate is 2.32%. The bonds are secured by real estate assessments in the Herriman Towne Center CDA, due in annual installments ranging from $780,000 to $1,420,000. Proceeds were used to construct infrastructure in the Herriman Towne Center CDA. In the event that a deficiency exists because of unpaid or delinquent special assessments at the time a debt service payment is due, the City must provide resources to cover the deficiency until other resources, for example, foreclosure proceedings are received. The City expects to make all payments.	6,504,505

Special Assessment Bonds

	Governmental	
Fiscal Year	Principal	Interest
2023	$ 749,562	$ 150,905
2024	766,158	133,515
2025	784,597	115,740
2026	803,037	97,537
2027	821,476	78,907
2028-2032	2,579,675	120,617
2033-2037	-	-
2038-2042	-	-
	$ 6,504,505	$ 697,220

Notes Payable:

2017 Note Payable:
$294,641 Note Payable due in annual principal interest payments through February 2023 – Interest rate 3.18%. Note Payable is secured by vehicles purchased with proceeds. $20,692

2018 Note Payable:
$7,222,483 Note Payable due in annual principal interest payments through March 2-24 – Interest rate 3.00%. Purchase agreement executed for the purchase of land. 2,092,133

2020 Note Payable:
$511,845 Note Payable due in annual principal interest payments through February 2025 – Interest rate 2.08%. Note Payable is secured by vehicles purchased with proceeds. Final portion of note proceeds received in fiscal year 2022 ($235,392). 235,392

2020 Note Payable:
$809,245 Note Payable due in annual principal interest payments through May 2025 – Interest rate 2.16%. Note Payable is secured by vehicles purchased with proceeds. 388,145

Notes Payable

	Governmental	
Fiscal Year	Principal	Interest
2023	$ 1,409,120	$ 139,602
2024	1,194,387	69,356
2025	132,855	2,832
2026	-	-
2027	-	-
	$ 2,736,362	$ 211,790

The future annual requirements for all outstanding bond obligations as of June 30, 2022, are as follows:

All Bonds and Notes

Fiscal Year	Principal	Interest
2023	$ 6,003,682	$ 2,637,943
2024	5,912,545	2,437,245
2025	4,983,452	2,241,227
2026	4,988,037	2,092,917
2027	5,157,475	1,928,084
2028-2032	26,684,675	6,962,528
2033-2037	18,501,000	2,667,383
2038-2042	5,990,000	610,600
	$ 78,220,866	$ 21,577,927

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Changes in Long-Term Debt

Governmental Activities:	July 1 2021	Additions	Retirements	June 30 2022	Due in One Year
Bonds Payable					
2015A Sales & Franchise Tax Revenue Bonds	$ 17,825,000	$ -	$ 885,000	$ 16,940,000	$ 915,000
2015B Sales & Franchise Tax Revenue Refunding Bonds	5,385,000	-	320,000	5,065,000	335,000
2016 RDA Tax Increment Revenue Bonds	8,544,000	-	635,000	7,909,000	645,000
2016 Special Assessment Refunding Bonds	7,236,550	-	732,045	6,504,505	749,562
2021 Sales and Fanchise Tax Revenue Bonds	-	10,593,000	-	10,593,000	650,000
Unamortized Bond Premium	1,445,521	-	108,953	1,336,568	108,953
Total Bonds Payable	40,436,071	10,593,000	2,680,998	48,348,073	3,403,515
Notes Payable-Vehicles	1,053,624	235,392	644,787	644,229	378,512
Note Payable-Walker Trust	3,092,722	-	1,000,589	2,092,133	1,030,607
Compensated Absences	1,435,945	1,377,462	1,195,515	1,617,892	889,841
Total Governmental Long-Term Obligations	46,018,362	12,205,854	5,521,890	52,702,327	5,702,475
Business-Type Activities					
2003 Water Revenue Bonds	628,000	-	205,000	423,000	210,000
2016 Water Revenue Refunding Bonds	6,660,000	-	290,000	6,370,000	305,000
2021 Water Revenue and Refunding Bonds	22,705,000	-	1,025,000	21,680,000	785,000
Unamortized Bond Premium	4,804,746	-	265,626	4,539,120	265,624
Total Bonds Payable	34,797,746	-	1,785,626	33,012,120	1,565,624
Compensated Absences	130,147	150,171	132,664	147,654	147,654
Total Business-Type Long-Term Obligations	34,927,893	150,171	1,918,290	33,159,774	1,713,278
Total Government-Wide Long-Term Obligations	$ 80,946,255	$ 12,356,026	$ 7,440,180	$ 85,862,101	$ 7,415,753

In governmental funds, long-term liabilities other than bonds and notes payable (such as compensated absences and pension liabilities) have typically been liquidated by the general fund.

NOTE 9 - PENSION PLANS

Plan Description. Eligible plan participants are provided with pensions through the Utah Retirement Systems (URS). URS is composed of the following pension trust funds:

- The Public Employees Noncontributory Retirement System (Noncontributory System) is a multiple employer, cost sharing public employee retirement system.
- The Public Safety Retirement System (Public Safety System) is a multiple employer, cost sharing public employee retirement system.
- Tier 2 Public Employees Contributory Retirement System (Tier 2 Public Employees System) and the Tier 2 Public Safety and Firefighter Contributory Retirement System (Tier 2 Public Safety and Firefighters System) are both multiple employer, cost sharing, public employees retirement systems.

The Tier 2 Public Employees System became effective July 1, 2011. All eligible employees beginning on or after July 1, 2011, who have no previous service credit with any of the Utah Retirement Systems, are members of the Tier 2 Retirement System.

The Utah Retirement Systems (Systems) are established and governed by the respective sections of Title 49 of the Utah Code Annotated 1953, as amended. The Systems' defined benefit plans are amended statutorily by the Utah State Legislature. The Utah State Retirement Office Act in Title 49 provides for the administration of the Systems under the direction of the Board, whose members are appointed by the Governor. The Systems are fiduciary funds defined as pension (and other employee benefit) trust funds. URS is a component unit of the State of Utah. Title 49 of the Utah Code grants the authority to establish and amend the benefit terms.

URS issues a publicly available financial report that may be obtained by writing to the below address or by visiting the website https://www.urs.org/general/publications:

Utah Retirement Systems
560 E 200 S
Salt Lake City, UT 84102-2021

Benefits Provided. URS provides retirement, disability, and death benefits. Retirement benefits are as follows:

Summary of Benefits by System

System	Final Average Salary	Years of Service Required and/or Age Eligible for Benefit	Benefit Percent per Year of Service	COLA**
Noncontributory System	Highest 3 Years	30 Years any age 25 Years any age* 20 Years age 60* 10 Years age 62 4 Years age 65	2.0% per year all years	Up to 4%
Public Safety System	Highest 3 Years	20 Years Any Age 10 Years Age 60 4 Years Age 65	2.5% Per Year Up to 20 Years; 2.0% Per year Over 20 Years	Up to 2.5% or 4% Depending Upon Employer
Tier 2 Public Employees System	Highest 5 Years	35 Years Any Age 20 Years Any Age 60* 10 Years Age 62* 4 Years Age 65	1.5% Per Year All Years	Up to 2.5%

Tier 2 Public Safety and Firefighter System	Highest 5 Years	25 Years Any Age 20 Years Any Age 60* 10 Years Age 62* 4 Years Age 65	1.5% Per Year to June 30, 2020 2% Per Year July 1, 2020 to Present	Up to 2.5%

** With actuarial reductions*
***All post-retirement cost-of-living adjustments are non-compounding and are based on the original benefit except for judges, which is a compounding benefit. The cost-of-living adjustments are also limited to the actual Consumer Price Index (CPI) increase for the year, although unused CPI increases not met may be carried forward to subsequent years.*

Contributions. As a condition of participation in the Systems, employers and/or employees are required to contribute a certain percentage of salary and wages as authorized by statute and specified by the URS Board. Contributions are actuarially determined as an amount that, when combined with employee contributions (where applicable) is expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded actuarial accrued liability. Contribution rates as of June 30, 2022 are as follows:

	Employee	Employer Contribution Rates	Employer Rate for 401(k) Plan
Contributory System			
111 – Local Government Division Tier 2	N/A	16.07%	0.62%
Noncontributory System			
15 – Local Government Division Tier 1	N/A	18.47%	N/A
Public Safety Retirement System			
122 – Contributory Tier 2 DB Hybrid	2.27%	23.74%	N/A
49 – Noncontributory Other Division B With 2.5% COLA	N/A	32.28%	N/A
Tier 2 DC Only			
211 Local Government	N/A	6.69%	10.00%
222 Public Safety	N/A	9.74%	14.00%

**Tier 2 rates include a statutory required contribution to finance the unfunded actuarial accrued liability of the Tier 1 plans.*

For fiscal year ended June 30, 2022, the employer and employee contributions to the Systems were as follows:

System	Employer Contributions	Employee Contributions
Noncontributory	$ 800,590	N/A
Public Safety	770,344	-
Tier 2 Public Employees	523,505	-
Tier 2 Public Safety and Firefighter	184,412	-
Tier 2 DC Only System	66,386	N/A
Tier 2 DC Public Safety and Firefighter System	9,140	N/A
Total Contributions	**$2,354,377**	**-**

Contributions reported are the URS Board approved required contributions by System. Contributions in the Tier 2 Systems are used to finance the unfunded liabilities in the Tier 1 Systems.

Combined Pension Assets, Liabilities, Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions. At June 30, 2022, the City reported a net pension asset of $4,620,653 and a net pension liability of $0:

	(Measurement Date): December 31, 2021				
	Net Pension Asset	Net Pension Liability	Proportionate Share	Proportionate Share December 31, 2020	Change (Decrease)
Noncontributory System	$ 3,276,110	$ -	0.5720358%	0.5830439%	-0.0110081%
Public Safety System	1,265,309	-	3.5331928%	3.6781080%	-0.1449152%
Tier 2 Public Employees System	68,157	-	0.1610377%	0.1726118%	-0.0115741%
Tier 2 Public Safety and Firefighters	11,077	-	0.2191585%	0.1687831%	0.0503754%
Total Net Pension Asset / Liability	$ 4,620,653	$ -			

The net pension asset and liability were measured as of December 31, 2020, and the total pension liability used to calculate the net pension asset and liability was determined by an actuarial valuation as of January 1, 2020 and rolled forward using generally accepted actuarial procedures. The proportion of net pension asset and liability is equal to the ratio of the employer's actual contributions to the Systems during the plan year over the total of all employer contributions to the System during the plan year.

For the year ended June 30, 2022, the City recognized pension expense of $312,947. At June 30, 2022, the City reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences Between Expected and Actual Experience	$ 1,184,492	$ 10,602
Changes in Assumptions	603,881	60,994
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	-	7,337,253
Changes in Proportion and Differences Between Contributions and Proportionate Share of Contributions	260,254	67,245
Contributions Subsequent to the Measurement Date	1,201,621	-
Total	$ 3,250,248	$ 7,476,094

$1,201,621 reported as deferred outflows of resources related to pensions results from contributions made by the City prior to our fiscal year end, but subsequent to the measurement date of December 31, 2021.

These contributions will be recognized as a reduction of the net pension liability in the upcoming fiscal year. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year Ended December 31,	Deferred Outflows (Inflows) of Resources
2022	$ (628,757)
2023	(1,932,801)
2024	(1,747,115)
2025	(1,209,525)
2026	14,948
Thereafter	75,784

Noncontributory System Pension Expense and Deferred Outflows and Inflows of Resources. For the year ended June 30, 2022, the City recognized pension expense of ($386,504).

At June 30, 2022, we reported deferred outflows of resources and deferred inflows of resources relating to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences Between Expected and Actual Experience	$ 343,137	$ -
Changes in Assumptions	307,475	21,147
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	-	4,410,843
Changes in Proportion and Differences Between Contributions and Proportionate Share of Contributions	80,109	27,348
Contributions Subsequent to the Measurement Date	397,253	-
Total	$ 1,127,974	$ 4,459,338

$397,253 reported as deferred outflows of resources related to pensions results from contributions made by the City prior to the fiscal year end, but subsequent to the measurement date of December 31, 2021.

These contributions will be recognized as a reduction of the net pension liability in the upcoming fiscal year. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year Ended December 31,	Deferred Outflows (Inflows) of Resources
2022	$ (668,439)
2023	(1,258,520)
2024	(1,068,780)
2025	(732,878)
2026	-
Thereafter	-

Public Safety System Pension Expense and Deferred Outflows and Inflows of Resources. For the year ended June 30, 2022, the City recognized pension expense of $404,079.

At June 30, 2022, the City reported deferred outflows of resources and deferred inflows of resources relating to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences Between Expected and Actual Experience	$ 798,751	$ -
Changes in Assumptions	220,425	37,234
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	-	2,724,145
Changes in Proportion and Differences Between Contributions and Proportionate Share of Contributions	134,525	36,389
Contributions Subsequent to the Measurement Date	388,525	-
Total	$ 1,524,226	$ 2,797,768

$388,525 reported as deferred outflows of resources related to pensions results from contributions made by the City prior to the fiscal year end, but subsequent to the measurement date of December 31, 2021.

These contributions will be recognized as a reduction of the net pension liability in the upcoming fiscal year. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year Ended December 31,	Deferred Outflows (Inflows) of Resources
2022	$ 78,468
2023	(625,051)
2024	(642,238)
2025	(455,245)
2026	-
Thereafter	-

Tier 2 Public Employees System Pension Expense and Deferred Outflows and Inflows of Resources. For the year ended June 30, 2022, the City recognized pension expense of $237,051.

At June 30, 2022, the City reported deferred outflows of resources and deferred inflows of resources relating to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences Between Expected and Actual Experience	$ 33,112	$ 8,782
Changes in Assumptions	63,551	644
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	-	168,408
Changes in Proportion and Differences Between Contributions and Proportionate Share of Contributions	40,846	-
Contributions Subsequent to the Measurement Date	305,571	-
Total	$ 443,080	$ 177,834

$305,571 reported as deferred outflows of resources related to pensions results from contributions made by the City prior to the fiscal year end, but subsequent to the measurement date of December 31, 2021.

These contributions will be recognized as a reduction of the net pension liability in the upcoming fiscal year. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year Ended December 31,	Deferred Outflows (Inflows) of Resources
2022	$ (31,260)
2023	(40,183)
2024	(29,045)
2025	(16,561)
2026	13,601
Thereafter	63,124

Tier 2 Public Safety and Firefighter System Pension Expense and Deferred Outflows and Inflows of Resources. For the year ended June 30, 2022, the City recognized pension expense of $58,321.

At June 30, 2022, the City reported deferred outflows of resources and deferred inflows of resources relating to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences Between Expected and Actual Experience	$ 9,492	$ 1,820
Changes in Assumptions	12,430	1,969
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	-	33,857
Changes in Proportion and Differences Between Contributions and Proportionate Share of Contributions	4,775	3,508
Contributions Subsequent to the Measurement Date	110,271	-
Total	$ 136,968	$ 41,154

$110,271 reported as deferred outflows of resources related to pensions results from contributions made by the City prior to the fiscal year end, but subsequent to the measurement date of December 31, 2021.

These contributions will be recognized as a reduction of the net pension liability in the upcoming fiscal year. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year Ended December 31,	Deferred Outflows (Inflows) of Resources
2021	$ (7,525)
2022	(9,047)
2023	(7,051)
2024	(4,841)
2025	1,348
Thereafter	12,660

Actuarial Assumptions. The total pension liability in the December 31, 2021, actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

- Inflation — 2.50 percent
- Salary Increases — 3.25 – 9.25 percent, average, including inflation
- Investment Rate of Return — 6.85 percent, net of pension plan investment expense, including inflation

Mortality rates were adopted from an actuarial experience study dated January 1, 2020. The retired mortality tables are developed using URS retiree experience and are based upon gender, occupation, and age as appropriate with projected improvement using 80 percent of the ultimate rates from the MP-2019 improvement assumption using a base year of 2020. The mortality assumption for active members is the PUB-2010 Employees Mortality Table for public employees, teachers, and public safety members, respectively.

The actuarial assumptions used in the January 1, 2021, valuation were based on the results of an actuarial experience study for the five year period ending December 31, 2019.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class and is applied consistently to each defined benefit pension plan. These ranges are combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

	Expected Return Arithmetic Basis		
Asset Class	**Target Asset Allocation**	**Real Return Arithmetic Basis**	**Long Term expected Portfolio real rate of return**
Equity securities	37.00%	6.58%	2.43%
Debt securities	20.00%	-0.28%	-0.06%
Real assets	15.00%	5.77%	0.87%
Private equity	12.00%	9.85%	1.18%
Absolute return	16.00%	2.91%	0.47%
Cash & cash equivalents	0.00%	-1.01%	0.00%
Total	100.00%		4.89%
Inflation			2.50%
Expected arithmetic nominal return			7.39%

The 6.85 percent assumed investment rate of return is comprised of an inflation rate of 2.50 percent and a real return of 4.35 percent that is net of investment expense.

Discount Rate. The discount rate used to measure the total pension liability was 6.85 percent. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current contribution rate and that contributions from all participating employers will be made at contractually required rates that are actuarially determined and certified by the URS board. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return on pension plan investments was applied to all period of projected benefit payments to determine the total pension liability. The discount rate does not use the Municipal Bond Index Rate. The discount rate was reduced from 6.95 percent to 6.85 percent from the prior measurement date.

Sensitivity of the Proportionate Share of the Net Pension Asset and Liability to Changes in the Discount Rate. The following table presents the proportionate share of the net pension liability calculated using the discount rate of 6.85 percent, as well as the proportionate share of the net pension liability (asset) would be if it were calculated using a discount rate that is 1 percentage point lower (5.85 percent) or 1 percentage point higher (7.85 percent) than the current rate:

System	1% Decrease (5.85%)	Discount Rate (6.85%)	1% Increase (7.85%)
Noncontributory System	$1,761,663	($3,276,110)	($ 7,479,150)
Public Safety System	2,332,617	(1,265,309)	(4,188,900)
Tier 2 Public Employees System	406,095	(68,157)	(432,285)
Tier 2 Public Safety and Firefighter	88,864	(11,077)	(90,416)
Total	$4,579,239	($4,620,653)	($12,190,751)

NOTE 10 - COMMITMENTS AND CONTINGENCIES

The City is a defendant in certain legal actions and pending actions, or in process for miscellaneous claims. The ultimate liability that might result from the final resolution of the above matters is not presently determinable. City management is of the opinion that the final outcome of the cases will not have an adverse material effect on the City's financial statements.

In the normal course of operations, the City receives grant funds from various federal agencies. The grant operations are subject to audit by agents of the granting authority, the purpose of which is to ensure compliance with conditions precedent to the granting of funds. Any liability for reimbursement that may arise as the result of audits of grant funds is not believed to be material.

NOTE 11 – TAX ABATEMENT AGREEMENTS

Utah State law (Utah Code Ann. § 17C-1-409) allows cities to abate taxes for a variety of economic development purposes. Herriman City reports its Community Development and Renewal Agency ("Agency") as a blended component unit. The City's Agency has the authority to negotiate tax abatement agreements on individual basis. As of June 30, 2022, the Agency manages 5 project areas (4 areas have been "triggered") and, at times, enters into agreements with developers and land owners that result in a GASB 77 disclosure requirement for tax abatements and foregone revenue. The Agency has tax abatement agreements with seven participants where specific action, which contributes to economic development, must be taken by the entity receiving the abatement.

The Agency has entered into multiple agreements in the Anthem CRA project area. Below is a summary of the agreements entered into by the Agency:

- Tax incentive agreement with Anthem Center LLC to reimburse infrastructure improvements, up to eligible reimbursement costs, with a cap of $11,660,300. Reimbursement is limited to the "Participant's Tax Increment Share," as outlined in the Agreement. $461,842 was paid to Anthem Center, LLC in fiscal year 2022 under this agreement.
- Sales tax incentive agreement with Winco Foods, LLC for the construction of a grocery store within the project area. Agreement is to rebate actual point of sale tax collected (as specified in the agreement), up to $200,000 per year, with a maximum cap of $500,000.
- Tax increment agreement with Anthem Center, LLC to reimburse up to 75 percent of Transportation and Water Impact Fees paid on development in project area prior to July 31, 2023, up to the amount of sales tax collected by businesses outside of Winco Foods. $89,464 was paid to Anthem Center, LLC in fiscal year 2022 under this agreement.
- Sales tax incentive agreement with Anthem Center, LLC to pay up to $200,000 per year ($400,000 maximum amount) after the sales tax incentive agreement with Winco Foods, LLC has been completed, as specified in the Agreement. This agreement will not be effective until the Agreement with Winco Foods is completed.
- Mitigation Agreement with Jordan School District to remit 35 percent of incremental tax revenues generated by the School District back to the District. $210,031 was paid to Jordan School District under this agreement in fiscal year 2022.
- Mitigation Agreement with Salt Lake County to remit 28.75 percent of Salt Lake County incremental tax revenues generated by Salt Lake County back to the County. $49,662 was paid to Salt Lake County in fiscal year 2022 under this agreement.
- Mitigation Agreement with Salt Lake County to remit 28.75 percent of Salt Lake County Library incremental tax revenues generated by Salt Lake County Library back to the County. $33,896 was paid to Salt Lake County in fiscal year 2022 under this agreement.

In the Innovation District CDA project area, the Agency entered into an agreement with the Jordan School District to remit 50 percent of incremental tax revenues generated by the School District back to the District. $68,297 was paid to Jordan School District under this agreement in fiscal year 2022.

In the Business Center CDA project area, the Agency entered into a tax increment participation agreement with the Sorensen Legacy Foundation and Sorensen Impact Foundation to remit property tax increment collected (outside of Salt Lake County), based on the formula outlined in the Agreement, to each Foundation. The participation agreement is designed to reimburse the Foundation for infrastructure installed in the District. If tax increment is insufficient to reimburse the Foundation for infrastructure in the project area, water, storm drain, and transportation impact fees may be used to make up the difference. $3,752,683 was paid to both Foundations in fiscal year 2022 under this agreement.

In the Herriman North CRA project area, the Agency entered into a tax increment participation agreement with 8 property owners for the purpose of acquiring certain property interest for the extension and construction of improvements to Herriman Main Street, which were necessary for infrastructure improvements in the project area. The agreement states that certain sales tax increment generated on specified parcels will be paid to the property owners through Butterfield Commercial, LLC, up to a maximum cap of $200,000. This agreement will be paid up to 15 years from the date of the agreement (February 11, 2019), or the point in time the maximum cap has been reached. Payments under this agreement began in fiscal year 2023. The Agency has also entered into participation agreements with Germain Marine, National Automall of Herriman, and T Johnson Management LLC for the purpose of developing an Automall and other commercial retail within the Herriman North CRA. The agreement specifies the Agency will pay a portion of the point-of-sale tax generated by sales on specific sites within the CRA. Each agreement allows for 100 percent of the sales tax generated by each specific site contained in the agreement to be paid to the Participant, after satisfaction of the Agency's obligations to Butterfield Commercial LLC (as specified in the paragraph above) and a set aside of 10 percent for housing as required by Utah Code § 17C-5-307. The Agency has not paid any amounts of this agreement as of June 30, 2022.

Utah Code § 5-1-403 prohibits the release of sales tax information specific to a particular entity. Therefore, no further detail can be provided regarding the sales tax abatement agreements listed above.

NOTE 12 - RISK MANAGEMENT

The City is exposed to various risks of loss related to torts, theft of, damage to and destruction of assets; errors and omissions; injuries to employees; and natural disasters. It is the policy of the City to purchase commercial insurance for these risks. Various policies are purchased through an insurance agency to cover liability, theft, damage, and other losses. A minimal deductible applies to these policies, which the City pay in the event of any loss. There have been no significant reductions in coverage from the prior year. Settled claims have not exceeded this commercial coverage in any of the three preceding years. The City also maintains a workers compensation policy through a commercial vendor.

NOTE 13 - REDEVELOPMENT AGENCY

The Community Development and Renewal Agency of Herriman City is established to further public purposes in the redevelopment of certain City areas. For the year ended June 30, 2022, the following activity occurred in the City's Renewal Agency:

Tax increment collection from other taxing agencies for various project areas	$4,031,470
Tax increment distributions	4,636,089
Outstanding loans to finance RDA projects	7,909,000
Amounts expended for installation of capital improvements, other public improvements, and housing donations	-
Amounts expended for administrative costs	40,375

NOTE 14 – PRIOR PERIOD ADJUSTMENTS

The City erroneously underreported capital assets in the Water Fund by $580,774 in fiscal year 2021. In addition, $307,272 of bond interest expense was not calculated correctly in fiscal year 2021. Both caused beginning net position to increase by $888,046 in fiscal year 2022.

Required Supplementary Information



HERRIMAN CITY

General Fund

Schedule of Revenues, Expenditures, and Changes in Fund Balance - Budget and Actual

For the Year Ended June 30, 2022

	Actual Amounts	Budgeted Amounts		
		Original	Final	Variance with Final Budget
REVENUES				
Taxes				
General Property Tax	$ 1,305,827	$ 913,237	$ 1,300,000	$ 5,827
General Sales & Use Taxes	11,577,127	11,066,597	11,066,597	510,530
Franchise Taxes	2,527,304	2,472,256	2,472,256	55,048
Total Taxes	15,410,258	14,452,090	14,838,853	571,405
Licenses & Permits				
Business License & Permits	20,281	50,000	50,000	(29,719)
Non-Business License & Permits	5,897,594	6,070,551	6,070,553	(172,959)
Total Licenses & Permits	5,917,876	6,120,551	6,120,553	(202,677)
Intergovernmental Revenues				
Class "C" Roads	2,166,740	1,766,354	1,766,354	400,386
Grants - Public Safety	164,661	200,000	170,500	(5,839)
State Liquor Allotment	41,727	39,000	41,727	(0)
American Rescue Plan Act	2,401,824	2,666,467	2,401,824	-
Total Intergovernmental Revenues	4,774,951	4,671,821	4,380,405	394,546
Charges for Services				
Administration	198,233	121,500	176,500	21,733
Engineering	48,241	6,000	45,671	2,570
Parks Recreation & Events	1,668,845	1,719,355	1,613,355	55,490
Public Safety	394,652	335,700	374,600	20,052
Operations	18,250	12,000	16,000	2,250
Total Charges for Services	2,328,221	2,194,555	2,226,126	77,792
Court Fines and Forfeitures	189,970	250,000	250,000	(60,030)
Public Safety Impact Fees	368,523	250,000	300,000	68,523
Miscellaneous Revenue				
Investment Earnings	176,696	200,000	200,000	(23,304)
Donations	615	75	3,500	(2,885)
Sundry Revenue	79,532	111,050	139,106	(59,574)
Total Miscellaneous	256,843	311,125	342,606	(85,763)
Total Revenues	$ 29,246,643	$ 28,250,142	$ 28,458,543	$ 763,796

HERRIMAN CITY

General Fund

Schedule of Revenues, Expenditures, and Changes in Fund Balance -
Budget and Actual (Continued)
For the Year Ended June 30, 2022

	Actual Amounts	Budgeted Amounts Original	Budgeted Amounts Final	Variance with Final Budget
EXPENDITURES				
General Government				
Legislative	$ 353,045	$ 425,850	$ 430,094	$ 77,049
Planning Commission	24,308	32,600	32,600	8,292
Administration	508,649	575,760	591,621	82,972
Legal	235,125	391,900	368,800	133,675
Communication	371,025	407,275	417,275	46,250
Courts	279,606	304,243	359,408	79,802
Human Resources	371,534	499,742	520,542	149,008
Recorder	418,312	466,234	462,474	44,162
Customer Service	131,155	149,661	149,661	18,506
Economic Development	272,380	387,170	387,220	114,840
Finance	513,978	604,590	604,590	90,612
Information Tehnology	747,060	728,851	744,851	(2,209)
Total General Government	4,226,177	4,973,876	5,069,136	842,959
Public Works - Operations				
Facilities	747,276	844,359	851,099	103,823
Fleet Management	344,461	427,765	427,765	83,304
Streets	2,726,654	4,632,404	4,633,328	1,906,674
Total Public Works - Operations	3,818,390	5,904,528	5,912,192	2,093,802
Parks, Recreation & Events				
Events	1,211,003	1,280,584	1,274,784	63,781
Parks & Cemetery	3,547,483	3,727,711	3,731,580	184,097
Total Parks, Recreation & Events	4,758,485	5,008,295	5,006,364	247,879
Community Development				
Building Services	1,039,711	1,111,457	1,103,422	63,711
Planning	674,249	840,165	837,880	163,631
Engineering	1,179,975	1,249,838	1,238,838	58,863
GIS	442,632	484,348	484,348	41,716
Total Community Development	3,336,568	3,685,808	3,664,488	327,920
Public Safety				
Emergency Services	54,067	65,500	65,500	11,433
Police	9,194,596	8,420,137	8,859,160	(335,436)
Animal Control	371,776	345,930	386,468	14,692
Total Public Safety	9,620,439	8,831,567	9,311,128	(309,311)
ARPA Funds	169,421	2,666,467	2,401,824	2,232,403
Total Expenditures	25,929,481	31,070,541	31,365,132	5,435,651
Excess (Deficiency) of Revenues Over (Under) Expenditures	3,317,162	(2,820,399)	(2,906,589)	6,223,751
OTHER FINANCING SOURCES (USES)				
Note Payable Proceeds	235,392	2,386,934	1,358,118	(1,122,726)
Transfers In	9,550,000	6,900,000	9,550,000	-
Transfers Out	(5,300,000)	(6,126,081)	(7,300,000)	2,000,000
Total Other Financing Sources (Uses)	4,485,392	3,160,853	3,608,118	877,274
Net Change in Fund Balance	7,802,554	340,454	701,529	7,101,025
Fund Balance - July 1	3,196,567	3,196,567	3,196,567	-
Find Balance - June 30	$ 10,999,121	$ 3,537,021	$ 3,898,096	7,101,025

The notes to the required supplementary information are an integral part of this schedule

HERRIMAN CITY

Herriman City Safety Enforcement Area Fund

Schedule of Revenues, Expenditures, and Changes in Fund Balance - Budget and Actual

For the Year Ended June 30, 2022

	Actual Amounts	Budgeted Amounts		Variance with Final Budget
		Original	Final	
REVENUES				
Property Tax	$ 7,848,084	$ 7,111,337	$ 7,800,000	$ 48,084
OTHER FINANCING SOURCES (USES)				
Transfers Out	(7,800,000)	(6,900,000)	(7,800,000)	-
Net Change in Fund Balance	48,084	211,337	-	48,084
Fund Balance-July 1	1,307,908	1,307,908	1,307,908	-
Fund Balance-June 30	$ 1,355,992	$ 1,519,245	$ 1,307,908	$ 48,084

The notes to the required supplementary information are an integral part of this schedule

HERRIMAN CITY

Herriman City Fire Service Area Fund

Schedule of Revenues, Expenditures, and Changes in Fund Balance - Budget and Actual

For the Year Ended June 30, 2022

	Actual Amounts	Budgeted Amounts		Variance with Final Budget
		Original	Final	
REVENUES				
Property Tax	$ 7,939,144	$ 5,947,148	$ 7,400,000	$ 539,144
Impact Fees	474,629	150,000	500,000	(25,371)
Interest Earnings	-	25,000	25,000	(25,000)
Miscellaneous Revenue	75,882	-	75,862	20
Total Revenues	8,489,654	6,122,148	8,000,862	488,792
EXPENDITURES				
Fire-Contract Services	4,984,001	4,800,000	5,000,000	15,999
Operations	44,609	-	-	(44,609)
Total Expenditures	5,028,610	4,800,000	5,000,000	(28,610)
Excess (Deficiency) of Revenues Over (Under) Expenditures	3,461,044	1,322,148	3,000,862	460,182
OTHER FINANCING SOURCES (USES)				
Transfers Out	(1,750,000)	-	(1,750,000)	-
Net Change in Fund Balance	1,711,044	1,322,148	1,250,862	460,182
Fund Balance-July 1	158,744	158,744	158,744	-
Fund Balance-June 30	$ 1,869,788	$ 1,480,892	$ 1,409,606	$ 460,182

The notes to the required supplementary information are an integral part of this schedule

HERRIMAN CITY

Required Supplementary Information

Schedule of the Proportionate Share of the Net Pension Liability

Measurement Date of December 31, 2021

June 30, 2022

Last 10 Fiscal Years*

		Noncontributory System	Public Safety System	Tier 2 Public Employees System	Tier 2 Public Safety and Firefighters System
Noncontributory System					
Proportion of the net pension liability (asset)	2022	0.5720358%	3.5331928%	0.1610377%	0.2191585%
	2021	0.5830439%	3.6781080%	0.1726118%	0.1687831%
	2020	0.5490521%	3.7546814%	0.1633763%	0.1853455%
	2019	0.5183287%	1.2104672%	0.1457050%	0.0594155%
	2018	0.4785770%	-	0.1290918%	-
	2017	0.4632172%	-	0.1256948%	-
	2016	0.4326968%	-	0.1151862%	-
	2015	0.3974375%	-	0.0983084%	-
Proportionate share of the net pension liability (asset)	2022	$ (3,276,110)	$ (1,265,309)	$ (68,157)	$ (11,077)
	2021	299,068	1,322,398	24,826	15,139
	2020	2,069,305	1,864,574	36,745	17,434
	2019	3,816,829	953,843	62,402	1,489
	2018	2,098,019	-	11,382	-
	2017	2,974,421	-	14,021	-
	2016	2,448,409	-	(251)	-
	2015	1,725,767	-	(2,979)	-
Covered Payroll	2022	$ 4,521,286	$ 2,479,393	$ 2,989,401	$ 524,090
	2021	4,691,795	2,518,552	2,759,259	334,771
	2020	4,486,349	2,542,783	2,269,551	305,462
	2019	4,297,331	788,429	1,698,932	77,775
	2018	4,076,207	-	1,263,229	-
	2017	4,003,493	-	1,030,797	-
	2016	3,653,333	-	744,262	-
	2015	3,394,535	-	482,391	-
Proportionate share of the net pension liability (asset) as a percentage of its covered employee payroll	2022	-72.46%	-51.03%	-2.28%	-2.11%
	2021	6.37%	52.51%	0.90%	4.52%
	2020	46.12%	73.33%	1.62%	5.71%
	2019	88.82%	120.98%	3.67%	1.91%
	2018	51.47%	-	0.90%	-
	2017	74.30%	-	1.36%	-
	2016	67.02%	-	0.03%	-
	2015	50.80%	-	-0.60%	-
Plan fiduciary net position as a percentage of the total pension liability	2022	108.70%	105.10%	103.80%	102.80%
	2021	99.20%	94.50%	98.30%	93.10%
	2020	93.70%	91.70%	96.50%	89.60%
	2019	87.00%	85.60%	90.80%	95.60%
	2018	91.90%	-	97.40%	-
	2017	87.30%	-	95.10%	-
	2016	87.80%	-	100.20%	-
	2015	90.20%	-	103.50%	-

*In accordance with GASB 68, until a full 10-year trend is compiled, information is presented for those years which information is available

The notes to the required supplementary information are an integral part of this schedule

HERRIMAN CITY

Required Supplementary Information

Schedule of Contributions - Utah Retirement Systems

June 30, 2022

Last 10 Fiscal Years*

	As of fiscal year end June 30,	Actuarial determined contributions	Contibutions in relation to the contractually required contributions	Contribution deficiency (excess)	Covered payroll	Contributions as a percentage of covered employee payroll
Noncontributory System	2014	$ 557,824	$ 557,824	$ -	$ 3,300,974	16.90%
	2015	639,873	639,873	-	3,554,400	18.00%
	2016	668,026	668,026	-	3,712,328	17.99%
	2017	737,843	737,843	-	4,131,738	17.86%
	2018	744,691	744,691	-	4,126,506	18.05%
	2019	800,868	800,868	-	4,417,299	18.13%
	2020	863,425	863,425	-	4,758,683	18.14%
	2021	849,818	849,818	-	4,692,891	18.11%
	2022	800,590	800,590	-	4,404,610	18.18%
Public Safety System	2014	$ -	$ -	$ -	$ -	0.00%
	2015	-	-	-	-	-
	2016	-	-	-	-	-
	2017	-	-	-	-	-
	2018	-	-	-	-	-
	2019	660,360	660,360	-	2,104,761	31.37%
	2020	776,979	776,979	-	2,468,986	31.47%
	2021	778,646	778,646	-	2,519,909	30.90%
	2021	770,344	770,344	-	2,517,273	30.60%
Tier 2 Public Employees System*	2014	$ 54,521	$ 54,521	$ -	$ 381,476	14.29%
	2015	85,348	85,348	-	571,177	14.94%
	2016	132,940	132,940	-	891,619	14.91%
	2017	169,242	169,242	-	1,132,248	14.95%
	2018	218,729	218,729	-	1,447,574	15.11%
	2019	306,679	306,679	-	1,969,199	15.57%
	2020	402,881	402,881	-	2,563,411	15.72%
	2021	457,798	457,798		2,878,120	15.91%
	2021	523,505	523,505		3,251,886	16.10%
Tier 2 Public Safety and Firefighter System*	2014	$ -	$ -	$ -	$ -	-
	2015	-	-	-	-	-
	2016	-	-	-	-	-
	2017	-	-	-	-	-
	2018	-	-	-	-	-
	2019	44,880	44,880	-	213,716	21.00%
	2020	68,807	68,807	-	317,418	21.68%
	2021	88,681	88,681	-	370,928	23.91%
	2022	184,412	184,412	-	776,195	23.76%
Tier 2 Public Employees DC Only System*	2014	$ 39	$ 39	$ -	$ -	-
	2015	5,018	5,018	-	68,084	7.37%
	2016	5,350	5,350	-	79,225	6.75%
	2017	6,189	6,189	-	90,103	6.87%
	2018	10,915	10,915	-	150,313	7.26%
	2019	19,601	19,601	-	253,771	7.72%
	2020	32,097	32,097	-	424,730	7.56%
	2021	50,818	50,818	-	710,318	7.15%
	2022	66,386	66,386	-	940,856	7.06%
Tier 2 Public Employees DC Only System*	2014	$ -	$ -	$ -	$ -	-
	2015	-	-	-	-	-
	2016	-	-	-	-	-
	2017	-	-	-	-	-
	2018	-	-	-	-	-
	2019	5,367	5,367	-	55,102	9.74%
	2020	11,725	11,725	-	117,016	10.02%
	2021	14,397	14,397	-	147,817	9.74%
	2022	9,140	9,140	-	93,844	9.74%

*Contributions in Tier 2 include an amortization rate to help fund the unfunded liabilities in the Tier 1 systems. Tier 2 systems were created July 1, 2011

Paragraph 81b of GASB 68 requires employers to disclose a 10 year history of contributions to RSI. Contributions as a percentage of covered payroll may be different than the board certified rate due to rounding and other administrative practives.

The notes to the required supplementary information are an integral part of this schedule

NOTE 1 – BUDGETARY INFORMATION

Budgets for the General Fund, Herriman City Safety Enforcement Area Fund and Herriman City Fire Safety Area Fund are adopted and presented on a basis consistent with Generally Accepted Accounting Principles (GAAP).

NOTE 2 – DEFINED CONTRIBUTION SYSTEM

The City participates in a defined contribution plan with Utah Retirement Systems and are generally supplemental plans to the basic retirement benefits of the Retirement Systems, but may also be used as a primary retirement plan. These plans are voluntary tax-advantaged retirement savings programs authorized under section 401(k), 457(b), and 408 of the Internal Revenue Code. Detailed information regarding plan provisions is available in the separately issued URS financial report.

Herriman City participates in the following Defined Contribution Savings Plans with the Utah Retirement Systems: 401(k), 457(b), and Roth IRA Plans.

Employee and employer contributions to the Utah Retirement Defined Contribution Savings Plans for the fiscal year ended June 30th were as follows:

	2022	2021	2020
401(k) Plan			
Employer Contributions	$ 1,052,842	$ 990,953	$ 859,876
Employee Contributions	401,200	376,427	316,931
457 Plan			
Employer Contributions	618,359	582,859	541,325
Employee Contributions	410,927	381,336	355,163
Roth IRA Plan			
Employer Contributions	N/A	N/A	N/A
Employee Contributions	67,402	53,749	40,738

NOTE 3 – CHANGES IN ASSUMPTIONS

The investment return assumption was decreased by 0.10% to 6.85% for use in the January 1, 2021 actuarial valuation. This assumption change was based on analysis performed by the actuary and adopted by the Utah State Retirement Board. In aggregate, this assumption resulted in a $509 million increase in the Total Pension Liability, which is about 1.3 percent of the Total Pension Liability as of December 31, 2020 for all systems combined. The demographic assumptions were reviewed and updated in the January 1, 2020 actuarial valuation and are currently scheduled to be reviewed in the year 2023.

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Supplementary Information



NONMAJOR GOVERNMENTAL FUNDS

SPECIAL REVENUE FUNDS

Special revenue funds are used to account for specific revenues that are restricted to expenditure for particular purposes.

1) **Herriman Business Center CDA Fund** – This fund is used to revenue and expenditures related to the Herriman Business Center CDA project area.
2) **Anthem CRA Fund** – This fund is used to account for revenues and expenditures related to the Anthem CRA project area.
3) **Herriman Innovation District CRA Fund** – This fund is sued to account for the revenues and expenditures of the Herriman Innovation District CRA project area.

CAPITAL PROJECT FUNDS

Capital project funds are used when a specific revenue source is restricted, committed, or assigned to expenditures for capital projects. Impact fees are charged on new developments within the City and are used to offset the impact of new development within the City.

1) **Park Impact Fee Fund** – This fund is used to account for the collection and expenditure of park impact fees. Park impact fees are received from new development within the City and are restricted to permitted uses under state law.
2) **Storm Drain Impact Fee Fund** – This fund is used to account for the collection and expenditure of storm drain impact fees. Storm drain impact fees are received from new development within the City and are restricted to permitted uses under state law.
3) **Road Impact Fee Fund** – This fund is used to account for the collection and expenditure of road impact fees. Road impact fees are received from new development within the City and are restricted to permitted uses under state law.
4) **Street Light Fee Fund** – This fund is used to account for the collection and expenditure of funds received for the purpose of installing street lights within the City.
5) **Street Sign Fee Fund** – This fund is used to account for the collection and expenditure of funds received for the purpose of installing street signs within the City.
6) **Herriman Towne Center-City Hall Fund** – This fund is used to account for funds designated for the City Hall building.
7) **Public Works Facility Fund** – This fund is used to account for the collection and expenditure of funds to be used for a new Public Works facility in the City.

HERRIMAN CITY

Combining Balance Sheet

Nonmajor Governmental Funds

June 30, 2022

	Special Revenue Fund			Capital Projects Funds							
	Herriman Business Center CDA	Anthem CRA	Herriman Innovation District CRA	Park Impact Fee	Storm Drain Impact Fee	Road Impact Fee	Street Light Fee	Street Sign Fee	Herriman Towne Center-City Hall	Public Works Facility	Total Nonmajor Governmental Funds
ASSETS											
Cash & Cash Equivalents	$ 1,085,672	$ 494,863	$ 158,197	$ -	$ -	$ -	$ 618,262	$ 270,317	$ 247,633	$ 546,868	$ 3,421,814
Restricted Cash	-	-	-	6,703,212	2,856,815	2,266,375	-	-	-	-	11,826,402
Other Receivables	-	-	-	550,000	-	-	-	-	-	-	550,000
Total Assets	$ 1,085,672	$ 494,863	$ 158,197	$ 7,253,212	$ 2,856,815	$ 2,266,375	$ 618,262	$ 270,317	$ 247,633	$ 546,868	$ 15,798,216
LIABILITIES											
Accounts Payable	804,690	293,589	68,297	337,517	-	49,330	82,109	152	20,466	-	1,656,150
FUND BALANCES											
Assigned	-	-	-	-	-	-	536,153	270,166	227,167	546,868	1,580,354
Restricted for:											
Redevelopment	280,982	201,274	89,900	-	-	-	-	-	-	-	572,156
Capital Projects	-	-	-	6,915,696	2,856,815	2,217,044	-	-	-	-	11,989,555
Total Fund Balances	280,982	201,274	89,900	6,915,696	2,856,815	2,217,044	536,153	270,166	227,167	546,868	14,142,066
TOTAL LIABILITIES AND FUND BALANCES	$ 1,085,672	$ 494,863	$ 158,197	$ 7,253,212	$ 2,856,815	$ 2,266,375	$ 618,262	$ 270,317	$ 247,633	$ 546,868	$ 15,798,216

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HERRIMAN CITY

Combinig Statement of Revenues, Expenditures, and Changes in Fund Balances
Nonmajor Governmental Funds
For the Year Ended June 30, 2022

	Special Revenue Fund			Capital Projects Funds							Total Nonmajor Governmental Funds
	Herriman Business Center CDA	Anthem CRA	Herriman Innovation District CRA	Park Impact Fee	Storm Drain Impact Fee	Road Impact Fee	Street Light Fee	Street Sign Fee	Herriman Towne Center-City Hall	Public Works Facility	
REVENUES											
Property Tax	$ 161,931	$ 136,311	$ 23,596	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 321,837
Intergovernmental	923,739	777,567	134,601	550,000	-	-	-	-	-	-	2,385,908
Impact Fee	-	-	-	3,253,264	682,348	2,374,775	675,669	102,455	-	-	7,088,511
Interest Earnings	-	-	-	15,112	10,857	9,255	-	-	-	-	35,224
Miscellaneous	-	-	-	70,000	-	-	-	-	-	-	70,000
Total Revenues	1,085,670	913,878	158,197	3,888,376	693,205	2,384,030	675,669	102,455	-	-	9,901,481
EXPENDITURES											
Current											
Streets	-		-	-	50,000	453,390	-	-	-	-	503,390
Parks & Recreation	-	-	-	78,400	-	-	-	-	-	-	78,400
Engineering	-	-	-	-	14,136	98,092	-	-	-	10,970	123,198
Tax Increment Distributions	3,463,820	1,103,972	68,297	-	-	-	-	-	-	-	4,636,089
Capital Outlay	-	-	-	2,366,248	20,064	126,762	756,032	115,139	39,119	-	3,423,364
Debt Service				-							
Principal	-	-	-	-	-	-	-	-	-	1,000,589	1,000,589
Interest	-	-	-	-	-	-	-	-	-	92,782	92,782
Total Expenditures	3,463,820	1,103,972	68,297	2,444,648	84,200	678,244	756,032	115,139	39,119	1,104,341	9,857,811
Excess (Deficiency) of Revenues Over (Under) Expenditures	(2,378,150)	(190,094)	89,900	1,443,728	609,005	1,705,787	(80,363)	(12,683)	(39,119)	(1,104,341)	43,670
OTHER FINANCING SOURCES (USES)											
Transfers In	-	-	-	-	-	1,425,000	-	-	-	1,576,671	3,001,671
Transfers Out	-	-	-	-	-	(1,000,000)	-	-	(276,671)	-	(1,276,671)
Total Other Financing Sources (Uses)	-	-	-	-	-	425,000	-	-	(276,671)	1,576,671	1,725,000
Net Change in Fund Balances	(2,378,150)	(190,094)	89,900	1,443,728	609,005	2,130,787	(80,363)	(12,683)	(315,790)	472,330	1,768,670
Fund Balances - Beginning	2,659,132	391,368	-	5,471,968	2,247,810	86,258	616,516	282,849	542,957	74,538	12,373,396
Fund Balances - Ending	$ 280,982	$ 201,274	$ 89,900	$ 6,915,696	$ 2,856,815	$ 2,217,045	$ 536,153	$ 270,166	$ 227,168	$ 546,868	$ 14,142,066

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HERRIMAN CITY

Debt Service Fund

Schedule of Revenues, Expenditures, and Changes in Fund Balance - Budget and Actual
For the Year Ended June 30, 2022

		Budgeted Amounts		
	Actual Amounts	Original	Final	Variance with Final Budget
REVENUES				
Intergovernmental	$ 800,000	$ -	$ -	$ 800,000
Interest Earnings	19,617	4,000	15,000	4,617
Total Revenues	819,617	4,000	15,000	804,617
EXPENDITURES				
Debt Service				
Principal	1,205,000	1,205,000	1,205,000	-
Interest	951,794	903,113	951,795	1
Cost of Issuance	51,300	-	-	(51,300)
Administration	10,000	10,000	10,000	-
Total Expenditures	2,218,094	2,118,113	2,166,795	(51,299)
Excess (Deficiency) of Revenues Over (Under) Expenditures	(1,398,477)	(2,114,113)	(2,151,795)	753,318
OTHER FINANCING SOURCES (USES)				
Transfers In	2,500,000	2,500,000	2,500,000	-
Net Change in Fund Balance	1,101,523	385,887	348,205	753,318
Fund Balance-July 1	1,277,051	1,277,051	1,277,051	-
Fund Balance-June 30	$ 2,378,574	$ 1,662,938	$ 1,625,256	$ 753,318

HERRIMAN CITY

Herriman Towne Center CDA/SAA Fund

Schedule of Revenues, Expenditures, and Changes in Fund Balance - Budget and Actual

For the Year Ended June 30, 2022

	Actual Amounts	Budgeted Amounts		Variance with Final Budget
		Original	Final	
REVENUES				
Property Tax	$ 384,880	$ 2,838,672	$ 2,838,672	$ (2,453,792)
Intergovernmental	2,195,563	-	-	2,195,563
Impact Fees	-	20,000	10,000	(10,000)
Interest Earnings	8,198	25,000	25,000	(16,802)
Total Revenues	2,588,641	2,883,672	2,873,672	(285,031)
EXPENDITURES				
Debt Service				
Principal	1,367,245	1,429,000	1,367,245	-
Interest	413,198	401,097	413,888	690
Administration	40,375	45,000	40,000	(375)
Total Expenditures	1,820,818	1,875,097	1,821,133	315
Net Change in Fund Balance	767,823	1,008,575	1,052,539	(284,716)
Fund Balance-July 1	4,258,649	4,258,649	4,258,649	-
Fund Balance-June 30	$ 5,026,472	$ 5,267,224	$ 5,311,188	$ (284,716)

HERRIMAN CITY

Herriman Business Center CDA Fund

Schedule of Revenues, Expenditures, and Changes in Fund Balance - Budget and Actual
For the Year Ended June 30, 2022

	Actual Amounts	Budgeted Amounts		Variance with Final Budget
		Original	Final	
REVENUES				
Property Tax	$ 161,931	$ 1,841,535	$ 1,841,535	$ (1,679,604)
Intergovernmental	923,739	-	-	923,739
Interest Earnings	-	12,000	12,000	(12,000)
Total Revenues	1,085,670	1,853,535	1,853,535	(767,865)
EXPENDITURES				
Tax Increment Distributions	3,463,820	4,484,855	4,484,855	-
Net Change in Fund Balance	(2,378,150)	(2,631,320)	(2,631,320)	253,170
Fund Balance-July 1	2,659,132	2,659,132	2,659,132	-
Fund Balance-June 30	$ 280,982	$ 27,812	$ 27,812	$ 253,170

HERRIMAN CITY

Anthem CRA Fund

Schedule of Revenues, Expenditures, and Changes in Fund Balance - Budget and Actual
For the Year Ended June 30, 2022

	Actual Amounts	Budgeted Amounts		Variance with Final Budget
		Original	Final	
REVENUES				
Property Tax	$ 136,311	$ 1,041,431	$ 1,041,431	$ (905,120)
Intergovernmental	777,567	-	-	777,567
Total Revenues	913,878	1,041,431	1,041,431	(127,553)
EXPENDITURES				
Tax Increment Distributions	1,103,972	1,000,000	1,000,000	(103,972)
Net Change in Fund Balance	(190,094)	41,431	41,431	(231,525)
Fund Balance-July 1	391,368	391,368	391,368	-
Fund Balance-June 30	$ 201,274	$ 432,799	$ 432,799	$ (231,525)

HERRIMAN CITY

Herriman Innovation District CRA Fund

Schedule of Revenues, Expenditures, and Changes in Fund Balance - Budget and Actual

For the Year Ended June 30, 2022

	Actual Amounts	Budgeted Amounts		Variance with
		Original	Final	Final Budget
REVENUES				
Property Tax	$ 23,596	$ -	$ 160,000	$ (136,404)
Intergovernmental Revenue	134,601	-	-	134,601
Interest Earnings	-	-	5,000	(5,000)
Total Revenues	158,197	-	165,000	(6,803)
EXPENDITURES				
Tax Increment Distributions	68,297	-	140,000	71,703
Net Change in Fund Balance	89,900	-	25,000	64,900
Fund Balance-July 1	-	-	-	-
Fund Balance-June 30	$ 89,900	$ -	$ 25,000	$ 64,900

HERRIMAN CITY

Capital Projects Fund

Schedule of Revenues, Expenditures, and Changes in Fund Balance - Budget and Actual

For the Year Ended June 30, 2022

	Actual Amounts	Budgeted Amounts		Variance with Final Budget
		Original	Final	
REVENUES				
Intergovernmental	$ 2,451,755	$ 3,800,000	$ 3,800,000	$ (1,348,245)
EXPENDITURES				
Engineering	-	30,000	-	-
Capital Outlay	4,315,295	4,905,450	14,948,073	10,632,778
Cost of Issuance	1,000	-	52,300	51,300
Total Expenditures	4,316,295	4,935,450	15,000,373	10,684,078
Excess (Deficiency) of Revenues Over (Under) Expenditures	(1,864,540)	(1,135,450)	(11,200,373)	9,335,833
OTHER FINANCING SOURCES (USES)				
Bond Proceeds	10,593,000	-	10,593,000	-
Transfers In	2,500,000	3,326,081	4,500,000	(2,000,000)
Transfers Out	(1,425,000)	-	(1,425,000)	-
Total Financing Sources (Uses)	11,668,000	3,326,081	13,668,000	(2,000,000)
Net Change in Fund Balance	9,803,460	2,190,631	2,467,627	7,335,833
Fund Balance-July 1	(6,469,722)	(6,469,722)	(6,469,722)	-
Fund Balance-June 30	$ 3,333,738	$ (4,279,091)	$ (4,002,095)	$ 7,335,833

HERRIMAN CITY

Park Impact Fee Fund

Schedule of Revenues, Expenditures, and Changes in Fund Balance - Budget and Actual

For the Year Ended June 30, 2022

	Actual Amounts	Budgeted Amounts		Variance with Final Budget
		Original	Final	
REVENUES				
Impact Fees	$ 3,253,264	$ 2,972,500	$ 2,972,500	$ 280,764
Intergovernmental	550,000	-	700,000	(150,000)
Miscellaneous	70,000	-	70,000	-
Interest Earnings	15,112	25,000	25,000	(9,888)
Total Revenues	3,888,376	2,997,500	3,767,500	120,876
EXPENDITURES				
Parks	78,400	1,000,000	70,000	(8,400)
Capital Outlay	2,366,248	4,550,000	3,127,272	761,024
Total Expenditures	2,444,648	5,550,000	3,197,272	752,624
Net Change in Fund Balance	1,443,728	(2,552,500)	570,228	873,500
Fund Balance-July 1	5,471,968	5,471,968	5,471,968	-
Fund Balance-June 30	$ 6,915,696	$ 2,919,468	$ 6,042,196	$ 873,500

HERRIMAN CITY

Storm Drain Impact Fee Fund

Schedule of Revenues, Expenditures, and Changes in Fund Balance - Budget and Actual

For the Year Ended June 30, 2022

	Actual Amounts	Budgeted Amounts		Variance with Final Budget
		Original	Final	
REVENUES				
Storm Drain Impact Fee	$ 682,348	$ 435,625	$ 435,625	$ 246,723
Interest Earnings	10,857	32,000	32,000	(21,143)
Total Revenues	693,205	467,625	467,625	225,580
EXPENDITURES				
Storm Drain	50,000	-	-	(50,000)
Engineering	14,136	-	15,000	864
Capital Outlay	20,064	350,000	25,000	4,936
Total Expenditures	84,200	350,000	40,000	(44,200)
Net Change in Fund Balance	609,005	117,625	427,625	181,380
Fund Balance-July 1	2,247,810	2,247,810	2,247,810	-
Fund Balance-June 30	$ 2,856,815	$ 2,365,435	$ 2,675,435	$ 181,380

HERRIMAN CITY

Road Impact Fee Fund

Schedule of Revenues, Expenditures, and Changes in Fund Balance - Budget and Actual
For the Year Ended June 30, 2022

	Actual Amounts	Budgeted Amounts		Variance with Final Budget
		Original	Final	
REVENUES				
Impact Fees	$ 2,374,775	$ 2,665,000	$ 2,665,000	$ (290,225)
Interlocal	-	-	406,771	(406,771)
Interest Earnings	9,255	-	10,000	(745)
Total Revenues	2,384,030	2,665,000	3,081,771	(697,741)
EXPENDITURES				
Streets	453,390	-	3,261,615	2,808,225
Engineering	98,092	90,000	90,000	(8,092)
Capital Outlay	126,763	655,000	300,446	173,683
Total Expenditures	678,245	745,000	3,652,061	2,973,816
Excess (Deficiency) of Revenues Over (Under) Expenditures	1,705,786	1,920,000	(570,290)	2,276,076
OTHER FINANCING SOURCES (USES)				
Transfers In	1,425,000	-	1,425,000	-
Transfers Out	(1,000,000)	(1,000,000)	(1,000,000)	-
Total Other Financing Sources (Uses)	425,000	(1,000,000)	425,000	-
Net Change in Fund Balance	2,130,786	920,000	(145,290)	2,276,076
Fund Balance-July 1	86,259	86,259	86,259	-
Fund Balance-June 30	$ 2,217,044	$ 1,006,259	$ (59,031)	$ 2,276,076

HERRIMAN CITY

Street Light Fee Fund

Schedule of Revenues, Expenditures, and Changes in Fund Balance - Budget and
For the Year Ended June 30, 2022

	Actual Amounts	Budgeted Amounts		Variance with Final Budget
		Original	Final	
REVENUES				
Street Light Fee	$ 675,669	$ 466,625	$ 466,625	$ 209,044
EXPENDITURES				
Capital Outlay	756,032	466,625	466,625	$ (289,407)
Net Change in Fund Balance	(80,363)	-	-	(80,363)
Fund Balance-July 1	616,516	616,516	616,516	-
Fund Balance-June 30	$ 536,153	$ 616,516	$ 616,516	$ (80,363)

HERRIMAN CITY

Street Sign Fee Fund

Schedule of Revenues, Expenditures, and Changes in Fund Balance - Budget and Actual
For the Year Ended June 30, 2022

	Actual Amounts	Budgeted Amounts		Variance with Final Budget
		Original	Final	
REVENUES				
Street Sign Fee	$ 102,455	$ 71,750	$ 85,000	$ 17,455
EXPENDITURES				
Capital Outlay	115,140	71,750	85,000	(30,140)
Net Change in Fund Balance	(12,684)	-	-	(12,684)
Fund Balance-July 1	282,850	282,850	282,850	-
Fund Balance-June 30	$ 270,166	$ 282,850	$ 282,850	$ (12,684)

HERRIMAN CITY

Herriman Towne Center - City Hall Fund

Schedule of Revenues, Expenditures, and Changes in Fund Balance - Budget and Actual
For the Year Ended June 30, 2022

	Actual Amounts	Budgeted Amounts		Variance with Final Budget
		Original	Final	
REVENUES				
Interest Earnings	$ -	$ -	$ -	$ -
EXPENDITURES				
Capital Outlay	$ 39,119	$ 150,000	$ 150,000	110,882
OTHER FINANCING SOURCES (USES)				
Transfers Out	(276,671)	(276,671)	(276,671)	-
Net Change in Fund Balance	(315,790)	(426,671)	(426,671)	110,882
Fund Balance-July 1	542,957	542,957	542,957	-
Fund Balance-June 30	$ 227,167	$ 116,286	$ 116,286	$ 110,882

HERRIMAN CITY

Public Works Facility Fund

Schedule of Revenues, Expenditures, and Changes in Fund Balance - Budget and Actual
For the Year Ended June 30, 2022

	Actual Amounts	Budgeted Amounts		Variance with Final Budget
		Original	Final	
REVENUES				
Interest Earnings	$ -	$ -	$ -	$ -
EXPENDITURES				
Debt Service				
Principal	$ 1,000,589	$ 1,000,589	$ 1,000,589	$ -
Interest	92,782	92,782	92,782	-
Engineering	10,970	300,000	300,000	289,030
Total Expenditures	1,104,341	1,393,371	1,393,371	289,030
OTHER FINANCING SOURCES (USES)				
Transfers In	1,576,671	1,576,673	1,576,673	2
Net Change in Fund Balance	472,330	183,302	183,302	289,028
Fund Balance-July 1	74,538	74,538	74,538	-
Fund Balance-June 30	$ 546,868	$ 257,840	$ 257,840	$ 289,028

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Statistical Information



STATISTICAL SECTION

This part of Herriman City's comprehensive annual financial report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about the City's overall financial health.

FINANCIAL TRENDS – These schedules contain trend information to help the reader understand how the city's financial performance and well-being have changed over time.

Net Position by Component 113
Changes in Net Position 114
Governmental Funds – Fund Balances 116
Governmental Funds – Changes in Fund Balances 117

REVENUE CAPACITY – These schedules contain information to help the reader assess the city's most significant local revenue sources: Property tax, sales tax, and water revenue.

Taxes and Special Assessment Revenues by Source 119
Assessed Value and Estimated Value of Taxable Property 120
Property Tax Rates 121
Principal Property Taxpayers 122
Property Tax Levies and Collections 123
Direct and Overlapping Sales Tax Rates 124
Sales Tax Distribution 125
Principal Sales Taxpayers 126
Franchise Tax Revenue 127
Water Utility Charges for Services 128
Water Utility Principal Water Users 129

DEBT CAPACITY – These schedules present information to help the reader assess the affordability of the city's current levels of outstanding debt and the government's ability to issue additional debt.

Ratios of Outstanding Debt by Type 130
Direct and Overlapping Governmental Activities Debt 131
Legal Debt Margin Information 132
Pledged Revenue Coverage 133

DEMOGRAPHIC AND ECONOMIC DEVELOPMENT INFORMATION – These schedules offer demographic and economic indicators to help the reader understand the environment within which the city's financial activities take place.

Principal Employers 134
Demographic and Economic Statistics 135
Full-time Equivalent Employees by Function/Program 136

OPERATING INFORMATION – These schedules contain service and infrastructure data to help the reader understand how the information in the city's financial report relates to the services the city provides and the activities it performs.

Operating Indicators by Function 138

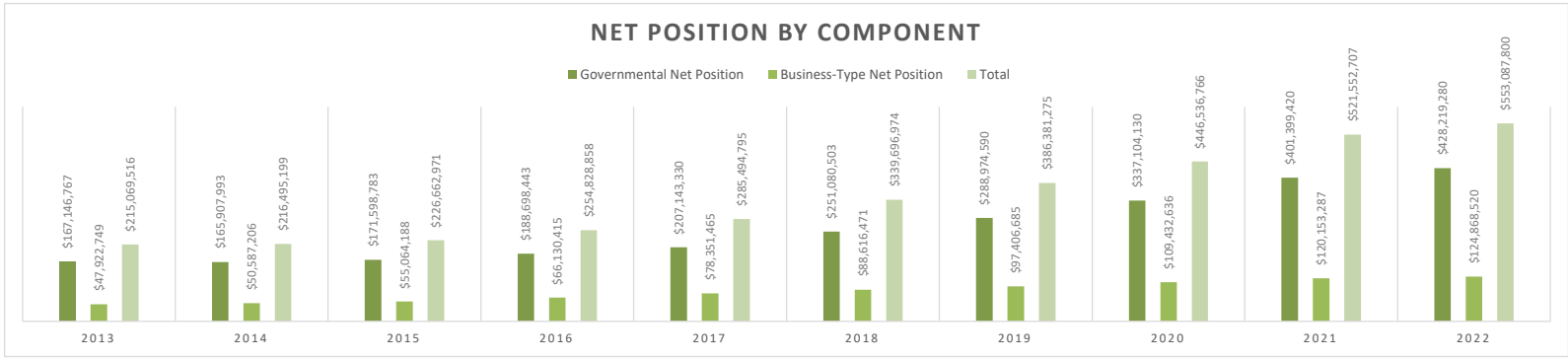
Sources: Unless otherwise noted, the information in these schedules is derived from the Comprehensive Annual Financial Reports for the relevant year.

HERRIMAN CITY

Net Position by Component

Last Ten Fiscal Years

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Governmental Activities										
Net Investment in Capital Assets	$ 147,361,038	$ 144,896,719	$ 147,849,294	$ 167,573,456	$ 177,531,718	$ 226,834,416	$ 266,836,972	$ 318,221,049	$ 367,820,439	$ 368,584,134
Restricted	1,419,158	2,095,016	2,393,934	2,496,374	14,177,611	9,335,756	12,782,338	9,577,627	8,332,432	18,881,504
Unrestricted	18,366,571	18,916,258	21,355,555	18,628,613	15,434,001	14,910,331	9,355,280	9,305,454	25,246,549	40,753,642
Total Governmental Activities Net Position	$ 167,146,767	$ 165,907,993	$ 171,598,783	$ 188,698,443	$ 207,143,330	$ 251,080,503	$ 288,974,590	$ 337,104,130	$ 401,399,420	$ 428,219,280
Business-Type										
Net Investment in Capital Assets	$ 38,843,710	$ 41,063,383	$ 50,289,078	$ 54,444,905	$ 67,652,812	$ 75,625,856	$ 82,528,574	$ 90,583,465	$ 80,675,533	$ 97,771,364
Restricted	2,678,481	7,742,702	4,775,391	7,292,347	1,617,916	1,380,679	6,615,372	6,698,488	26,375,301	9,304,846
Unrestricted	6,400,558	1,781,121	(281)	4,393,163	9,080,737	11,609,936	8,262,739	12,150,683	13,102,454	17,792,310
Total Business-Type Activities Net Position	$ 47,922,749	$ 50,587,206	$ 55,064,188	$ 66,130,415	$ 78,351,465	$ 88,616,471	$ 97,406,685	$ 109,432,636	$ 120,153,287	$ 124,868,520
Primary Government										
Net Investment in Capital Assets	$ 186,204,748	$ 185,960,102	$ 198,138,372	$ 222,018,361	$ 245,184,530	$ 302,460,272	$ 349,365,546	$ 408,804,514	$ 448,495,972	$ 466,355,498
Restricted	4,097,639	9,837,718	7,169,325	9,788,721	15,795,527	10,716,435	19,397,710	16,276,115	34,707,732	28,186,350
Unrestricted	24,767,129	20,697,379	21,355,274	23,021,776	24,514,738	26,520,267	17,618,019	21,456,137	38,349,003	58,545,952
Total Primary Government Net Position	$ 215,069,516	$ 216,495,199	$ 226,662,971	$ 254,828,858	$ 285,494,795	$ 339,696,974	$ 386,381,275	$ 446,536,766	$ 521,552,707	$ 553,087,800



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HERRIMAN CITY

Changes in Net Position

Last Ten Fiscal Years

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Expenses										
Government Activities										
Governmental										
General Government	$ -	$ -	$ 557,998	$ 338,309	$ 390,970	$ 622,921	$ 436,509	$ 553,798	$ 873,100	$ 5,280,294
Administration	4,895,368	2,170,656	1,499,399	2,268,368	2,767,185	1,974,074	2,738,100	3,050,890	5,476,003	-
Finance	-	-	1,055,781	744,188	908,731	814,515	1,042,638	1,184,748	1,141,435	-
Public Works - Operations	8,826,036	14,941,796	15,504,607	15,827,140	13,294,673	13,521,031	15,554,792	10,751,923	12,919,152	10,244,005
Parks Recreation and Events	-	-	-	-	4,090,883	5,582,534	5,910,387	5,776,361	5,791,608	5,902,668
Engineering	-	-	-	-	1,252,787	1,500,305	1,635,882	1,873,195	1,958,399	-
Community Development	3,017,958	2,510,679	2,147,816	2,543,734	1,418,508	1,595,033	1,850,419	1,890,805	2,137,013	3,165,530
Public Safety	-	-	-	-	-	2,316,373	6,432,625	6,790,781	10,691,941	12,969,841
Tax Increment Distributions	-	-	-	-	-	-	-	-	-	4,636,089
ARPA Funds	-	-	-	-	-	-	-	-	-	148,421
Interest on Long Term Debt	1,179,005	1,003,028	1,009,575	1,097,968	1,509,864	1,543,111	1,688,347	1,603,103	1,450,203	1,579,811
Total Governmental Activities Expense	17,918,367	20,626,159	21,775,176	22,819,707	25,633,601	29,469,897	37,289,699	33,475,604	42,438,853	43,926,658
Business-Type Activities										
Water	6,950,902	7,364,438	7,107,079	8,775,933	10,361,250	12,233,508	12,854,649	12,220,660	14,309,552	14,455,049
Hi Country I	56,733	64,639	81,851	56,826	64,735	48,463	48,360	239,673	542,218	68,429
Hi Country II	152,492	93,425	105,536	163,947	124,513	87,158	122,785	116,364	69,622	99,007
Storm Water	-	-	-	-	-	-	-	1,161,949	1,239,164	1,412,447
Total Business Type-Activities	7,160,127	7,522,502	7,294,466	8,996,706	10,550,498	12,369,129	13,025,794	13,738,646	16,160,556	16,034,933
Total Primary Governmental Expense	25,078,494	28,148,661	29,069,642	31,816,413	36,184,099	41,839,026	50,315,493	47,214,250	58,599,408	59,961,591
Program Revenues										
Governmental Activities										
Charges for Services										
General Government	3,594,800	121,048	827,526	1,032,099	1,044,580	444,635	525,113	1,040,288	8,277,673	475,665
Public Works - Operations	3,028,613	740,609	821,571	765,021	1,882	12,780	10,133	8,763	3,233,160	18,250
Parks Recreation & Events	-	-	-	-	873,147	1,129,458	1,316,512	1,275,382	1,808,695	1,740,287
Engineering	-	-	-	-	-	3,278	-	-	-	-
Community Development	758,793	4,197,729	4,312,894	4,473,260	7,182,836	8,244,610	7,272,335	6,069,205	5,189,484	5,945,987
Public Safety	-	-	-	-	-	-	18,443	206,856	545,656	406,026
Operating Grants & Contributions	810,853	785,409	-	-	-	-	-	-	-	198,501
Capital Grants & Contributions	14,353,680	7,769,118	15,587,667	27,668,303	28,064,327	50,462,978	43,607,629	54,611,438	60,225,754	27,712,058
Total Governmental Activities Program Revenues	$ 22,546,739	$ 13,613,913	$ 21,549,658	$ 33,938,683	$ 37,166,772	$ 60,297,739	$ 52,750,165	$ 63,211,932	$ 79,280,422	$ 36,496,774

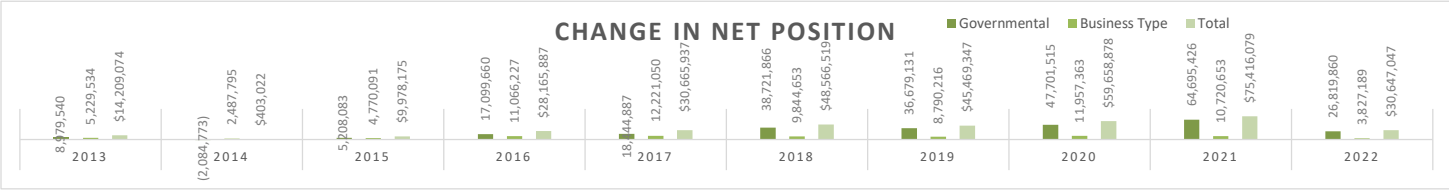
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HERRIMAN CITY

Changes in Net Position (Continued)

Last Ten Fiscal Years

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Business-Type Activities										
Charges for Services										
Water	$ 5,733,022	$ 5,929,877	$ 6,721,742	$ 7,651,498	$ 9,735,533	$ 9,696,338	$ 10,336,047	$ 11,781,776	$ 13,393,787	$ 12,227,795
Storm Water	-	-	-	-	-	-	-	1,380,981	1,480,244	1,555,975
Operating Grants & Contributions	-	-	-	-	-	-	-	-	-	-
Capital Grants & Contributions	6,612,997	4,047,629	5,269,711	12,385,722	13,017,658	12,272,899	11,389,652	12,340,263	11,965,122	5,969,276
Total Business Type Activities Program Revenues	12,346,019	9,977,506	11,991,453	20,037,220	22,753,191	21,969,237	21,725,699	25,503,020	26,839,154	19,753,046
Total Primary Government Program Revenue	34,892,758	23,591,419	33,541,111	53,975,903	59,919,963	82,266,976	74,475,864	88,714,952	106,119,576	56,249,820
Net (Expenses) Revenue										
Government Activities	4,628,372	(7,012,246)	(225,518)	11,118,976	11,533,171	30,827,842	15,460,466	29,736,328	36,841,569	(7,429,885)
Business Type Activities	5,185,892	2,455,004	4,696,987	11,040,514	12,202,693	9,600,108	8,699,905	11,764,374	10,678,599	3,718,110
Total Primary Government Net Expenses	9,814,264	(4,557,242)	4,471,469	22,159,490	23,735,864	40,427,950	24,160,371	41,500,702	47,520,168	(3,711,774)
General Revenues and Other Changes in Net Position										
Governmental Activities										
Property Tax Levied for General Purposes	581,374	678,146	598,403	699,434	743,479	900,124	13,086,980	8,275,943	15,155,482	19,905,579
Sales and Use Tax	2,384,822	2,644,745	2,983,126	3,352,430	3,849,515	4,681,527	5,338,970	7,208,500	9,527,545	11,577,127
Franchise Tax	1,296,438	1,466,102	1,591,785	1,760,349	1,880,837	1,843,545	1,982,851	2,120,819	2,307,026	2,527,304
Unrestricted Earnings Investment	48,039	97,479	14,859	168,471	436,512	319,628	763,330	356,925	129,911	239,735
Miscellaneous	40,495	-	-	-	-	-	-	-	-	-
Gain (Loss) on Disposal of Capital Assets	-	41,001	245,428	-	1,373	149,200	46,534	3,000	733,893	-
Total Governmental Activities	4,351,168	4,927,473	5,433,601	5,980,684	6,911,716	7,894,024	21,218,665	17,965,187	27,853,857	34,249,745
Business Type Activities										
Unrestricted Investment Earnings	43,642	32,791	41,106	25,713	18,357	244,545	90,311	192,989	42,054	109,076
Gain (Loss) on Disposal of Capital Assets	-	-	31,998	-	-	-	-	-	-	-
Total Business Type Activities	43,642	32,791	73,104	25,713	18,357	244,545	90,311	192,989	42,054	109,076
Total Changes in Net Position										
Governmental Activities	8,979,540	(2,084,773)	5,208,083	17,099,660	18,444,887	38,721,866	36,679,131	47,701,515	64,695,426	26,819,860
Business Type Activities	5,229,534	2,487,795	4,770,091	11,066,227	12,221,050	9,844,653	8,790,216	11,957,363	10,720,653	3,827,189
Total Changes in Net Position - Primary Government	$ 14,209,074	$ 403,022	$ 9,978,175	$ 28,165,887	$ 30,665,937	$ 48,566,519	$ 45,469,347	$ 59,658,878	$ 75,416,079	$ 30,647,047



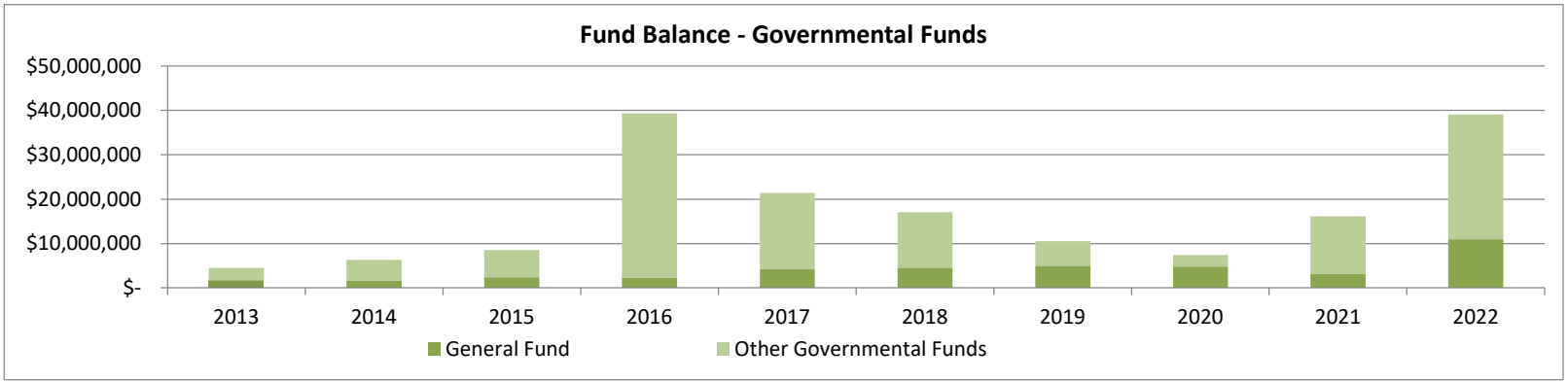
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HERRIMAN CITY

Governmental Funds - Fund Balances

Last Ten Fiscal Years

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
General Fund										
Nonspendable	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 137,444
Restricted	87,773	-	-	-	-	-	-	97,066	367,434	2,992,168
Unassigned	1,579,488	1,655,215	2,423,686	2,302,516	4,191,176	4,587,354	4,998,323	4,723,752	2,829,134	7,869,509
Total General Fund	$ 1,667,261	$ 1,655,215	$ 2,423,686	$ 2,302,516	$ 4,191,176	$ 4,587,354	$ 4,998,323	$ 4,820,818	$ 3,196,568	$ 10,999,121
All Other Governmental Funds										
Assigned										
Special Revenue Fund	$ -	$ -	$ 2,845,793	$ 18,312	$ -	$ 50,209	$ 598,597	$ 1,884,224	$ 8,617,056	$ 2,508,976
Debt Service	-	-	2,372	-	691,806	2,312,576	1,487,607	1,885,216	1,276,833	1,627,198
Capital Projects	-	-	895,924	1,408,016	2,365,470	3,090,398	1,044,974	1,102,118	1,675,604	1,580,354
Restricted										
Special Revenue Fund	1,826,396	-	-	-	-	21,868	-	-	-	3,187,103
Debt Service	369	574	458,199	9,749,420	3,638,057	693,688	2,570,149	3,048,580	218	3,162,902
Capital Projects	1,005,945	2,095,016	1,935,735	25,834,324	11,294,803	6,645,086	10,212,189	6,431,981	7,806,037	23,266,434
Unassigned	-	2,545,552	-	-	(755,249)	(377,827)	(10,359,213)	(11,727,708)	(6,469,722)	(7,226,336)
Total All Other Governmental Funds	2,832,710	4,641,142	6,138,023	37,010,072	17,234,887	12,435,998	5,554,303	2,624,411	12,906,026	28,106,631
Total Governmental Funds	$ 4,499,971	$ 6,296,357	$ 8,561,709	$ 39,312,588	$ 21,426,063	$ 17,023,352	$ 10,552,626	$ 7,445,229	$ 16,102,594	$ 39,105,751



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HERRIMAN CITY

Governmental Funds - Changes in Fund Balances

Last Ten Fiscal Years

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Revenues										
Property Taxes	$ 581,374	$ 678,146	$ 566,619	$ 655,513	$ 682,218	$ 816,509	$ 7,098,327	$ 7,541,781	$ 8,653,260	$ 17,799,772
Sales & Use Taxes	2,637,415	2,644,745	2,983,126	3,352,430	3,849,515	4,681,527	5,338,970	7,208,500	9,527,545	11,577,127
Franchise Taxes	1,043,846	1,466,102	1,591,785	1,760,349	1,880,837	1,843,545	1,982,851	2,120,819	2,307,026	2,527,304
Licenses & Permits	3,496,040	3,799,173	4,342,534	5,431,249	7,441,090	8,282,428	7,317,441	6,104,733	5,203,961	5,917,876
Intergovernmental	797,757	796,914	1,422,530	5,802,035	6,900,774	12,588,399	10,346,528	8,571,390	14,460,241	12,684,059
Charges for Services	1,570,322	1,185,542	1,375,669	1,441,607	1,610,609	1,297,324	1,555,183	1,648,969	2,308,027	2,328,221
Fines & Forfeitures	157,179	120,864	171,547	137,853	128,739	176,006	182,012	167,741	101,337	189,970
Special Assessment Revenue	-	1,174,073	1,456,676	358,831	496,565	-	296,735	332,057	-	-
Impact Fee Revenue	2,011,906	2,671,337	5,009,135	9,202,733	8,442,663	10,550,138	8,387,654	5,071,445	6,747,499	7,931,663
Contributions	1,375,818	1,142,606	241,468	-	-	-	-	-	-	-
Grants	88,454	-	-	-	-	-	-	-	-	-
Interest Earnings	47,552	97,478	14,859	168,471	436,512	319,628	763,330	356,925	129,911	239,735
Miscellaneous Revenue	1,596,160	1,496,193	644,944	128,712	314,416	79,003	87,900	580,651	239,476	150,147
Total Revenues	$ 15,403,823	$ 17,273,173	$ 19,820,893	$ 28,439,783	$ 32,183,938	$ 40,634,507	$ 43,356,931	$ 39,705,011	$ 49,678,282	$ 61,345,875
Expenditures										
Current Operating										
Governmental										
General Government										
Legislative	$ -	$ -	$ 134,828	$ 114,612	$ 109,223	$ 126,929	$ 164,103	$ 223,571	$ 489,623	$ 353,045
Planning Commission	-	-	19,717	19,695	15,925	20,032	22,920	20,626	23,008	24,308
Administration	1,502,331	1,380,794	813,770	814,622	1,182,206	657,465	522,987	632,123	2,433,341	508,649
Legal	-	-	186,872	207,081	262,736	208,544	268,470	322,153	362,669	235,125
Communications			174,233	234,787	272,951	399,610	489,658	458,906	368,338	371,025
Courts	-	157,852	163,567	181,176	176,650	209,087	221,312	245,101	247,817	279,606
Human Resources	243,350	285,494	211,511	218,467	249,744	417,126	419,288	450,535	470,872	371,534
Recorder	-	166,538	194,307	285,858	303,206	374,860	355,973	382,031	360,341	418,312
Customer Service	-	-	-	-	-	20,413	66,853	66,488	134,765	131,155
Economic Development	-	95,291	96,309	164,714	224,248	372,478	300,547	326,759	344,343	272,380
Finance	-	-	419,069	430,068	460,964	317,759	449,376	515,729	479,439	513,978
Information Technology	-	-	544,931	326,105	443,681	478,603	575,533	646,414	649,549	747,060
Operations										
Facilities	246,683	346,511	359,281	374,417	336,009	455,115	599,412	761,165	738,454	791,885
Fleet Management	158,799	174,430	181,214	172,439	203,138	215,797	291,256	469,317	363,798	344,461
Streets	1,346,123	3,555,361	2,435,815	3,005,992	4,005,831	3,188,972	5,171,482	3,041,987	5,741,236	3,230,043
Parks Recreation & Events										
Events	-	598,103	653,255	698,667	785,756	911,065	1,069,552	950,738	1,044,297	1,211,003
Parks & Cemetery	1,361,370	1,423,463	2,091,311	2,220,338	2,322,333	3,824,322	3,435,581	3,487,469	3,584,077	3,625,884
Community Development										
Building	832,497	474,060	561,395	623,263	768,033	844,142	988,663	940,697	1,084,408	1,039,711
Planning	752,936	508,825	440,483	405,604	423,455	409,823	610,033	582,581	723,865	674,249
Engineering	716,330	594,754	886,003	1,096,063	918,914	1,077,064	1,284,841	1,385,206	1,490,748	1,303,173
GIS	734,240	815,532	255,960	291,646	300,950	357,623	349,561	383,820	448,690	442,632
Public Safety										
Enforcement/Emergency	366,158	340,145	341,703	366,288	389,610	277,541	279,479	54,394	49,674	54,067
Police	-	-	-	-	-	2,273,552	6,040,987	5,985,545	7,908,837	9,194,596
Fire	-	-	-	-	-	-	-	-	2,555,383	4,984,001
Animal Services	-	-	-	-	-	-	-	420,532	306,758	371,776

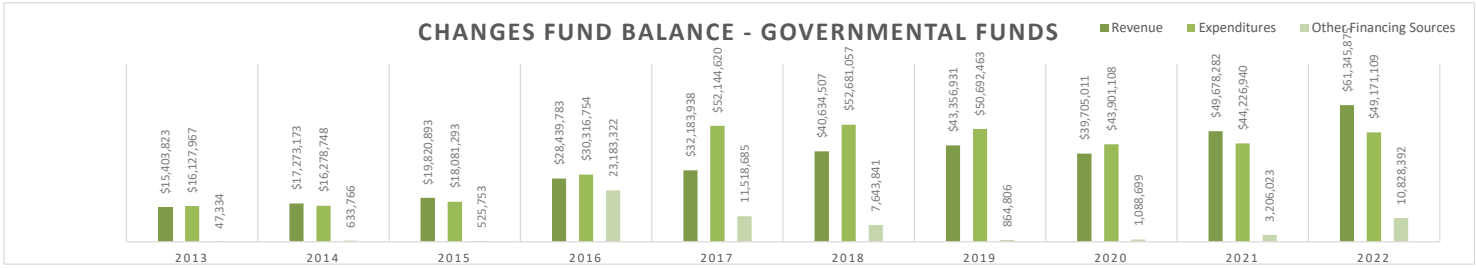
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HERRIMAN CITY

Governmental Funds - Changes in Fund Balances (Continued)

Last Ten Fiscal Years

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Tax Increment Distributions	-	-	-	-	-	-	-	-	-	4,636,089
ARPA Funds	-	-	-	-	-	-	-	-	-	169,421
Capital Outlay	4,815,689	2,960,304	3,581,305	15,738,538	32,258,881	30,118,263	21,645,338	15,433,105	6,854,047	7,738,658
Debt Service										
Principal Retirement	1,875,000	1,375,625	2,320,140	1,246,036	1,213,351	3,644,851	3,372,681	4,123,151	3,472,896	3,572,834
Interest and Fiscal Charges	1,176,461	1,025,666	1,014,314	781,955	1,283,869	1,468,863	1,652,831	1,581,465	1,454,167	1,457,774
Cost of Issuance/Trustee Fees	-	-	-	298,323	293,325	11,158	43,746	9,500	41,500	102,675
Transfer to Trustee from City Funds	-	-	-	-	2,939,631	-	-	-	-	-
Total Expenditures	$ 16,127,967	$ 16,278,748	$ 18,081,293	$ 30,316,754	$ 52,144,620	$ 52,681,057	$ 50,692,463	$ 43,901,108	$ 44,226,940	$ 49,171,109
Excess (Deficiency) of Revenues	$ (724,144)	$ 994,425	$ 1,739,600	$ (1,876,971)	$ (19,960,682)	$ (12,046,550)	$ (7,335,532)	$ (4,196,097)	$ 5,451,342	$ 12,174,766
Other Financing Sources										
Transfers In	904,284	1,534,472	1,660,454	6,576,246	13,320,880	7,552,271	10,444,074	11,947,049	14,300,000	17,551,671
Transfers Out	(904,284)	(1,534,472)	(1,660,454)	(6,576,246)	(13,320,880)	(7,552,271)	(10,444,074)	(11,947,049)	(14,300,000)	(17,551,671)
Contributed Capital	-	-	-	-	-	-	72,042	-	-	-
Sale of Capital Assets	-	(2,800)	245,428	-	1,373	149,200	46,534	3,000	3,206,023	-
Loan Proceeds	47,334	636,566	280,325	29,985,037	22,139,678	7,494,641	746,230	1,085,699	-	10,828,392
Payment to Bond Escrow Trustee	-	-	-	(6,801,715)	(10,622,366)	-	-	-	-	-
Total Other Sources	47,334	633,766	525,753	23,183,322	11,518,685	7,643,841	864,806	1,088,699	3,206,023	10,828,392
Net Change in Fund Balance	(676,810)	1,628,191	2,265,353	21,306,351	(8,441,997)	(4,402,709)	(6,470,726)	(3,107,398)	8,657,365	23,003,158
Fund Balance-Beginning	5,176,801	4,499,971	6,296,357	8,561,709	29,868,060	21,426,063	17,023,354	10,552,628	7,445,230	16,102,593
Prior Period Adjustment	-	168,195	-	-	-	-	-	-	-	-
Fund Balance-Ending	$ 4,499,991	$ 6,296,357	$ 8,561,710	$ 29,868,060	$ 21,426,063	$ 17,023,354	$ 10,552,628	$ 7,445,230	$ 16,102,595	$ 39,105,751
Debt Service (Principal & Interest)	$ 3,051,461	$ 2,401,291	$ 3,334,454	$ 2,027,991	$ 2,497,220	$ 5,113,714	$ 5,025,512	$ 5,704,616	$ 4,927,063	$ 5,030,608
Total Expenditures	16,127,967	16,278,748	18,081,293	30,316,754	52,144,620	52,681,057	50,692,463	43,901,108	44,226,940	49,171,109
Capital Outlay	6,558,537	6,572,480	2,640,309	22,433,133	32,119,477	29,444,510	21,746,721	16,093,971	6,453,912	7,738,658
Non Capital Expenditures	9,569,430	9,706,268	15,440,984	7,883,621	20,025,143	23,236,547	28,945,742	27,807,137	37,773,028	41,432,451
Debt Service as a percent of Non-Capital Expenditures	31.89%	24.74%	21.59%	25.72%	12.47%	22.01%	17.36%	20.51%	13.04%	12.14%



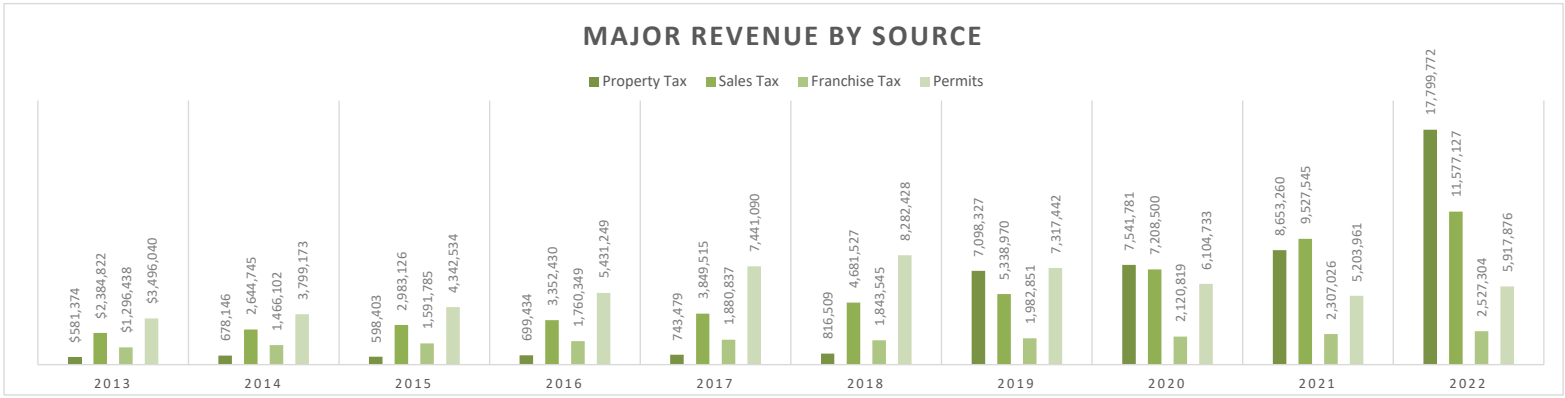
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HERRIMAN CITY

Governmental Activities Taxes and Special Assessment Revenues by Source

Last Ten Fiscal Years

Fiscal Year	Property Taxes	Sales & Use Tax	Franchise Tax	Permits
2013	$ 581,374	$ 2,384,822	$ 1,296,438	$ 3,496,040
2014	678,146	2,644,745	1,466,102	3,799,173
2015	598,403	2,983,126	1,591,785	4,342,534
2016	699,434	3,352,430	1,760,349	5,431,249
2017	743,479	3,849,515	1,880,837	7,441,090
2018	816,509	4,681,527	1,843,545	8,282,428
2019	7,098,327	5,338,970	1,982,851	7,317,442
2020	7,541,781	7,208,500	2,120,819	6,104,733
2021	8,653,260	9,527,545	2,307,026	5,203,961
2022	17,799,772	11,577,127	2,527,304	5,917,876



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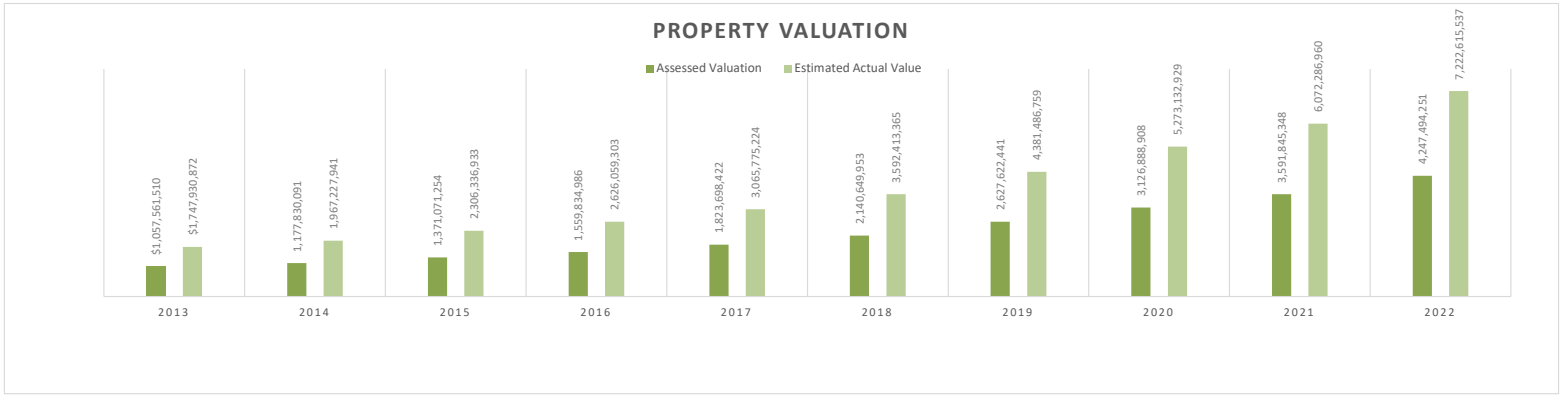
HERRIMAN CITY

Assessed Value And Estimated Value of Taxable Property

Last Ten Fiscal Years

Fiscal Year	Real Property							Personal Property	Motor Vehicles	Total Taxable Assessed Value	Total Direct Tax Rate	Actual Market Value	Assessed Value as a Percentage of Actual Value
	Primary Residential	Secondary Residential	Commercial Property	Agricultural	FAA	Unimproved Land	Centrally Assessed						
2013	$ 846,688,889	$ 111,560,170	$ 50,063,840	$ 562,250	$ -	$ 2,559,730	$ 33,424,767	$ 10,290,521	$ 2,411,343	$ 1,057,561,510	0.4180	$ 1,747,930,872	60.503623%
2014	964,777,865	119,898,900	49,184,760	590,330	-	1,840,530	27,960,311	11,087,528	2,489,867	1,177,830,091	0.3840	1,967,227,941	59.872578%
2015	1,143,062,234	115,991,620	62,074,820	590,550	-	5,505,780	28,390,803	12,883,600	2,571,847	1,371,071,254	0.3610	2,306,336,933	59.448003%
2016	1,303,125,506	137,908,010	69,507,750	633,310	-	1,295,370	30,812,158	13,821,374	2,731,508	1,559,834,986	0.3420	2,626,059,303	59.398315%
2017	1,518,093,869	149,053,310	89,505,030	877,340	-	2,761,810	41,374,640	19,011,833	3,020,590	1,823,698,422	0.3260	3,065,775,224	59.485719%
2018	1,774,320,070	181,678,550	114,855,530	503,160	3,650,340	-	45,506,890	16,768,896	3,366,517	2,140,649,953	0.3070	3,592,413,365	59.588075%
2019	2,143,576,370	181,332,760	221,895,750	512,040	673,650	-	51,755,003	24,184,783	3,692,085	2,627,622,441	0.2870	4,381,486,759	59.971023%
2020	2,623,152,175	169,139,040	236,367,930	208,900	785,140	-	67,820,283	25,548,593	3,866,847	3,126,888,908	0.2800	5,273,132,929	59.298503%
2021	3,031,614,235	163,245,010	288,085,330	276,620	1,623,690	-	72,629,115	30,301,897	4,069,451	3,591,845,348	0.4180	6,072,286,960	59.151443%
2022	3,636,226,892	143,883,480	311,310,810	258,750	10,728,670	-	75,127,903	34,386,287	35,571,459	4,247,494,251	0.3725	7,222,615,537	58.808256%

Source: Utah State Tax Commission Property Tax Division



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HERRIMAN CITY

Property Tax Rates

Direct and Overlapping Governments

Last Ten Fiscal Years

	Direct	Overlapping Rates													
	Herriman City	Salt Lake County													
Fiscal Year	General	General	Multi-County Assessing & Collecting	County Assessing & Collecting	Library	Unified Fire Service	Salt Lake Valley Law Enforcement	Herriman City Fire Service Area	Herriman City Safety Enforcement	Jordan Valley Water Conservancy District	South Valley Sewer	Central Utah Water Conservancy	South Salt Lake Mosquito Abatement	Jordan School District	Total Direct & Overlapping Rates
2013	0.4180	3.1800	0.0000	0.0000	0.7550	2.1920	2.2300	0.0000	0.0000	0.4240	0.3960	0.4460	0.0210	7.1320	17.1940
2014	0.3840	3.0360	0.0000	0.0000	0.7150	2.0970	2.1450	0.0000	0.0000	0.3990	0.3710	0.4220	0.0200	6.7000	16.2890
2015	0.3610	2.5310	0.0000	0.0000	0.6830	2.0000	2.0420	0.0000	0.0000	0.4000	0.3540	0.4050	0.0190	6.8720	15.6670
2016	0.3420	2.3710	0.0110	0.2570	0.6390	1.8880	1.9250	0.0000	0.0000	0.3720	0.3310	0.4000	0.0180	6.9060	15.4600
2017	0.3260	2.2380	0.0100	0.2440	0.6120	1.8120	2.0330	0.0000	0.0000	0.4000	0.3160	0.4000	0.0170	6.4240	14.8320
2018	0.3070	2.0250	0.0090	0.2250	0.5590	1.8580	2.1390	0.0000	0.0000	0.4000	0.2960	0.4000	0.0150	6.5010	14.7340
2019	0.2870	1.9330	0.0090	0.2160	0.5360	1.7460	0.0000	0.0000	1.9620	0.3830	0.2800	0.4000	0.0140	6.6760	14.4420
2020	0.2800	1.9480	0.0120	0.2100	0.5150	1.7170	0.0000	0.0000	1.9000	0.3660	0.2710	0.4000	0.0130	6.5670	14.1990
2021	1.9970	1.7770	0.0120	0.1960	0.4740	0.0000	0.0000	0.0000	1.7280	0.3690	0.2500	0.4000	0.0120	6.1680	13.3830
2022	0.1940	1.4590	0.0150	0.1600	0.3860	0.0000	0.0000	1.3200	1.3200	0.3190	0.1990	0.4000	0.0090	5.9680	11.7490

Source: Utah State Tax Commission Property Tax Division

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HERRIMAN CITY

Principal Property Taxpayers

Current Year and Nine Years Ago

	2022			2013		
Taxpayer	Total Assessed Value	Rank	Percentage of Total Assessed Value	Total Assessed Value	Rank	Percentage of Total Assessed Value
Soleil Apartment Holdings, LLC	$ 75,376,015	1	1.77%			
Pinnacle-Herriman, LLC	43,514,955	2	1.02%			
CR Farmgate Communities	40,961,525	3	0.96%			
RSL Training Academy, LLC	39,413,060	4	0.93%			
HTC Apartments SPE, LLC	36,640,670	5	0.86%			
WCW Olympus Terrameer	31,810,910	6	0.75%			
Lily Stockton, LLC	28,312,900	7	0.67%			
Dogwood Propco UT III, LP	21,315,700	8	0.50%			
CR Timbergate Communities, LLC	20,850,720	9	0.49%			
Solameer Partners, LLC	19,009,045	10	0.45%			
South Farm LLC				23,777,374	1	2.25%
Herriman Apartment Associates LLC				14,633,795	2	1.38%
Rosecrest Inc.				14,587,600	3	1.38%
Rosecrest Village LLC				6,664,085	4	0.63%
Miller Timbergate Apartments, LLC				6,624,725	5	0.63%
Red Castle Enterprises LLC				5,462,400	6	0.52%
Smith's Food & Drug Centers Inc				5,182,040	7	0.49%
Cove at Herriman Springs LLC				4,657,200	8	0.44%
Herriman Springs Developers LLC				4,480,100	9	0.42%
Herriman Crossroads, LLC				4,381,100	10	0.41%
Total	$ 357,205,500		8.41%	$ 90,450,419		8.55%

Source: Salt Lake County Treasurer's Office

HERRIMAN CITY

Property Tax Levies and Collections

Last Ten Fiscal Years

Fiscal Year	Total Tax Levy for Fiscal Year	Collections within the Current Fiscal Year of Levy		Collections in Subsequent Years	Total Collections to Date	
		Amount	% of Levy	Amount	Amount	% of Levy
2013	$ 458,386	$ 444,784	97.03%	$ 10,820	$ 455,604	99.39%
2014	491,136	474,871	96.69%	12,639	487,510	99.26%
2015	525,778	506,877	96.41%	14,461	521,338	99.16%
2016	562,169	544,840	96.92%	12,642	557,481	99.17%
2017	623,069	601,214	96.49%	15,789	617,003	99.03%
2018	696,697	676,164	97.05%	13,818	689,982	99.04%
2019	806,121	785,036	97.38%	12,291	797,327	98.91%
2020	897,314	872,640	97.25%	13,630	886,270	98.77%
2021	1,005,496	981,560	97.62%	9,372	990,933	98.55%
2022	8,418,044	8,224,239	97.70%		8,224,239	97.70%

Source: Salt Lake County Treasurer's Office

Fiscal year 2014 through 2018 tax receipts doe not include tax increment funds received by the Community Development and Renewal Agency of Herriman.

HERRIMAN CITY

Direct and Overlapping Sales Tax Rates

Last Ten Fiscal Years

	Direct Tax Rate		Overlapping Tax Rate						
	Sales Tax Rate	Local Sales Tax Rate	Mass Transit Tax Rate	Additional Mass Transit Tax Rate	County Option Transportation Rate	Transportation Infrastructure	Botanical, Cultural, Zoo Tax Rate	County Option Tax Rate	Total Sales Tax Rate
2013	4.70%	1.00%	0.30%	0.25%	0.25%	0.00%	0.10%	0.25%	6.85%
2014	4.70%	1.00%	0.30%	0.25%	0.25%	0.00%	0.10%	0.25%	6.85%
2015	4.70%	1.00%	0.30%	0.25%	0.25%	0.00%	0.10%	0.25%	6.85%
2016	4.70%	1.00%	0.30%	0.25%	0.25%	0.00%	0.10%	0.25%	6.85%
2017	4.70%	1.00%	0.30%	0.25%	0.25%	0.00%	0.10%	0.25%	6.85%
2018	4.70%	1.00%	0.30%	0.25%	0.25%	0.00%	0.10%	0.25%	6.85%
2019	4.85%	1.00%	0.30%	0.25%	0.25%	0.25%	0.10%	0.25%	7.25%
2020	4.85%	1.00%	0.30%	0.25%	0.25%	0.25%	0.10%	0.25%	7.25%
2021	4.85%	1.00%	0.30%	0.25%	0.25%	0.25%	0.10%	0.25%	7.25%
2022	4.85%	1.00%	0.30%	0.25%	0.25%	0.25%	0.10%	0.25%	7.25%

Source: Utah State Tax Commission (http://www.tax.utah.gov/sales/rates/

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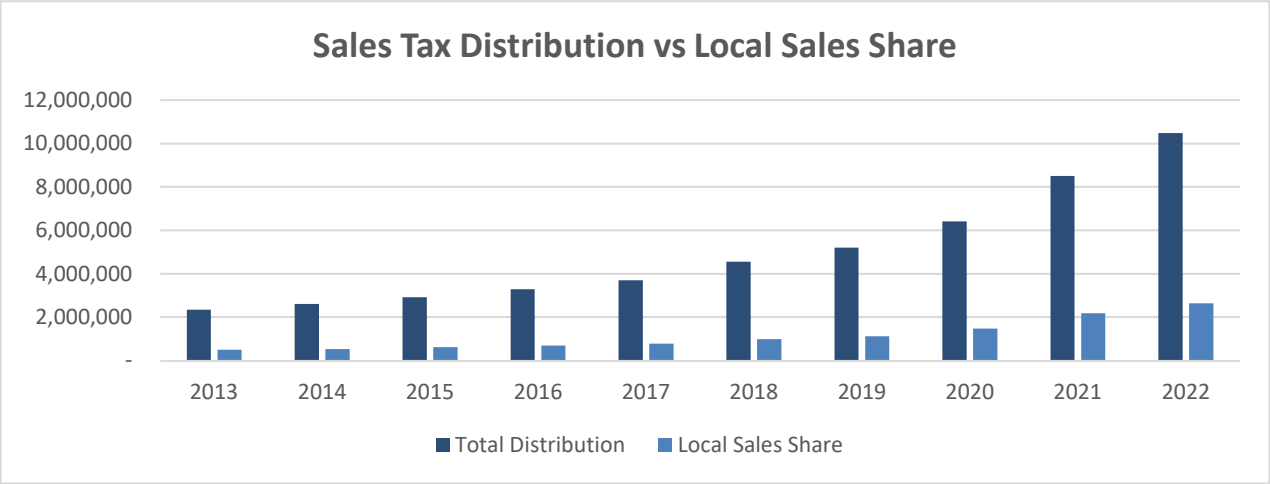
HERRIMAN CITY

Sales Tax Distribution

Last Ten Fiscal Years

	Total Point of Sales	50% of State Wide POS/POP Pool	Remainder of POS	Less Adjustments and Administration	Total Distribution	Percent Increase
2013	$ 1,010,388	$ 1,895,935	$ 505,194	52,892	2,348,237	
2014	1,072,138	2,123,167	536,069	54,983	2,604,253	10.90%
2015	1,225,997	2,362,009	612,998	54,650	2,920,358	12.14%
2016	1,391,476	2,648,726	695,748	62,937	3,281,537	12.37%
2017	1,563,892	2,973,078	781,954	51,973	3,703,058	12.85%
2018	1,989,546	3,609,821	994,773	54,930	4,549,664	22.86%
2019	2,244,917	4,157,599	1,122,463	83,877	5,196,185	14.21%
2020	2,956,331	4,992,785	1,478,166	64,771	6,406,181	23.29%
2021	4,373,225	6,382,133	2,186,612	64,153	8,504,592	32.76%
2022	5,270,958	7,931,126	2,635,479	81,257	10,485,348	23.29%

Source: Utah State Tax Commission



HERRIMAN CITY

Principal Sales Taxpayers

Current Year and Nine Years Ago

	2022		2013	
Taxpayer	Rank	Percentage of Total Sales Tax Collections	Rank	Percentage of Total Sales Tax Collections
AMAZON COM SERVICES LLC	1	16.41%		
SMITHS FOOD & DRUG 108	2	7.14%		
WINCO FOODS	3	7.09%	No Information Available	
USTC MOTOR VEHICLE	4	6.96%		
WALMART MARKET 7168	5	5.14%		
UTAH POWER & LIGHT CO	6	4.06%		
UTAH STATE ALCOHOLIC BEVERAGE CONTROL	7	2.42%		
QUESTAR GAS COMPANY	8	2.28%		
BEEF HOLLOW	9	1.88%		
APPLE COMPUTER INC 871	10	1.75%		
Total		55.14%		0.00%

Source: Utah State Tax Commission

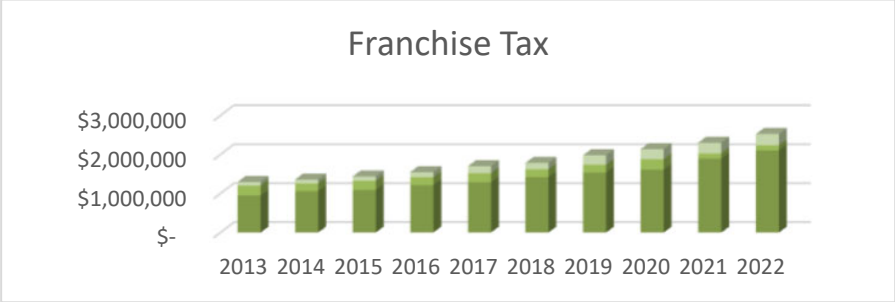
HERRIMAN CITY

Franchise Tax Revenue

Last Ten Fiscal Years

	Energy	Telephone	Cable TV	Total
2013	$ 951,409	$ 252,593	$ 92,437	$ 1,296,439
2014	1,060,260	198,922	102,259	1,361,441
2015	1,093,716	231,147	114,221	1,439,084
2016	1,223,053	197,116	130,635	1,550,804
2017	1,288,496	234,010	178,850	1,701,356
2018	1,424,495	203,227	159,280	1,787,002
2019	1,541,192	200,581	241,078	1,982,851
2020	1,616,760	267,840	255,451	2,140,051
2021	1,898,586	134,448	273,992	2,307,026
2022	2,111,972	125,237	290,095	2,527,304

Source: Herriman City



HERRIMAN CITY

Water Utility Charges for Services Revenue

Last Ten Fiscal Years

	Water Fund	Hi Country I	Hi Country II	Total
2013	$ 5,733,022	$ 37,804	$ 155,032	$ 5,925,858
2014	5,747,227	96,034	142,569	5,985,830
2015	6,485,109	124,653	142,048	6,751,810
2016	7,321,211	132,994	187,431	7,641,635
2017	9,344,997	145,651	175,424	9,666,073
2018	9,255,000	131,212	161,226	9,547,438
2019	9,617,316	134,676	167,533	9,919,525
2020	11,251,908	128,879	174,320	11,555,107
2021	12,780,032	139,055	200,407	13,119,494
2022	11,601,338	129,416	198,089	11,928,843

Source: Herriman City

HERRIMAN CITY

Water Utility Charges for Services Principal Customers

Current Year and Nine Years Ago

	2022			2013		
Taxpayer	Rank	Annual Water Bill	% of Total Billed	Rank	Annual Water Bill	% of Total Billed
Herriman City*	1	335,835	3.31%			
Jordan School District	2	183,115	1.80%	1	194,073	3.75%
Rosecrest Village in Homes HOA	3	100,417	0.99%	4	73,630	1.42%
CR Farmgate Communities, LLC	4	100,449	0.99%	2	99,562	1.93%
Soleil Lofts Holdings LLC	5	74,777	0.74%			
Riverton FM Group	6	70,890	0.70%	3	76,280	1.48%
Solameer	7	59,571	0.59%			
Hi Country II	8	57,692	0.57%	8	47,946	0.93%
CR Timbergate Associates LLC	9	56,512	0.56%			
Olympus at the Canyons	10	53,732	0.53%			
Garbett Construction				5	71,174	1.38%
Legacy Ranch Townhomes				7	51,450	1.00%
Timbergate Apartments				6	70,078	1.36%
Cove @ Herriman Springs				9	33,913	0.66%
Herriman Village HOA				10	31,482	0.61%
Total		**$ 1,092,990**	**10.77%**		**$ 749,588**	**14.50%**

Source: Herriman City

*Herriman City did not charge itself for water consumed in fiscal year 2013.

HERRIMAN CITY

Ratios of Outstanding Debt by Type

Last Ten Fiscal Years

	Governmental Activities				Business-Type Activities					
Fiscal Year	Sales Tax Bonds	Special Assessment Bonds	Purchase Agreement	Notes Payable	Water Bonds	Purchase Agreement	Notes Payable	Total Primary Government	Percentage of Personal Income	Per Capita
2013	$ 7,450,000	$ 15,742,227	$ 300,000	94,023	$ 21,935,589	$ 603,738	33,126	$ 46,156,703	7.15%	1,712
2014	7,250,000	14,915,000	721,875	97,104	21,275,659	1,025,613	203,457	45,488,708	6.23%	1,569
2015	7,025,000	12,995,000	581,250	344,583	22,522,000	198,068	337,663	44,003,564	5.20%	1,399
2016	30,635,286	12,098,173	440,625	219,172	24,618,239	122,563	197,038	68,331,096	6.99%	1,905
2017	29,561,333	21,759,910	300,000	487,124	18,361,720	56,413	64,525	70,591,025	6.30%	1,872
2018	28,375,335	20,524,000	6,223,000	556,025	17,520,202	-	15,770	73,214,332	5.53%	1,639
2019	27,163,427	19,172,000	5,007,319	1,115,979	16,528,684	-		68,987,409	- 4.66%	1,344
2020	24,370,000	18,676,474	4,064,168	1,729,371	15,659,166	-		64,499,179	- 3.84%	1,170
2021	24,655,521	15,780,550	3,092,722	1,053,624	34,797,746	-		79,380,163	- Not Available	1,364
2022	32,598,000	14,413,505	2,092,133	647,721	33,012,122	-	-	82,763,481	Not Available	1,268

Source: Herriman City and Utah State Tax Commission (Personal Income)

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HERRIMAN CITY

Direct and Overlapping Governmental Activities Debt

June 30, 2022

Governmental Unit	Debt Outstanding	Estimated Percentage Applicable*	Estimated Share of Overlapping Debt
Jordan School District	$ 245,858,636	20.22%	$ 49,706,626
Salt Lake County	133,245,000	5.37%	7,150,194
South Valley Sewer District	44,443,016	25.49%	11,328,261
Sub-Total Overlapping Debt	423,546,652		56,856,821
Herriman City Direct Debt	49,751,359		49,751,359
Total Direct and Overlapping Debt	$ 473,298,011		$ 106,608,180

* Percentage is an estimate of total population for the overlapping entity and Herriman's population

Source: ACFR or Financial Statements From Each Overlapping Debt Entity

HERRIMAN CITY

Legal Debt Margin Information

Last Ten Fiscal Years

Legal Debt Margin Calculation for Fiscal Year 2022

Assessed Value	$ 4,247,494,251
Reasonable Fair Cash Value	7,222,615,537
Debt Limit (12% of Reasonable Cash Value)	866,713,864
Debt Applicable to Limit:	
General Obligation Bonds	
Less: Amount Set Aside for Repayment of General Obligation Debt	-
Total Net Debt Applicable to Limit	-
Legal Debt Margin	$ 866,713,864

	Fiscal Year									
	2013	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Debt Limit										
General (4% Fair Cash Value)	$ 69,917,235	$ 78,689,118	$ 92,253,477	$ 105,042,372	$ 122,631,009	$ 143,696,535	$ 175,259,470	$ 210,925,317	$ 242,891,478	$ 288,904,621
Water and Sewer (8% Fair Cash Value)	139,834,470	157,378,235	184,506,955	210,084,744	245,262,018	287,393,069	350,518,941	421,850,634	485,782,957	577,809,243
Legal Margin	209,751,705	236,067,353	276,760,432	315,127,116	367,893,027	431,089,604	525,778,411	632,775,951	728,674,435	866,713,864
Total Net Debt Applicable to Limit	-	-	-	-	-	-	-	-	-	-
Total Net Debt Applicable to the Limit as a Percentage of Debt Limit	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Source: Salt Lake County Auditor's Office

Notes: The General Obligation bonded debt of the City is limited by the Utah State Constitution (Article 14, Section 4) to 12 percent of the "resonable cash value" of property. Of this percent, 4 percent may be use for general purposes. The remaining 4 percent and any unused portion of the 4 percent available for general purposes up to the maximum of 8 percent may be utilized for water and/or sewer purpose:

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HERRIMAN CITY

Pledged Revenue Bond Coverage

Last Ten Fiscal Years

Sales and Franchise Tax Bonds							
Fiscal Year	Gross Revenue	Expenses Net of Depreciation	Net Available Revenue	Principal	Interest	Total	Coverage
2013	3,681,261	-	3,681,261	200,000	375,071	575,071	6.40
2014	3,705,006	-	3,705,006	200,000	368,196	568,196	6.52
2015	4,565,189	-	4,565,189	225,000	360,453	585,453	7.80
2016	4,988,113	-	4,988,113	225,000	351,959	576,959	8.65
2017	5,730,352	-	5,730,352	964,999	1,139,992	2,104,991	2.72
2018	6,471,603	-	6,471,603	1,075,000	1,025,203	2,100,203	3.08
2019	5,366,370	-	5,366,370	1,105,000	997,215	2,102,215	2.55
2020	9,329,319	-	9,329,319	1,130,000	976,083	2,106,083	4.43
2021	11,834,571	-	11,834,571	1,160,000	945,988	2,105,988	5.62
2022	13,133,999	-	13,133,999	1,205,000	951,794	2,156,794	6.09

Water Revenue Bonds							
Fiscal Year	Gross Revenue	Expenses Net of Depreciation	Net Available Revenue	Principal	Interest	Total	Coverage
2013	7,953,077	4,267,088	3,685,989	642,702	846,076	1,488,778	2.48
2014	8,317,568	4,514,186	3,803,382	581,405	726,883	1,308,288	2.91
2015	8,802,703	3,997,841	4,804,862	666,000	720,265	1,386,265	3.47
2016	16,826,812	5,820,147	11,006,665	694,000	589,606	1,283,606	8.57
2017	18,625,562	7,014,669	11,610,893	958,519	575,148	1,533,667	7.57
2018	16,617,178	8,608,030	8,009,148	1,303,000	774,982	2,077,982	3.85
2019	15,240,421	8,916,193	6,324,228	938,000	518,354	1,456,354	4.34
2020	15,365,196	8,679,155	6,686,041	959,121	822,213	1,781,334	3.75
2021	17,362,824	10,450,290	6,912,534	487,000	290,388	777,388	8.89
2022	15,528,956	8,873,854	6,655,102	1,520,000	906,252	2,426,252	2.74

HERRIMAN CITY

Principal Employers

Current Year and Nine Years Ago

	2022		2013	
Employer	**Employees**	**Rank**	**Employees**	**Rank**
Herriman City	250-499	1		
Bullfrog Spas	250-499	2		
Providence Hall Charter School	250-499	3		
Lee's Marketplace	100-249	4		
Herriman High School	100-249	5		
Copper Mountain Middle School	100-249	6	**Not Available**	
Fort Herriman Middle School	100-249	7		
Wal-Mart	100-249	8		
Blackridge Elementary	100-249	9		
Silvercrest Elementary	100-249	10		

Source: Utah Department of Workforce Services

Workforce Services only provides employment ranges, not specific employer counts.

HERRIMAN CITY

Demographic and Economic Statistics

Last Ten Fiscal Years

Fiscal Year	Population	Personal Income	Per Capita Personal Income	Unemployment Rate
2013	26,966	$ 645,696,389	$ 23,945	4.10%
2014	28,984	730,565,952	25,206	3.50%
2015	31,444	846,774,977	26,929	3.50%
2016	35,879	977,933,628	27,257	3.10%
2017	37,712	1,121,374,053	29,736	3.10%
2018	44,663	1,325,064,793	29,668	3.20%
2019	51,348	1,480,769,230	28,838	2.60%
2020	55,144	1,678,444,292	30,437	6.10%
2021	58,198	Not Available	Not Available	3.20%
2022*	65,272	Not Available	Not Available	2.30%

Source: United States Census Bureau (Population), United States Bureau of Labor Statistics (Unemployment Rate), Utah State Tax Commission (Personal Income)

*Population is estimated based on utility services.

HERRIMAN CITY

Full-Time Equivalent Employees

Last Ten Fiscal Years

Functional Areas	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
General Government										
Elected Officials	1.50			1.50	1.50	1.50	1.50	3.00	2.92	2.51	2.50	2.54
Administration										
Administration	6.86			8.68	5.18	5.57	6.30	7.18	7.66	8.30	6.02	6.88
Communications	-	-			0.63	0.75	2.04	3.24	3.47	3.12	3.07	3.43
Courts	1.76			1.70	1.54	2.66	2.71	2.98	3.24	3.33	3.02	3.14
Human Resources	1.50			1.52	0.77	0.55	1.56	2.10	2.10	2.11	2.00	2.05
Recorder	1.00			1.31	2.32	2.68	3.19	3.57	4.14	4.21	3.89	4.88
Customer Service	0.76			0.75	0.75	0.75	0.55	2.53	2.89	3.83	3.85	3.73
Total Administration	11.88	13.96		11.19	12.96	16.35	21.60	23.51	24.90	21.86	24.12	
Finance										
Finance	2.43			2.60	3.03	2.77	2.94	2.82	3.80	4.29	4.62	4.93
Information Technology	-	-			1.09	1.22	1.27	2.25	2.21	1.80	2.57	3.03
Total Finance	2.43			2.60	4.12	3.99	4.21	5.07	6.01	6.09	7.19	7.96
Operations										
Facilities	2.53			3.40	3.39	3.30	2.90	2.65	4.16	5.26	5.37	5.91
Fleet Management	2.28			2.18	2.28	4.89	2.78	2.65	2.88	3.36	3.95	3.48
Street Maintenance	8.63	8.27	10.55		12.04	13.85	13.79	13.50	14.88	11.42	11.62	
Total Operations	13.44	13.85		16.22	20.23	19.53	19.09	20.54	23.50	20.74	21.01	
Park Recreation & Events										
Community Events and Recreation	4.85			5.75	6.50	7.10	7.89	7.73	8.35	8.07	7.89	7.38
Parks/Cemetery	10.41	12.44	14.96	14.01	17.80	18.53	17.64	18.45	19.95	19.87		
Total Park Recreation & Events	15.26	18.19	21.46	21.11	25.69	26.26	25.99	26.52	27.84	27.25		

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HERRIMAN CITY

Full-Time Equivalent Employees (Continued)

Last Ten Fiscal Years

Functional Areas	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Engineering										
Engineering	6.11			5.87	6.83	7.10	7.62	7.45	7.72	12.24	11.98	12.67
GIS	5.95			5.55	3.49	3.00	3.02	3.33	3.06	3.39	3.61	3.56
Total Engineering	12.06	11.42		10.32	10.10	10.64	10.78	10.78	15.63	15.59	16.22	
Community Development										
Building	4.63			4.75	5.66	6.37	7.26	7.16	8.64	9.01	7.69	8.98
Economic Development	0.25			0.75	0.52	0.50	0.75	1.78	2.00	2.00	2.01	1.49
Planning	3.25			3.26	4.11	3.99	4.49	4.25	4.93	4.34	4.84	5.13
Total Planning & Development	8.13	8.76	10.29			10.86	12.50	13.19	15.57	15.35	14.53	15.60
Public Safety										
Emergency Services	0.10		0.10	0.10		-	-	-	-	-	-	-
Police	-		-	-	-	-	0.35	37.47	47.34	52.00	63.33	
Animal Services	-		-	-	-	-	-		0.14	1.40	2.18	3.04
Crossing Guards	-	-	-	-	-	-	6.09	10.16	9.40	8.53		
	0.10	0.10	0.10	-	-	0.35	43.70	58.91	63.58	74.90		
Water	12.88	12.06	13.65	14.34	17.23	16.28	17.55	20.08	18.92	21.68		
Storm Water	-	-	-	-	-	-	-	-	5.10	3.76		
Total Full-Time Equivalent Units	77.68	82.44	88.85	95.09	107.65	115.62	166.58	193.47	197.85	215.05		

Source: Herriman City

Note: Full Time Equivalent Employees Was Calculated by Dividing Number of Hours Worked During the Year by 2,080.

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HERRIMAN CITY

Operating Indicators by Function

Last Ten Fiscal Years

Function	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Municipal Court										
Traffic Cases Filed	2,022	1,368	2,001	880	1,402	2,065	1,827	1,242	1,651	2,163
Traffic Cases Disposed	2,115	1,306	2,136	963	1,406	2,042	1,812	815	835	2,006
Criminal Cases Filed	194	173	173	115	171	141	217	246	283	288
Criminal Cases Disposed	173	173	152	120	151	170	178	158	175	231
Small Claims	26	27	38		34	26	42	60	72	31
Streets										
Storm Drain (linear feet)			349,442	383,118	386,964	409,990	409,990	463,000	463,000	589,129
Street Signs			2,306	2,617	2,946	3,461	3,582	3,904	3,904	4,293
Streets (lane miles)			260	260	274	301	311	336	336	346
Parks, Recreation and Trails										
Parks (acres)			43	43	131	133	236	240	240	310
Trees			4,374	4,374	4,511	4,827	5,088	5,200	5,200	7,450
Park Strips (miles)			26	26	25	29	29	29	29	31.9
Water Used										
Culinary (thousand gallons)			170,500	170,750	170,750	146,894	123,506	115,600	116,500	138,637
Secondary (thousand gallons)			61,307	250,000	81,307	17,655	73,203	75,608	80,000	54,923
Asphalt and Concrete Trails (miles)			20.34	20.34	20.34	19.90	23.90	23.90	24	26.9
Unpaved Equestrian Trails (miles)			6.33	6.33	6.33	4.70	4.71	4.71	5	5.4
Primative Trails (miles)			7.16	7.16	7.16	15.10	16.81	16.81	17	16.3
Maintained Open Space (acres)			97	97	97	97	117	117	117	266
Non-maintained Open Space (acres)			658	658	1,751	2,008	1,570	1,570	1,570	2,007
Fences (miles)			22.60	22.60	22.60	22.90	22.97	22.97	23	26.4

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HERRIMAN CITY

Operating Indicators by Function (Continued)

Last Ten Fiscal Years

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Building										
Single Family	445	421	400	489	605	654	581	551	466	483
	$ 66,013,880	$ 60,611,220	$ 61,083,690	$ 67,719,900	$ 168,776,429	$ 180,747,272	$ 161,572,000	$ 156,744,000	$ 137,494,000	$ 140,235,000
Condos, Townhomes	28	47	71	125	90	202	174	71	67	87
	$ 9,312,340	$ 15,900,350	$ 31,645,740	$ 88,416,750	$ 59,210,410	$ 170,908,445	$ 149,313,000	$ 110,430,000	$ 55,809,358	$ 71,577,000
Basement	93	135	117	173	225	207	220	254	317	280
	$ 202,950	$ 292,840	$ 265,910	$ 373,870	$ 1,468,907	$ 1,471,607	$ 1,610,000	$ 1,670,000	$ 2,211,000	$ 1,991,000
Detached Garage/Barns	12	23	15	24	21	30	32	35	43	33
	$ 88,260	$ 123,820	$ 58,760	$ 113,230	$ 654,080	$ 1,341,216	$ 1,355,000	$ 1,398,100	$ 1,696,000	$ 1,659,000
Commercial	19	30	44	35	48	91	87	68	113	97
	$ 5,287,250	$ 3,201,350	$ 3,785,490	$ 5,837,940	$ 59,031,000	$ 23,438,201	$ 42,438,850	$ 37,258,192	$ 11,864,387	$ 24,163,262
Other	218	265	260	349	467	366	321	233	336	412
	$ 128,600	$ 149,560	$ 349,540	$ 587,730	$ 19,857,798	$ 6,010,173	$ 3,860,666	$ 2,329,373	$ 5,496,797	$ 5,471,900
Water										
Water Gallons Billed (in thousands)										
Cullinary	1,428,877	1,345,948	1,260,089	1,980,186	2,065,743	2,127,844	2,192,129	2,063,521	2,829,358	2,312,052
Secondary	57,547	89,768	88,664	149,869	150,425	173,434	174,637	183,521	263,481	192,207
Water Connections										
Cullinary	5,911	6,950	7,570	8,133	8,586	9,926	11,127	12,962	12,566	13,239
Secondary	1,014	1,360	1,471	1,561	1,666	1,840	2,029	2,102	2,549	2,586

Source: Herriman City

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Supplemental Reports



HINTON BURDICK
CPAs & ADVISORS

Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

The Honorable Mayor and
City Council
Herriman City, Utah

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of Herriman City, Utah, as of and for the year ended June 30, 2022, and the related notes to the financial statements, which collectively comprise Herriman City, Utah's basic financial statements, and have issued our report thereon dated December 27, 2022.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered Herriman City, Utah's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of Herriman City, Utah's internal control. Accordingly, we do not express an opinion on the effectiveness of Herriman City, Utah's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that have not been identified. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. We did identify certain deficiencies in internal control, described in the accompanying schedule of findings and questioned costs that we consider to be a significant deficiency:

2019-001 Year-End Accounting and Financial Statement Controls, Reissued, Reworded

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Herriman City, Utah's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards.*

Herriman City, Utah's Response to Findings

Herriman City, Utah's response to the findings identified in our audit is described in the accompanying corrective action plan. Herriman City's response was not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on it.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

HintonBurdick, PLLC
St. George, Utah
December 27, 2021

HINTON BURDICK
CPAs & ADVISORS

Independent Auditors' Report on Compliance and Report on Internal Control Over Compliance As Required by the *State Compliance Audit Guide*

To the Honorable Mayor and
Members of the City Council
Herriman City, Utah

Report On Compliance with General State Compliance Requirements

We have audited Herriman City's compliance with the applicable state compliance requirements described in the *State Compliance Audit Guide*, issued by the Office of the Utah State Auditor that could have a direct and material effect on Herriman City for the year ended June 30, 2022.

State compliance requirements were tested for the year ended June 30, 2022 in the following areas:

Budgetary Compliance
Fund Balance
Justice Courts
Restricted Taxes and Related Revenues
Fraud Risk Assessment
Governmental Fees
Cash Management
Enterprise Transfers, Reimbursements, Loans, and Services
Tax Levy Revenue Recognition
Impact Fees
Utah Retirement Systems
Public Treasurers Bond
Open and Public Meetings Act

Management's Responsibility

Management is responsible for compliance with the state requirements referred to above.

Auditor's Responsibility

Our responsibility is to express an opinion on Herriman City's compliance based on our audit of the state compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States; and the *State Compliance Audit Guide*. Those standards and the *State Compliance Audit Guide* require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the state compliance requirements referred to above that could have a direct and material effect on a state compliance required occurred. An audit includes examining, on a test basis, evidence about Herriman City's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for each state compliance requirement referred to above. However, our audit does not provide a legal determination of Herriman City's compliance with those requirements.

HintonBurdick.com 888-566-1277

Opinion on Compliance

In our opinion, Herriman City complied, in all material respects, with the state compliance requirements referred to above for the year ended June 30, 2022.

Other Matters

The results of our auditing procedures disclosed an instances of noncompliance, which is required to be reported in accordance with the *State Compliance Audit Guide* and which is described in the accompanying schedule of findings and recommendations as items 2019-002. Our opinion on compliance is not modified with respect to this matter.

Herriman City's response to the noncompliance finding identified in our audit is described in the accompanying response to the schedule of findings and recommendations. Herriman City's response was not subjected to the auditing procedures applied in the audit of compliance and, accordingly, we express no opinion on the response.

Report On Internal Control Over Compliance

Management of Herriman City is responsible for establishing and maintaining effective internal control over compliance with the state compliance requirements referred to above. In planning and performing our audit of compliance, we considered Herriman City's internal control over compliance with the state compliance requirements referred to above to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance with those state compliance requirements and to test and report on internal control over compliance in accordance with the *State Compliance Audit Guide*, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of Herriman City's internal control over compliance.

A *deficiency in internal control over compliance* exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a state compliance requirement on a timely basis. *A material weakness in internal control over compliance* is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a state compliance requirement will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a state compliance requirement that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control and compliance and the results of that testing based on the requirements of the *State Compliance Audit Guide*. Accordingly, this report is not suitable for any other purpose.

HintonBurdick, PLLC
St. George, Utah
December 27, 2022

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HERRIMAN CITY

STAFF REPORT

DATE: January 11, 2023

TO: The Honorable Mayor and City Council

FROM: Kyle Maurer

SUBJECT: Consideration and approval of amendments to the Herriman City Fiscal Year 2023 Budget

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RECOMMENDATION:
Staff recommends approval of the proposed budget amendments.

ISSUE BEFORE COUNCIL:
Should the City Council approve the proposed amendments?

BACKGROUND/SUMMARY:
Good budgetary and accounting practices require periodic amendments to the City's adopted fiscal year budget. A number of budget amendments are being requested to ensure departments are staying within their allotted budgets and to ensure transactions are being accounted for correctly in the financial system.

The proposed budget amendments were discussed during the January 11, 2023 City Council meeting.

DISCUSSION:
A number of budget amendments are being proposed. While there are a number of reasons for the amendments, the majority of amendments deal with budget carryovers from the prior fiscal year. In addition, a thorough analysis of the Police Department's budget has been performed. Below is a summary of the budget amendments (by fund):

General Fund
Overall General Fund revenues and expenditures are proposed to increase by $1,762,257. Of this amount, $1,613,528 is due to budget carryovers from fiscal year 2022. One notable proposed amendment is for property tax revenue. When the City lowered its property tax rate in August 2022 (with a corresponding increase to the Fire Safety Area tax rate), the Salt Lake County

Treasurer's Office subsequently recalculated property tax due to the City and the Fire Safety Area from January to September 2022. Because the City was using general property tax to fund the Fire Safety Area prior to setting a dedicated property tax rate, the Fire Service Area needs to reimburse the General Fund for property taxes collected January-September. There is a corresponding reduction in estimated property tax revenue for the General Fund (in other words, a net zero effect). Another notable proposed budget amendment is a transfer from the Hi Country II Fund to the General Fund. Due to a clerical error, the Parks Department had erroneously paying for the water consumed by Hi Country II. The amounts paid for by the Parks Department total $163,235.

In 2019 the City entered into a settlement agremeent with a number of property owners related to land needed for the City's automall. This agreement requires payment of sales tax generated on the property. A transfer is being proposed from the General Fund to the Herriman North CRA Fund to fulfill the first year of this settlement.

General Fund – Police
City Administration, Finance, and the Police Department have begun examining the Police Department's funding sources, expenditures, and fiscal sustainability. The first step of this process involves the fiscal year 2023 budget. A number of revenue adjustments are being requested to align projected revenues with the budget. In addition, on the expenditure side, the Axon taser contract was erroneously left out of the approved fiscal year 2023 budget. It is proposed to add this contract to the budget (increasing expenditures by $213,000). Adjustments are also needed for fuel ($22,000) and dispatch ($14,000) costs. The dispatch increase is a onetime cost due to a VECC settlement. Police vehicles are another area where an adjustment is needed. The City ordered 6 vehicles slated for purchase in 2024 in 2023 ($455,000). The Police Department moved one vehicle replacement from the Police Department to Animal Services. Since Animal Services is funded by the General Fund (and not the HCSEA), a transfer from the General Fund is needed to fund the already ordered Animal Services vehicle.

General Fund – ARPA
Budget amendments are proposed to fund ARPA projects outlined in the City's Capital Improvement Plan and for projects that have outstanding contracts. As previously discussed with the City Council, these projects are for storm drain improvements.

Parks Impact Fee Fund
All of the proposed amendments carry over projects budgeted in fiscal year 2022 to fiscal year 2023. In addition, an additional $1,000 is needed to complete the design of Mountain Ridge Park, and County TRCC Funds were budgeted in the Park Impact Fee Fund, but were not correctly allocated to the Juniper Canyon Recreation Area project. The City also received a $150,000 grant from the state of Utah and $24,613 from the Jordan Valley Water Conservancy District for the Juniper Canyon Recreation Area.

Road Impact Fee Fund
The majority of amendments pertain to budget carryovers from the prior fiscal year. Staff are also proposing eliminating the transfer out to the Debt Service Fund. Analysis shows the City has transferred more than is needed for the impact fee eligible portion of the debt service payments.

In addition, an additional $95,000 of funding is being requested to fulfill the Rose Canyon Road widening reimbursement.

Debt Service Fund
As mentioned under the Road Impact Fee Fund discussion, staff is proposing eliminating the $1,000,000 transfer from the Road Impact Fee Fund and use previously transferred road impact fee funds for impact fee eligible debt service fund. In addition, an analysis shows the fund has $1,000,000 in unrestricted fund balance, which is proposed to be transferred out to the Capital Projects fund for the Herriman Boulevard reimbursement agreement.

Capital Projects Fund
The majority of proposed amendments are carrying over projects budgeted in fiscal year 2022 to fiscal year 2023. In addition, the City spent $2,091,681 to purchase land which will be reimbursed by Corridor Preservation Funds from Salt Lake County. A $52,000 budget amendment is proposed for the purchase of land from UDOT at Miller Crossing and Mountain View Corridor. The funds for this purchase would come from Capital Projects fund balance. The City also received a grant from Jordan Valley Water Conservancy District for the Main Street Landscaping project. A sewer district reimbursement (revenue) is being proposed for the Hidden Oaks Backbone project.

Due due a bond forfeiture, $99,056 is proposed to be transferred from the General Fund to cover work not performed by the developer (this amount will remain in restricted fund balance until fully spent). In addition, a transfer of $1,000,000 from the Debt Service Fund is being proposed to fulfill the Herriman Boulevard reimbursement agreement (6800 West to 7300 West). A transfer of $10,485,370 from the Water Impact Fee Fund is also proposed to alleviate the deficit fund balance issue noted by the City's external auditors. The interfund loan is expected to be paid by 2025.

Capital Projects – City Hall Fund
$100,000 is proposed to be transferred from fund balance for projects related to City Hall.

Water Fund
A number of budget amendments are being proposed for the Water Fund. Previously, bond principal payments were not budgeted for (payments were directly offset against the bond liability). While this process is acceptable for Generally Accepted Accounting Principles, it does not formally adopt the payments through the budget process. A total of $242,219 in projects is proposed to be carried over. In addition, $525,000 is proposed to be budgeted to fulfill an agreement for the Hidden Oaks Backbone project, $20,000 for increased vehicle costs, and $55,000 to purchase vehicles budgeted in fiscal year 2024.

Water Rights Impact Fee Fund
A transfer of $10,485,370 is proposed to the Capital Projects Fund to alleviate the deficit fund balance incurred as a result of the interfund loan with the Capital Projects Fund. This transfer will be repaid when the interfund loan is paid back by 2025.

Water Impact Fee Fund

$769,951 in projects from fiscal year 2022 are proposed to be carried over. In addition, $3.6 million for the Zone 2 & 3 Water Improvements project is proposed to be budgeted. While the majority of the funding will come from the bond issued in fiscal year 2022, obligating the funds through a budget amendment will allow use of the funds if needed to complete the project. Once the project is bid and awarded (and a final budget can be set), funds will either be obligated, de-obligated, or transferred to the Water Fund to cover a portion of the bond debt service payments.

Storm Water Fund
The Storm Water Fund has two proposed amendments – The first one covers vehicle cost increases ($22,075), and the second is funding to fulfill a previously executed agreement with Ivory Homes ($556,485). Note fulfillment of the agreement will cause the Storm Water Fund to enter a negative fund balance.

ALTERNATIVES:
The City Council may choose to not adopt any of the proposed amendments, some of the amendments, or all of the amendments.

FISCAL IMPACT:
Fiscal impact of each funds is outlined in the detail budget amendment sheets attached.

ATTACHMENTS:
Proposed FY2023 Budget Amendments Resolution

HERRIMAN, UTAH

RESOLUTION NO. R -2023

A RESOLUTION OF THE HERRIMAN CITY COUNCIL APPROVING AN AMENDMENT TO THE 2022-2023 FISCAL YEAR BUDGET

WHEREAS, the Herriman City Council ("Council") met in regular meeting on January 25, 2023, to consider, among other things, approving an amendment to the 2022-2023 fiscal year budget; and

WHEREAS, the Council has determined it necessary to amend the budget to reflect various changes; and

WHEREAS, the Council determines that the amendment presented to the Council is necessary and appropriate.

NOW, THEREFORE, BE IT RESOLVED by the Council that the budget for the period of July 1, 2022, through June 30, 2023, is hereby amended as set forth on the attached amended budget.

This Resolution, shall take effect immediately upon passage and acceptance as provided herein.

PASSED AND APPROVED by the Council of Herriman, Utah, this 25th day of January, 2023.

HERRIMAN CITY COUNCIL

By: _____
Mayor Lorin Palmer

ATTEST: _____
Jackie Nostrom, MMC
City Recorder

Herriman City
General Fund Fiscal Year 2023 Proposed Budget Amendments

GL Account	Department	GL Account Description	FY2023 Budget (Current)	Proposed Amendment	2023 Adjusted Budget (Proposed)	Explanation
10-31100		Property Tax - Current	$ 933,756	$ (221,119)	$ 712,637	Property tax was recalculated using 2022 rate from January-September. This is the amount of property tax the general property tax levy apportioned to the Fire Safety Area until the tax rate was set up for calendar year 2022.
10-31150		Motor Vehicle in Lieu	466,244	(335,209)	131,035	Motor vehicle fee in lieu was recalculated using the 2022 rate from January-September. This is the amount of property tax the general property tax levy apportioned to the Fire Safety Area until the tax rate was set up for calendar year 2022.
10-31300		Sales Tax	12,424,226	25,000	12,449,226	Record transfer to Herriman North CRA for settlement agreement with Garden Plot owners.
10-33652		Grants - State of Utah	-	34,332	34,332	Utah Outdoor Recreation Grant $31,932 (offset Trail Maintenance); Urban Forestry Grant $2,400 (offset Match-Tree Grant line item).
10-33668		Grants - EDC Utah	-	1,750	1,750	Grant from EDC Utah for business backpacks
10-36885		Lease Proceeds	553,010	46,990	600,000	$48,000 - Increase needed due to increased prices of streets and parks dump trucks
10-36905		Bond Forfeiture	-	99,056	99,056	Miller Crossing bond forfeiture - Fee in lieu payment for wall project.
10-39111		Transfer From Hi Country II	-	163,235	163,235	Reimbursement From Hi Country II Fund for water purchases erroneously paid for by the General Fund.
10-39119		Transfer From Fire District	650,000	556,328	1,206,328	Property tax and motor vehicle in lieu was recalculated using 2022 rate from January-September. This is the amount of property tax the general property tax levy apportioned to the Fire Safety Area until the tax rate was set up for calendar year 2022. (Offset general fund proeprty tax).
10-39120		Budgeted Use of Fund Balance	-	1,391,894	1,391,894	
		TOTAL REVENUE ADJUSTMENTS - GENERAL FUND	**$ 15,027,236**	**$ 1,762,257**	**$ 16,789,493**	

GL Account	Department	GL Account Description	FY2023 Budget (Current)	Proposed Amendment	2023 Adjusted Budget (Proposed)	Explanation
10-60080	Facilities	Vehicle Purchases	$ 38,864	$ 7,136	$ 46,000	Additional increase needed for cost increases.
10-65080	Streets	Vehicle Purchases	$ 314,914	$ 411,941	$ 726,855	FY2022 carryover ($326,637); $24,000 increase in lease proceeds (due to increased costs); $6,529 increased costs (FY2023 vehicles); $54,775 - FY2024 vehicle purchased FY2023.
10-65275	Streets	Crack Seal/Chip Seal	1,262,500	935,000	2,197,500	Increase for amount not spent in FY2022 (carryover).
10-70080	Street Lights	Vehicle Purchases	-	247,076	247,076	FY2022 carryover ($213,217) plus additional $33,859 for FY2022 vehicle price increases.
10-73540	Arts Council	Capital Outlay	-	65,606	65,606	Purchase of sound equipment ($35,600 from reduction in expenditure line items; remainder from one-time transfer).
10-73105	Arts Council	Arts Production/Performance	65,000	(25,000)	40,000	Reduction in budget to partially cover sound equipment purchase.
10-73106	Arts Council	Children's Production	12,500	(5,300)	7,200	Reduction in budget to partially cover sound equipment purchase.
10-73126	Arts Council	Youth Theatre	12,500	(5,300)	7,200	Reduction in budget to partially cover sound equipment purchase.
10-76080	Parks	Vehicle Purchases	323,638	225,889	549,527	FY2022 carryover ($138,674) plus additional $17,738 for FY2022 vehicles; $24,000 increase in lease proceeds (FY2023 vehicles); $45,477-FY2024 vehicle purchased FY2023.
10-76027	Parks	Match - Tree Grant	8,000	2,400	10,400	Urban Forestry Grant received for conference (offset-grant revenue).
10-76098	Parks	Trail Maintenance	125,000	31,932	156,932	Utah Outdoor Recreation Grant (grant revenue offset).
10-80080	Engineering	Vehicle Purchases	30,056	5,569	35,625	Increase needed for FY2023 vehicles due to increased cost.
10-81045	Economic Development	Economic Development Relations	4,000	1,750	5,750	Grant from EDC Utah for business backpacks.
10-99253		Transfer to Herriman North CRA	-	25,000	25,000	Transfer to Herriman North CRA to fulfill the Garden Plot owners settlement agreement.
10-99135		Transfer to Public Safety Fund	837,074	99,500	936,574	Additional increase for Animal Services vehicle and cost increase in Community Services vehicle.
10-99200		Transfer to Capital Projects	3,974,955	99,056	4,074,011	Reimbursement to Capital Projects for Miller Crossing bond forfeiture.
10-99999		Budgeted Increase in Fund Balance	359,998	(359,998)	-	Removal of expected addition to fund balance (EXCLUDING POLICE).
		TOTAL EXPENDITURE ADJUSTMENTS - GENERAL FUND	**$ 7,368,999**	**$ 1,762,257**	**$ 9,131,256**	

Fund Balance Summary (Excluding ARPA and Public Safety Impact Fees)	FY2021	FY2022	FY2023
Beginning Fund Balance	$ 4,723,752	$ 1,619,059	$ 7,869,509
Additions (Reductions)	(3,104,693)	6,250,450	(1,765,724)
Ending Fund Balance	**$ 1,619,059**	**$ 7,869,509**	**$ 6,103,785**
Fund Balance as a % of Revenues	**6%**	**27%**	**21%**

Herriman City
Public Safety Fund (General Fund) Fiscal Year 2023 Proposed Budget Amendments

GL Account	Department	GL Account Description	FY2023 Budget (Current)	Proposed Amendment	2023 Adjusted Budget (Proposed)	Explanation
15-33650	Public Safety (Police)	Liquor Allotment	$ 43,000	$ 3,000	$ 46,000	Increase liquor allotment to match actual revenue received.
15-33655	Public Safety (Police)	Highway Safety Grants	100,000	(40,000)	60,000	Reduce budget based on historical actuals.
15-33671	Public Safety (Police)	Department of Justice Grants	-	3,200	3,200	Bulletproof Vest Grant reimbursement
15-33660	Public Safety (Police)	Jordan School District SRO	210,000	50,000	260,000	Utah Outdoor Recreation Grant $31,932 (offset Trail Maintenance); Urban Forestry Grant $2,400 (offset Match-Tree Grant line item).
15-33661	Public Safety (Police)	Providence Hall SRO	45,000	20,000	65,000	Increase budget to match anticipated agreement with Providence Hall.
15-33662	Public Safety (Police)	Athlos SRO	5,000	(5,000)	-	Eliminate SRO revenue - No SRO at school.
15-33663	Public Safety (Police)	RSL Academy SRO	19,000	(19,000)	-	Eliminate SRO revenue - No SRO at school.
15-36900	Public Safety (Police)	Miscellaneous Revenue	13,000	(3,000)	10,000	Revising budget down due to historical actuals
15-39120	Public Safety (Police)	Budgeted Use of Fund Balance	302,830	71,000	373,830	$71,000 - Amount needed for current year vehicles
15-39118	Public Safety (Police)	Transfer From HCSEA	8,520,000	783,000	9,303,000	Increase needed to balance Police department costs for current year
		TOTAL REVENUE ADJUSTMENTS - POLICE	**$ 9,257,830**	**$ 863,200**	**$ 10,121,030**	
15-33700	Public Safety (Animal Control)	Animal Licenses	$ 17,000	$ 8,000	$ 25,000	Increase due to historical actuals.
15-33702	Public Safety (Animal Control)	Animal Impound Fee	13,000	3,000	16,000	Increase due to historical actuals.
15-33710	Public Safety (Animal Control)	Adoption Fees	2,000	500	2,500	Increase due to historical actuals.
15-33750	Public Safety (Animal Control)	Animal Services Donations	3,500	(3,000)	500	Decrease due to historical actuals.
15-39500	Public Safety (Non Police)	Transfer From General Fund	837,074	99,500	936,574	Transfer to cover additional cost for Police vehicles and vehicle transferred from Police to Animal Services.
		TOTAL REVENUE ADJUSTMENTS - PUBLIC SAFETY (NON POLICE)	**$ 872,574**	**$ 108,000**	**$ 980,574**	

GL Account	Department	GL Account Description	FY2023 Budget (Current)	Proposed Amendment	2023 Adjusted Budget (Proposed)	Explanation
15-90006	Public Safety (Police)	Subscriptions/Memberships/Dues	$ 32,865	$ 213,000	$ 245,865	Axon taser contract was not included in the fiscal year 2023 budget (ongoing cost = $149,436). Taser contract was included in FY2024 budget.
15-90018	Public Safety (Police)	Fuel	118,000	22,000	140,000	Increase to match last year's actuals. Currently spent 77% of fiscal year's budget.
15-90085	Public Safety (Police)	Clothing & Uniforms	79,500	3,200	82,700	Bulletproof Vest Grant reimbursement (one time-offsetting revenue).
15-90058	Public Safety (Police)	Dispatch	300,000	14,000	314,000	Increase due to VECC settlement (one time cost).
15-90741	Public Safety (Police)	Vehicle Purchase	1,099,897	611,000	1,710,897	Carryover from prior year - $126,000; additional funds from HCSEA (FY2023 vehicles) - $30,000; $455,000 - FY2024 vehicles ordered in FY2023 (6) (timing issue; funding from HCSEA fund balance).
		TOTAL EXPENDITURE ADJUSTMENTS - POLICE	**$ 1,630,262**	**$ 863,200**	**$ 2,493,462**	
15-95063	Public Safety (Animal Services)	Vehicle Purchase	$ -	$ 90,000	$ 90,000	One Police vehicle was moved to Animal Services. Budget needs to be set.
15-97741	Public Safety (Community Services)	Vehicle Purchase	65,148	18,000	83,148	Due to cost increases, vehicle purchase is expected to exceed budget.
		TOTAL EXPENDITURE ADJUSTMENTS - PUBLIC SAFETY (NON POLICE)	**$ 65,148**	**$ 108,000**	**$ 173,148**	

Herriman City
ARPA Fund (General Fund) Proposed Fiscal Year 2023 Budget Amendments

GL Account	Department	GL Account Description	FY2023 Budget (Current)	Proposed Amendment	2023 Adjusted Budget (Proposed)	Explanation
18-33999		Use of Fund Balance	$ -	$ 2,232,403	$ 2,232,403	Fund balance of ARPA funds
		TOTAL REVENUE ADJUSTMENTS - ARPA FUND	**$ -**	**$ 2,232,403**	**$ 2,232,403**	

GL Account	Department	GL Account Description	FY2023 Budget (Current)	Proposed Amendment	2023 Adjusted Budget (Proposed)	Explanation
18-41070		Hamilton Farms Storm System Improvements	$ -	$ 1,636,727	$ 1,636,727	Engineer's Estimate.
18-41080		Rosecrest/Sentinel Ridge Pond Improvements	-	1,530,500	1,530,500	Amount on CIP list.
18-41090		Shoshone Pond Improvements	-	310,000	310,000	Contract Amount.
18-41100		Jensen Place Pond Improvements	-	192,000	192,000	Contract Amount.
18-41110		Antelope Meadows Pond Improvements	-	3,732,403	3,732,403	Contract Amount.
18-41120		Berwick Pond Improvements	-	350,000	350,000	Contract Amount.
18-41130		Rose Canyon/7300 W Pond Improvements	-	165,000	165,000	Contract Amount.
18-41151		McCuiston Storm Drain	-	60,000	60,000	List of Open Contracts.
18-41152		SLCC Pond Lift Station	-	190,000	190,000	Contract Amount.
18-41200		Capital Outlay	2,401,824	(5,934,227)	(3,532,403)	Allocation of ARPA funds to storm drain projects.
		TOTAL EXPENDITURE ADJUSTMENTS -ARPA FUND	**$ 2,401,824**	**$ 2,232,403**	**$ 4,634,227**	

Herriman City
Parks Impact Fee Fund Proposed Fiscal Year 2023 Budget Amendments

GL Account	Department	GL Account Description	FY2023 Budget (Current)	Proposed Amendment	2023 Adjusted Budget (Proposed)	Explanation
20-31227		JVWCD Grant	-	24,613	24,613	Juniper Canyon Recreation Area Grant
20-31228		State of Utah Grant	-	150,000	150,000	Juniper Canyon Recreation Area Grant
		TOTAL REVENUE ADJUSTMENTS - PARK IMPACT FEE FUND	**$ -**	**$ 174,613**	**$ 174,613**	

GL Account	Department	GL Account Description	FY2023 Budget (Current)	Proposed Amendment	Budget (Proposed)	Explanation
20-47622		0121-00 Teton Ranch Park Design	-	204,000	204,000	Reallocated from Rose Creek Trail Connector Project (Duplicate Budget)
20-47623		0104-00 Rose Creek Trail Connector	408,000	(156,500)	251,500	($204,000) - Duplicate budget approved (reallocated to Teton Ranch Park Design); $47,500 - Carryover from FY2022
20-47624		0083-00 Mountain Ridge Park Design	-	23,837	23,837	FY2022 carryover; additional $1,000 to complete project
20-47625		0068-1A Juniper Canyon Recreation Area 1A	-	1,524,613	1,524,613	County TRCC funds not allocated to project (but included in revenue budget). Funds needed to complete project ($631,000 carryover)
20-47628		0061-00 Hidden Oaks Backbone Phase 2	-	73,726	73,726	FY2022 carryover
20-47632		0079-00 Midas Creek Pavilion	-	8,000	8,000	FY2022 carryover
20-4890		Budgeted Increase in Fund Balance	2,067,425	(1,503,063)	564,362	FY2022 carryover
		TOTAL EXPENDITURE ADJUSTMENTS - PARK IMPACT FEE FUND	**$ 2,475,425**	**$ 174,613**	**$ 2,650,038**	

Fund Balance Summary	FY2021	FY2022	FY2023
Beginning Fund Balance	3,879,208	5,471,968	6,915,696
Additions (Reductions)	1,592,760	1,443,728	564,362
Ending Fund Balance	**$ 5,471,968**	**$ 6,915,696**	**$ 7,480,058**

Herriman City
Storm Drain Impact Fee Fund Proposed Fiscal Year 2023 Budget Amendments

GL Account	Department	GL Account Description	FY2023 Budget (Current)	Proposed Amendment	2023 Adjusted Budget (Proposed)	Explanation
21-3900		Budgeted Use of Fund Balance	-	283,534	283,534	Use of fund balance to meet Rose Creek reimbursement agreement.
		TOTAL REVENUE ADJUSTMENTS - PARK IMPACT FEE FUND	**$ -**	**$ 283,534**	**$ 283,534**	

GL Account	Department	GL Account Description	FY2023 Budget (Current)	Proposed Amendment	2023 Adjusted Budget (Proposed)	Explanation
21-48360		0103-00 Rose Creek Storm Drain (Reimbursement)	236,595	333,405	570,000	Reimbursement was budgeted over three years. However, developer will meet the requirements to be reimbursed this fiscal year.
21-4920		Budgeted Increase in Fund Balance	49,871	(49,871)	-	($204,000) - Duplicate budget approved (reallocated to Teton Ranch Park Design); $47,500 - Carryover from FY2022
		TOTAL EXPENDITURE ADJUSTMENTS - PARK IMPACT FEE FUND	**$ 286,466**	**$ 283,534**	**$ 570,000**	

Fund Balance Summary	FY2021	FY2022	FY2023
Beginning Fund Balance	2,552,773	2,247,810	2,856,815
Additions (Reductions)	(304,963)	609,005	(283,534)
Ending Fund Balance	**$ 2,247,810**	**$ 2,856,815**	**$ 2,573,281**

Herriman City
Road Impact Fee Fund Proposed Fiscal Year 2023 Budget Amendments

GL Account	Department	GL Account Description	FY2023 Budget (Current)	Proposed Amendment	2023 Adjusted Budget (Proposed)	Explanation
22-3900		Budgeted Use of Fund Balance	-	950,021	950,021	Use of fund balance for reimbursement agreements and carryover.
		TOTAL REVENUE ADJUSTMENTS - ROAD IMPACT FEE FUND	**$ -**	**$ 950,021**	**$ 950,021**	

GL Account	Department	GL Account Description	FY2023 Budget (Current)	Proposed Amendment	2023 Adjusted Budget (Proposed)	Explanation
22-49421		0016-02 7300 W Phase 2 ROW & Design	$ 1,114	$ 80,021	$ 81,135	FY2022 carryover.
22-49422		0012-00 6400 W & 13400 S Intersection (Reserves at	45,365	93,662	139,027	FY2022 carryover.
22-49722		0102-00 Rose Canyon Rd Widening (Reimbursement)	-	105,500	105,500	$10,500-Carryover from FY2022; $95,000-Remainder of agreement.
22-49729		0061-00 Hidden Oaks Backbone Ph 2 Reimbursement	-	2,847,645	2,847,645	FY2022 carryover.
22-49901		Transfer to Debt Service	1,000,000	(1,000,000)	-	Reduction of transfer to debt service (proposal to use restricted fund balance instead).
22-49999		Budgeted Increase in Fund Balance	1,176,807	(1,176,807)	-	Removal of anticipated increase/addition of expected use.
		TOTAL EXPENDITURE ADJUSTMENTS - ROAD IMPACT FEE FUND	**$ 2,223,286**	**$ 950,021**	**$ 3,173,307**	

Fund Balance Summary	FY2021	FY2022	FY2023
Beginning Fund Balance	(296,011)	86,259	2,217,045
Additions (Reductions)	382,270	2,130,786	(950,021)
Ending Fund Balance	**$ 86,259**	**$ 2,217,045**	**$ 1,267,024**

Herriman City
Debt Service Fund Proposed Fiscal Year 2023 Budget Amendments

GL Account	Department	GL Account Description	FY2023 Budget (Current)	Proposed Amendment	2023 Adjusted Budget (Proposed)	Explanation
30-38121		Transfer From Road Impact Fee Fund	$ 1,000,000	$ (1,000,000)	-	Instead of trasfer, propose to use impact fee fund balance (restricted from road impact fee fund transfers) to cover impact fee eligible portion of debt service payments.
30-3990		Budgeted Use of Fund Balance	-	1,617,894	1,617,894	Use of fund balance to 1) Reduce impact fee restricted fund balance and 2) Transfer to capital projects for Herriman Blvd developer reimbursement obligation.
TOTAL REVENUE ADJUSTMENTS - FIRE SERVICE AREA FUND			**$ 1,000,000**	**$ 617,894**	**$ 1,617,894**	

GL Account	Department	GL Account Description	FY2023 Budget (Current)	Proposed Amendment	2023 Adjusted Budget (Proposed)	Explanation
30-47940		Transfer to Capital Projects	-	1,000,000	1,000,000	Transfer excess fund balance to Capital Projects for Herriman Blvd developer reimbursement obligation.
30-49900		Budgeted Increase in Fund Balance	382,106	(382,106)	-	Transferring from increase in fund balance to use of fund balance.
TOTAL EXPENDITURE ADJUSTMENTS - FIRE SERVICE AREA FUND			**$ 382,106**	**$ 617,894**	**$ 1,000,000**	

Fund Balance Summary	FY2021	FY2022	FY2023
Beginning Fund Balance	1,885,749	1,277,052	2,378,575
Additions (Reductions)	1,277,052	1,101,523	(1,617,894)
Ending Fund Balance	**$ 3,162,801**	**$ 2,378,575**	**$ 760,681**

Herriman City
Capital Projects-City Hall Fund Proposed Fiscal Year 2023 Budget Amendments

GL Account	Department	GL Account Description	FY2023 Budget (Current)	Proposed Amendment	2023 Adjusted Budget (Proposed)	Explanation
39-3900		Budgeted Use of Fund Balance		100,000	100,000	Use of Fund Balance for City Hall Projects
		TOTAL REVENUE ADJUSTMENTS - CITY HALL FUND	**$ -**	**$ 100,000**	**$ 100,000**	

GL Account	Department	GL Account Description	FY2023 Budget (Current)	Proposed Amendment	2023 Adjusted Budget (Proposed)	Explanation
39-44100		City Hall	-	100,000	100,000	City Hall Projects
		TOTAL EXPENDITURE ADJUSTMENTS - CITY HALL FUND	**$ -**	**$ 100,000**	**$ 100,000**	

Fund Balance Summary			
	FY2021	FY2022	FY2023
Beginning Fund Balance	552,422	542,957	227,168
Additions (Reductions)	(9,465)	(315,789)	(100,000)
Ending Fund Balance	**$ 542,957**	**$ 227,168**	**$ 127,168**

Herriman City
Capital Projects Fund Proposed Fiscal Year 2023 Budget Amendments

GL Account	Department	GL Account Description	FY2023 Budget (Current)	Proposed Amendment	2023 Adjusted Budget (Proposed)	Explanation
40-36105		Salt Lake County	$ 700,000	$ 2,091,681	$ 2,791,681	Corridor Preservation Funds (offset Property Acquisition).
40-36128		JVWCD Grant	-	26,113	26,113	Main Street Landscaping project grant.
40-36050		Transfer From General Fund	3,837,433	99,056	3,936,489	Bond forfeiture from Miller Crossing Pod 1 for prior wall project.
40-36057		Transfer From Debt Service Fund	-	1,000,000	1,000,000	Transfer to fulfill Herriman Boulevard reimbursement agreement.
40-36099		Interest Income	-	210,000	210,000	$90,000-Allocated to Main Street Widening
40-36302		South Valley Sewer Reimbursement	-	406,771	406,771	Sewer District Reimbursement for Hidden Oaks Backbone Phase 2.
40-36056		Transfer From Water Impact Fee Fund	-	10,485,370	10,485,370	Transfer amount of interfund loan to resolve deficit fund balance.
40-3900		Budgeted Use of Fund Balance	1,073,692	505,148	1,578,840	
		TOTAL REVENUE ADJUSTMENTS - CAPITAL PROJECTS FUND	**$ 5,611,125**	**$ 14,824,139**	**$ 20,435,264**	

GL Account	Department	GL Account Description	FY2023 Budget (Current)	Proposed Amendment	2023 Adjusted Budget (Proposed)	Explanation
40-47557		Property Acquisition	$ 3,700,000	$ 2,143,681	$ 5,843,681	$52,000 - Amendment for acquisition of UDOT property (Miller Crossing and MVC) (fund balance); $2,091,681 - Property purchase using Corridor Preservation funds.
40-47562		0058-00 Herriman Main Street Widening		10,650,074	10,650,074	$10,560,074 - Prior year ending balance in construction account; $90,000 - Anticipated interest earnings on construction funds.
40-47566		0061-00 Hidden Oaks Backbone Phase 2 (Reimbursement)	-	1,025,309	1,025,309	Carryover from FY2022 plus $406,771 Sewer District reimbursement.
40-47588		0033-00 Cemetery Restroom	195,000	33,975	228,975	Carryover from FY2022.
40-47598		0074-00 Main Street Park Strips and Open Space	989,406	(88,900)	900,506	($115,013) - Amount project was over budget in FY2022; $26,113 - JVWCD landscaping grant.
40-47607		0010-01 6000 W Road Widening Phase 1	150,000	60,000	210,000	Carryover from FY2022.
40-47702		0055-05 Herriman Blvd Phase 5 (Reimbursement)	-	1,000,000	1,000,000	UDOT grant funds from June 2019 for the extension of Herriman Blvd from 6800 West to 7300 West.
		TOTAL EXPENDITURE ADJUSTMENTS - CAPITAL PROJECTS FUND	**$ 5,034,406**	**$ 14,824,139**	**$ 19,858,545**	

Fund Balance Summary			
	FY2021	FY2022	FY2023
Beginning Fund Balance	(12,173,678)	(6,469,722)	3,333,738
Additions (Reductions)	5,703,956	9,803,460	(1,578,840)
Ending Fund Balance	**$ (6,469,722)**	**$ 3,333,738**	**$ 1,754,898**
Interfund Loan (Water Rights Impact)	**$ 10,485,370**	**$ 10,485,370**	**$ -**
Adjusted Ending Balance	**$ 4,015,648**	**$ 13,819,108**	**$ 1,754,898**

Herriman City
Water Fund Proposed Fiscal Year 2023 Budget Amendments

GL Account	Department	GL Account Description	FY2023 Budget (Current)	Proposed Amendment	2023 Adjusted Budget (Proposed)	Explanation
51-39999		Use of Fund Balance	10,479,071	2,172,219	12,651,290	$242,219 - Capital project carryover; $50,000 - Additional vehicle cost; $55,000 - FY2024 Vehicle Ordered FY2023; $525,000 - Reimbursement agreement (new); $1,300,000 - Bond principal payments not previously budgeted.
		TOTAL REVENUE ADJUSTMENTS - WATER FUND	**$ 10,479,071**	**$ 2,172,219**	**$ 12,651,290**	

GL Account	Department	GL Account Description	FY2023 Budget (Current)	Proposed Amendment	2023 Adjusted Budget (Proposed)	Explanation
51-47110		Bond Principal	-	1,300,000	1,300,000	Bond principal payments previously not budgeted.
51-48104		0017-00 AMI Water Reading System	25,000	120,000	145,000	FY2022 Carryover
51-48132		0061-00 Hidden Oaks Backbone	-	525,000	525,000	Amount of Hidden Oaks Backbone Reimbursement Agreement
51-81080		Vehicle Purchases	753,638	227,219	980,857	FY2022 Carryover ($122,219) plus $20,000 for FY2022 carryovers; additional $30,000 for FY2023 vehicles; $55,000-FY2024 vehicles ordered FY2023.
		TOTAL EXPENDITURE ADJUSTMENTS - WATER FUND	**$ 778,638**	**$ 2,172,219**	**$ 2,950,857**	

Fund Balance Summary	FY2021	FY2022	FY2023
Beginning Fund Balance	(16,025,623)	11,911,090	16,249,567
Additions (Reductions)	27,936,713	4,338,477	(12,651,290)
Ending Fund Balance*	**$ 11,911,090**	**$ 16,249,567**	**$ 3,598,277**

*FY2021 = Unrestricted Net Position in ACFR

Herriman City
Water Rights Fund Proposed Fiscal Year 2023 Budget Amendments

GL Account	Department	GL Account Description	FY2023 Budget (Current)	Proposed Amendment	2023 Adjusted Budget (Proposed)	Explanation
52-3900		Usage of Fund Balance	2,616,500	10,485,370	13,101,870	Transfer Outstanding Interfund Loan Amount to Capital Projects.
		TOTAL REVENUE ADJUSTMENTS - WATER IMPACT FEE FUND	**$ 2,616,500**	**$ 10,485,370**	**$ 13,101,870**	

GL Account	Department	GL Account Description	FY2023 Budget (Current)	Proposed Amendment	2023 Adjusted Budget (Proposed)	Explanation
52-89999		Transfer to Capital Projects Fund	-	10,485,370	10,485,370	Transfer to Capital Projects to alleviate negative interfund loan issue.
		TOTAL EXPENDITURE ADJUSTMENTS - WATER IMPACT FEE FUND	**$ -**	**$ 10,485,370**	**$ 10,485,370**	

Fund Balance Summary	FY2021	FY2022	FY2023
Beginning Fund Balance	14,718,995	16,064,088	15,967,361
Additions (Reductions)	1,345,093	(96,727)	(13,101,870)
Ending Fund Balance	**$ 16,064,088**	**$ 15,967,361**	**$ 2,865,491**

Herriman City
Water Impact Fee Fund Proposed Fiscal Year 2023 Budget Amendments

GL Account	Department	GL Account Description	FY2023 Budget (Current)	Proposed Amendment	2023 Adjusted Budget (Proposed)	Explanation
53-3900		Use of Fund Balance	1,362,987	6,031,283	7,394,270	
		TOTAL REVENUE ADJUSTMENTS - WATER IMPACT FEE FUND	**$ 1,362,987**	**$ 6,031,283**	**$ 7,394,270**	

GL Account	Department	GL Account Description	FY2023 Budget (Current)	Proposed Amendment	2023 Adjusted Budget (Proposed)	Explanation
53-47554		0141-00 Zone 2 & 3 Major Water Improvements	-	3,600,000	3,600,000	IFFP indicates that $3.6 million of project is impact fee eligible. Majority of project will be covered by bond issued in FY2022.
53-47600		Master Plan - Water	50,000	35,582	85,582	FY2022 carryover
53-47841		0061-00 Hidden Oaks Backbone Ph 2 (Reimbursement)	-	733,951	733,951	FY2022 carryover
53-48724		0058-00 Herriman Main Street Widening	38,250	1,661,750	1,700,000	Engineer's estimate of the amount Water will need to contribute to the project.
		TOTAL EXPENDITURE ADJUSTMENTS - WATER IMPACT FEE FUND	**$ 88,250**	**$ 6,031,283**	**$ 6,119,533**	

Fund Balance Summary	FY2021	FY2022	FY2023
Beginning Fund Balance	18,914,929	21,281,842	3,410,898
Additions (Reductions)	2,366,913	(17,870,944)	(7,394,270)
Ending Fund Balance	**$ 21,281,842**	**$ 3,410,898**	**$ (3,983,372)**

Herriman City
Storm Water Fund Proposed Fiscal Year 2023 Budget Amendments

GL Account	Department	GL Account Description	FY2023 Budget (Current)	Proposed Amendment	2023 Adjusted Budget (Proposed)	Explanation
55-39999		Use of Fund Balance	465,787	578,560	1,044,347	Fund balance will be needed to cover agreement with Ivory Homes for L&L Hamilton Park and increase in cost for vehicle purchase.
		TOTAL REVENUE ADJUSTMENTS - STORM WATER FUND	**$ 465,787**	**$ 578,560**	**$ 1,044,347**	

GL Account	Department	GL Account Description	FY2023 Budget (Current)	Proposed Amendment	2023 Adjusted Budget (Proposed)	Explanation
55-61080		Vehicle Purchases	47,133	22,075	69,208	Due to inflationary pressures, budget needs to be increased for vehicle that is on order.
55-63001		0073-00 L&L Hamilton Park	-	556,485	556,485	Executed agreement that will need to be paid in FY2023.
		TOTAL EXPENDITURE ADJUSTMENTS - STORM WATER FUND	**$ 47,133**	**$ 578,560**	**$ 625,693**	

Fund Balance Summary	FY2021	FY2022	FY2023
Beginning Fund Balance	185,446	356,442	513,985
Additions (Reductions)	170,996	157,543	(1,044,347)
Ending Fund Balance*	**$ 356,442**	**$ 513,985**	**$ (530,362)**

*Ending fund balance is unrestricted net position per ACFR

HERRIMAN CITY

STAFF REPORT

DATE: January 12, 2023

TO: The Honorable Mayor and City Council

FROM: Sandra Llewellyn, Economic Development Coordinator and Jackie Nostrom, City Recorder

SUBJECT: Approval of a single event permit Local Consent for Levy Restaurants to be issued and regulated by the Utah Department of Alcoholic Beverage Control

RECOMMENDATION:
Approval of a resolution to grant a single event permit local consent to Levy Restaurants to sell wine at the Utah Warriors Rugby home games.

ISSUE BEFORE COUNCIL:
Does the City Council want to approve a resolution to grant a single event permit local consent to Levy Restaurants to sell wine at the Utah Warriors Rugby home games?

BACKGROUND/SUMMARY:
Levy Restaurants currently holds a liquor license to sell beer. They are seeking approval to obtain a single event permit to sell wine at the Utah Warriors Rugby home games in a separate location from the beer sales held on the following dates: February 25, 2023, March 25, 2023, March 31, 2023, April 15, 2023, May 6, 2023, May 20, 2023, May 27, 2023 and June 10, 2023.

Utah State Code requires local consenty for all ”single event permit” licenses issued and regulated by the State Department of Alcoholic Beverage Control (DABC).

DISCUSSION:
32B-9-303. Director's power to issue single event permit.

(1), Before a person may sell, offer for sale, or furnish liquor at retail for on-premise consumption at an event, the person shall first obtain a single event permit from the director in accordance with this part.
(2), (a), Subject to Subsection (5), the director may issue a single event permit to any of the following that is conducting a convention, civic, or community enterprise, a bona fide:
(i), partnership;
(ii), corporation;

(iii), limited liability company;
(iv), religious organization;
(v), political organization;
(vi), incorporated association;
(vii), recognized subordinate lodge, chapter, or other local unit of an entity described in this Subsection (2)(a);
(viii), state agency; or
(ix), political subdivision of the state.

(b), The director may not issue a single event permit to an entity that has not been in existence as a bona fide entity for at least one year before the day on which the entity applies for a single event permit.

(3), (a), A single event permit may authorize:
(i), the storage, sale, offering for sale, furnishing, and consumption of liquor at an event at which the storage, sale, offering for sale, furnishing, or consumption of liquor is otherwise prohibited by this title under either:
(A), a 120 hour single event permit; or
(B), a 72 hour single event permit; and

(ii), the storage, sale, offer for sale, furnishing, and consumption of beer at the same event for the period that the storage, sale, offer for sale, furnishing, or consumption of liquor is authorized under Subsection (3)(a)(i) for the single event permit.

(b), The single event permit shall state in writing whether the single event permit is:
(i), a 120 hour single event permit; or
(ii), a 72 hour single event permit.

(4), The director may not issue more than:
(a), four single event permits in any one calendar year to the same person listed in Subsection (2) if one or more of the single event permits is a 120 hour single event permit; or

(b), 24 single event permits in any one calendar year to the same person listed in Subsection (2) if each of the single event permits issued to that person is a 72 hour single event permit.

(5), Before the director issues or denies the issuance of a single event permit under this section, the director shall comply with Section 32B-9-202.

ALTERNATIVES:
The Council could determine not to grant local consent for the single event permit.

FISCAL IMPACT:
There is no fiscal impact in granting local consent.

ATTACHMENTS:
Single Event Permit Application
Resolution

HERRIMAN UTAH

RESOLUTION NO. R -2023

A RESOLUTION GRANTING LOCAL CONSENT FOR A SINGLE EVENT PERMIT FOR A SERIES OF EVENTS HELD BY LEVY RESTAURANTS AT THE UTAH WARRIORS HOME GAMES

WHEREAS, the Herriman City Council ("Council") met in regular session on January 25, 2023, to consider, among other things, approving a resolution granting local consent for a single event permit; and

WHEREAS, Utah Code Ann. § 32B-9-201 provides among other things that to obtain a single event permit, a person shall submit to the Department of Alcoholic Beverage Control written consent of the local authority; and

WHEREAS, Utah Code Ann. §32B-1-102 defines Local Authority as the Council; and

WHEREAS, Levy Restaurants (the "Licensee") requested written consent of the local authority to hold a series of events for the Utah Warriors Rugby home games to be held on February 25, 2023, March 25, 2023, March 31, 2023, April 15, 2023, May 6, 2023, May 20, 2023, May 27, 2023, and June 10, 2023; and

WHEREAS, the Council finds that it is in the best interest of Herriman residents to grant the Licensee a single event permit.

NOW, THEREFORE, BE IT RESOLVED that the Council grants local consent to the Licensee to obtain a single event permit for the series of events to be held on February 25, 2023, March 25, 2023, March 31, 2023, April 15, 2023, May 6, 2023, May 20, 2023, May 27, 2023, and June 10, 2023, from the State, and authorizes and directs the City Manager or designee to execute and deliver to the Alcoholic Beverage Control Commission all forms and consents necessary to implement the intent of this resolution.

This Resolution, assigned No. R -2023 shall take effect immediately upon passage and acceptance as provided herein.

PASSED AND APPROVED by the Council of Herriman. Utah, this 25th day of January 2023.

HERRIMAN

_____

Lorin Palmer, Mayor

Jackie Nostrum, MMC
City Recorder

SINGLE EVENT PERMIT
Local Consent

PURPOSE: Local business licensing authority provides written consent to the Alcoholic Beverage Control Commission to issue an event permit to an organization for the purposes of storage, sale, offer for sale, furnish, or allow the consumption of an alcoholic product on the event premises. **Authority:** Utah Code 32B-9-201

Herriman, ☒ City ☐ Town ☐ County
Local business license authority

hereby grants its consent to the issuance of a temporary single event permit license to:

Applicant Entity/Organization: Levy Restaurants

Event Name: Utah Warriors Rugby Home Games

Event location address: 14787 Academy Pkwy (Street) Herriman (city) UT (state) 84096 (zip)

On the Event series (see attached) (dates) day(s) of _____ (month), _____ (year)

during the hours of 1:00 pm - 11:00 pm (define hours from and to), pursuant to the provision of Utah Code 32B-9 for

the sale of (Check all that apply): ☐ Beer ☐ Heavy Beer ☒ Wine ☐ Flavored Malt Beverages ☐ Liquor

We are recommending this entity as conducting a civic or community enterprise* ☒ Yes ☐ No

☐ NOT providing a recommendation

***As Part of local consent required by 32B-9-201 (1) (c), the locality <u>may</u> provide a recommendation as to whether the entity is conducting a civic or community enterprise.** A civic or community enterprise means a function that is in the nature of a temporary special event such as a social, business, religious, political, governmental, educational, recreational, cultural, charitable, athletic, theatrical, scholastic, artistic, or scientific event. A "civic or community enterprise" generally is a gathering that brings members of a community together for the common good. Single event permits may not be issued to or obtained by an entity or organization for the purpose of avoiding or attempting to avoid the requirement of state retail alcohol licensing.

_____
Authorized Signature

_____ _____
Name/Title Date

HOME SCHEDULE



WEEK 2	VS DALLAS JACKALS	**FEB 25 / 2PM** CHAMPIONS NIGHT
WEEK 6	VS TORONTO ARROWS	**MAR 25 / 2:30PM** UTAH BUILT
WEEK 7	VS NE FREE JACKS	**MAR 31 / 7:30PM** WOMEN IN SPORTS
WEEK 9	VS SEATTLE SEAWOLVES	**APR 15 / 7:30PM** FAMILY NIGHT
WEEK 12	VS SAN DIEGO LEGION	**MAY 6 / 7:30PM** YOUTH IN SPORTS
WEEK 14	VS HOUSTON SABERCATS	**MAY 20 / 7:30PM** WARRIORS SPIRIT
WEEK 15	VS RUGBY ATL	**MAY 27 / 7:30PM** MILITARY APPRECIATION
WEEK 17	VS CHICAGO HOUNDS	**JUN 10 / 8PM** COMMUNITY / FAN APPRECIATION

*ALL TIMES ARE MOUNTAIN TIME

HERRIMAN CITY

STAFF REPORT

DATE: January 17, 2023

TO: The Honorable Mayor and City Council

FROM: Jackie Nostrom

SUBJECT: Approval of the 2023 Amended Annual Meeting Schedule

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RECOMMENDATION:
Staff recommends approving a resolution amending the 2023 annual meeting schedule for Herriman City Council and Planning Commission as outlined in Exhibit A.

ISSUE BEFORE COUNCIL:
Does the Council want to remove the meeting notices from the Annual Meeting Schedule?

BACKGROUND/SUMMARY:
U.C.A §52-4-202 requires all public entities to adopt and publish an Annual Meeting Schedule if they hold regular meetings scheduled in advance over the course of a year.

On January 11, 2023, Herriman City Council voted to move the Herriman boards and commissions from Title 2 in the Herriman City Code to have the Friends of Herriman non-profit provide services set forth in the boards and commissions to avoid duplicating efforts between the respective committees.

DISCUSSION:
With the adoption of Ordinance No. 2023-01, Herriman City no longer will have the requirement to notice meetings scheduled by the Friends of Herriman non-profit organization and are looking to amend the Herriman City Annual Meeting Schedule to reflect the change.

ALTERNATIVES:
The Council may direct staff to work directly with the non-profit to notice meetings.

FISCAL IMPACT:
There is no fiscal impact to amend the annual meeting schedule

ATTACHMENTS:
Resolution
Amended Annual Meeting Notice

HERRIMAN CITY, UTAH
RESOLUTION NO. R -2023

A RESOLUTION OF THE CITY COUNCIL OF HERRIMAN CITY, UTAH AMENDING THE ANNUAL MEETING SCHEDULE FOR 2023

WHEREAS, the Utah State Legislature has declared that cities of the third, fourth or fifth class shall hold meetings at least once a month in the Utah State Code §10-3-502

WHEREAS, Herriman City has reached the classification of a third-class city by attainment of a population between 30,000 and 65,000 as defined in the Utah State Code §10-2-301;

WHEREAS, the Herriman City Code §1-6-4(A) requires regular meetings to be held on the second and fourth Wednesdays of each month, unless otherwise changed by the City Council as the need arises. In no case shall any less than one meeting per month be held in accordance with U.C.A. §10-3-502.

WHEREAS, The Utah State Legislature has further required public bodies which hold regular meetings scheduled in advance over the course of a year to give public notice of the annual meeting schedule, and to include the date, time and place of such meetings in Utah State Code §52-4-202.

NOW THEREFORE, **BE IT RESOLVED** by the City Council of Herriman City, Utah, on this 25th day of January, 2023, to amend the meeting schedule ("Exhibit A") as the official City Council, Commissions, and Committees meeting schedules for the calendar year 2023;

AND FURTHERMORE, RESOLVE to authorize its publication and posting according to U.C.A. 52-4-202

HERRIMAN CITY

_____
Lorin Palmer, Mayor

ATTEST:

_____
Jackie Nostrom, MMC
City Recorder

HERRIMAN CITY
ANNUAL MEETING SCHEDULE FOR 2023
Amended January 25, 2023

ANNUAL MEETING SCHEDULE FOR THE CITY COUNCIL

PUBLIC NOTICE is hereby given that the 2023 Annual Meeting Schedule of the City Council of Herriman, Utah is as follows:

REGULAR MEETING	DATE
January……	11 – 25
February……..	8 – 22
March……..	8 – 22 – 29*
April……	12 – 26
May…….	10 – 24 – 31*
June…….	14
July…….	12
August……	9 – 23 – 30*
September……..	13 – 27
October……..	11 – 25
November……..	8 – 29*
December……..	13

Regular meetings of the City Council are held in the City Hall Council Chambers, 5355 West Herriman Main Street, Herriman, Utah commencing at 7:00 p.m. on the second and fourth Wednesday of each month. Work Meetings begin at 5:30 p.m. in the Fort Herriman Conference Room and are held on the second and fourth Wednesday of each month. Meetings may be cancelled due to holidays or lack of agenda items. Call the City Offices at 801-446-5323 or check www.herriman.org for more information.

* Joint Meetings with the City Council and the Planning Commission will be held in the City Hall Community Room, 5355 West Herriman Main Street, Herriman, Utah commencing at 6:00 p.m. on the fifth Wednesday of each month. Meetings may be cancelled due to holidays or lack of agenda items.

ANNUAL MEETING SCHEDULE FOR THE PLANNING COMMISSION

PUBLIC NOTICE is hereby given that the 2023 Annual Meeting Schedule for the Planning Commission is as follows:

REGULAR MEETING	DATE
January……	4 – 18
February……...	1 – 15
March……...	1 – 15 – 29*
April……	5 – 19
May……..	3 – 17 – 31*
June……..	7 – 21
July……	5 – 19
August……...	2 – 16 – 30*
September…….	6 – 20
October…….	4 – 18
November…….	1 – 15 – 29*
December…….	6 – 20

Regular meetings of the Planning Commission are held in the City Hall Council Chambers, 5355 West Herriman Main Street, Herriman, Utah commencing at 7:00 p.m. on the first and third Wednesday of each month. Work Meetings begin at 6:00 p.m. in the Fort Herriman Conference Room. Meetings may be cancelled due to holidays or lack of agenda items. The City Council may periodically attend the Planning Commission meetings. Call Community Development at 801.446.5323 or check www.herriman.org for more information.

* Joint Meetings with the City Council and the Planning Commission will be held in the City Hall Community Room, 5355 West Herriman Main Street, Herriman, Utah commencing at 6:00 p.m. on the fifth Wednesday of each month. Meetings may be cancelled due to holidays or lack of agenda items.

ANNUAL MEETING SCHEDULE FOR THE YOUTH CITY COUNCIL

PUBLIC NOTICE is hereby given that the 2023 Annual Meeting Schedule of the Youth City Council of Herriman, Utah is as follows:

REGULAR MEETING	DATE
January……	12
February……..	9
March……..	
April……	13
May…….	11
June……	
July…….	
August……	10
September……..	14
October……..	12
November……..	9
December……..	14

Regular meetings of the Youth City Council are held in the City Hall Community Room, 5355 West Herriman Main Street, Herriman, Utah commencing at 4:00 p.m. on the second Thursday of each month. Call the City Offices at 801-446-5323 or check www.herriman.org for more information.

~~ANNUAL MEETING SCHEDULE FOR THE ARTS COUNCIL~~

~~**PUBLIC NOTICE** is hereby given that the 2023 Annual Meeting Schedule of the Arts Council of Herriman, Utah is as follows:~~

~~REGULAR MEETING~~	~~DATE~~
~~January……~~	~~12~~
~~February……..~~	~~9~~
~~March……..~~	~~9~~
~~April……~~	~~13~~
~~May……~~	~~11~~
~~June……~~	~~8~~
~~July……~~	~~13~~
~~August……~~	~~10~~
~~September……..~~	~~14~~
~~October……..~~	~~12~~
~~November……..~~	~~9~~
~~December……..~~	~~14~~

~~Regular meetings of the Arts Council are held in City Hall located at 5355 West Herriman Main Street, Herriman, Utah commencing at 7:00 p.m. on the second Thursday of each month. Call the City Offices at 801-446-5323 or check www.herriman.org for more information. Meetings may be cancelled due to holidays or lack of agenda items.~~

~~ANNUAL MEETING SCHEDULE FOR THE HEALTHY HERRIMAN~~

~~**PUBLIC NOTICE** is hereby given that the 2023 Annual Meeting Schedule of the Healthy Herriman, Utah is as follows:~~

~~REGULAR MEETING~~	~~DATE~~
~~January……~~	~~26~~
~~February……..~~	~~23~~
~~March……..~~	~~23~~
~~April……~~	~~27~~
~~May……~~	~~25~~
~~June……~~	~~29~~
~~July……~~	~~27~~
~~August……~~	~~24~~
~~September……..~~	~~28~~
~~October……..~~	~~26~~
~~November……..~~	
~~December……..~~	~~23~~

~~Regular meetings of the Healthy Herriman in Herriman City Hall located at 5355 West Herriman Main Street, Herriman, Utah commencing at 10:00 a.m. on the fourth Thursday of each month. Call the City Offices at 801-446-5323 or check www.herriman.org for more information. Meetings may be cancelled due to holidays or lack of agenda items.~~

~~ANNUAL MEETING SCHEDULE FOR THE HERRIMAN TRAILS COMMITTEE~~

~~**PUBLIC NOTICE** is hereby given that the 2023 Annual Meeting Schedule of the Healthy Herriman Trails Committee, Utah is as follows:~~

~~REGULAR MEETING~~	~~DATE~~
~~January……~~	~~5~~
~~February……..~~	~~2~~
~~March……..~~	~~2~~
~~April……~~	~~6~~
~~May……~~	~~4~~
~~June……~~	~~1~~
~~July……~~	~~6~~
~~August……..~~	~~3~~
~~September……~~	~~7~~
~~October……~~	~~5~~
~~November……~~	~~2~~
~~December……~~	~~7~~

~~Regular meetings of the Healthy Herriman Trails Committee will be held in Herriman City Hall located at 5355 West Herriman Main Street, Herriman, Utah commencing at 7:30 p.m. on the first Thursday of each month. Call the City Offices at 801-446-5323 or check www.herriman.org for more information. Meetings may be cancelled due to holidays or lack of agenda items.~~

Notice Provided to the Deseret News January , 2023
Posted in City Hall from January , 2023

HERRIMAN CITY

STAFF REPORT

DATE: January 11, 2023

TO: The Honorable Mayor and City Council

FROM: Michael Maloy, AICP, Planning Director

SUBJECT: Consideration of a request from Herriman 73 Partners LLC to amend the Herriman City Zoning Map for ±8.23 acres of property located approximately at 12400 S Mountain View Corridor from A-1-43 Agricultural to AMSD Auto Mall Special District. (City File No. Z2022-175)

RECOMMENDATION:

On January 4, 2023, the Planning Commission conducted a public hearing and voted 6-0 to forward a ***positive*** recommendation to the City Council to amend the Herriman City Official Zoning Map for property located at 12400 S Mountain View Corridor from ±8.23 Acres of A-1-43 (Agricultural) Zone to AMSD (Auto Mall Special District) Zone.

ISSUE BEFORE COUNCIL:

Should the City amend the Herriman City Official Zoning Map for property located at 12400 S Mountain View Corridor from ±8.23 Acres of A-1-43 (Agricultural) Zone to AMSD (Auto Mall Special District) Zone?

BACKGROUND/SUMMARY:

The property owner recently acquired the subject property and requested Herriman rezone it from A-1-43 (Agricultural) to AMSD (Auto Mall Special District). The property is within the Auto Mall MDA, which indicates the property should be zoned AMSD, not A-1-43.

The property owner also submitted applications for preliminary subdivision plat and site plan approval for the subject property, which are currently being reviewed by staff.

A zoning map amendment is a legislative decision. City Code requires the Planning Commission to hold a public hearing and make a recommendation to the City Council. The City Council then holds a public meeting and makes a final decision on the application.

Notice of a public hearing was published in three (3) places as required by State Code on December 22, 2022. Staff also mailed notices to all property owners within 300 feet of the subject property and affected entities. No public comments for or against the proposal have been received by staff or the Planning Commission during the public hearing process.

DISCUSSION:

City Code 10-5-8.E: A decision to amend the text of this title or the zoning map is a matter within the legislative discretion of the City Council as described in subsection 10-5-6A of [City Code]. In making an amendment, the following factors should be considered:

1. **Whether the proposed amendment is consistent with goals, objectives, and policies of the General Plan;**

   Staff Finding *– Because the property was formerly owned by the Utah Department of Transportation (UDOT) and was considered part of the Mountain View Corridor, the subject property does not have a current land use designation in the General Plan. However, all adjacent property is designated as General Retail. The City also recently approved the AMSD (Auto Mall Special District) MDA, which indicated the property should be rezoned to AMSD (as proposed).*

2. **Whether the proposed amendment is harmonious with the overall character of existing development in the vicinity of the subject property;**

   Staff Finding *– The proposed rezone is surrounded by AMSD zoning on the north, west, and south sides. There is commercial zoning further to the south between the AMSD Zone and 12600 S Mountain View Corridor (located on the east side of the subject property). As such, staff finds the proposal is harmonious with the overall character of existing development in the vicinity of the subject property.*

3. **The extent to which the proposed amendment may adversely affect adjacent property; and**

   Staff Finding *– Adjacent and surrounding parcels are currently zoned commercial. As such, the subject property is a prime location for commercial land uses, which will provide regional auto shopping services.*

4. **The adequacy of facilities and services intended to serve the subject property, including, but not limited to, roadways, parks and recreation facilities, police and fire protection, schools, stormwater drainage systems, water supplies, and wastewater and refuse collection.**

Staff Finding *– All affected City Departments, including Engineering, Public Works, Police, and Fire, have reviewed the proposal and found that the public facilities and services needed for the subject property are adequate or will be made adequate through the development permit review process.*

ALTERNATIVES:

The City Council may consider the following alternatives:

Alternatives	Pro – Considerations For	Con – Considerations Against
Approve rezone as submitted	**Approval facilitates commercial development within the city [RECOMMENDED ACTION]**	**None identified by the Planning Commission or staff**
Approve proposal with conditions	None identified by the Planning Commission or staff	A zoning condition would likely be unnecessary as the MDA already considered the impacts of rezoning the property to AMSD
Postpone proposal (with or without date)	The Council may identify additional issues that warrant further research and review based on the information provided. A motion to postpone should identify what additional information is required	Staff has not identified any findings that would warrant postponement; this alternative action would require additional staff time and cause a potentially unnecessary delay
Deny proposal	Following the public meeting, the Council may find that a motion for denial is warranted to protect the public interest. (Council should identify findings and applicable standards in motion.)	Staff has not identified any findings that warrant denial. Furthermore, this alternative would be inconsistent with prior actions of the Council

ATTACHMENTS:

A. Vicinity Map
B. Draft Ordinance

HERRIMAN, UTAH
ORDINANCE NO. 2023-___

Z2022-175 – AMENDING THE HERRIMAN CITY OFFICIAL ZONING MAP FOR ±8.23 ACRES OF PROPERTY LOCATED APPROXIMATELY AT 12400 S MOUNTAIN VIEW CORRIDOR FROM A-1-43 AGRICULTURAL TO AMSD AUTO MALL SPECIAL DISTRICT

WHEREAS, the City of Herriman, pursuant to the Utah State Code, may adopt an ordinance to establish land development regulations, which includes the adoption or amendment of a zoning map; and

WHEREAS, pursuant to Utah State Code, the Planning Commission shall prepare and recommend any zoning map amendments to the City Council; and

WHEREAS, pursuant to the City of Herriman Land Development Code, the Planning Commission shall hold a public hearing and provide reasonable notice at least ten (10) days prior to the said public hearing to recommend any zoning map amendments to the City Council; and

WHEREAS, a notice of Planning Commission public hearing on a zoning map amendment was mailed to all affected property owners and entities on December 21, 2022, for a meeting to be held on January 4, 2023, at 7:00 p.m.; and

WHEREAS, the Planning Commission made a recommendation for the zoning map amendment in a public meeting held on January 4, 2023, at 7:00 p.m. in the City Council Chamber; and

WHEREAS, pursuant to Herriman City Code, it is the responsibility of the City Council to consider the zoning map amendment and Planning Commission recommendation in a public meeting; and

WHEREAS, a City Council public meeting was held on January 25, 2023, at 7:00 p.m. to discuss the zoning map amendment; and

WHEREAS, the City Council finds that it is in the best interest of the citizens of Herriman City to adopt the zoning map amendment, which was recommended by the Planning Commission and documented in City File No. Z2022-175;

NOW, THEREFORE, be it ordained by the Herriman City Council approval to amend the Herriman City Official Zoning Map for ±8.23 acres of property located approximately at 12400 S Mountain View Corridor from A-1-43 Agricultural to AMSD Auto Mall Special District as described in Exhibit A.

This Ordinance assigned Ordinance No. 2023-____, shall take immediate effect as soon as it shall be published or posted as required by law and deposited and recorded in the office of the City's recorder.

PASSED AND APPROVED this 25th day of January 2023.

HERRIMAN CITY

_____

ATTEST: **Mayor Lorin Palmer**

_____

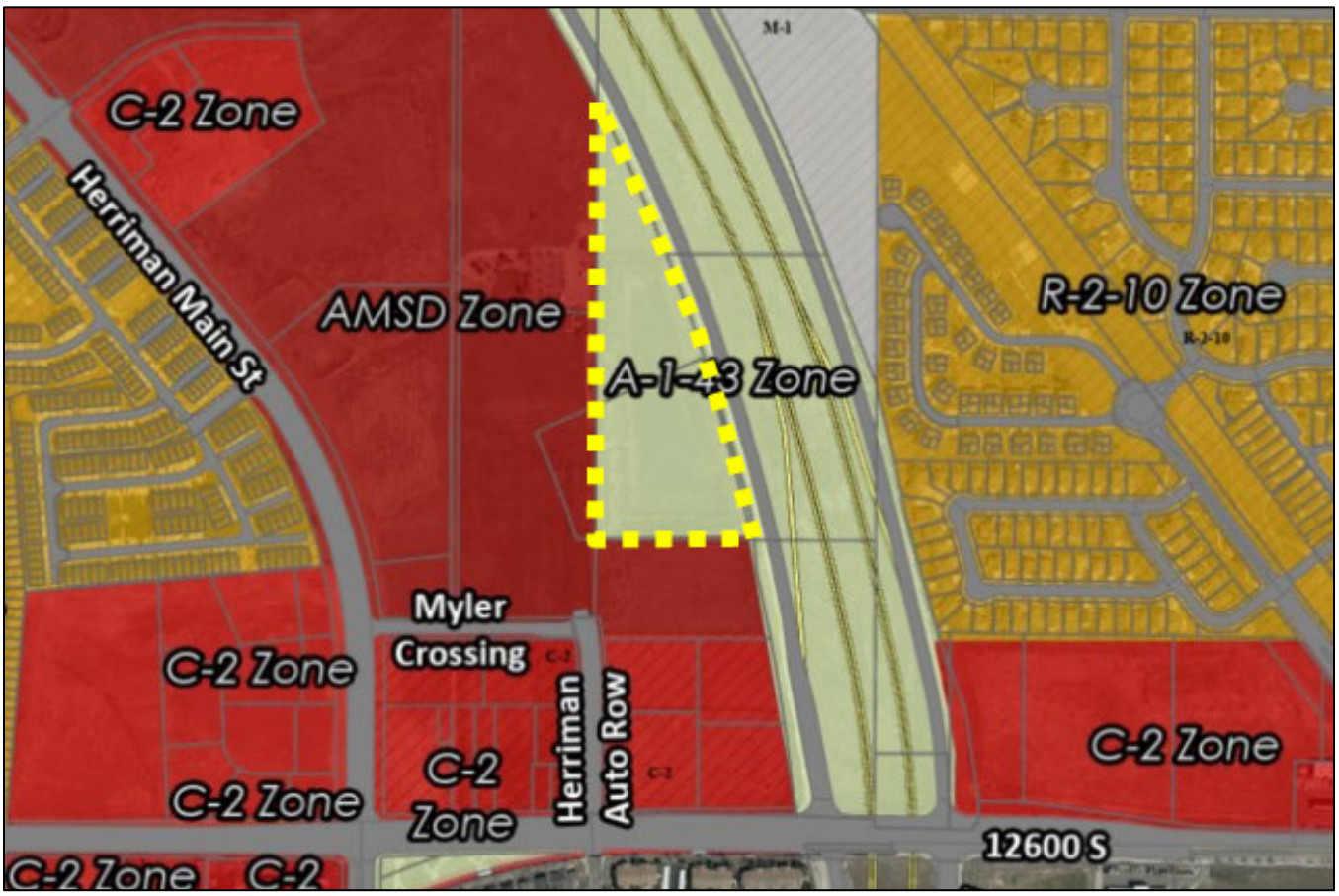
Jackie Nostrom, City Recorder

Exhibit A

A parcel of land situated within the Southwest Quarter of Section 25, Township 3 South, Range 2 West, Salt Lake Base and Meridian, located in Herriman City, County of Salt Lake, State of Utah, and being more particularly described as follows:

Beginning at the southwest corner of said tract of land, which corner is 224.67 feet N 89º53'36" West along the quarter section line and 268.31 feet S 37º30'36" East and 1,523.14 feet South and 843.12 feet West from the East Quarter corner of said Section 25, and running thence North 1,318.05 feet along the westerly boundary line of said tract of land to the westerly right of way and limited access line of the existing highway State Route 85 (Mountain View Corridor) at a point in a 6,060.00 foot radius non-tangent curve to the right (Note: Radius bears South 63º05'21" West) said point is 240.00 feet radially distant westerly from the Mountain View Corridor Right of Way Control Line opposite approximate engineer station 1156+65.44; thence along said westerly right of way and limited access line the following two (2) courses: (1) southerly 1,323.04 feet along the arc of said curve concentric with said control line, through a central angle of 12º30'32" (Note: Chord to said curve bears South 20º39'23" East for a distance of 1,320.40 feet) to a point opposite engineer station 1142+90.00; thence (2) South 07º16'59" East for a distance of 1,320.40 feet) to a point opposite engineer station 1142+90.00; thence (2) South 07º16'59" East 83.20 feet to the southerly boundary line of said tract of land; thence West 476.34 feet along said southerly boundary line to the point of beginning.

The above described parcel of land contains 358,394 square feet in area or 8.228 acres, more or less.



HERRIMAN CITY

STAFF REPORT

DATE: January 18, 2023

TO: The Honorable Mayor and City Council

FROM: Todd Sheeran

SUBJECT: Consideration of proposed amendments to Chapters 10-3, 10-16, and 10-25 of the Land Development Code and enacting Title 11 to define and regulate Residential Treatment Facilities for the Disabled.
Applicant: Herriman City
File No: Z2022-172

RECOMMENDATION:

Staff recommends the Council approve the attached Ordinance.

ISSUE BEFORE COUNCIL:

Should the City approve the proposed amendments in Title 10 and enact Title 11 to modify and improve the regulation of Residential Treatment Facilities for the Disabled?

BACKGROUND/SUMMARY:

Herriman is a growing city with an estimated population of 58,198 (2021), with 85% of houses being owner-occupied. See U.S. Census Bureau, Attachment A. The purpose of the proposal is to ensure compliance with Utah State Code and applicable Federal Regulations, as well as the protection of the health, safety, and welfare of the general public.

DISCUSSION:

Following the review of applicable codes, regulations, and case law, the City Attorney's Office drafted a series of amendments that will improve the administrative regulations for Residential Treatment Facilities for the Disabled in compliance with the Fair Housing Act Amendments of 1988. See Draft Ordinance, Attachment B.

Specifically, the proposed text amendment:

· Repeals Chapter 10-25 and enacts Title 11.
· Adds, removes, and revises several definitions.

· Clarifies the process to obtain a business license.
· Allows up to eight unrelated disabled persons to reside in a facility. See Supporting Research, Attachment C.
· Updates the process for a person or entity to request a reasonable accommodation, which will be decided by a hearing officer with experience and knowledge of applicable laws.

The Planning Commission reviewed the draft amendment and forwarded a positive recommendation with one minor change.

ALTERNATIVES:
· Option 1 – Modify the proposed text amendment.
· Option 2 – Deny the proposed text amendment.

FISCAL IMPACT:

ATTACHMENTS:
A. U.S. Census Bureau B. Draft Ordinance C. Supporting Research

An official website of the United States government

United States® Census Bureau

QuickFacts

Herriman city, Utah

QuickFacts provides statistics for all states and counties, and for cities and towns with a ***population of 5,000 or more***.

Table

All Topics	Herriman city, Utah
Population Estimates, July 1 2021, (V2021)	**58,198**
PEOPLE	
Population	
Population Estimates, July 1 2021, (V2021)	**58,198**
Population estimates base, April 1, 2020, (V2021)	55,312
Population, percent change - April 1, 2020 (estimates base) to July 1, 2021, (V2021)	5.2%
Population, Census, April 1, 2020	55,144
Population, Census, April 1, 2010	21,785
Age and Sex	
Persons under 5 years, percent	10.6%
Persons under 18 years, percent	39.2%
Persons 65 years and over, percent	4.5%
Female persons, percent	51.7%
Race and Hispanic Origin	
White alone, percent	86.7%
Black or African American alone, percent (a)	1.7%
American Indian and Alaska Native alone, percent (a)	0.5%
Asian alone, percent (a)	1.7%
Native Hawaiian and Other Pacific Islander alone, percent (a)	0.4%
Two or More Races, percent	7.4%
Hispanic or Latino, percent (b)	9.0%
White alone, not Hispanic or Latino, percent	83.0%
Population Characteristics	

Veterans, 2016-2020	1,089
Foreign born persons, percent, 2016-2020	4.6%
Housing	
Housing units, July 1, 2021, (V2021)	X
Owner-occupied housing unit rate, 2016-2020	85.0%
Median value of owner-occupied housing units, 2016-2020	$414,600
Median selected monthly owner costs -with a mortgage, 2016-2020	$1,943
Median selected monthly owner costs -without a mortgage, 2016-2020	$546
Median gross rent, 2016-2020	$1,368
Building permits, 2021	X
Families & Living Arrangements	
Households, 2016-2020	12,211
Persons per household, 2016-2020	3.70
Living in same house 1 year ago, percent of persons age 1 year+, 2016-2020	83.9%
Language other than English spoken at home, percent of persons age 5 years+, 2016-2020	7.9%
Computer and Internet Use	
Households with a computer, percent, 2016-2020	100.0%
Households with a broadband Internet subscription, percent, 2016-2020	95.9%
Education	
High school graduate or higher, percent of persons age 25 years+, 2016-2020	97.7%
Bachelor's degree or higher, percent of persons age 25 years+, 2016-2020	38.5%
Health	
With a disability, under age 65 years, percent, 2016-2020	5.1%
Persons without health insurance, under age 65 years, percent	⚠ 3.4%
Economy	
In civilian labor force, total, percent of population age 16 years+, 2016-2020	75.3%
In civilian labor force, female, percent of population age 16 years+, 2016-2020	64.9%
Total accommodation and food services sales, 2017 ($1,000) (c)	18,815
Total health care and social assistance receipts/revenue, 2017 ($1,000) (c)	18,705
Total transportation and warehousing receipts/revenue, 2017 ($1,000) (c)	14,529
Total retail sales, 2017 ($1,000) (c)	129,939
Total retail sales per capita, 2017 (c)	$3,315
Transportation	
Mean travel time to work (minutes), workers age 16 years+, 2016-2020	28.3
Income & Poverty	
Median household income (in 2020 dollars), 2016-2020	$102,096

Per capita income in past 12 months (in 2020 dollars), 2016-2020	$32,262
Persons in poverty, percent	⚠ 3.5%

BUSINESSES

Businesses	
Total employer establishments, 2020	X
Total employment, 2020	X
Total annual payroll, 2020 ($1,000)	X
Total employment, percent change, 2019-2020	X
Total nonemployer establishments, 2019	X
All employer firms, Reference year 2017	374
Men-owned employer firms, Reference year 2017	225
Women-owned employer firms, Reference year 2017	59
Minority-owned employer firms, Reference year 2017	S
Nonminority-owned employer firms, Reference year 2017	328
Veteran-owned employer firms, Reference year 2017	S
Nonveteran-owned employer firms, Reference year 2017	337

GEOGRAPHY

Geography	
Population per square mile, 2020	2,549.1
Population per square mile, 2010	1,075.0
Land area in square miles, 2020	21.63
Land area in square miles, 2010	20.27
FIPS Code	4934970

About datasets used in this table

Value Notes

⚠ Estimates are not comparable to other geographic levels due to methodology differences that may exist between different data sources.

Some estimates presented here come from sample data, and thus have sampling errors that may render some apparent differences between geographies statistically indistinguishable. Click the Quick Info ⓘ icon to
row in TABLE view to learn about sampling error.

The vintage year (e.g., V2021) refers to the final year of the series (2020 thru 2021). Different vintage years of estimates are not comparable.

Users should exercise caution when comparing 2016-2020 ACS 5-year estimates to other ACS estimates. For more information, please visit the 2020 5-year ACS Comparison Guidance page.

Fact Notes

- **(a)** Includes persons reporting only one race
- **(c)** Economic Census - Puerto Rico data are not comparable to U.S. Economic Census data
- **(b)** Hispanics may be of any race, so also are included in applicable race categories

Value Flags

- **-** Either no or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest or upper open ended distribution.
- **F** Fewer than 25 firms
- **D** Suppressed to avoid disclosure of confidential information
- **N** Data for this geographic area cannot be displayed because the number of sample cases is too small.
- **FN** Footnote on this item in place of data
- **X** Not applicable
- **S** Suppressed; does not meet publication standards
- **NA** Not available
- **Z** Value greater than zero but less than half unit of measure shown

QuickFacts data are derived from: Population Estimates, American Community Survey, Census of Population and Housing, Current Population Survey, Small Area Health Insurance Estimates, Small Area Income and Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits.

ORDINANCE NO_____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF HERRIMAN, SALT LAKE COUNTY, STATE OF UTAH, AMENDING CHAPTER 10-3, CHAPTER 10-16, AND CHAPTER 10-25 OF THE CITY CODE AND ENACTING TITLE 11 OF THE HERRIMAN CITY CODE.

PART I

FINDINGS

1. The City recognizes, through its observation, study and experience, as the United States Supreme Court recognized in *Village of Belle Terre v. Boraas*, 416 U.S. 1, 9, 94 S.Ct. 1536, 1541, 39 L.Ed.2d 797 (1974), that group living, including "[t]he regimes of boarding houses, fraternity houses, and the like present urban problems." Among other things, with such living arrangements (hereafter "Group Living Arrangements"), "[m]ore people occupy a given space; more cars rather continuously pass by; more cars are parked; noise travels with crowds." *Id.*

2. The U.S. Supreme Court, in an attempt to help clarify the appropriate role of local government with respect to community planning has noted:

> "The values it represents are spiritual as well as physical, aesthetic as well as monetary. It is within the power of the legislature to determine that the community should be beautiful as well as healthy, spacious as well as clean, well balanced as well as carefully patrolled."

Berman v. Parker, 348 U.S. 26, 33, 75 S. Ct. 98, 102-03, 99 L.Ed. 27 (1954).

3. The United States Supreme Court and federal appellate courts continue to recognize that "[l]and use planning and the adoption of land use restrictions constitute some of the most important functions performed by local government." *Bryant Woods Inn, Inc. v. Howard County*, 124 F.3d 597, 603 (4th Cir. 1997) (citing *FERC v. Mississippi*, 456 U.S. 742, 768 n. 30, 102 S.Ct. 2126, 2141 n. 30, 72 L.Ed.2d 532 (1982) ("regulation of land use is perhaps the quintessential state activity")). These courts continue to recognize that local land use ordinances may legitimately be utilized "to preserve 'the character of neighborhoods, securing "zones where family values, youth values, and the blessings of quiet seclusion and clean air make the area a sanctuary for people."'" *Id.* (quoting *City of Edmonds v. Oxford House, Inc.*, 514 U.S. 725, 732-33, 115 S.Ct. 1776, 1780, 131 L.Ed.2d 801 (1995) (quoting *Village of Belle Terre v. Boraas*, 416 U.S. 1, 9, 94 S.Ct. 1536, 1541, 39 L.Ed.2d 797 (1974))).

4. According to the latest U.S. Census data for Herriman City, the average household size is 3.7 persons per household. And, for the years 2016-2020, 83.9% of individuals living in Herriman City lived in the same house for 1 year or more.

5. Among other things, Group Living Arrangements tend to introduce transiency, congestion, increased traffic, increased parking and other urban problems and challenges into communities.

6. Regulation of Group Living Arrangements serves to preserve housing densities consistent with both reality (in terms of the average composition of single family households in Herriman City) and the goals and objectives of the General Plan. It also promotes permanence and stability in neighborhood composition.

7. Regulating Group Living Arrangements is an essential aspect of fostering the goals of the General Plan and Herriman City's zoning scheme, which seeks uncrowded, stable (non-transitory) single family neighborhoods.

8. The City also recognizes the need, in certain demonstrable circumstances, for individuals with handicaps or disabilities to live in a Group Living Arrangements. For example, one of the most common types of Group Living Arrangements for individuals with handicaps or disabilities is a sober living home, Oxford House, or recovery residence where unrelated persons with the disability of alcohol or drug addiction live together in a single family dwelling. The City has consulted experts in the field, expert reports and testimony submitted in other jurisdictions, and considered the scholarly literature on these type of facilities and recognizes the need to provide some type of accommodation to them.

9. In order to fulfill the purposes of the General Plan while accommodating the demonstrable needs of individuals with handicaps or disabilities to live in Group Living Arrangements, which are generally prohibited for individuals without disabilities or handicaps, the City desires to clarify its ordinances and define its practices and policies with regard to these issues.

WHEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF HERRIMAN CITY, UTAH, AS FOLLOWS:

PART II

TEXT OF ORDINANCE

SECTION 1. Chapter 10-3 of the City Code is hereby amended as follows:

A. The following definition of "**DISABILITY**" is added to Section 10-3-5:

> DISABILITY: With respect to a person, a physical or mental impairment which substantially limits one or more of such person's major life activities, a record of having such an impairment, or being regarded as having such an impairment; but does not include a person engaged in the current illegal use of, or addiction to, any federally-controlled substance, as defined in Section 102 of the Controlled Substances Act, 21 U.S.C. Sec. 802.

B. The following definition of "**GROUP LIVING ARRANGEMENT**" is added to Section 10-3-6.B:

> GROUP LIVING ARRANGEMENT: A group living or congregate living arrangement where groups of more than four unrelated persons live together in a single dwelling, including, but not limited to, an assisted living facility, boarding house, congregate living facility, protected living facility, residential facility for persons with a disability, boarding school, dormitory,

student housing, fraternity, club, institutional group, half-way house, convent, monastery, or other similar group living or congregate living arrangement of unrelated persons. A Group Living Arrangement does not include clinics, medical or dental; hospital(s) or hospital/clinic.

C. The definition of "**RESIDENTIAL FACILITY FOR PERSONS WITH A DISABILITY**" in Section 10-3-6.B is repealed in its entirety and replaced with the following:

RESIDENTIAL FACILITY FOR PERSONS WITH A DISABILITY: Any facility or dwelling that houses or seeks to provide housing to five (5) or more persons with a disability.

D. The definition of "**SCHOOL, THERAPEUTIC**" in Section 10-3-6.B is repealed and deleted in its entirety.

SECTION 2. Chapter 10-16 (Table of Uses) is hereby amended as follows:

A. The list of prohibited uses in Section 10-16-1 shall include the following:

Group Living Arrangement(s) (unless a more specific type of Group Living Arrangement is expressly allowed as a conditional or permitted use in the table of uses below).

B. The term "School, boarding" is deleted from the table of uses in Section 10-16-1.

C. The term "School, therapeutic" is deleted from the table of uses in Section 10-16-1.

SECTION 3. Chapter 10-25 of the City Code is repealed in its entirety.

SECTION 4. Title 11 of the City Code is hereby enacted as follows:

11-10 General Provisions
11-10-010 Intent And Purpose
11-10-020 Findings
11-10-030 Scope
11-10-040 Definitions

11-10-010 Purpose

The purpose of this Title is to provide flexibility in the application of the City Code requirements for the disabled when flexibility is necessary to eliminate barriers to equal housing opportunities. This Title is intended to facilitate compliance with federal and state fair housing laws and promote housing opportunities for disabled residents of the City.

An additional purpose of this Title is to establish a procedure whereby disabled persons seeking equal access to housing can make requests for reasonable accommodations in policies, regulations, and practices when these accommodations are necessary to afford the disabled equal opportunity to use and enjoy a dwelling.

11-10-020 Findings

The City finds that increasing the number of unrelated persons who may live together in a single dwelling from four (4) unrelated persons to eight (8) unrelated disabled persons in a residential dwelling is reasonable and necessary to help ameliorate the most common handicaps and disabilities encountered by the City's residents.

The City further finds that it is reasonable and necessary to provide a mechanism whereby the disabled can request further accommodations through the processes outlined in this Title.

11-10-030 Scope

If any facility, dwelling, residence, congregate living, or other housing arrangement meets the definition of a residential facility for persons with a disability in Section 10-3-6.B of the City Code, this Title shall govern and shall supersede any other conflicting provision of City Code. The requirements of this Title shall not be construed to prohibit or limit other applicable provisions of this Title, this Code, or other laws.

11-10-040 Definitions

The words and phrases utilized in this Title are defined in Chapter 10-3 of the City Code. Additionally, for purposes of this Title, the terms defined below shall apply. In the event of any conflict between the definitions in this Section and federal or state definitions, the federal and state definitions shall control.

BUSINESS LICENSE OFFICIAL: Is defined in City Code § 3-1-1.

FHA: Means the Fair Housing Amendments Act of 1988, codified as 42 USC § 3601, et seq.

RFPD: Means a residential facility for persons with a disability as defined in Section 10-3-6.B of the City Code.

11-20 Provisions Applicable to RFPDs
11-20-010 Residential Zone Regulations
11-20-020 General Regulations

11-20-010 Residential Zone Regulations

A. Permitted Uses: The table of permitted, conditional, or prohibited uses for residential zones is found in Section 10-16-1 of the City Code. An RFPD shall be a permitted use in any zone where a specific subtype of Group Living Arrangement is shown in the Table of Uses as a permitted or conditional use, subject to the same development standards as are applied to Group Living Arrangements in this Title and Title 10. In determining whether a Group Living Arrangement is allowed, only those specific uses and types of Group Living Arrangements currently and presently allowed by ordinance and shown in Table 10-16-1 shall be considered. Variances, prior accommodations, pre-existing noncomplying structures, or pre-existing nonconforming uses shall not be considered.

B. Pre-Existing Nonconforming Use/Noncomplying Structure. Any lawfully created pre-existing nonconforming use(s) or noncomplying structure(s) that are in conflict with this Title or any other provision of the City Code may be continued as allowed by City Code. A nonconforming use, noncomplying structure, nonconforming lot, or other nonconformity may not be changed except in conformance with the provisions of this Title. Such changes requiring conformance with the provisions of this Title shall include, but not be limited to, a change in state licensure, additional state licensure(s), an increase in resident census size, or any other expansion of or change in use.

C. Maintain Residential Character of Facility: An RFPD located in a residential zone shall be capable of use as a facility without structural or landscaping alterations that would change the structure's residential character or appearance. Any new or remodeled structure constructed for use as a facility shall be of a size, scale, and design that is in harmony with other residential uses in the vicinity and shall not create a fundamental change in the residential character of the neighborhood in which it is proposed to be located.

D. Occupying Restrictions: The RFPD shall not house more than eight (8) persons with a disability.

E. Voluntary Residency: Residency in the facility shall be on a strictly voluntary basis and not a part of, or in lieu of, confinement, rehabilitation, or treatment in either a correctional facility or a condition of probation or parole. A facility shall not include any persons referred by the Utah state department of corrections or any adult or juvenile court.

F. Distance Restrictions. No Group Living Arrangement shall be located within one-half (1/2) mile of another Group Living Arrangement. Measurement shall be in a

straight line between the closest property lines of the lots/parcels, whether located in the City, County, State, or a surrounding municipality.

11-20-020 General Regulations

Each RFPD shall comply with the following:

A. Conform to Applicable State and Local Requirements: Each RFPD shall comply with all applicable state and local building, safety, health, and zoning requirements.

B. Conform to Relevant State Standards and Have Appropriate Licensure: Each RFPD shall comply with all applicable federal and state, laws, standards, and requirements, including state licensure, if applicable and required.

C. Provide Adequate Parking: The minimum number of parking spaces required for an RFPD shall be the same as for similar structures located in the same zone in which the facility is located. Off-street parking shall be adequate to serve the needs of residents, visitors, staff members, and others. Additional parking may be required based on the number of residents occupying the facility, the number of residents who are reasonably expected to maintain a vehicle at the facility, the reasonably anticipated number of visitors, number of staff members who will be serving the residents, the number of vendors that will serve the facility, and any other factors that may increase or impact parking demands for the facility.

D. No Tenants Who Constitute Direct Threat to Health or Safety: The RFPD shall not be made available to or occupied by any person whose tenancy would constitute a direct threat to the health or safety of other individuals or whose tenancy would result in substantial physical damage to the property of others.

11-30 Business License
11-30-010 Business License Required
11-30-020 Review Authority And Decision
11-30-030 License Change, Transferability, And Revocation

11-30-010 Business License Required

An applicant shall comply with and apply for a business license in accordance with Title 3 before an RFPD can operate and house the disabled.

11-30-020 Review Authority And Decision

A. Incomplete Applications: If an applicant submits an incomplete application, the Business License Official shall not approve the application and shall send notice to the applicant that the application was incomplete.

B. Complete Applications: Once an applicant submits a complete application and payment of its associated fee, the Business License Official shall provide written approval (or denial) of the business license within a reasonable amount of time. An application shall be approved if it meets the requirements of this Title and Title 3.

11-30-030 License Change, Transferability, And Revocation

A business license or facility regulated under this Title:

A. is not transferable; and

B. may be denied, suspended, or revoked in accordance with Title 3, Chapter 1 of the City Code.

11-40 Reasonable Accommodation
11-40-010 Requesting A Reasonable Accommodation
11-40-020 Application Requirements
11-40-030 Review Authority
11-40-040 Hearing Process and Decision

11-40-010 Requesting A Reasonable Accommodation

An applicant may request a reasonable accommodation pursuant to federal and state law and this Chapter. A requested accommodation may be made concurrently with a complete business license application.

11-40-020 Application Requirements

A. Application Process: A person requesting a reasonable accommodation shall submit the following to the City Recorder by email, hand delivery or certified mail:

1. A complete application that includes:

a. Property Information: Address, parcel number, current zoning, and name of the property owner.

b. Applicant Information: Name, address, phone number, and email address of the applicant.

c. Supporting Information:

(1) The specific regulation, policy, or procedure from which an accommodation is sought and/or for which deviation or waiver is requested.

(2) A document that provides a detailed explanation of why the requested accommodation is warranted under federal and/or state law, including a description how the person(s) is handicapped under the FHA, and analysis with evidence, legal authorities, and other information showing that the accommodation is reasonable and necessary to afford the handicapped/disabled person(s) an equal opportunity to use and enjoy the residential dwelling. Any arguments and/or evidence not submitted with the application may not be presented at the hearing.

(3) The number of residents and employees that will have vehicles at the property and a site plan showing where the vehicles will be parked at the property.

(4) Whether the owner/operator of the RFPD or applicant has other facilities for the disabled and, if so, a description and

copy of any complaints from neighbors, incident reports from a local police department, or investigations, citations, notices of violation(s) or complaints received from any federal, state, or local agencies, etc. relating to licensure, parking, traffic, a direct threat to the health or safety of other persons, or substantial physical damage to the property of others.

(5) An accurate description of the type of program(s), treatment(s), therapies, and/or services, if any, that will be provided to the residents of the RFPD.

(6) The category of state licensure, if any, the RFPD will have.

(7) An accurate summary and/or description of the RFPD's admissions criteria and standards.

d. Payment of applicable fees in accordance with the City's adopted fee schedule.

e. The RFPD's business license application.

f. Any additional evidence, including the following:

(1) a complete statement and summary of all testimony and opinions the witnesses, including the applicant and any expert witnesses, will express at the hearing and the basis and reasons for them;

(2) the exhibits, evidence, facts or data considered and relied upon by the applicant or any witness(es) in forming its/their opinion and/or argument;

(3) a copy of any exhibits or other evidence that will be used at the hearing;

(4) the expert witness's qualifications, including a list of all publications authored in the previous 10 years; and a list of all other cases in which, during the previous 4 years, the expert witness testified as an expert, including testimony at hearings, trial or by deposition.

B. Hearing.

1. Submission to Hearing Officer: Once an applicant submits a complete application and payment of its associated fee to the City Recorder as required by this Chapter, the City Recorder shall submit the complete application to a Hearing Officer.

11-40-030 Review Authority

A. Hearing Officer: The City may contract with a neutral Hearing Officer before or at the time a reasonable accommodation request is made.

B. The Hearing Officer shall:

1. have demonstrable experience as a Hearing Officer and knowledge of the FHA, Americans with Disabilities Act, Rehabilitation Act and/or applicable anti-discrimination laws;

2. act in a quasi-judicial manner and make a decision on whether the applicant shall receive a reasonable accommodation;

3. consider the reasonable accommodation application and the City's responsive briefing;

4. conduct and oversee an informal hearing on the application; and

5. issue a written decision, including detailed findings and conclusions, that affirms, affirms in part, denies, or denies in part the request for accommodation.

11-40-040 Hearing Process and Decision

A. Scheduling of the Hearing: Within ten (10) days after the Hearing Officer's receipt of the complete accommodation application from the City Recorder, the Hearing Officer shall contact the applicant and the City or its representative to schedule the time, date and place for the hearing. The Hearing Officer shall schedule the hearing for the time, date, and place mutually agreed by the City and the applicant and, if the City and the applicant cannot agree, at a time, date, and place determined by the Hearing Officer.

B. No Ex Parte Communications. The applicant, City, and their representatives shall avoid ex parte communications with the Hearing Officer. The applicant, City, and their representatives shall include each other when communicating with the Hearing Officer about the information required by this Chapter and when transmitting the information required by this Chapter to the Hearing Officer.

C. City Response to the Application: At least five (5) business days before the hearing, the City may, at its discretion, file a responsive brief regarding the City's position on whether the requested accommodation should be granted or denied, in whole or in part. The brief should address whether the requested accommodation is warranted under federal and/or state law, including an analysis of whether the RFPD's residents are handicapped under the FHA, and contain analysis with evidence, legal authorities, and other information addressing whether

the accommodation is reasonable and necessary to afford the handicapped/disabled person(s) an equal opportunity to use and enjoy the residential dwelling. Any arguments and/or evidence not submitted with the City's response may not be presented at the hearing. The City's response shall also include the following:

1. a complete statement and summary of all testimony and opinions the witnesses, including the City's witness(es) and any expert witnesses, will express at the hearing and the basis and reasons for them;

2. the exhibits, evidence, facts or data considered and relied upon by the City or any witness(es) in forming its/their opinion and/or argument;

3. a copy of any exhibits or other evidence that will be used at the hearing;

4. the expert witness's qualifications, including a list of all publications authored in the previous 10 years; and a list of all other cases in which, during the previous 4 years, the expert witness testified as an expert, including testimony at hearings, trial or by deposition.

D. Informal Hearing Procedures:

1. The hearing will be a public meeting but shall not be open to participation by the public. The applicant and the City may bring their attorneys or witnesses, if so desired.

2. The hearing shall be conducted on an informal basis. The Utah Rules of Evidence or Federal Rules of Evidence shall not apply.

3. Each of the parties may make an opening statement, if so desired. The applicant shall be allowed to make its presentation. The City shall then be allowed to make its presentation. Each of the parties may then make a closing statement, if so desired. Each of the parties may question any witnesses. The Hearing Officer may ask additional questions related to the requested accommodation to the applicant, witnesses, or the City and may adjust or modify the hearing procedures in the Hearing Officer's discretion.

4. A witness, including the applicant, may only speak at the hearing if a witness statement for that witness was submitted in the application (if by the applicant) or responsive brief (if by the City).

5. The hearing shall be recorded by the City Recorder through audio and/or video means.

6. A transcript of the hearing may be requested by any party to the hearing at its/their own expense.

E. Burden of Proof: The applicant bears the burden of proving that its residents are handicapped and/or have a disability and that the reasonable accommodation is necessary and reasonable for disabled persons to enjoy an equal opportunity to use the dwelling.

F. Decision: The Hearing Officer shall issue a written decision on the accommodation application and deliver the decision to the applicant, City, and City Recorder within 14 days of the hearing date. A decision of a Hearing Officer is a quasi-judicial decision and shall take effect on the date when the Hearing Officer issues a written decision. The reasonable accommodation decision shall not be deemed a variance or to run with the land.

G. Findings and Conclusions: The Hearing Officer's written decision shall make written findings and conclusions addressing the following:

1. Whether the housing, which is the subject of the request for reasonable accommodation, will be used by one or more persons with a handicap or disability.

2. Whether the requested accommodation is necessary to afford such persons an equal opportunity to use and enjoy a dwelling.

3. Whether the requested accommodation is reasonable.

4. Whether tenancy of the property proposed to be occupied by such persons would constitute a direct threat to the health or safety of other persons or result in substantial physical damage to the property of others.

11-50 Appeals
11-50-010 Business License Appeal
11-50-020 Reasonable Accommodation Appeal

11-50-010 Business License Appeal
A person may appeal a business license approval, approval with conditions, or denial in accordance with Title 3.

11-50-020 Reasonable Accommodation Appeal
A person with standing who is aggrieved by the Hearing Officer's decision in City Code § 11-40-040 may file for relief in any court of competent jurisdiction within thirty (30) days of the Hearing Officer's decision.

11-60-010 Nontransferable
Any use permitted by this Chapter, including a use and/or reasonable accommodation approved by the Hearing Officer is nontransferable, does not run with the land, and shall terminate if any of the following occur:

A. Cessation of Use: Persons with disabilities or handicaps no longer reside at the facility and operations have ceased for a period of more than sixty (60) days not precipitated or caused by a force majure.

B. Termination of Licensure: If the RFPD is required to have state licensure, the termination or revocation of such licensure by the State of Utah or any of its departments or divisions.

C. Noncompliance: The RFPD fails to comply with the requirements set forth in Title 3, this Chapter, and/or fails to comply with any conditions of accommodation issued by the Hearing Officer.

PASSED AND ORDERED PUBLISHED BY THE CITY COUNCIL OF HERRIMAN CITY, UTAH, THIS ____ DAY OF _____ 20__.

_____
The Mayor

ATTEST:

_____
City Recorder

A Review of Optimal Group Size and Modularisation or Continuous Entry Format for Program Delivery

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Executive Summary

Program mangers and administrators are seeking methods of more efficiently delivering correctional programs while at the same time not compromising program quality or public safety. Two methods of potentially increasing the number of offenders who complete programs that have been proposed is increasing group size and the delivery of programs in a continuous entry or modularised format.

This literature review on group size found that there were very few empirical studies that would provide strong evidence of the optimal group size; however, practitioners from diverse program areas have consistently recommended that group size should not exceed 6-8 participants. Very rarely does a researcher or practitioner recommend a group size above 10 participants.

It is possible that educational or didactic programs may be delivered to larger groups without compromising program quality and effectiveness. With larger groups, administrators should carefully monitor facilitators for the potential of burn out.

Writers recommending the number of participants in a group acknowledge that the optimal size of the group should depend on the goals of the program, the theoretical orientation of the program, the profile of the participants and the requirements of the agency.

Correctional programs are based upon cognitive-behavioural principles and require that participants be actively involved in practicing skills and receiving feedback from facilitators. Large groups make this requirement for practice very difficult.

Correctional programs in CSC address the multiple needs of offenders who have learning and behavioural problems. They come from diverse ethnic and offence backgrounds. Given the challenges of this population, when there is only one facilitator, the group size should not exceed 10 offenders. For very high needs groups, the group size should be smaller than this.

Despite its administrative challenges, the modularised format does provide flexibility and the ability to tailor the program delivery to offender need. Based on interviews and recommendations from program deliverers the following circumstances are those in which the format works best:

- When the group is relatively homogenous, i.e. participants have similar offence histories or similar criminogenic needs. (It should be noted however that the Community Maintenance Program (CMP) is able to integrate offenders from diverse backgrounds into a continuous entry program);
- When the group participants are not high risk or high need;
- When the participants come from a previous program background so that the material is not entirely new to them;
- When the program is offered in the community.

Modularised or continuous entry format may be too difficult to implement for the high risk and high need offenders who take programs at institutional sites. The community sites have had success in the delivery of the Community Maintenance Program which may be because referral criteria require participants to have previously completed a correctional program.

An alternative to offering all of the program in a modularised format is proposed that would involve the delivery of an initial module based on the design of AMIs (Adaptation of Motivational Interviewing) that have been shown to improve the impact of later treatment participation and have been effective in producing long standing change in some problem behaviours as stand alone interventions (Burke, Arkowitz & Menchola, 2003).

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PRINCIPLES OF EFFECTIVE CORRECTIONAL INTERVENTION

The Correctional Service of Canada (CSC) is responsible for providing federally sentenced offenders with correctional programs that will address needs related to their offending and promote their successful reintegration into the community (CSC, 2003). Interventions which adhere to the principles of risk, need and responsivity have been found to be the most effective in reducing recidivism. These three principles stipulate that the intensity of the intervention should correspond to the offenders' level of risk (that is, higher risk offenders receive high intensity programs; lower risk offenders should receive low intensity programs or no interventions), that programs should target criminogenic needs (i.e., those dynamic factors associated with reducing recidivism), and that programs should be delivered in a style and form that is sensitive to the offenders' culture and gender but also their level of skills and abilities (Andrews & Bonta, 2006).

Various program group characteristics comprise a key aspect of responsivity and as such can have an impact on effective delivery. CSC has a mandate to deliver effective programs to all offenders who require them. This can be challenging and as a result, managers and administrators are constantly trying to identify strategies that improve on program effectiveness and also on efficiency. Their goal is to find more efficient ways to deliver correctional programs that will allow more offenders to complete their program requirements while at the same time not compromise the program quality or public safety. Factors such as group size and the continuous or controlled intake of participants (i.e., entry that is flexible and open throughout the course of the program) may affect the response of offenders to the program material. The purpose of the following paper is to briefly review the literature and the input of stakeholders to determine: (1) the optimal group size for correctional programs; and (2) the advantages and disadvantages of delivering programs applying a continuous entry or modularised format. A third strategy to increase program efficiency by delivering correctional programs twice per day has also been proposed. However, no research could be found on this subject so it is not included in the discussion.

GROUP SIZE

Offering programs in a group format has the benefits of providing an environment in which individuals can appropriately socialize, learn to listen, communicate and handle conflicts. In addition, a group setting gives participants a place where they can share and learn from each other, practice new skills and work through issues together. Group size is a cost effective method of delivering key services that would otherwise be offered by staff to individual offenders, requiring a much larger facilitator staff complement.

The number of participants in a group can have important potential implications for the effective delivery of group programs. Some of the disadvantages of larger treatment and program groups may include less time per participant to work through problems, less time to practice key skills and receive feedback, a tendency for participants to disengage with the material or become disruptive, and increase the potential of the more withdrawn members to not actively express themselves or engage with the group. Group cohesiveness may be a challenge in very large groups. Several authors stress the relationship between group cohesiveness and group efficacy (Oesterheld, McKenna & Gould, 1987; Hartmann, Herzog & Drinkmann, 1992; Mitchell, 1991; Cox & Merkel, 1989), and conclude that a stable membership is difficult to achieve due to higher drop-out rates in larger groups (Yalom & Leszcz, 2005). In agencies with a large demand for services , however, and a mandate to provide programs to offenders who require them, larger groups can increase program capacity and decrease wait times, bed space, and ultimately, reduce costs to the public.

Within the CSC, policy sets limits on the number of participants who can participate in a program at a given time. This is dependent on the number of facilitators (Correctional Program Officers (CPOs) or psychologists) who are delivering the program. The moderate intensity programs are typically facilitated by one staff member; in this case the maximum number of participants is set at ten, while this is increased to twelve if two staff members are facilitating (CSC, 2008). All the high intensity correctional programs are delivered by two facilitators. It is recognised, however, that this policy may not be suitable for all types of correctional programs and the types of offenders for which these programs are geared towards. For example, the Women's Violence Prevention Program (WVPP) is set to a maximum of six participants throughout the pilot phase, with a potential of being brought to a maximum of eight once this

phase is completed. This lower maximum is set due to the nature of the program's intensity and because of the high risk and high needs profile of the target population (CSC, 2008a). In comparison, the violence prevention program designed for male offenders[1] (VPP) is co-facilitated by a CPO and a mental health staff member and can have a maximum of twelve participants (CSC, 2004). In smaller community sites or in some institutional settings where the variable language profile of offenders or the problem of association with other offenders Security has designated as "incompatibles" make it more difficult to load a program with ten or twelve offenders, it is recognised that programs can be started with fewer offenders. Indeed, the latest version of Reintegration Programs' policy does not set a restriction on the minimum number of offenders required to launch a program although site managers may not want to allocate staff resources to very small groups.

Other correctional agencies similarly recommend limiting group size. For example, the US Department of Justice suggests an optimal group size of twelve, with a maximum of sixteen (Linhorst, 2000) while the British Prison Service and Probation set the upper limit on group size at ten and always employ two facilitators. The John Howard Society recommends that groups range in size from eight to twelve members (2004).

Most of the literature on this topic is restricted to observations on ideal group size for group psychotherapy whereas the correctional programs in CSC are based on cognitive-behavioural principles and their effective delivery requires a lot of skills training and practice. The usual recommendation among practitioners is to aim for groups with five to seven clients (Levine, 1979; Yalom, 1975) but the basis for this limitation has not been made clear and there is very little empirical support for their contentions. Erickson's (1982) review of small group psychotherapy noted that recommendations in the literature regarding group size vary, although clinical tradition has settled on about eight members.

Yalom writes that in his experience, groups of five to ten are acceptable with the ideal being around seven. He considers that groups under five lack some of the benefits from the group's dynamics.

Slavson (1957) defines a group as having to consist of three or more persons; he goes on to state that, within therapy groups, a minimal number of individuals is necessary in order to foster meaningful relationships. Ideally, he states, the size of psychotherapy groups often ranges

[1] The VPP became an accredited program in June, 2000.

between five to ten participants. The lower limit is determined by the number of individuals required in order to function cohesively as a group, while the upper limit is determined by the number of participants that the therapist can effectively work with in the given amount of time (Yalom & Leszcz, 2005).

Fulkerson, Hawkins & Alden (1981) surveyed the literature on small groups and reported that groups with a size of five members are reported to be most satisfying to the members. They propose five as the minimum number of members necessary for the therapeutic group process to develop. Groups with more than five members appear to more easily develop cohesion, group identity (perhaps the most important single factor in therapeutic effectiveness) and to form an interactive group process.

Larger groups restrict the amount of "air time" each member of the group can expect. There is evidence that communication in general is attenuated when groups are larger. Castore's (1962) study of the number of verbal interrelationships in inpatient groups of varying sizes demonstrated sharp drops in verbal interrelations when the group reached nine and seventeen members, concluding that five to eight members is optimal for patient participation. Here again, however, the nature and goals of the group in question determine optimal size.

Bond (1984) examined the role group size had on the degree of norm regulation within the group. Group norms are shared understandings among group members regarding appropriate and inappropriate behaviours. Factors that reflect norm regulation include the extent of the diversity of opinion, compliance on issues related to attendance, participation and confidentiality. These factors are related to the degree of normative conflict in a group. Larger groups, owing simply to their greater numbers, are more likely to have a diversity of opinion that can result in conflict. Bond found that in the case of positive regulation, there was a significant nonlinear relationship with group size. The moderate sized groups (five to six) achieved the greatest positive norm regulation. He speculated that a group with five to six is optimal for the development of positive norm regulation, balancing off the inhibiting factor of the awkwardness of a restricted range of behaviour of a small group and exploiting the dynamics of the group form while keeping conflict among participants manageable by the therapist.

Fettes & Peters (1992) considered the impact of group size for the delivery of programs to address bulimia. They found a positive association between outcome and the number of subjects per group, but that association was not significant. They concluded that group

psychotherapy for bulimia can be effective when conducted with high client-to-therapist ratios. They warned, however, that large groups may have a harmful long term effect on service providers by increasing 'burn out', thus reducing efficacy and efficiency in the long term.

Thorn and Kuhajda (2006) suggest that groups for dealing with chronic pain would ideally comprise between five to seven patients. They favour limiting the size to five because they believe it is sufficient to facilitate interaction among group members while providing enough time for each patient to be heard.

In their recommendations for group therapy for depression, Hollon and Shaw (1979) stated that six participants would appear to be the maximum number practical for a single therapist to handle. Other authors support numbers close to this size. Scott and Stradling (1990) examined small group cognitive therapy for depression and compared the results to individual therapy. They found that group therapy was as effective as individual therapy and that treatment gains were still demonstrated after six months. They did not find that increasing the group size from 6 to 8 diminished the effectiveness of the therapy. They calculated that for the average group size of six patients, there was a saving of 42% of therapist time, and for eight patients that figure would be 50%. They concluded that group therapy was more efficient than individual.

In Weis' (2003) review of support groups for cancer patients he noted that the number of members in groups ranges from five to a maximum of twelve members. The optimal group size, he stated, has been shown to be about eight members.

McCaughrin and Price (1992) completed research on the impact of various characteristics of substance abuse treatment programs on outcomes. They reported that smaller groups (lower case loads and smaller patient to staff ratios) was one feature associated with superior treatment outcomes. Similar results were confirmed by Broome, Flynn, Knight, and Simpson (2007) in their large scale study of program characteristics and their impact on program effectiveness. They concluded that larger capacity programs appear to be less productive environments for both clients and staff, as underscored by the lower sense of efficacy ($r = -.26$), professional community ($r = -.14$), and poorer climate ($r = -.08$) that prevails there. This suggests that the barriers to interaction and greater workload may outweigh any potential resource advantage associated with increased size. They advise that the challenge that faces programs is to work toward an optimal size, neither too small nor too large, to balance the benefits of efficiency and social interaction.

An evaluation of a national offender substance abuse program (OSAP) in CSC provided a natural experiment with which to look at the impact of group size on offender outcomes. The researchers were able to capitalize on the fact that the OSAP program was administered to 20 consecutive groups of offenders with groups ranging in size from 9 to 20 offenders. Four categories of group size were created: (1) average group size of 12 (range = 9 to 14); (2) average group size of 16 (range = 15 to 17); (3) average group size of 18 (no combining of other group sizes); and (4) average group size of 20 (range = 19 to 20). The re-admission rates for each of the four groupings increased according to the average size of the group. Average group sizes of between 18 and 20 offenders had re-admission rates of 34% and 33%, respectively, compared to a smaller average group size of 12 (re-admission rate of 27%). Although the differences were not statistically significant, the authors claimed that there was a trend indicating that re-admission rate increased with increasing group size (there is however, the possibility that the lower numbers who completed some of the groups included those who remained after the higher risk or less motivated offenders had dropped out, thus distilling those with outcomes that are more likely to be positive). The authors concluded that the findings suggest that an effort to increase the number of participants in a group will impact negatively on post-release success.

Delivering a group correctional program within a correctional setting presents the challenge of adequately delivering program material to a unique population. Ross et al. (2008) suggest that working effectively with a large group of offenders many of whom may have learning problems, language barriers, brain injury, personality disorders and come from very diverse cultural backgrounds may be beyond the scope of any one therapist. The demands of processing a group with so many multiple learning needs has the potential to adversely affect both the program facilitator and the participating offenders. For this reason, Ross, Polaschek & Ward (2008) have suggested that working with ten offenders may be too many for one therapist to effectively handle. In a recent survey of ten experienced program delivery facilitators in CSC, nine out of ten noted that an ideal group number for a group led by one facilitator is fewer than eight. Most believed that a group should be between six to eight members. Most acknowledged that with two facilitators groups could have ten to twelve members.

Group size: Summary

This brief review looked at recommendations for program group size from various sources. These sources and their recommendations are compiled in Appendix A. With few exceptions, reviewers or researchers recommend groups of fewer than ten participants. Although the empirical literature comparing larger with smaller groups is scant, the consensus of opinion across practitioners is impressive. Optimal group size depends on several variables including the type of program delivered, the length of the program, the profile of the clientele, and the demands placed on the facilitator. The effective delivery of correctional programs requires that each participant must be actively involved in role plays, practice skills and receive feedback from the facilitator. The group content touches on very personal material and requires the application of new ways of thinking and behaving in high risk situations. The participants generally represent a population with multiple problems that affect their learning and come from ethically and linguistically diverse backgrounds. It is recommended, therefore, that for the delivery of these program where there are so many challenges faced by facilitators the number of participants in a group with one facilitator should not exceed ten and should be lower for groups with very high needs offenders. For programs that are educational and didactic, that is, those that are purely information-based, group size can probably be larger without having a negative impact on effectiveness.

CONTINUOUS INTAKE OR MODULARISED FORMAT PROGRAM DELIVERY

Another correctional program characteristic to be considered is the viability of a modular program format. Sometimes referred to as open group programs, this style of delivery offers flexible entry so that offenders are able to start a program when they are ready without having to wait to start at the beginning when the program comes available. This format could include entry at the beginning of a new module or the most flexible version will allow for entry at any point in the program.

The advantage of running open group interventions that allows for the accommodation of participants as soon as they are available for the program is that it potentially results in shorter and more manageable waitlists. Moreover, continuous intake can facilitate participants learning from each other as the experienced participants can assist newcomers as they enter the program (Marshall & Williams, 2001).

Despite these advantages, closed groups (i.e., those programs which do not have flexible entry and whose participants all start and end the intervention at the same time) also offer some advantages. Program entry is often closed in order to maintain a better sense of cohesion amongst group participants (CSC, n.d.). Many of CSC's programs are designed in such a way that learning the concepts and skills is cumulative, with each session building on the previous one. Programs that have not been designed to allow continuous entry but use the format anyway place a lot of demands on the facilitator to help new participants catch up. This can also irritate the existing group participants who have already reviewed the material and can be stressful for the incoming participant. While both formats bring their benefits, unfortunately, there is not enough substantiated evidence to suggest which format is more appropriate in successfully addressing offender risk, need and responsivity (Marshall & Williams, 2001). In the end, the decision to adopt one format over another will depend on a combination of factors including the profile of the participants, the design of the program and the regime at the site.

One example of a CSC program designed with continuous intake is the Women Offenders' Substance Abuse Program (WOSAP). This program consists of three modules, two of which are delivered as continuous intake. The first is a low intensity module that is open to all women offenders and delivered on a frequent basis so there is no immediate necessity to offer this module with continuous intake (Sherri Doherty, personal correspondence, March 25, 2009).

The first cycle of the WVPP was facilitated with continuous intake in order to reduce the length of time women would have to wait for program admission (CSC, 2008a); however, it was found in the first phase of the pilot that adding participants during the program cycle caused disruption, resistance and affected the cohesiveness of the group as the women were not all at the same stages. Overall, it was decided that continuous intake was not beneficial for high risk/high needs women offenders and the program is no longer being offered on a continuous entry basis for the rest of the pilot phase (CSC, 2008b). Similarly, administrative problems were experienced with efforts to launch the Moderate Intensity Violence Prevention (MIVPP) program in a modular format. Consistent with the decisions made by on the Women's Substance Abuse Program, the MIVPP program is now being run only as a closed group program (Yazar, 2008).

Survey of facilitators on modularised program delivery in CSC

Since there is little empirical evidence to commend one format over the other we have designed a brief piece of research that involved interviewing facilitators within CSC who have used both the closed group and open group formats. The description of the survey and the results are presented below.

Method

Ten telephone interviews were conducted with experienced correctional program facilitators. Their responses were coded and later analysed. The questions to be posed were sent to the facilitators prior to the interview to save on interview time. All the facilitators had at least 2 years of experience within CSC and some had over 15 years of program experience (Mean = 8.5 years). All had delivered the standard CSC programs as well as versions of the modularised program format at least twice. All regions were represented although the greatest number of interviews was conducted with facilitators from the Prairie region. Six respondents delivered programs in the institutions and four in the community. The type of programs delivered by respondents that involved a modularised or continuous entry format were: Community Maintenance (4), Violence Prevention Program (2) and Women Offenders' Substance Abuse Program (4).

Results

Table 1 presents the frequencies of the main responses provided by the participating facilitators to the question, "What are the advantages of a modularised format?" The most common advantage cited for the modularised format is the reduction in wait times for offenders (N = 9) and increased flexibility to tailor the program to the specific needs of the offender (N = 4).

Table 1

Advantages of a Modularised Program Delivery Format

Positive features of a modularised program delivery format	Number agreed (%)
1. Reduces wait times/offender can start program right away	9 (90%)
2. Increased flexibility/can better tailor program to meet the needs of the offender (i.e. do not have to assign the entire program, can focus only on necessary modules)	4 (40%)
3. Having new members join group can have positive effect on group dynamics (roles do not become fixed/reduces impact of negative members)	2 (20%)
4. Existing members can model acceptable rules/expectations/skills for new members	2 (20%)
5. Offender can leave the program after a module and then come back at a later date without having to redo entire program	2 (20%)
6. Allows offenders to retake certain modules if needed, without having to retake entire program	1 (10%)
7. New participants joining group increases learning and motivation for others/ seeing older members graduate and succeed is motivating for new members	1 (10%)
8. Having new members join provides opportunity to practice skills of meeting new people and adapting to new environments	1 (10%)
9. Works well in a multilevel facility, as people are continuously rotating anyway	1 (10%)
10. Report writing is spread out, does not need to be completed all at once	1 (10%)

Table 2 presents the most common problems that facilitators noted with the modularised format. The most frequently cited problems are: Increased workload/report writing (N = 9); Disruptive to group dynamics/group cohesion (N = 8) and Challenge to constantly repeat information and bring new members up to speed when they join (N = 6).

Table 2

Disadvantage of a Modularised Program Delivery Format

	Issues with delivery of a modularised program delivery format	Number agreed (%)
1.	Increase in workload/report writing	9 (90%)
2.	Disruptive to group dynamics and cohesion/reduces trusts/reduces level of sharing and participation	8 (80%)
3.	Must repeat information every time new member joins/challenge to bring new members up to speed quickly	6 (60%)
4.	Modules build on each other and are not self-contained	2 (20%)
5.	Harder to accommodate different skill levels/different needs of the group when members constantly change	2 (20%)
6.	Building motivation is more challenging	1 (10%)
7.	OMS does not accommodate for modular report writing/not able to track modules in OMS	1 (10%)
8.	"Sunset clause" (whereby all modules need to be completed within a specified period of time) should be changed. Not always feasible/realistic for offender to complete in timeframe/can lead to higher incompletion rates	1 (10%)
9.	Increased risk of burnout for facilitators	1 (10%)
10.	Hard to track completions if not on top of referrals	1 (10%)
11.	Hard to stop program as new members are constantly joining	1 (10%)
12.	Format is confusing for offenders/ hard for them to keep track of where they are in their program	1 (10%)

When asked which format they prefer delivering, 50% of the facilitators said they prefer the standard format; 30% said that both formats had their strengths and 20% preferred the modularised or continuous entry format. Although this was a small sample size there appeared to be clear difference in preference of format based on site. Facilitators working in the institutions

preferred the standard closed entry format (67%) while those in the community were ready to deliver either format.

Program format: Summary

Despite its challenges, the modularised format does provide flexibility and the potential to tailor program delivery to individual offender need. Based on interviews and recommendations from facilitators the following circumstances are those in which the format works best:

1. When the group is relatively homogenous, i.e., participants have similar offence histories or criminogenic needs. (It should be noted, however, that the CMP is able to integrate offenders from diverse background into a continuous entry program);
2. When the group participants are *not* high risk or high need;
3. When the participants come from a previous program background so that the material is not entirely new to them;
4. When the program is offered in the community.

Obviously, when all four criteria are met the continuous entry or modularised format has ideal conditions in which to be implemented. Using a modularised program delivery format in the institutions in CSC has proven to be very difficult. Administratively, it is unlikely that an offender who completes one of the modules at one institution and is transferred out can expect to pick up the same program at the right time to complete the next module. Monitoring of compliance on report writing and program completion rates is also difficult. Continuous entry in the institutions poses another set of problems when high risk or high needs offenders react negatively to the constant integration of new participants. It should be noted that there are successful exceptions to this. For example, a continuous entry option (or rolling program) has been offered to sex offenders in the British Prison Service for several years and those practionners find the format manageable. Sex offenders, however, are generally recognised as more motivated and more compliant than offenders with other offence patterns. One alternative to a complete modularised program format is a modified modularisation that could be implemented in an institutional setting. This would involve offenders in an initial generic module common to all program approaches and offence patterns. Such a module would introduce

offenders to the group program process, the vocabulary of programs and help them acquire a basic understanding of their offence patterns. Similar brief interventions to build motivation to participate in further programming has been reviewed in the literature and found to improve later program completions (Burke, Arkowitz & Mencola, 2003).

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APPENDIX A

GROUP SIZE

Author	Report	Date	Group size recommendation
CSC	Specific guidelines for methadone maintenance treatment. Section F: Substance abuse intervention http://www.csc-scc.gc.ca/text/pblct/methadone/f-eng.shtml	2003	-maximum group size of 10
McKisack,C. & Waller, G.	Factors influencing the outcome of group psychotherapy for bulimia nervosa. International Journal of Eating Disorders, 22(1), 1-13	1996	-group psychotherapy for eating disorders can be effective with large group numbers if conducted in efficient manner -however, large group size may negatively affect attendance rates and group cohesion
Linhorst, D.	Summary of key findings of a process evaluation of the Ozark Correctional Center drug treatment program. U.S. Department of Justice http://www.ncjrs.gov/pdffiles1/nij/grants/181647.pdf	March 8, 2000	-optimal group size 12, maximum 16
John Howard Society	Perspectives on Canadian Drug Policy http://www.nald.ca/library/research/drugs/perspect/volume2/volume2.pdf	2004	-group size should be linked to program intensity, characteristics of participants, and experience of deliverers. -groups size should be no less than 8 and no more than 12
CSC	The offender substance abuse program pre-release program: Analysis of intermediate and post-release outcomes http://www.csc-scc.gc.ca/text/rsrch/reports/r40/r40e_e.pdf	1995	-program facilitators trained by CSC are trained to limit group size to 10 offenders -offender rates of re-admission back into custody increased according to program group size.
Morrison, N.	Cognitive group therapy: Treatment of choice or sub-optimal option? Behavioural and Cognitive Psychotherapy, 29, 311-332	2001	-group size should range from 6 to 12 -in larger group sizes, care must be taken to avoid development of sub-groups
Satterfield, J.	Integrating group dynamics and cognitive-behavioural groups: A hybrid model. Clinical Psychology: Science and Practice, 196	1994	-therapy group should typically consist of 6 to 10 members, based on clinical experience of therapist and pragmatic limitations -research not yet verified optimal number of group members
Bond, G.	Positive and negative norm regulation and their relationship to therapy group size. Group, 8(2), 35-44.	1984	-small groups achieved more norm regulations than larger groups.
Erickson, R.	Inpatient group psychotherapy: A survey. Clinical Psychology, 2, 137-151	1982	-clinical custom is 8 members
Yalom, I	Theory and Practice of Group Psychotherapy (3rd ed.) New	1985	-8 is optimal number of group members

	York: Basic Books		
Weis, J.	Support groups for cancer patients. Supportive Care in Cancer, 11, 763-768	2003	-optimal group size is 8, but can range from 5 to 12
Fulkerson, C., Hawkins, D. & Alden, A.	Psychotherapy groups of insufficient size. International Journal of Group Psychotherapy, 31, 73-81.	1981	-groups of 5 were most satisfying to members -5 proposed as minimum number needed to foster therapeutic group process -group should not exceed 10
Rutan, J. & Stone, W.	Psychodynamic group therapy. Lexington, MA: Collamore	1984	-optimal groups size will depend on considerations of therapist comfort, meeting length, room size, theoretical orientation.
Broome, K.M., Flynn, P. M, Knight, D.K.& Simpson, D.D	Program Structure, Staff Perceptions, and Client Engagement in Treatment. *Journal of Substance Abuse Treatment.* 33(2), 149–158.	2007	- larger capacity programs appear to be less productive environments for both clients and staff, -
Castore, G. F	Number of verbal interrelationships as a determinant of group size. *Journal of Abnormal and Social Psychology*, 64(4), 56-8.	1962	-demonstrated sharp drops in verbal interrelations when the group reached nine and seventeen members, -five to eight members is optimal for patient participation.
Hollon, S.D. & Shaw, B.F.	Group Cognitive Therapy for Depressed Patients. In, A.T. Beck, A.J. Rush, B.F. Shaw and G. Emery (eds), *Cognitive Therapy of Depression*, Guilford Press, New York.	1979	-six participants is maximum number practical for a single therapist to handle
Levine, B.	*Group Psychotherapy: Practice and Development.* Englewocd Cliffs, NJ: Prentice-Hall.	1979	-5 to 7 clients per group
McCaughrin W.C. & Price R.H	Effective outpatient drug treatment organizations: Program features and selection effects. *International Journal*	1992	-smaller groups are associated with superior treatment outcomes

of the Addictions, *27*(11), 1335–1358.

Ross, E.C., Polaschek, D.L.L., & Ward, T	The therapeutic alliance: A theoretical revision for offender rehabilitation. *Aggression and Violent Behavior*, *13*, 462-480.	2008	-working effectively with a large group of offenders many of whom may have learning problems, language barriers, brain injury, personality disorders and come from very diverse cultural backgrounds may be beyond the scope of any one therapist.
Scott, M. J., & Stradling, S. G	Group cognitive therapy for depression produces clinically significant change in community-based settings. *Behavioural Psychotherapy*, *18*, 1–19.	1990	-group therapy was as effective as individual and treatment gains were still demonstrated at 6 months. -increasing the group size from 6 to 8 did not diminish the effectiveness of the therapy. -for the average group size of six patients, there was a saving of 42% of therapist time, and for eight patients that figure would be 50%
Slavson, S. R.,	Are there "group dynamics" in therapy groups? *International Journal of Group Psychotherapy*, *7*, 131-154.	1957	-defines a group as having three or more members - a minimal number of individuals is necessary in order to foster meaningful relationships. -the size of psychotherapy groups often ranges between five to ten participants
Thorn, B. & Kuhajda, M	*Group cognitive therapy for chronic pain;* Journal of Clinical Psychology, 62(11), 1355-1366.	2006	-5 to 7 patients per group

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Counteracting 'Not in My Backyard': The Positive Effects of Greater Occupancy within Mutual-help Recovery Homes

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Abstract

Group homes sometimes face significant neighborhood opposition, and municipalities frequently use maximum occupancy laws to close down these homes. This study examined how the number of residents in Oxford House recovery homes impacted residents' outcomes. Larger homes (i.e., 8 or more residents) may reduce the cost per person and offer more opportunities to exchange positive social support, thus, it was predicted that larger Oxford Houses would exhibit improved outcomes compared to smaller homes. Regression analyses using data from 643 residents from 154 U.S. Oxford Houses indicated that larger House size predicted less criminal and aggressive behavior; additionally, length of abstinence was a partial mediator in these relationships. These findings have been used in court cases to argue against closing down larger Oxford Houses. 125 words

Keywords

Oxford Houses; group homes; 'Not in My Backyard'; substance abuse recovery

Group Homes and 'NIMBY'

Since the 1960's, many institutional settings have been replaced with community-based programs for persons with mental illnesses, developmental disabilities, and substance abuse disorders (Michelson & Tepperman, 2003). An example of a community-based, mutual-aid recovery home for individuals dealing with substance abuse problems is Oxford House (OH; Jason, Ferrari, Davis, & Olson, 2006a). Oxford House has grown since 1975 to over 1,200 homes across the U.S., 30 in Canada, and eight in Australia. All homes are single-sex (i.e., men or women-only), and some women Houses allow residents' minor children. Individuals are typically referred to Oxford Houses by treatment facilities or through word of mouth, and new residents are admitted based on an 80% House vote. Regarding the operation and maintenance of Oxford Houses, no professional staff is involved, enabling residents to create their own rules for communal governance (Oxford House, 2002). Residents are held accountable to abstain from substance use or disruptive behavior; find and maintain a job; complete chores; and pay for rent, food, and utilities. Failure to comply with these rules along with any disruptive/criminal behavior or substance use is grounds for expulsion, and all rules are enforced by the house residents; as long as rules are followed, residents are allowed to stay indefinitely. In addition, residents are required to hold house positions (e.g., president or treasurer) elected for six-month intervals by 80% majority vote. A randomized study found that at two-year follow up, the Oxford House participants had lower substance use (31% vs. 65%, respectively), higher monthly income ($989 vs. $440), and lower

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incarceration rates (3% vs. 9%) compared to usual-aftercare participants (Jason, Olson, Ferrari, & Lo Sasso, 2006b).

There are numerous theoretical reasons why group homes such as Oxford Houses should be located in residential areas (Seymour, no date). For example, group homes in residential communities may allow for community integration, an active ingredient in the treatment of substance abuse and many other disorders. Group homes might also serve to educate the community about stigmatized populations (e.g., people with substance abuse problems, developmental disabilities, or mental illnesses). Finally, group homes can be a deterrent to crime because residents are generally required to maintain positive behaviors (e.g., sobriety) and are often vigilant. The Oxford House national organization dictates that new Houses be established in safe, low crime, economically stable neighborhoods with minimal opportunities for relapse (Oxford House, 2002). Regardless of geographic location, Oxford Houses are typically situated in low-drug, low-crime communities in which residents have access to resources and amenities that enable autonomy and substance-free lifestyles (Ferrari, Jason, Blake, Davis, & Olson; 2006a; Ferrari, Groh, Jason, & Olson, 2007).

Nonetheless, group homes in residential areas sometimes face significant opposition (Zippay, 1997), with neighbors' concerns relating to property values, traffic, noise, inappropriate behavior (Cook, 1997), and safety (Schwartz & Rabinovitz, 2001; Solomon & Davis, 1984). This phenomenon is commonly referred to as the 'Not in My Backyard' syndrome (NIMBY; e.g., Dear, 1992; Kim, 2000; Low, 1993). Oxford Houses are certainly not immune to NIMBY; for instance, a North Carolina Oxford House was protested and vandalized by neighbors before it opened. In addition to neighborhood opposition, municipalities employ several techniques to legally regulate, restrict, or even close down group homes (Gathe, 1997). To start out with, cities sometimes decline to provide the required license to prevent the opening of a recovery home. Other regulatory tactics involve density limitations, which may include the Fair Housing Act and Landlord-Tenant Laws (e.g., group homes cannot remove substance-using or disruptive residents without a court order), prohibiting more than one recovery home within a certain radius, and maximum occupancy rules, the focus of the current investigation (i.e., too many unrelated people living in the same dwelling).

Despite the resistance faced by these homes, group homes actually have very little impact on their surrounding neighborhoods and generally blend into the community (Cook, 1997). Community members frequently expect to have more problems with group homes than really occur (Cook; McConkey et al., 1993), and residential facilities do not tend to negatively affect public safety (Center for Community Corrections, 2002). In fact, contrary to popular fears, literature reviews suggest that these settings may actually increase property values in their neighborhoods (Aamodt & Chiglinksy, 1989; Center for Community Corrections). Similar patterns have been demonstrated for Oxford House recovery homes. Local communities reported Oxford House residents blended well into the neighborhood and made good neighbors (Jason, Roberts, & Olson, 2005). The majority of Oxford House neighbors interviewed had either gained resources, friendships, or a greater sense of security following contact with the Oxford House residents. Furthermore, no evidence of property devaluation was found for neighborhoods containing Oxford Houses; community members who knew of the Oxford House actually saw an increase in property value over an average of 3 years.

Several studies investigated factors that influence the reception of group homes in residential areas. The Center for Community Corrections (2002) interviewed community members and found that neighbor acceptance of community justice facilities and halfway homes was enhanced by an engaged public, a well-run program with access to substance

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abuse treatment and job development, community input and continuing involvement, discernible contributions to the community, and a careful assessment of the community prior to entry. Additionally, the more a facility resembles the neighborhood in which it resides and the more autonomous the facility residents, the more likely residents will integrate into the community (Makas, 1993). Further, research indicates that closer proximity (Gale, Ng, & Rosenblood, 1988) and increased contact (Butterfield, 1983) between community members and group home residents has a positive effect on the reception of the homes. Jason and colleagues (2005) revealed that residents who lived adjacent to an Oxford House, as opposed to a block away, had significantly more positive attitudes towards the need to provide a supportive community environment for those in recovery, allow substance abusers in a residential community, and the willingness to have a self-run home on their block.

In attempt to reduce the amount and level of concern related to Oxford Houses and other group homes, educational efforts might be developed such as documenting the effects of group homes on property values, having facility residents maintain friendly rapport with neighbors, and residents becoming more familiar with their surroundings in order to address neighbors' fears (Cook, 1997). For example, staff at a residential facility implemented educational measures to inform the neighborhood about the opening of the home (Schwartz & Rabinovitz, 2001). Significant interactions were found between neighbors visiting these facilities and decreases in dissatisfaction. Finally, it has been suggested that researchers should focus on developing ways that the public can become more familiar with halfway houses and other group homes (Center for Community Corrections, 2002).

Group Home Size

In order to implement educational efforts, this research study focused on one NIMBY threat to group homes: house size. While very little research exists on this topic, one study (Segal & Darwin, 1996) found that within sheltered care facilities for individuals with mental illness, although home size did not relate to levels of management, larger homes were less restrictive in their rules and procedures. Larger homes also spent more on program activities for their residents, and their residents were more involved in facility-based activities. It is possible that these greater occupancy facilities were able to provide more of an opportunity for residents to develop a sense of community. However, this type of sheltered care facility is fairly different from Oxford House recovery homes.

It is suggested that a sufficient number of residents in each home might be a necessary component in the effectiveness of Oxford House through the mechanism of social support. Individuals recovering from addictions should be surrounded by a community in which they feel they belong and are able to obtain sobriety goals (Jason & Kobayashi, 1995). Oxford House residents rated "fellowship with similar peers" the most important aspect of living in an Oxford House (Jason, Ferrari, Dvorchak, Groessl, & Malloy, 1997). The Oxford House experience also provides residents with abstinent-specific social support networks consisting of other residents in recovery (Flynn, Alvarez, Jason, Olson, Ferrari, & Davis, 2006). Individuals who spent more time in an Oxford House had a greater sense of community with others in recovery, less support for substance use (Davis & Jason, 2005), and more support for abstinence (Majer, Jason, Ferrari, Venable, & Olson, 2002). Oxford Houses with more residents might have greater opportunities for members to provide and receive these vital social resources. It is believed that larger Houses will promote recovery through their ability to promote larger (Zywiak, Longabaugh, & Wirtz, 2002), more supportive social networks (MacDonald, 1987) that include sober others in recovery (Hawkins & Fraser, 1987; Zywiak et al.), constructs linked to sober living.

In addition to increased levels of social support, there are other hypothesized benefits to larger Oxford Houses. For instance, rent may be lower in larger homes because residents can

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split the costs. Additionally, having more residents allows members to learn from each other and increases opportunities for diversity. In this study, we examined the effects of House size on criminal and aggressive behaviors among Oxford House residents, two areas of significant concern to communities containing group homes (Cook; Schwartz & Rabinovitz, 2001; Solomon & Davis, 1984). Oxford House has been found to promote positive outcomes regarding both criminal activity (Jason et al., 2006b; Jason, Davis, Ferrari, & Anderson, 2007a; Jason, Olson, Ferrari, Majer, Alvarez, & Stout, 2007b) and self-regulation (Jason et al., 2007b), which relates to aggression. Therefore, it was hypothesized in the present study that residents of larger Houses (with 8 or more members) would exhibit fewer criminal and aggressive behaviors as measured by the *Global Appraisal of Individual Needs-Quick Screen* than residents of smaller Houses.

Method

Procedure

Data included in the present study were from the baseline data collection (completed between December 2001 and April 2002) of a community evaluation of residents living in one of 213 U.S. Oxford Houses (see Jason et al., 2007a for details). Participants from this Institutional Review Board-approved study were recruited and surveyed using two strategies. The majority of participants (n = 797) were recruited through an announcement published in the monthly Oxford House newsletter that provided contact information for the study. We then contacted Oxford Houses via letters to House Presidents, conducted follow-up phone calls to the Houses, and where possible, members of the research team arranged to visit Houses. Of the 189 Oxford Houses that were approached, 169 (89.4%) had at least one individual who agreed to participate in the study, and the average number of individuals per House choosing to participate in the study was 4.7. For the second method, 100 individuals were randomly selected to fill out the baseline questionnaires at an annual Oxford House Convention attended by 300. Analyses revealed no difference in demographic or outcome variables between the two recruitment groups.

In each case, the nature, purpose, and goals of the study were explained to the potential participants. As part of the consent process, staff members explained that participation was entirely voluntary and that withdrawal from the study was possible at any time. Fifteen dollar payments were made to participants following the survey. These data were gathered by research staff who primarily administered questionnaires in person to the participants. Some data were collected by telephone, which was often the case for those who had left Oxford House. No significant differences were found based on data collection method.

In addition, an environmental survey (assessing House size) was mailed to the House Presidents of all 213 Oxford Houses. No identifiable information about any House resident was requested, and confidentially was maintained for all data. Most often the survey was completed by the House President (60.2%) or another House officer (31.6%), such as the Secretary or Treasurer. The survey then was returned by mail, and a small package of coffee was subsequently sent to the House for participation. Pilot testing indicated that it would take less than 20 minutes to complete and mail the survey, which were collected over a four month period.

Participants

For this investigation, we only included participants from the 154 Houses for which we had data on House size, representing 72.3% of Houses in the larger study. On average, Houses had about 7 total members (M = 7.1, SD = 2.0, *Median* = 7), and Houses in this study ranged in size from 3–18 residents. Regarding geographic region within the U.S., 27.7% of Houses

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were located in the West, 18.4% were in the Midwest and Texas, 28.3% were in the Northeast, and 25.7% were in the Southeast.

This present baseline sample consisted of 643 Oxford House residents, including 227 females (35.3%) and 416 males (64.7%). The sample was ethnically diverse, with 62.5% European American, 29.2% African American, 3.9% Hispanic/Latino, and 4.4% others. At baseline, the average age of the sample was 38.3 (*SD* = 9.2), and the average education level was 12.7 years (*SD* = 2.0). Regarding marital status, 50.4% were single or never married, 45.4% were divorced/widowed/separated, and 4.2% were married. With respect to employment, 67.4% reported being employed full-time, 14.2% part-time, 13.3% unemployed, and 5.1% retired or disabled, and the average monthly income of the sample was $965 (*SD* = 840). The average participant had stayed in an Oxford House for 1.0 years (*SD* = 1.4). The mean length of sobriety was 1.7 years (*SD* = 2.4) for alcohol and 1.9 years (*SD* = 3.2) for illicit drugs. Regarding recent substance use, participants on average consumed alcohol on 2.3 days (*SD* = 9.1) and drugs on 5.1 days (*SD* = 18.3) in the past 90 days. Concerning legal status, 30% of participants were currently on probation, and 14% claimed that their entry into OH was prompted by the law. Regarding lifetime data, the average participant was charged with a crime 9.9 times (*SD* = 14.0) and were incarcerated a total of 15.9 months (*SD*= 36.8).

Measures

Baseline demographic information (e.g., gender, race, substance disorder typology) was obtained from items on the 5th Edition of the *Addiction Severity Index-lite* (*ASI*; McLellan et al., 1992). The *ASI* assesses common problems related to substance abuse: medical status, drug use, alcohol use, illegal activity, family relations, and psychiatric condition. The *ASI* has been used in a number of alcohol and drug use studies over the past 15 years and has been shown to have excellent predictive and concurrent validity (McLellan et al.).

The *Form-90* (Miller & Del Boca, 1994) was administered to obtain a continuous record of alcohol and drug consumption and intensity within a 90-day time span. This measure gathers information related to employment, health care utilization, incarceration, and alcohol and other drug use over a 90-day retrospective (which provides a reliable time frame for abstinence assessment; Miller & Del Boca).

The number of residents per Oxford House was determined using a brief version of a reliable environmental audit developed and utilized by Ferrari and colleagues (Ferrari et al., 2006a; Ferrari, Jason, Davis, Olson, & Alvarez, 2004; Ferrari, Jason, Sasser, Davis, & Olson, 2006b) for use with group recovery settings. This survey requested responses to forced choice and frequency items in a number of domains, including information about the House setting such as the percentage of residents in recovery from alcohol, drugs, and poly-substances, along with the number of inhabitants within a House. Other sections of this audit gathered information on the interior and immediate exterior House characteristics, amenities found within a 2-block radius of the House, and characteristics of the surrounding neighborhood.

The *Global Appraisal of Individual Needs-Quick Screen* (*GAIN-QS;* Dennis & Titus, 2000) is a self-report, clinical screening tool examining whether or not a psychological or substance abuse symptom has occurred in the past 12 months similar to the DMV-IV Axis I criteria. While the *GAIN-QS* is not a diagnostic tool, it has been utilized within clinical screening contexts to identify problem areas and psychological symptoms that warrant further explanation. For the purposes of this study, 2 indices from the *GAIN-QS* were used as the outcome variables measuring aggressive and criminal behaviors: *Conduct Disorder/*

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Aggression Index (6 items; *Cronbach's alpha* = .78, *Mean Score* = 1.34) and *General Crime Index* (4 items; *Cronbach's alpha* = .69; *Mean Score* = .29).

Results

House Size and GAIN-QS Subscores

The average House size in this study was about 7 members (M = 7.1, *median* = 7), and because a pending court case attempted to make it illegal for Oxford Houses to house 8 or more residents, we decided to compare 7 or fewer members in a House (i.e., smaller Houses) with 8 or more residents of an Oxford House (i.e., larger Houses). *Regression analyses*[1] determined that this dichotomized House size variable significantly predicted the *GAIN-QS* subscales of *Conduct Disorder/Aggression*, $\beta = -.10$, $t(632) = -2.52$, $p = .01$, and *General Crime Index*, $\beta = -.10$, $t(634) = -2.44$, $p = .02$. House size accounted for 0.8% of the variance in *General Crime Index* scores and 1.9% of the variance in *Conduct Disorder/Aggression* scores. Larger Houses had fewer problems related to conduct disorder/aggression, and criminal activity. Smaller Houses had a *General Crime Index* mean score of 0.34 and a *Conduct Disorder/Aggression Index* mean score of 1.43, whereas the respective scores for larger Houses were 0.21 and 1.16 (lower scores indicate fewer problem symptoms in each area).

House Size and Demographic Analyses

Next, *one-way ANOVA* and *chi-square* analyses were run to determine whether large and small Houses (7 or less vs. 8 or more) differed on demographic variables. Results indicated that the groups only differed on one key demographic variable: larger House residents had been abstinent from drugs and alcohol longer than individual from smaller Houses, $F(1,637) = 4.42$, $p = .04$. Residents in smaller Houses had 298.1 (SD = 458.6) cumulative days of abstinence on average, compared to 379.5 (SD = 476.5) days for residents of larger Houses. This indicates that individual living in larger Houses maintained abstinence for about 81 days longer. Since larger Houses had significantly longer lengths of cumulative abstinence, we ran correlations to determine if this variable also related to the *GAIN-QS* subscale scores. Among participants for whom we have House size data, cumulative days sober did significantly and negatively correlate with the *GAIN-QS* subscales of *Conduct Disorder/Aggression*, $r(633) = -.26$, $p = .000$, and *General Crime Index*, $r(631) = -.30$, $p = .000$.

Mediational Analyses

We next examined whether the variables in the House size and *GAIN-QS* subscore regression analyses were only significant because individuals in larger Houses had been sober for longer periods of time. In order to evaluate this possibility, we utilized Baron & Kenny's (1986) framework for testing of mediation. In Baron & Kenny's model, the influence of variable A (the initial variable) on variable B (the outcome) may be explained by a third variable known as variable C (the process variable). Complete mediation occurs when variable A no longer affects B after C has been controlled. Partial mediation occurs when the path from variables A to B (the total effect) is diminished in total size but still different from zero after the mediating variable is controlled. The mediational model is a causal one; therefore, the mediator is presumed to bring about the outcome and not vice versa.

[1]Although participants were nested within Oxford Houses, we decided not to focus on Hierarchical Linear Modeling results because we wanted to test for mediation, which can be done using regression but not HLM. However, we did run HLM analyses and found that House size (as a level 2 group variable) significantly predicted individually-assessed level 1 *General Crime Index* scores ($t[144] = -2.18$, $p = .03$) but not level 1 *Conduct Disorder/Aggression* scores ($t[144] = -1.17$, $p = .25$).

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We used Baron & Kenney's (1986) framework to determine whether cumulative days sober mediated the relationship between House size and *Conduct Disorder/Aggression* (A = House size [7 or less vs. 8 or more], B = cumulative days sober, and C = *Conduct Disorder/ Aggression*). As demonstrated earlier with linear regression analyses, House size significantly predicted *Conduct Disorder/Aggression*. House size also significantly predicted cumulative days sober (A→B; β = .08, $t[637] = 2.10$, $p = .04$; $r^2 = .007$), and cumulative days sober predicted *Conduct Disorder/Aggression* (B→C; β = −.30, $t[630] = -7.86$, $p = .000$; $r^2 = .089$). Finally, when both House size and cumulative days sober were put in the model predicting *Conduct Disorder/Aggression* (A and B→C), House size maintained significance, but less than earlier (House size: β = −.08, $t[628] = -2.11$, $p = .04$; cumulative days sober: β = −.29, $t[628] = -7.69$, $p = .000$; $r^2 = .096$). Therefore, House size is related to *Conduct Disorder/Aggression*, and cumulative abstinence is a partial mediator in this association. These two variables (i.e., House size and cumulative abstinence) explained almost 10% of the variance in *Conduct Disorder/Aggression* scores.

We again employed Baron & Kenney's (1986) framework to determine whether cumulative days sober mediated the relation between House size and *General Crime Index* (A = House size [7 or less vs. 8 or more], B = cumulative days sober, and C = *General Crime Index).* As reported earlier, House Size was a significant predictor of *General Crime Index*, and House Size significantly predicted cumulative days sober. Regarding new analyses, cumulative days sober predicted *General Crime Index* (B→C; β = −.26, $t[631] = -6.77$, $p = .000$; $r^2 = .068$). Finally, with both House size and cumulative days sober as predictors of *General Crime Index* (A and B→C), House size retained significance but less so than before (House Size: β = −.08, $t[630] = -2.04$, $p = .04$; cumulative days sober: β = −.25, $t[630] = -6.60$, $p = .000$; $r^2 = .074$). Thus, House size is related to *General Crime Index* scores, and cumulative sobriety is a partial mediator in this relationship. These two variables (i.e., House size and cumulative abstinence) explained more than 7% of the variance in *General Crime Index* scores.

Discussion

The objective of the present investigation was to examine how the number of residents in an Oxford House impacted outcomes related to aggression and crime among residents. Regression analyses supported our hypotheses that larger House size (i.e., 8 or more residents) would predict less criminal and aggressive behavior. However, an unexpected result was that length of abstinence was a significant mediator in these relationships. House size lost a fair amount of significance when the mediator of cumulative days sober was entered into the models predicting *GAIN* subscale scores, and the addition of cumulative sobriety to the models greatly increased the amount of variance explained. Cumulative sobriety partially explained the relationships between House size and *General Crime Index* and House size and *Conduct Disorder/Aggression*. Thus, greater House size leads to greater cumulative abstinence, which in turn leads to less criminal activity and aggression; however, House size does have some independent impact of its own on these outcomes. It is clear that having more residents in a House is beneficial to residents' recovery from alcohol and drug abuse.

These findings have important policy implications regarding the future of recovery homes. It is argued that local governments allow Oxford Houses immunity from maximum occupancy regulations due to the great need in many communities for these settings. It is very difficult for individuals lacking stable living environments to maintain a sober lifestyle following residential treatment (Milby, Schumacher, Wallace, Feedman, & Vuchinich, 1996). As the cost of housing continues to rise, many individuals leaving inpatient facilities are unable to find affordable housing. Without Oxford House or other recovery home options, former

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addicts frequently have no choice but to return to their old negative environments and fall back into their pre-treatment habits, which frequently include antisocial activities such as substance use and criminal activity. Regardless of how successful a client has been in treatment, this progress can be reversed through residence in an environment that promotes crime and drug use (Polcin, Galloway, Taylor & Benowitz-Fredericks, 2004). As demonstrated in this study, a sufficient number of House residents is a factor in the ability of Oxford House to promote these outcomes that benefit local communities.

Furthermore, it is suggested that maximum occupancy regulations that apply to recovery homes are often based on false beliefs and fears. Neighbors often oppose recovery homes because they fear increased crime and violence (Cook, 1997; Schwartz & Rabinovitz, 2001; Solomon & Davis, 1984; Zippay, 1997), and in order to appease these residents, cities frequently use maximum occupancy laws to close the group homes (Gathe, 1997). This pattern is quite ironic given that the Houses being closed (i.e., larger homes) should actually give neighbors less reason for concern. It seems obvious that laws based on these misconceptions should be eliminated. Overall, Oxford Houses have positive (not negative) effects on local communities (Jason et al., 2005), and residents of larger Houses appear to be highly desirable community members (i.e., who engage in less criminal and aggressive behaviors).

This investigation provides one more step in the movement to improve the reception of Oxford Houses and other group homes in local communities. While second-order change alters the systems that cause the problems (Dalton, Elias, & Wanderman, 2001), ‘Not in My Backyard’ typically serves to inhibit this type of change. Changing the attitudes of mental health professionals, community members, and policy makers may break down the barriers to second-order change (Olson et al., 2002). Educational efforts along with successes in the court room may promote a more positive social climate and set legal precedents. Finally, researchers have argued that social scientists should explore ways that the public can become more familiar with residential facilities (Center for Community Corrections, 2002). We hope that these efforts and the efforts of other researchers, individuals in recovery, treatment providers, lawyers, and political activists are successful in reducing the opposition to group homes in residential areas.

Concerning limitations, our findings might not apply to other group homes or residential facilities, which can vary greatly in focus, procedures, setting, and size. For instance, a “large” Oxford House setting (i.e., greater than 7 members) might be very small in comparison to other residential settings, which may accommodate several dozen residents. It is actually possible in these cases that somewhat smaller settings are more effective. In addition, we were typically not able to collect data from all members within a House; thus, some Houses have more representation than others in this sample. Future studies in this area should acquire information from all members of a House if possible. Furthermore, data analyzed in this study were self-report; therefore, it may have been useful to obtain House size estimates using data from other sources such as Oxford House Inc., the national body that oversees Oxford Houses. Also, alcohol and drug use had little variability within this sample because all participants were recruited from Oxford Houses instead of treatment or detoxification centers (suggesting a later stage in recovery), and because residents caught using can be evicted. Perhaps future research assessing occupancy levels of recovery homes should consider a sample with more variability with regards to substance use. A final limitation is our use of regression analyses as opposed to Hierarchical Linear Modeling due to the tested nature of the data; however, we wanted to test the mediational model, which can be done using regression but not HLM. Nonetheless, future researchers assessing group home size may want to seriously consider the use of HLM.

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In order to improve the reception of Oxford Houses in local communities and counteract the NIMBY syndrome, the Oxford House Research Team has provided expert testimony in court cases, sent information to legislators, disseminated research findings with policy implications, collaborated with community partners and state-level agencies, and worked with the media to change the image of recovery homes (see Jason, Davis, Ferrari, & Bishop, 2001). In particular, the DePaul University research team has been involved in several court cases over past several years on the behalf of Oxford Houses. Most recently, municipalities located in Kansas, Iowa, and North Carolina have attempted to close down Oxford Houses or similar recovery homes due to too many unrelated individuals living in one dwelling. Findings from the present study were used in these court cases, and at the present time, the Oxford House organization has won every court case.

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Interaction of Motivation and Social Support on Abstinence among Recovery Home Residents

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Abstract

Background and Aims—The impetus to abstain from alcohol and drugs is especially robust when individuals seek help. However, motivation to continue abstinence during ongoing recovery is less understood. The present study assessed how social support interacted with motivation to affect abstinence over an 18-monthe time period.

Methods—A sample of 289 residents entering residential recovery homes were recruited and followed at 6-, 12-, and 18-months. Motivation was measured as the perceived costs and benefits of abstinence. Five social influence measures were used to assess interactive effects with costs and benefits on abstinence.

Results—Perceived costs and benefits of abstinence were robust predictors of abstinence over the 18 month assessment period. Two social support factors interacted with perceived benefits to influence abstinence: 12-step involvement and number of persons in the social network.

Conclusion—Suggestions are made for recovery services to influence perceived costs, benefits, and social network characteristics.

Keywords

Motivation; Social Influences; Social Support; Sober Living House; Recovery Home

Introduction

Few concepts in the addiction literature have received more attention than motivation for change. One view of motivation is that is an intrapersonal trait, something within the individual (Miller, 2006). However, research suggests that motivation to change substance use behaviours can be altered by the social context in which it occurs (Miller, 1999; Miller et al., 1995; Moos, 2008). Anecdotally, practitioners in the substance misuse treatment field have long acknowledged that the most motivated clients are also the most successful. Research has generally supported this contention, as studies on motivation for change have been associated with improved alcohol and drug use outcomes (Adamson, Sellman, & Frampton, 2009; McKay & Weiss, 2001). However, much of the literature on motivation has centered on a single measurement of motivation rather than a multidimensional construct.

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Motivation has typically been assessed at treatment entry to predict later outcome (Korcha, Polcin, Bond, Lapp, & Galloway, 2011). Less emphasis has been devoted to assessing change in motivation over time or how motivation may function to maintain long term abstinence. However, one study of motivation as a longitudinal and multidimensional construct showed better drug and alcohol outcomes over 18 months were predicted by higher perceived benefits of sobriety, while increased costs, or negative aspects of sobriety (e.g., boredom, social anxiety, and stress),were predictive of worse outcomes (Korcha, et al., 2011).Similarly, Heather and McCambridge (Heather & McCambridge, 2013) found support for improved drinking outcomes based on level of motivation after clients completed treatment.

A strong body of work indicates that the characteristics of one's social network impacts substance use (Galea, Nandi, & Vlahov, 2004; Kaskutas, Humphreys, & Bond, 2001; Longabaugh, Wirtz, Zweben, & Stout, 1998). Several theories have been proposed to understand the influence of social networks, including Hirschi'ssocial control of behaviour (Hirschi, 1969). Social control refers to the strong bonds with family, friends, and other interpersonal relationships that promote drug use prosocial behaviour and discourage deviant behaviour. Addiction research has traditionally examined social control as the amount of support given toward inhibiting or abstaining from alcohol and (Beattie & Longabaugh, 1999; Longabaugh, Beattie, Noel, Stout, & Malloy, 1993; Longabaugh, Wirtz, Zywiak, & O'Malley, 2010; Miller, 2006). Support from the social network that is drug and alcohol specific is more predictive of treatment outcomes than general support (Groh, Jason, Davis, Olson, & Ferrari, 2007; Polcin, Korcha, Bond & Galloway, 2010) and a social network that is supportive of recovery efforts is related to better treatment outcomes (Beattie & Longabaugh, 1999; Subbaraman & Kaskutas, 2012).

Recent studies have considered the mediational role of motivation to understand how motivation operates in the wider scope of the recovery process (Hunter-Reel, McCrady, & Hildebrandt, 2009; Hunter-Reel, McCrady, Hildebrandt, & Epstein, 2010; Small, Ounpraseuth, Curran, & Booth, 2012). Hunter-Reel and colleagues (Hunter-Reel, et al., 2009), proposed that social network members may provide motivation to resist drinking and motivation may change as a function of these relationships. This theory was supported in a later study (Hunter-Reel, et al., 2010) that demonstrated motivation as a mediator between social support and drinking outcomes for alcohol dependent women.

Purpose

The present work examined a variety of social network factors that might interact with motivation to influence abstinence over time. Our goal was to identify ways social support might buffer the destructive effects of low motivation and identify groups for whom motivation might be particularly important. This work contributes to the literature in two important ways. First, most studies on motivation and substance use outcomes have used treatment seeking populations. Motivation to abstain from alcohol and drugs for those with some recovery time has largely been ignored. Of central interest to the present study was examining factors that influence motivation to *maintain abstinence* from alcohol and drugs rather than the motivation to stop or decrease substance use. A second goal was to expand on

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the operationalization of the social network to include different types of social influences. We included traditional characteristics of the social network (e.g., number of persons in the network and number of alcohol and drug users in the network) but also other forms of social influences that may impact motivation and alcohol and drug abstinence. The concept of confrontation (Polcin, 2003;Polcin, Galloway, Bond, Korcha, & Greenfield, 2009,2010) as a measure of supportiveness is a relatively recent development in the addiction literature that updates the notion of confrontation as it is perceived by the recipient. The concept of confrontation as helpful takes on a broader perspective that specifically queries those in recovery on the comments or warnings they may have received about their drug and alcohol use from multiple sources (e.g., “bad things” may happen if they do not change their substance use or, if in recovery, make changes to maintain abstinence). Previous work has found this construct or confrontation to be generally experienced as accurate, helpful and supportive by the recipient (Polcin, et al., 2009).

Additionally, this work included affiliation with 12-step programs such as Alcoholics Anonymous (AA) (Humphreys, Kaskutas, & Weisner, 1998) as another component of social influence that might moderate the effect of motivation on outcome. We hypothesized that the relationship between motivation and abstinence would be strongest when there were high levels of alcohol and drug abstinence in the social network, more supportive confrontation, and greater affiliation with 12-step groups. However, we also wanted to explore whether these social influences night buffer destructive influences when motivation remained low over time.

Methods

Sample

Participants were recruited within the first week of entry into residential recovery homes in Northern California. Three programs were targeted. All three used a social model approach to recovery that emphasized 12-step involvement, peer support, and residence in an alcohol and drug-free living environment. However, there were some differences between the sites. The largest (n=218) consisted of 16 houses and required at least a few days of sobriety and no signs of withdrawal from substances prior to entry into the residence. Although these freestanding houses were not affiliated with any type of treatment program, nearly half of the residents reported receipt of residential or outpatient treatment in the 30 days prior to entering the house (n=106). The second location consisted of 51 residents that entered SLHs that were affiliated with an outpatient treatment program. Typically, these individuals needed to be in good standing in the outpatient program for 30 day before applying to the sober living residence. The third site was smaller site (N=20) and offered some on-site treatment services in a residential setting for a period of 30 to 60 days followed by residence in sober living homes. All study materials and protocols were approved by the Public Health Institute’s internal review board (IRB).

To maximize generalization of study findings, few exclusionary criteria were implemented and refusal to participate in the study was rare. Eligibility required all participants to be at least 18 years old, have the ability to understand and read English, report no major psychiatric impairments that would interfere with their ability to provide informed consent,

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and be available for follow-up interviews. A total of 323 residents were recruited from three locales. All residents were interviewed at baseline and follow-up interviews were conducted at 6, 12 and 18 months. A total of 289 residents (90%) were interviewed for at least one follow-up interview. Because the current paper targets assessment of longitudinal changes over time, residents who did not complete a follow up interview were excluded from the analysis. The sample selected was favourable for the current study because we saw significant increases in alcohol and drug abstinence over time (Polcin, et al., 2010). We could therefore assess how interactions between motivation and social support were associated with improved rates of abstinence.

Measures

Demographic characteristics—In addition to the usual demographic indicators such as gender, race, marital status, education, psychiatric symptoms, and alcohol and drug use measures, SLH information on the length of stay (LOS) and number of days living in a controlled environments in the 30 days prior to house entry are included.

Psychiatric symptoms—To assess current psychiatric severity we used the Brief Symptom Inventory (Derogatis & Melisaratos, 1983). The 53-item measure assesses severity of psychiatric symptoms on nine clinical scales as well as a Global Severity Index (GSI). Items are rated on a 5-point scale and ask about symptoms over the past 7 days. The GSI was used to assess overall psychiatric severity.

Alcohol and Drug Consequences Questionnaire (ADCQ)—The ADCQ (Cunningham, Sobell, Gavin, Sobell, & Breslin, 1997) draws upon a view of motivation that emphasizes the ‘pros’ and ‘cons’of behaviour (e.g., Janis, 1977).The ADCQ uses the terms “perceived costs” and “perceived benefits” to describe two subscales. Perceived costs consists of 15 items and the perceived benefits subscale was inclusive of 14 items. Examples of costs include items such as “I will have difficulty relaxing,” “I will get depressed,” and “I will feel bored.” Examples of benefits include items such as “I will have a better relationship with my family,” “I will feel better about myself”and“Iwillbemoreactiveandalert.”Because this instrument was administered several times over the course of the study and included persons with no recent substance use, participants were asked to consider their substance use prior to administration of ADCQ items and pick one of two options; (1) “if I keep my sobriety” or (2) “if I stop or cut down.” Responses are measured on a 6-point Likert scale ranging from zero to five assessing level of importance for each cost and benefit item. Two scales were created by summing scores and dividing by the number of items. Alphas for our modification of these scales (i.e., assessing motivation to “keep my sobriety” as a response option) were 0.88 for costs and 0.84 for benefits (Polcin, Korcha& Bond, 2015).

Alcohol and Drug Confrontation Scale (ADCS)—The ADCS used 8 items to assess experiences of supportive confrontation from 9sources: spouse, family, friends SLH residents, health care professionals, mental health professionals, substance use treatment professionals, co-workers, and criminal justice professionals (Polcin, et al., 2009). Assessment of each source section begins with the question, “Did (source) say bad things might happen to you if you did not make changes to address drug or alcohol problems or if

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you did not make changes to maintain your sobriety?" If the response was affirmative, additional questions followed assessing the intensity of confrontation (Internal Intensity subscale) and supportiveness of confrontation (Internal Support subscale). We used the Internal Support scale as our measure of Supportive Confrontation. Examples of items on this scale included the participant's assessments of how supportive the person(s) were of their recovery, how supportive the person(s) were overall, and how much the confronter was trying to help. Items were rated on a 5-point Likert scale and averaged for each participant. Psychometric support for this scale is derived from several studies (Polcin, et al., 2009; Polcin, Galloway, Bostrom, & Greenfield, 2007). The alpha coefficient across all sources of confrontation was 0.90 and a confirmatory factor analysis yielded a comparative fit index of 0.90. Although a two factor structure was found, only one factor, internal support, was hypothesized to be a moderator of motivation and abstinence. The scale was dichotomized at the median so that scores below 4.5 were deemed 'lower internal support' and those at 4.5 or higher were 'higher internal support'.

Six-month abstinence—Was a single question which asked if any alcohol or drugs were used during the past 6 months (Gerstein, 1994). This dichotomous variable is the primary outcome measure analysed here. Abstinence was chosen because our measure of motivation specifically asked about motivation "to keep sobriety." In addition, abstinence was the explicit goal of all of the recovery homes. For an analysis of outcomes a using a wide variety of alcohol and drug and other outcome measures see Polcin et al (2010).

Important People Instrument (IPI)—The IPI (Zywiak, Longabaugh, & Wirtz, 2002 was used to assess number of important persons in the social network, drinking in the social network and drug use in the social network. This instrument allows participants to identify up to 12 important people in his or her network with whom they have had contact in the past six months. The four most important persons from this list were identified and rated on importance on a scale from 1–6 and mean importance was averaged. Information was obtained on the type of relationship, amount of contact over the past 6 months (a 7-point Likert scale ranging from once in the past 6 months to daily),and drug and alcohol use for each member of the social network (a 5-point Likert scale including ranging from "in recovery" to "heavy user"). Our analyses used three social network measures were dichotomized at the median: 1) size of social network was defined as 'low' if the resident's network was empty or consisted of 1 person, 'high' if 2–12 persons were reported; 2) alcohol use of the social network scale was alcohol use multiplied by the amount of contact with the resident. This scale was scored as 'low' if the mean scale score was 0.83 or less and 'high' if 0.84 or higher; 3) drug use of the social network scale was the drug use of the network members multiplied by the amount of contact with the resident. A 'low' score corresponded to a scale score of 0 and a 'high' scores indicated a scale score above 0.

Alcoholics Anonymous Affiliation Scale (AA affiliation)—This measure includes 9 items and was used to assess the strength of an individual's affiliation with 12-step groups including Alcoholics Anonymous (AA), Narcotics Anonymous (NA), or Cocaine Anonymous (CA) (Humphreys, et al., 1998). The scale includes items assessing attendance at meetings, questions about sponsorship, spirituality, and volunteering for service positions

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at meetings. The measure shows strong validity and internal consistency with Cronbach's alphas of 0.85 for treatment samples and 0.84 for community samples. Because the data distribution for this variable was highly skewed we used a dichotomized measure.

Analysis Plan

The main outcome measure of 6-monthabstinence was analysed using random effects logistic regression modelling for panel models, adjusted for age and gender via the 'xtlogit' Stata macro (Stata Corp., 2013). The formal model estimated was: $\text{logit}(p_{i,t}) = \alpha_i + \beta_1 A_i + \beta_1 G_i + \gamma_1 M_{i,t} + \gamma_2 Z_{i,t} + \gamma_3 M_{i,t} Z_{i,t} + \varepsilon_i$, where A_i is the baseline age, G_i the gender (females are the reference), and $M_{i,t}$ and $Z_{i,t}$ represent the motivation (i.e., costs and, separately, benefits) and social support moderator measures, respectively. The random intercept term ε_i represents the combined effect of all unmeasured subject-specific covariates that may result in systematic over or under-prediction of abstinence within individual across the three waves analysed. Such a model estimates the time averaged effect of the number of persons in the social network, alcohol and drug use in the social network, supportive confrontation, and 12-step affiliation measures as moderators of the relationship between motivation measures and 6-month abstinence. Demographic information was obtained from the baseline interview but, because a central goal of the study was to evaluate a population with at least some degree of time in recovery, only data from the 6-, 12-, and 18-month follow-ups were used in the logistic regression models and graphs.

Results

As Table 1 indicates, residents were primarily male (81.0%) and white (65.1%). Most had received a high school education or equivalent (78.5%). Approximately half of the residents had never been married with a minority that were married or living with a partner prior to moving to the SLH (10.7%). Over a quarter had served jail or prison time in the past 30 days (29.1%). Most met DSM-IV criteria for at least one substance in the past year, with about half the sample (49.8%) reporting dependence on 2 or more substances.

Length of stay (LOS) in the sober living residence was over six months on average, although differences were apparent by site. Those residents living in sober living house affiliated with the outpatient treatment program stayed an average of 254 days (sd=169.1). Shorter lengths of stay were reported for individuals in the residential treatment program 143 days (sd=133) and the freestanding SLHs (166.6 days; sd=162.). Few other demographic differences were observed between the study locales except that those affiliated with the outpatient program tended to be older (43 years; sd=9.) compared to those in the residential treatment program 36 years (sd=12.) and freestanding houses (37 years; sd=10.). Residents in the houses affiliated with outpatient treatment also had a higher percentage of African-Americans (70%) and more men (94%).

Psychiatric symptomatology as measured by the Global Severity Index on the Brief Symptom Inventory was higher than normative data on adult non-patient populations but lower than adult psychiatric outpatients (Derogatis & Melisaratos, 1983). Residents entering the residential treatment program had significantly high GSI scores at baseline (1.1; sd=0.7) than those that completed the 90 day outpatient treatment (0.7; sd=0.6).

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Table 2 displays variable distributions for motivation and social support scales as well as abstinence. Residents rated the perceived benefits of sobriety much more highly than the perceived costs at every interview. Cross-sectional t-tests comparing perceived costs and perceived benefits at each time point were significant at $p < 0.001$ at every interview. Within subject repeated measurement for the perceived costs and for the perceived benefits did not differ significantly, indicating that resident ratings of these two measures of motivation remained relatively stable across the one year time span. Social influence variables (i.e., 12-step affiliation, supportive confrontation, drug use in the social network, alcohol use in the social network, and number of contacts in the network) were dichotomized due to highly skewed variable distributions across all follow up time points. Table 2 shows the percentages for the dichotomized categories at each follow-up time point. Most of these variables were consistent over the course of the study, showing only modest variation across data collection time points. The one exception was 12-step Affiliation, which showed a decline, particularly at the 18 month time point.

Table 3 displays beta coefficients for the interaction terms of the perceived benefits and the perceived costs with each of the social influence variables, predicting abstinence. First, two models were first run to examine the marginal effects of perceived benefits and the perceived costs (not tabled). One demonstrated a significant negative relationship between perceived costs and the odds of abstinence ($\beta = -0.8$; 95% CI=−1.0 to −0.6; $p<0.001$) and a second model showed a significant positive relationship between perceived benefits and odds of abstinence ($\beta=0.6$; 95% CI=0.4 to 0.8; $p<0.001$). Interaction terms, entered in separate models, were then included to test whether social influence measures moderated the relationship between motivation and abstinence. None of the social influence measures moderated the relationship between perceived costs and abstinence. However, significant interactions were evident for the perceived benefits. Interactions included the number of persons in the social network ($p<.05$) and12-step affiliation ($p < 0.05$).

The number of persons in the social network interacted with perceived benefits to influence abstinence (Figure 1). For residents with low and high numbers of social contacts, higher perceived benefits was associated with higher abstinence. However, smaller networks were associated higher abstinence than larger social networks across all levels of benefits, but especially when benefits were low. As benefits increased for the larger social network group there was a relatively larger effect on abstinence. For persons in the smaller social network group, increases in benefits resulted in more modest improvement on abstinence.

The relationship between perceived benefits and abstinence also showed differing patterns based on level of 12-step affiliation (Figure 2). Abstinence was highest among persons in the high 12-step involvement group. That finding held across all levels of perceived benefits. However, there was a stronger effect for benefits among the low 12-step involvement group. As perceived benefits increased, the log odds of abstinence increased more among those with low rather than high 12-step affiliation.

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Discussion

Research assessing motivation at treatment entry has shown only modest effects on long-term outcome. Less studied is the influence of motivation to maintain abstinence over time once a person has established some time in recovery. The findings reported here and results from previous work (e.g., Korcha, et al., 2011) demonstrate that proximal measures of motivation are strong predictors of abstinence across time. The current paper adds to this literature by showing how social influences alter the impact of motivation on abstinence.

The discussion below begins with an examination of the resiliency of costs and benefits as influential factors on abstinence. The discussion then examines the two social support factors that interacted with benefits to influence abstinence: size of the social network and 12-step involvement. Implications of the findings for sober living homes and other recovery services are discussed along with identification of study limitations.

Resiliency of Perceived Costs and Benefits

Results show that the two ADCQ scales, especially the costs scale, are strong, resilient predictors of abstinence. These scales appear to be useful for predicting outcome for a range of different client groups with different characteristics. We hypothesized that a number of social influences, such as social networks with limited or no alcohol or drug use, high affiliation with 12-step programs and greater receipt of supportive confrontation would mitigate the poorer outcomes observed with higher perceived costs. Yet all of these models, irrespective of the moderator tested, were non-significant. While 12-step affiliation and the size of the social network moderated the effect of perceived benefits on abstinence, neither substance use in the social network nor supportive confrontation had moderating effects.

It is important to remember that we were testing these social factors as moderators of motivation, not their direct impact on outcome. For example, previous research with this dataset (Polcin et al, 2010) showed alcohol and drug use in the social network and 12-step affiliation were strong predictors of outcome. One potential reason for the lack of findings for supportive confrontation is that few individuals yielded low scores on the internal support scale used. There were few counterproductive experiences of confrontation and therefore limited variation of scores. A sample with more varied experiences of how confrontation was received might yield more significant results.

Social influences on abstinence that were found in previous studies (e.g., alcohol and drug use in the social network) appear to be unrelated to motivation as measured by costs and benefits. Social influences may operate independently through containment of impulses to use substances and social reinforcement for continued abstinence. For a qualitative analysis of different ways social influences within recovery homes facilitates abstinence see Polcin and Korcha (2015).

Twelve-step Involvement

The finding that high12-step affiliation was associated with higher abstinence across all levels of perceived benefits supports our previous work (Polcin, et al, 2010). Results suggest that for those with high 12-step affiliation increases in perceived benefits adds little to

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maintaining abstinence. Practical application of the finding is limited by the fact that the 12-step model of recovery is not necessarily suited to all persons in recovery (Miller, 2008; Walters, 2002) and other approaches to assist these 'non-affiliated' individuals achieve success are needed. Hoffman (Hoffmann, 2003) suggested that individuals have 12-step career types. Some move in and out of 12-step participation but do not fully commit to it while others have 'tourist careers' with 12-step programs where they attend meetings due to coercion but have little interest in continued attendance.

Even though SLHs follow a social model program of recovery that requires 12-step attendance and promotes resident affiliation with 12-step, only about half the residents reported feeling a high level of connection with a 12-step program. Nearly all residents had left the SLH by the 18-month interview and a noticeable increase in the percentage reporting lower 12-step affiliation occurred at the 12-month interview. These results indicate that 12-step affiliation is not consistent over time and that the road to recovery is not the same for all individuals.

Interestingly, those residents with lower levels of 12-step affiliation increased the odds of abstinence with increased perceived benefits. The most rewarding aspects of sobriety may act as a buffer to using drugs and alcohol for those not interested in active participation in 12-step programs. Treatment efforts aimed at increasing perceptions about the benefits of abstinence may be particularly helpful for these individuals.

Number of Persons in the Social Network

Interaction models were not significant for alcohol or drug use in the social network, but the number of persons in the network, regardless of alcohol or drug use, was a significant moderator of the relationship between benefits and abstinence. Residents with one or no members in their social network showed a trajectory of improved abstinence with increased perceived benefits. However, the increase was significantly less than that found among residents with two or more persons in their network. These larger social networks showed a stronger improvement on abstinence as benefits increased.

One potential explanation for this finding is that individuals with larger social networks might have more opportunities to use the benefits of abstinence as a prophylaxis to relapse. For example, persons with larger networks may engage in more social activities where alcohol or drug use is possible. Possessing a strong sense of why abstinence is important (i.e., the benefits) might be very helpful in avoiding or successfully managing potential relapse situations. Individuals with little or no social support in their networks will have fewer opportunities for benefits to help them avoid relapse in social situations. It was interesting that these individuals with limited social support had higher abstinence than those with higher numbers of contacts across all levels of motivation. It seems likely that some of the participants with limited social support who were achieving abstinence were successfully avoiding contact with persons who could potentially exert a destructive influence.

Given the widespread finding that social contact and social support facilities health and well-being, recovery home service providers might consider ways to increase social support for socially isolated residents through structured recreational and social activities within the

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home or facilitating involvement in outside activities. For example, individuals with little or no social support in their personal networks might need the structured social support found in 12-step meetings, even though they might not indicate fellow 12-step members as "important people" in their lives, which is how the size of the social network item is worded.

Strategies for Maximizing Motivation

Study results support the importance of addressing several issues to facilitate recovery. First, our findings suggest that the emphasis that SLHs place on 12-step involvement is warranted. Although 12-step involvement interacted with benefits to influence abstinence, higher involvement in 12-step groups was associated with higher odds of abstinence across all levels of perceived benefits. Residents identifying few important people in their lives might particularly benefit from such involvement.

Second, strategies that help individuals learn how to cope with the challenges (i.e., costs) that abstinence presents are essential. In the current study as well as in previous work (e.g., Korcha, et al., 2011), motivation as measured by the costs scale had a consistent and robust association with outcome. The absence of moderators suggests that addressing costs should be an important part of the recovery process for all persons with substance use disorders. Cognitive behavioural therapy (CBT) interventions that address ways to cope with the challenges of recovery, such as those described by Kadden et al. (1994) and Carroll (1998) seem to be warranted. These types of interventions address issues that can exacerbate substance use, such as anxiety and depression, difficulty socializing, and discomfort when experiencing urges to use. Moreover, they provide alternative ways of getting needs met that substitute for alcohol and drug use. Our results suggest that addressing the costs associated with abstinence should be conducted over the course of recovery, not limited to relatively brief periods during treatment. Although SLHs do not typically provide formal services such as CBT, modifications could be made to provide them in a group format onsite.

Our results also suggest that service providers pay attention to the experienced benefits of sobriety over time, particularly with some subgroups. Individuals with higher numbers of contacts in their social networks and lower involvement in 12-step groups were those who were most impacted by benefits. It therefore makes sense to target efforts to increase perceived benefits most among these subgroups. The same aforementioned CBT strategies can be used to help individuals recognize the benefits of sobriety and use those recognitions as a prophylaxis to alcohol and drug use.

Limitations

There are a variety of limitations that need to be considered:

1. Our study sample consisted of SLH residents in Northern California and outcomes may not generalize to other populations, although SLH residents may be more representative of a broader community context than traditional treatment seeking samples (Jason & Ferrari, 2010).

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2. Concomitant with using self-report measures is the possibility of under- or over-reporting although random urine screens were implemented and agreement with self-report was high.

3. Motivation has been measured in a variety of ways other than assessing perceived costs and benefits. Other measures of motivation may show different associations with abstinence and social support.

4. It is difficult to know whether our findings continue beyond an 18-month time period.

5. There were limitations in our variable distributions. Most of our measures were highly skewed and were therefore dichotomized for analyses. This was particularly the case for the internal support scale, which was used as our measure of supportive confrontation.

6. Because we assessed "motivation to maintain sobriety" our outcome variable was abstinence. Other outcomes, such as ways that motivation impacts severity of alcohol and drug problems, could result in different findings.

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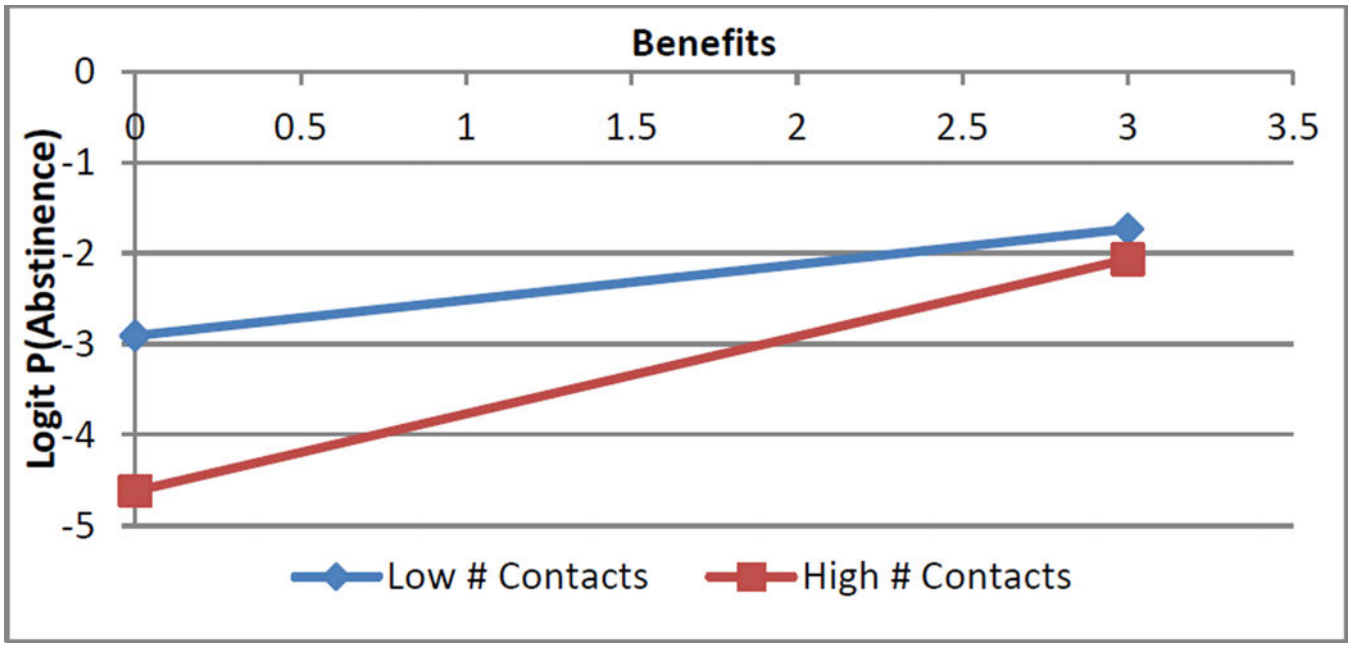


Figure 1.
Perceived benefits by number of persons in the social network at each interview.

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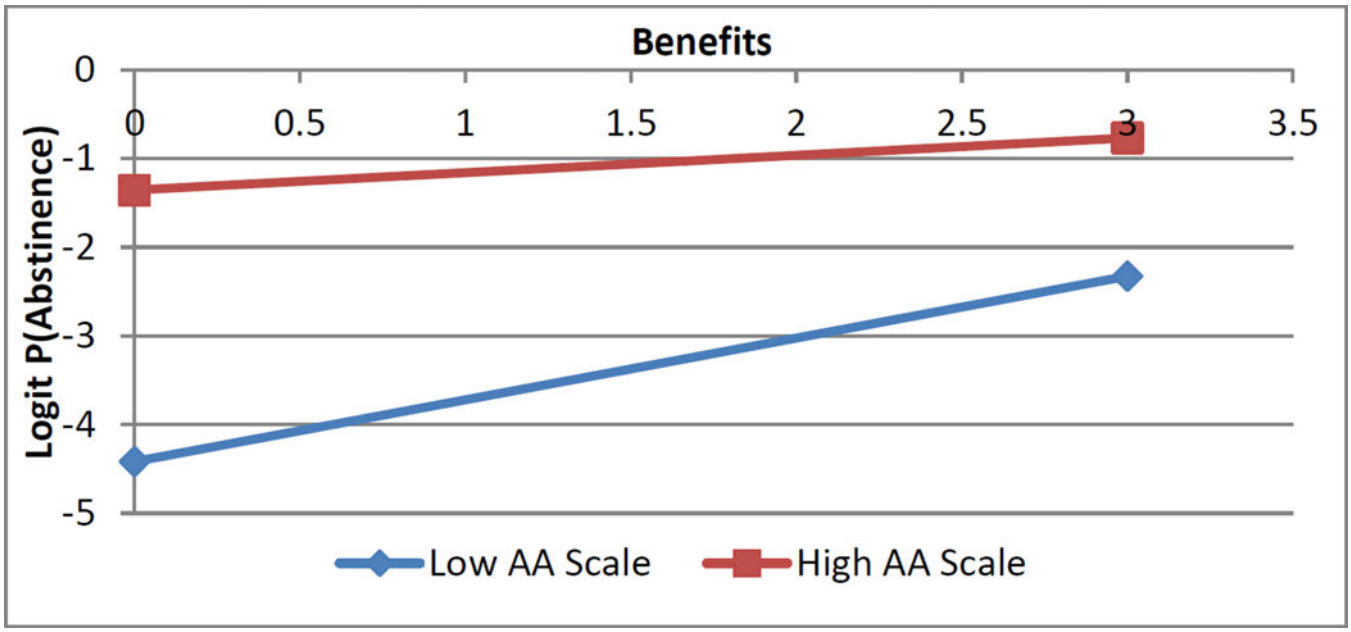


Figure 2.
Perceived Benefits by 12-step affiliation at each interview.

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Table 1

Baseline demographic characteristics of the SLH residents (N=289).

	%
Male	81.0
Marital status	
Never Married	50.9
Married or live-in relationship	10.7
Divorced/separated/widow(er)	38.5
Children under 18	46.0
Race/ethnicity	
White/Caucasian	65.1
African-American	18.7
Hispanic	8.0
Other	7.6
GED/High School Education	78.5
Other Environments in (past 30days) Jail/prison	29.1
Any inpatient or outpatient treatment	56.7
Any employment (past 30 days)	25.6
Any substance use in the 6 months prior to SLH entry	17.0
DSM-IV dependence (past 12 mos)	
None	12.9
Alcohol only	11.5
Methamphetamine only	15.3
Cocaine only	6.2
Opiate only	3.5
Marijuana only	0.8
Multiple drug dependency	49.8
	$\bar{x}$ (sd)
Age	37.5 (10.1)
Length of stay at SLH (# days)	181.9 (166.4)
Global Severity Index (GSI)	0.83 (0.75)

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Table 2

Characteristics of the predictor variables and percent abstinent at each study interview (N=289).

	6-month	12-month	18-month
	x̄ (sd)	*x̄ (sd)*	*x̄ (sd)*
Costs	0.9 (1.0)	0.8 (1.0)	0.8 (1.0)
Benefits	4.0 (1.1)	4.1 (1.1)	4.0 (1.1)
	%	%	%
Percent 6-months abstinent	45.5	49.1	43.1
# of contacts			
Low (0 or 1 person)	62.0	55.3	61.1
High (2 to 12 persons)	37.6	44.7	38.9
Alcohol use of network scale			
Low (0 to 0.83)	51.2	50.6	51.1
High (0.84 to 10)	48.8	49.4	49.9
Drug use of network scale			
Low (0)	65.3	67.7	67.4
High (0.01 to 10)	34.7	32.3	32.6
Supportive Confrontation			
Low (0 to 4.49)	47.5	41.5	43.4
High (4.50 to 5)	52.5	58.5	56.6
12-step Affiliation			
Low (0 to 6)	43.8	49.2	63.9
High (6.01 to 10)	56.2	50.9	36.1

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Table 3

Beta coefficients of the interaction of social influence and motivation predicting abstinence

	Interaction of social influence measure and benefits		**Interaction of social influence measure andcosts**	
	β	***95% CI***	**β**	***95% CI***
# in the social network	**0.5**[a]	**0.03, 0.9**	−0.01	−0.5, 0.5
Supportive Confrontation	−0.3	−0.9, 0.3	−0.02	−0.4, 0.5
12-step affiliation	**−0.5**[b]	**−1.0, −0.03**	−0.01	−0.4, 0.5
Alcohol use in the network	0.4	−0.04, 0.8	0.02	−0.5, 0.5
Drug use in the network	0.2	−0.3, 0.6	0.02	−0.5, 0.5

Note: All models control for age and gender

[a] $p < 0.05$; interaction illustrated in Figure 1 below

[b] $p < 0.05$; interaction illustrated in Figure 2 below

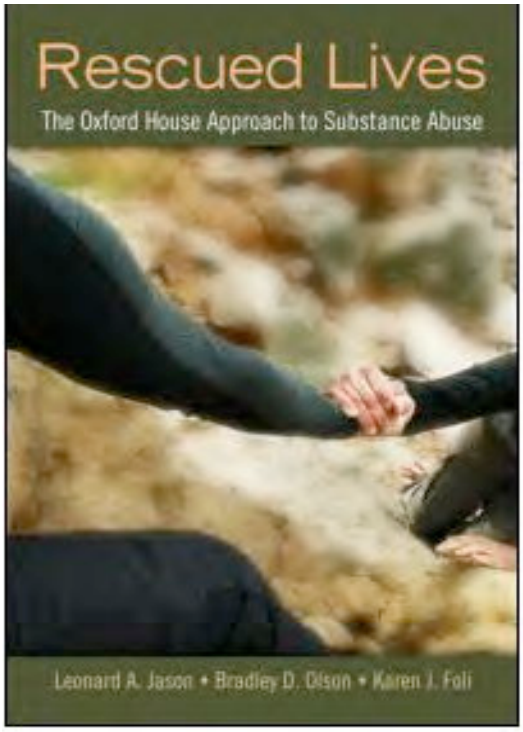
Oxford House™
"Celebrating 35 Years"



Reprint

Oxford House – The Model

12th Oxford House World Convention
The Fairmont Hotel - Chicago, IL
September 2-5, 2010



Rescued Lives: The Oxford House Approach to Substance Abuse was published July 2008. The book by Leonard Jason, Bradley Olson and Karen Foli has received the following early reviews:

"With both passion and detail, the authors chronicle the extraordinary social forces that shaped the revolutionary Oxford House Movement. In doing so, they show why the pursuit of elegantly designed, but de-contextualized approaches to drug treatment often fall short, and how a more contextualized, peer-centered approach can bring about long-term recovery."

Jean Rhodes
Professor of Psychology
University of Massachusetts, Boston

"Rescued Lives: The Oxford House Approach to Substance Abuse offers value for two diverse audiences. For those involved in addiction treatment, it provides a clear, concise, and vivid presentation of a novel, effective, and cost-efficient approach. For community psychologists, it offers a fine illustration of a program that puts into action several of the discipline's core concepts, including social support, self-help, empowerment, tolerance for and promotion of diversity, and psychological sense of community. A stimulating and compelling brand of powerful first-hand vignettes and solidly designed quantitative and qualitative research. "

David Glenwick, PhD
Professor of Psychology
Fordham University

"Remarkable … ***Rescued Lives*** cogently combines personal experience, exhaustive research, and clear descriptions to tell the story of the Oxford House approach for treating substance abuse, especially alcoholism … insightful … demonstrates what effective university-community partnerships can accomplish in understanding an important phenomenon over a sustained period of time … Offers challenges to the conventions that have produced a costly, ineffective health care system for treating addiction … A better future for substance abuse treatment starts with reading ***Rescued Lives***. "

Chris Keys, PhD
Professor Emeritus and Former Chair
Department of Psychology
University of Illinois at Chicago

Rescued Lives: The Oxford House Approach to Substance Abuse is available from Amazon or directly from the publisher Routledge. Simply go on line and put Routledge into Google and then put either the book title or author [Jason] in the search window. The price of the book is $29.95 plus shipping. It is a good read and tells the story of Oxford House well.

Many of the scholarly research articles published by the DePaul group are downloadable by clicking on "Publications/Evaluations/DePaul" on our website: www.oxfordhouse.org.

See inside of back page for information concerning an earlier publication by the DePaul group that reports on specific studies of Oxford House done by them over the last 14 years.

Oxford House – Together We Can

Washington, D.C. Convention 2009

Recovery Homes for Recovering Alcoholics and Drug Addicts

Oxford House–The Model

The Federal Anti-Drug Abuse Act of 1988, P.L. 100-690, required each State to establish a revolving fund to make loans to six or more recovering individuals to rent houses to use as self-run, self-supported group homes that are alcohol and drug free. The law was based on the then thirteen- year experience of the national network of self-help Oxford Houses. Today, after 33 years experience, there are more than 1,300 Oxford Houses throughout the United States.

This paper explains how to start self-run, self-supported recovery houses in your state. It is a simple concept, based on the Oxford House experience, and provides a cost-effective way to help thousands of individuals recovering from alcoholism and drug addiction to avoid a return to addiction by living a comfortable life without the use of alcohol and drugs. Recovering individuals living together in the disciplined environment of an Oxford House in a good neighborhood are almost always able to help each other stay clean and sober without relapse.

The requirement that states have recovery home revolving loan funds is now permissive but many states continue them. In other areas, various groups have established similar start-up funds. In other places, recovering individuals themselves simply put together three or four thousand dollars to help get a new house started.

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Characteristics of Oxford Houses

Oxford House, Inc. is a network of self-run, self-supported recovery houses. It is not part of Alcoholics Anonymous or any other group, but its members rely on AA and similar self-help programs for additional outside support. In its first twelve years [1975-1987], it expanded quietly from one house to thirteen houses without any outside financing. Following enactment of the Anti-Drug Abuse Act of 1988, Oxford House, Inc. established an expansion program utilizing trained outreach workers and the small start-up loan program available under the new law. Now there are more than 1,000 Oxford Houses throughout the United States. Most residents of Oxford Houses have become comfortably clean and sober even though they had often failed in the past. This paper describes how self-run, self-supported Oxford Houses are established and maintained following a disciplined democratic system of operations.

Oxford House, Inc. does not own property. It simply encourages groups of recovering individuals to rent houses and become affiliated with the Oxford House, Inc. network of individual houses. Such affiliation brings with it the Oxford House System, which is not difficult to learn but is very effective. The Oxford House System fosters democratically run group housing and an operating framework tailor-made for the individual recovering from alcohol or drug addiction.

By the time many persons addicted to alcohol or drugs get serious about recovery, they have lost their normal living accommodations or at best made their living in them very difficult. Going home becomes either impossible or risky for continued recovery. Oxford House can provide a transitional home between early recovery and past homes or new homes. It can also provide a permanent home for those who decide that they prefer living in a supportive group environment to living alone.

Since Oxford House is democratically run and self-supported, the members living in an Oxford House vote to determine if an applicant for membership is accepted.

When an individual is accepted for membership in an Oxford House, there is no time limit on how long he or she can live there, but use of alcohol or drugs or non-payment of rent will result in expulsion. That simple policy lies at the heart of what Oxford House is and what makes it work.

Recovering individuals interested in self-run, self-supported recovery houses have two options. If they are in an area where Oxford Houses already exist, they should investigate the possibility of admission to one of those houses. Applications for residence are available at each house. If there is not an Oxford House in their area, or if the existing houses are full, they should consider starting one.

Establishing A New Oxford House

The steps generally necessary to get ready to get a new Oxford House started are:

1. Contact Oxford House, Inc. (1-301-587-2916) to ask for help and obtain detailed information about "How Oxford House Works."

2. Contact other recovering individuals in the area who are interested in starting an Oxford House.

3. File an application with Oxford House, Inc. for an Oxford House Charter.

Step 1. Getting Information

In addition to reading this technical assistance paper, you may want to find out more about how an Oxford House works. Oxford House World Services, the non-profit, tax-exempt corporation that acts as an umbrella service organization for all Oxford Houses, can provide you with additional information and encouragement based upon its 29-year experience. You may contact:

Oxford House World Services
1010 Wayne Avenue, Suite 300
Silver Spring, Maryland 20910
Telephone (301) 587-2916
Facsimile (301) 589-0302

Internet: www.oxfordhouse.org

Many states and other public and private organizations have contracts with Oxford House World Services to provide on-site technical assistance. Oxford House World Services can put you in touch with them. If your area does not have such a contract, Oxford House World Services can suggest ways to get one. Often local organizations provide money to get technical assistance from Oxford House World Services to assure proper establishment of a new Oxford House.

Step 2. Getting Members

The original Oxford House got started because several recovering individuals decided to work together to start it. After the first house had been going a few months, three members of the first house decided to start another. Those three members became "Charter Members" of the new house – that is, they asked the other members of the first house if they could receive authorization to replicate the first house at another location. The members of the first house not only agreed that they could, but also lent them money to help get the second house started.

Step Two of starting a new house consists of finding at least two recovering individuals willing to live in the new house. Of course, it is better to find three, four, five, six or more recovering individuals who want to live together in an Oxford House from the start, but that is sometimes difficult to do. Oxford House, Inc. encourages charter applicants to get as many charter members as possible because the larger the number, the easier it is to assume that expenses of the new house can be met. Nevertheless, interested individuals should not be discouraged from contacting Oxford House, Inc. just because they have only a few prospects as charter members. Oxford House, Inc. will be able to suggest ways to find other prospective charter members in the particular locality. Among other principles of Oxford House is one that limits affiliation to single-sex houses accommodating *at least six* residents (the average number of residents in an Oxford House is between eight and nine).

Step 3. Formally Applying For A Charter

Self-run, self-supported recovery houses can be started by anyone and may stand-alone or be formally affiliated with Oxford House. Oxford House affiliation is advantageous for a new house because of the mutual support that can come from such an existing organization.

Once a group that is interested in starting an Oxford House has been formed, it should file an application for a charter. An application for a charter can be obtained by calling Oxford House World Services office at 301-587-2916 or can be downloaded from the Internet at www.oxfordhouse.org.

Bottom–Up Democracy and Support

The advantage of becoming affiliated with the Oxford House Network of Recovery Houses is the ability to share the experience of other self-run, self-supported recovery houses. Most Oxford Houses make monthly contributions of $50 to help pay the expenses of Oxford House World Services.[1] The monthly contribution per

[1] At the first annual Oxford House World Convention in 1999 the individual houses established a goal for each house to make a $50 a month voluntary contribution to support the World Services Office and many do. These voluntary contributions combined with grants,

house amounts to about $5 a resident and is payable out of house funds rather than as an individual assessment.

Individual Oxford Houses work together at a local level by forming Chapters. Within the Chapter framework most houses pay a small amount of monthly dues to defer expenses.[2]

Since 1997, the World Council has governed the policies and programs of the organization. The individual Oxford Houses elect the World Council.[3] The Oxford House, Inc. board of directors is made up of outside directors with representation of the World Council. It determines the overall business practices of the organization.

There is **no charge** for the Charter, but each house must maintain its operation consistent with the following conditions:

- A new Oxford House must be run in accordance with the concept, system of operations and traditions of Oxford House as set forth in the *Oxford House Manual©*.
- A resident member of a house must immediately leave if such member returns to using alcohol or drugs or fails to keep up with his or her share of the costs for operating the house, and
- A new Oxford House must be a good neighbor in the community and pay its bills in a timely manner.
- Groups of Oxford Houses in a locality form chapters to follow mutually supportive principles set forth in the *Oxford House Chapter Manual©*.

The charter becomes a valuable asset for providing support when a house is faced with the problem of having to expel a resident because of a return to drinking alcohol or using drugs. Expulsion of a member who has relapsed is always difficult but it becomes easier when members balance the decision to expel against the risk of losing the house charter if they fail to maintain an alcohol and drug free environment.

Another value of the Charter is that a new Oxford House becomes part of Oxford House, Inc., a non-profit corporation that has been recognized as qualifying under section 501(c)(3) of the Internal Revenue Code as a tax-exempt organization.[4] This status permits individuals who make donations to claim a tax deduction.[5]

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Finding the Right House

As a general rule Oxford Houses are located in good areas of a community and not in slums. Recovering individuals have enough to do in staying sober and straight. There is no need to add fear of safety or poor living conditions to their effort[6]. Experience has shown that by living in a good house in a good neighborhood, all individuals, whether from poor, middle class or wealthy neighborhoods, value their living accommodations and have an additional incentive to stay clean and sober.

From a zoning standpoint, Oxford House has always maintained that its members should be treated the same as any residential family. In at least one locality the city council has passed a resolution finding Oxford House to be a residential family classification for

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contracts and other contributions provide financial support for the national World Services Office to assure development of a strong network of individual Oxford Houses.

[2] In 1999, the average chapter dues were $2.50 per resident per month. Chapter dues are used to keep individual houses in the chapter informed of meetings, events and programs fostered by the local cluster of Oxford Houses.

[3] In 1997 Oxford House, Inc. reorganized in order to have some outside directors to enable a faster expansion of the number of Oxford Houses. However, the reorganization kept the elected national group [the World Council] to make certain that the traditions and charter conditions of Oxford House are maintained. At an annual convention individual houses elect members of the 12-member World Council for staggered 3 - year terms of office.

[4] Any non-profit corporation can apply for tax-exempt status but it must (1) incorporate as a non-profit corporation, and (2) demonstrate that it is in fact non-profit. It takes up to two years to get recognition as qualifying under Section 501(c)(3) of the Internal Revenue Code. The same result can be obtained by affiliating with Oxford House, Inc.,

[5] The Internal Revenue Service often checks deductions claimed by taxpayers against the records of the recipient of the claimed donation. Therefore it is important that the tax-exempt organization keep accurate records so that the contributor does not get in trouble with the IRS. Oxford House, Inc. is a tax-exempt organization recognized as qualifying under Section 501(c)(3) of the Federal Internal Revenue Code. It will act as a central "record keeper" for individual Oxford Houses. It makes sense for new houses to get a charter from Oxford House, Inc. in order to become eligible to receive contributions, but the houses must follow the reporting rules of Oxford House, Inc. in order to assure proper record keeping. [Read the Oxford House pamphlet "contributions."]

[6] While all Oxford Houses are presently in good neighborhoods, Oxford House, Inc. has occasionally considered some good houses in not very good neighborhoods. Those houses were rejected primarily because individuals recovering from addiction to drugs pointed out the existence of drug trafficking in the area. Unlike liquor stores, which do not push their product door to door, drug dealers are less passive.

zoning purposes[7]. In every situation members living in an Oxford House have proved themselves to be good neighbors and zoning ordinances have not been a barrier. Moreover, the Fair Housing Act Amendments of 1988 (effective March 1, 1989) make it unlawful to discriminate against disabled persons such as those living together in self-run, self-supported recovery houses.[8]

The size of a house to be rented is significant. Experience has shown that at least four good-sized bedrooms are necessary. Experience has also shown that at least several of the bedrooms should be suitable for two people. Isolation and loneliness are threats to sobriety – particularly for the newly recovering. From an economic standpoint, expenses are best managed when the house is fully utilized. The goal should be to use a house as a large family would but to avoid overcrowding.

Experience has also shown that the only threat of an Oxford House being less than a good neighbor is the automobile. Members living in an Oxford House need to be careful not to use all the parking spaces in a neighborhood and not to park their cars in a way that makes their house look like a used car lot. In seeking a house to rent as a new Oxford House, keep in mind that once recovering individuals have been sober, they begin to get their finances straightened out and will often acquire a car. Can it be parked in a place that does not offend the neighbors?

Oxford House, Inc. can provide good information about the type of house to rent. However, the following rules of thumb are helpful to keep in mind:

- utilities and other costs usually run about fifty percent of monthly rent, therefore per member monthly payment will be the number of members in a house divided into 150 per cent of the rent[9];
- the amount of weekly rent a member can afford depends upon the locality, but as a general rule members can afford between $55 and $115 a week to cover rent and other expenses;
- some vacant beds are to be expected during the first three to four months of operation (individual costs are higher when there are fewer members living in a house) because a new house takes time to become known (this can be overcome by lining up a greater number of charter members willing to move in on Day One) and some individuals will be kicked out because they relapse, thereby causing a vacancy until a new member is voted in. Keeping a member's rent paid in advance minimizes the economic impact of this event; and
- new houses are generally able to get donated furnishings.

Experience has shown that individual members of AA or NA are very helpful to newly recovering individuals who want to start an Oxford House. Newly recovering individuals should ask older recovering members for help in finding a house to rent and getting a charter from Oxford House, Inc. approved. Some older recovering individuals may even own rental property they are willing to rent to a new Oxford House. Generally, every Oxford House has paid rent on time and, if a house is adequate, the residents will continue to rent it year after year.

Rehabilitation facilities, local government alcohol and drug rehabilitation programs, and local halfway houses have also proven useful as sources of help for new houses. Generally, local halfway houses have a time limit for residents and welcome the opportunity to have an Oxford House in their locality to provide further transitional housing for recovering individuals. Any doubts they have about how Oxford House works can be alleviated through contact with a member of the Oxford House Staff. From a landlord's standpoint, Oxford House residents make good tenants. The groups tend to live in a house year after year, whereas the normal renter may move every few years. This fact alone is of great value to a landlord who avoids missing any monthly rental income and does not have to refurbish the property continually to attract a new tenant.

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[7] The Chief of the Bureau of Inspections for the City of Bethlehem, Pennsylvania on September 11, 1987 made the following finding: "After reviewing your letter and review of the 'Oxford House' literature, regarding recovering alcoholics living together in a self-supported dwelling, I have concluded the proposal is within the definition of a 'family': as defined in the City of Bethlehem, Pa. Zoning Code."

[8] The United Supreme Court on May 15, 1995 issued a decision in *City of Edmonds, WA v. Oxford House, Inc.* [514 U.S. 725] which confirms that recovering alcoholics and drug addicts in an Oxford House are "handicapped" within the meaning of the Federal Fair Housing Act, as amended, and local jurisdictions must make a reasonable accommodation in local zoning laws to avoid discrimination under the Act. Likewise, casualty insurance companies must offer the same homeowner's policy to landlords renting to an Oxford House group as to an ordinary family. *Wai and Oxford House, Inc. v. Allstate Insurance Company, et. al.* [75 F. Supp. 2d 1 (DDC 1999)].

[9] This rule of thumb applies except in regions where the rent for a four to six bedroom house is very high (above $2,500 per month) or low (less than $600 or $700 a month). In high rent cases the "150% rule of thumb" will overstate the amount of cost per person and in low rent cases it will understate the cost per person. Oxford House can provide worksheets to compute actual costs. Such actual computation is always better to use than the "rule of thumb."

The physical qualities of a house should include the following:

good location - location of the house is very important since a poor location can result in drug pushers and crime; a good location can provide incentive to stay clean and sober;

adequate size - size of the house is important because enough space is needed to comfortably accommodate a large "family" of recovering individuals;

adequate facilities - facilities of the house should be adequate to accommodate the individuals living in it including one bath or shower for every four residents, a dishwasher to assure good health and at least one common room suitable for family like gatherings to discuss the new lifestyle free of alcohol and drug use; and

proximity to public transportation - in urban areas, proximity to public transportation is important because many individuals in early recovery from addiction to alcohol or drugs will not have an automobile.

Starting a new Oxford House takes some work, but help is available and the rewards are considerable – for many, the rewards are life saving.

Rehabilitation facilities are often willing to help a new house since Oxford House has been of great value to many rehabilitation facilities in their efforts to provide aftercare, which increases the chances of recovery. Alcohol and drug treatment programs run by local governments are usually very interested in the Oxford House concept because of its low cost and relapse prevention potential. Potential landlords with an interest in alcohol or drug abuse rehabilitation are often willing to help. Good business and doing good can go hand in hand. And, of course, individual members of AA and NA can usually be relied upon for support.

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Moving In

Newly-weds in America will generally "set up housekeeping" on their own. They usually do so with very few furnishings – a bed, some linens, dishes, and few pots and pans for cooking. So, too, with the residents of a new Oxford House.

The new group that has found a house and applied for its charter cannot simply wait to get all the furnishings needed. The rent for the house must be paid; the recovering individuals need a place to live. It is often necessary, therefore, to move in with a minimum of furnishings.

The first item to obtain is beds. Frequently, potential residents of the house have a bed to donate. Retailers of beds often have mismatched twin bed sets that they will donate to Oxford House – which is a 501(c)(3) tax-exempt organization. If they will not donate the beds, they may be willing to sell the mismatched beds at a substantial discount.

Twin-sized beds are best and, whenever possible, it is advisable to have two people to a bedroom in an Oxford House in order to guard against isolation, loneliness and depression which can be a threat to sobriety while an individual is in early recovery.

Once beds are in the new house individuals can move in – the other necessary household furnishings can be obtained after individuals are living in the house and paying rent. Suggestions for getting the other items are listed in random order below:

- **Dishes, pots and pans** and other kitchen utensils are most often obtained by simply letting members at an AA or NA meeting know that the new house needs these items – if that does not produce results, try "Good Will" or a thrift or second-hand shop.

- **Tables and chairs** for the kitchen and dining room are also most often obtained by letting those in AA or NA know that the new house needs tables and chairs – others who can be asked for donations include church groups, veteran's groups, and service clubs such as the Lions, Rotary, Elks or Moose.

- **Chests of Drawers** and small tables for the bedroom are sometimes hard to get because families have a tendency to keep chests around for extra drawer space even when they are replaced. However, if you let people know you need them, you may be surprised. Again thrift shops, household content sales and yard sales may be a source for reasonably priced chests and tables. The local furniture store may have seconds, or discontinued or damaged merchandise. A house with an Oxford House Charter will be recognized as part of a 501 (c)(3) charitable organization, so that businesses and individuals can claim a tax deduction for the value of whatever is donated.[10]

[10] Material sent when a house receives an Oxford House Charter includes a booklet; "Reporting Donations for Tax Purposes," which explains the record keeping that must be done to permit individuals or

- Because the new Oxford House will be a family to a number of individuals who will prepare their own main meal, extra **refrigerator** space will probably be needed. The local appliance dealer will have some good second-hand refrigerators. As a rule of thumb, each member of the house should be able to use two refrigerator shelves.

- A **microwave** oven will help reduce the time that individuals need in the kitchen, but a house generally waits until a house is going a few months before it accumulates the money to buy one.

- A **clothes washer** and **dryer** are often standard equipment in a rental property.

- A **vacuum cleaner** and **rugs** are items that a new house usually seeks. They may not be essential, but both go a long way toward making a house a pleasant place to live in.

Although it may seem difficult to furnish a whole house, the members of an Oxford House will find that slowly but surely a house gets comfortably furnished.

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Organizing The House

Oxford House is a **concept** and a **system of operation**. The two go hand-in-hand. The concept is that recovering individuals can live together and democratically run an alcohol and drug-free living environment which supports the recovery of every resident. The system of operation is the nuts and bolts or how to make a self-run, self-supported recovery house work.

The Oxford House System of Operation has worked well for twenty-eight years and has evolved into practices and procedures that work well for establishing a new Oxford House and keeping it on track once it has been established. Because recovering alcoholics and recovering drug addicts developed it, it takes into account the way responsibility is learned or relearned by those afflicted with alcoholism or drug addiction.

At the heart of the system of operations is fairness assured by democratic procedures and elected officials from within the Oxford House resident community. Each House officer is democratically elected for a term not to exceed six months in the same office. The limited term of office for any particular office minimizes the chance that an individual prone to bossism will dominate an individual self-run, self-supported recovery house. Democracy, however, lies at the heart of the Oxford House system of operations – both for practical and therapeutic reasons.

As products of the democratic traditions of the United States, all members of an Oxford House can readily understand the utilitarian aspects of deciding issues by a majority vote. From the New England town meeting to the Congress of the United States, the practicality of resolving disagreements through the freely cast vote is understood. In an Oxford House the vote can resolve the color of a rug to be purchased, the assignment of clean-up chores, and the expulsion of a member who has relapsed.

Perhaps less clearly understood are the reasons that a democratically self-run recovery house provides special help to recovering individuals undertaking the task of developing a new lifestyle – often after years of practicing a lifestyle dominated by addiction to alcohol and drugs. Because Oxford House works to help individuals undergo that change in lifestyle, it is worth the time to consider the role that democratic rule by peers – and only peers – plays in the process. There is no better place to turn for a thorough understanding than the political commentaries about the system of government adopted for and tested by the more than two hundred years of history of the United States.

A starting point is an observation written in the 50th *Federalist* paper used to convince the Nation's forefathers that they should adopt the Constitution. "If men were angels," said the 50th *Federalist*, "no government would be necessary." As recovering individuals, each member of an Oxford House knows that men and women are not "angels". By the same token, involvement in Alcoholics Anonymous and Narcotics Anonymous convinces one that all men and women are neither depraved nor immoral. Author Arthur M. Schlesinger, Jr. summarized the value of democracy in achieving the balance between perfection and depravity in the following ways:

> Democracy, properly construed, assumes neither total perfectibility nor total depravity. It sees humans simultaneously as tainted by original sin and as capable of redemption.

It is this "capability of redemption" that permits recovering individuals to live together in an alcohol and drug-free environment and work together to preserve that environment, accept responsibility and learn a new individual lifestyle free of alcohol and drug use. Always on guard against reverting to old behavior

business to claim a tax deduction. Such information can also be obtained from the local office of the United States Internal Revenue Service.

patterns, each individual works as part of the group to learn values such as tolerance, caring and responsibility without having anyone to blame or fault for conditions as they exist. All the recovering individuals in a house are in the same boat; their common enemy is addiction to alcohol and drugs; their common goal a new lifestyle comfortably rid of both alcohol and drugs.

Just as the Constitution provides a framework for democracy to work in the United States and the Twelve Steps and Twelve Traditions provide a framework for Alcoholics Anonymous and Narcotics Anonymous to work, so too do the Oxford House System of Operations and Oxford House Traditions provide a framework for the self-run, self-supported recovery house to work. Some rules of procedure are necessary for democracy to work and these include the election of officers, the management of finances, acceptance of new residents, and removal of those who return to the use of alcohol or drugs.

Officers elected in an Oxford House are but "trusted servants" and their power is limited by the will of the majority and the Oxford House Traditions. The term of office in any one office is for a continuous period no more than six months. (An individual can be elected to the same office again after an intervening term of six months has elapsed. This is often necessary in smaller houses having very little turnover.)

The number of officers in an Oxford House depends – in part – upon the particular house. Every Oxford House elects the following officers:

- ❏ President
- ❏ Treasurer
- ❏ Comptroller
- ❏ Secretary
- ❏ Coordinator

Each of the above officers has a specific role to play in making the Oxford House System of Operations work.

The **President** presides at the weekly business meeting of the house. In that role he or she brings up items of business in a regular order, recognizes all the members wishing to comment on any issues, and conducts votes to determine the decision of the membership, when appropriate. Usually the President of an Oxford House will be one of two individuals whose signature will be required on each check written by the House. (The other signature required is generally that of the Treasurer.)[11] Finally, each of the house presidents exercises leadership by resolving disputes among house members, listens to individual members who have problems, and represents the entire house in monthly Chapter meetings where several Oxford Houses in a geographic area work with each other to assure the good name and high quality of all Oxford Houses.

The **Treasurer** has primary responsibility for maintaining the finances of an Oxford House in good order. The Treasurer keeps the checking account in balance, writes checks for timely payment of house bills, collects the rent and lets the members know the financial status of the house at every weekly business meeting. Most houses post the Treasurer's Weekly Report in a prominent place in the house so that each member can examine it at his or her leisure. There are no secrets when it comes to house finances.

The **Secretary** records minutes of each house business meeting. Those minutes are read at the next business meeting so that the group will be able to focus on unfinished business and continually keep track of house problems, policies and decisions. The Secretary also keeps track of applications for membership in the house, arranges interviews for applicants, and maintains a file of applicants accepted and rejected. After a house has been in existence a short period of time, the number of applications is likely to far exceed the number of spaces available.

The **Comptroller** is an assistant to the Treasurer and has primary responsibility for collecting weekly 'rent' from the members of the house on time. Every self-run, self-supported recovery house charges each member the same amount of weekly rent and the amount of rent is an equal share of the house expenses. Because there is no "fat" in the weekly share of expenses assessments, everybody must pay on time. Each week the entire house discusses what to do about any member's overdue share of expenses. In general, most houses try to collect the equal share of expenses at least one week in advance of when it is due.

The **Coordinator** is – in many ways – the most important office in the house. He or she must assign

[11] Proper management of finances is very important in a self-run, self-supported recovery house. Two signatures are always required to write any checks. The money belongs to all the members of the house as a group and great care has to be taken to make certain it is expended only for expenditures authorized by the group.

and review weekly chores that every resident in the house must undertake to keep the house neat and clean. Because the offices are held for only six months, everyone tends to cooperate because each person knows he or she may be elected Coordinator the next time around. Working together to keep a house clean is one of the ways house members learn responsibility and gain self-esteem.

Group decisions are made by majority vote, except with respect to admission of new members into the group. To admit a new member, an 80% favorable vote by existing members is needed. The purpose of the 80% vote is three-fold: (1) acceptance of a new member into the group involves a commitment by nearly everyone in the house and a newcomer should be assured a supportive environment when he or she moves in; (2) knowing that an 80% acceptance vote is needed, the newcomer will value his or her admission more than if admission were by a simple majority, and (3) an 80% admission vote forces thoughtful consideration by the entire house when a newcomer applies for admission.

The *Oxford House Manual*© provides guideposts for organization of an Oxford House. Within a matter of weeks the self-run, self-supported recovery house can be operating smoothly if organizational procedures are followed, including a business meeting in the house at least once a week. (There are no AA or NA meetings held in an Oxford House, but the members of a house tend to go to an average of five or six AA or NA meetings outside the house each week.)

The importance of the weekly business meeting cannot be overstated. It not only serves to keep the members of a house up-to-date concerning the financial matters of the house but also serves as a place to resolve personality differences between house members. It also provides a forum in which peer pressure can be used to encourage each member to work his or her own 12-step program of recovery. In brief, the house meeting becomes an important opportunity for members to help each other keep on a steady course to develop a new comfortable lifestyle that is free of alcohol and drug use.

The most difficult – and most important decision – a self-run, self-supported recovery house has to make is whether or not a resident has returned to using alcohol or drugs. The decision is made at a meeting of the house residents. The members consider the facts – all of who know about addiction from their own experiences – and a vote is taken on whether or not a relapse has occurred. If a majority of the members vote that the resident has relapsed, he or she must leave immediately.

Since recovering addicts are highly vulnerable to relapse, it is likely that many houses will have some members who relapse. Each member, however, realizes that the system works only if the relapser is expelled. The common welfare of the group in maintaining an alcohol and drug-free living environment is too great to risk by not expelling any individual at the first sign of a relapse. Moreover, each member knows that failure to expel a member who has used drugs or alcohol places the charter of their house at risk. Oxford House, Inc. makes it clear that a charter can be revoked if members who return to using are not expelled.

Once a member has been expelled, he or she is normally not accepted back into the same Oxford House. However, the member may be accepted into another Oxford House following a period of thirty days' sobriety.

The expulsion of relapsers has a positive effect on both the relapser and the other members of the house. As painful as an expulsion may be, it is a judgment by one's peers. The peers themselves who make the difficult decision seem to have their own sobriety reinforced.

The democratic nature of the house organization, the written system of operations, the election of officers, the written traditions and the grant of the charter all work together to promote recovery through the exercise of responsibility. As the members enjoy their recovery and realize the role that the self-run, self-supported recovery house has played in recovery, they help replicate the experience for others by starting another recovery house.

Individual houses organize themselves into groups [chapters] through which houses help each other to stay on track help assurance of quality operation by each house. In local areas the officers of each house meet at one of the member houses as a chapter each month. Chapters provide a forum for individual houses at the local level to share their strength, experience and hopes. In doing so they provide an effective means for keeping

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The Concept

The concept underlying self-run, self-supported recovery houses is the same as the one underlying Alcoholics Anonymous and Narcotics Anonymous – addicted individuals can help themselves by helping each other abstain from alcohol and drug use one day at a time for a long enough time to permit a new set of values to be substituted for the values of a lifestyle in which alcohol and drugs were used.

Dr. George E. Vaillant, in his book *The Natural History of Alcoholism*, states the obvious goal in the treatment of alcoholism [or drug addiction] when he states that, "The treatment of alcoholism should be directed toward altering an ingrained habit of maladaptive use of alcohol. ..." He goes on to spell out the four components of treatment that can achieve that goal:

> (1) offering the patient a nonchemical substitute dependency for alcohol,
>
> (2) reminding him ritually that even one drink can lead to pain and relapse,
>
> (3) repairing the social and medical damage that he has experienced, and
>
> (4) restoring self-esteem.[12]

Vaillant also points out that providing all four components at once is not easy.

> Disulfiram (Antabuse) and similar compounds that produce illness if alcohol is ingested are reminders not to drink, but they take away a cherished addiction without providing anything in return: they provide the second component but ignore the first. Prolonged hospitalization provides the first three components but ignores the fourth and eventually the first. Hospital patienthood destroys self-esteem, and when hospitalization ceases the patient loses his substitute dependency. Tranquilizing drugs provide the first component but ignore the other three. For example, providing the anxious alcoholic with tranquilizers will give temporary relief of anxiety but may also facilitate the chain of conditioned responses that lead to picking up a drink at the next point of crisis. Over the long term, providing alcoholics with pills only reinforces their illusion that relief of distress is pharmacological, not human.[13]

Vaillant does note that "self-help groups, of which Alcoholics Anonymous is one model, offer the simplest way of providing the alcoholic with all four components referred to above."[14] So too with Oxford House. It provides the benefits of prolonged hospitalization without the destruction of self-esteem. In fact, self-esteem is restored through the exercise of responsibility, helping others, resocialization, and constructive pride in maintaining an alcohol and drug-free living environment without dependency upon any outside authority or helper.

The concept – which seems never before to have been formalized on a democratically, self-run, and self-supported basis – is not new.

The basic idea that one addict is a primary source of help for another has long been known and was, in fact, basic to the history of AA. Robert Thomsen, in his biography of Bill Wilson, one of the co-founders of AA, describes the first meeting between Bill and Dr. Bob Smith as follows:

> They talked on for hours. Soon Dr. Bob had opened up and was speaking as frankly, as unashamedly, as Bill. When they parted after eleven o'clock, they knew something had radically changed in them both. Although they could not be specific about what it was, a spark that was to light future fires had been struck.
>
> For Bill it had been a unique, wondrous and totally engrossing experience. After admitting his deep need to share his problems with another drunk, he had not felt the slightest desire to preach or in any way judge the other man. With a sense of incredible freedom, relief and, yes, joy, he'd felt the two of them growing closer, their talk becoming a mutual thing, and he knew they had both felt this. Two drunks had found a new, mysterious and loving kind of communication, a new language of the heart. The link he had been seeking was located that night in Henrietta's library.[15]
>
> They had dinner together the next evening and after a few days Bill moved in with Anne and Dr. Bob in their

[12] George E. Vaillant, *The Natural History of Alcoholism,* Harvard University Press, Cambridge, 1983, p. 300.

[13] Id. 301.

[14] Id. 301.

[15] Henrietta Siberling of Akron, Ohio, who had been a member of an Oxford Group in Akron and responsible for getting Bill Wilson and Dr. Bob Smith together.

> home on Ardmore Avenue. He sent word to his proxy associates in New York that he'd be staying on in Akron, and, to his surprise, they wired some cash to him and suggested he might hire a lawyer and investigate the possibility of fraud at the stockholders meeting.[16] Thus he was no longer penniless, but his primary interest now was his work with Dr. Bob and the uncanny parallels they were discovering in their stories.
>
> Both were Vermonters, Bob the son of a judge in St. Johnsbury. Both had taken up drinking at an early age, Bob while still a student at Dartmouth, even before medical school, and from the beginning they had both gone at booze heavily. Each, except for the hells created by drinking, had had a happy marriage and each admitted he must have been born with an iron constitution to withstand the beating he had given himself. And each had wrecked a career that had started out brilliantly.
>
> These were the external parallels. The interior ones were equally striking, the guilt and remorse, the defenses they'd constructed, the passionate desires and the futile efforts to understand and be in control, and finally, after seeking so many other solutions, they had both wound up trying to give shape and meaning to their lives by adhering to the excruciatingly high standards of the Oxford Group.[17]

About ten days after Bill Wilson had moved in to live with Dr. Bob and Anne, Dr. Bob went to a medical meeting in Atlantic City and relapsed into drinking alcohol. Five days later, Dr. Bob returned to Akron drunk. His wife Anne and Bill Wilson sobered him up over a three-day period. Dr. Bob took his last drink on June 10, 1935. Bill Wilson stayed in Akron living in Dr. Bob's house on Ardmore Avenue for four months and in many ways it was the first Oxford House – two former drunks living in an alcohol and drug-free environment focused upon helping each other and others recover from addiction to alcohol.

Bill Wilson and Dr. Bob Smith went on to practice and refine the principles they learned in the first few months of living together in the alcohol and drug-free environment of the house on Ardmore Avenue in Akron. Their legacy to individuals now struggling to recover from alcoholism and drug addiction –AA– is present in every town throughout the United States and most of the world. It is that legacy that provides the underpinning for the self-run, self-supported recovery house as an alcohol and drug-free, self-run and self-supported living environment.

The concept of a self-run, self-supported recovery house for individuals recovering from addiction is simple, but it requires individual initiative and acceptance by society for mass replication to become a reality. The sanction and the framework provided by the Anti-Drug Abuse Act of 1988 and the Fair Housing Act Amendments of 1988 create a climate, which encourages replication. The experience and expertise of Oxford House can provide the motivation and technical know-how to help make mass replication of recovery houses a reality throughout the State.

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State Recovery House Revolving Loan Programs

The State Recovery House Loan Programs can serve as the catalyst needed to get individual recovery houses started throughout the State.[18] The first month's rent and security deposit is usually available to get a house started. This section of the paper explains how to effectively use this simple program to begin the process of affording all individuals recovering from addiction with the support they need to get the long-term support they need to use 12-step programs to develop a lifestyle permanently free of addiction to alcohol and drugs.

Some states have contracts or grant arrangements with Oxford House World Services. In those cases the process for finding a suitable house, recruiting recovering individuals to live in the house and to teach those individuals the right way to organize and operate an Oxford House is easier than where there is no Oxford House presence. In all states, Oxford House World Services is prepared to help anyone to learn how to start and operate Oxford Houses.

Technical Assistance

The telephone number for getting assistance from Oxford House World Services is **1-301-587-2916**. Specific questions and general information about how to help make the State Recovery Housing Program a success should be directed to them. Oxford House has people who have experience starting and running self-

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[16] Bill Wilson had been in Akron to work on the acquisition of a company in which there was a stockholders proxy fight.

[17] Robert Thomsen, *Bill W.*, Harper & Row, New York 1975, pp 238-239.

[18] 42 USC 300x-25 is the section of the U.S. Code that is the provision of law permitting states to use block grant money to establish a recovery home revolving loan fund. Some states have such funds; others do not. See our website: www.oxfordhouse.org for a discussion of start-up loans and contact information for each state alcohol and drug agency. Click "Links/State Gov".

run, self-supported recovery houses and will share that experience with citizens wanting to make the State program a success or to get a recovery home start-up revolving loan fund established. Oxford House World Services also has experienced individuals available to states though modest grants or contracts. The on-site outreach workers can provide the expertise to enable local recovering individuals to establish clusters or statewide networks of self-run, self-supported Oxford Houses to encourage treatment providers, drug courts and re-entry from prison programs to provide a realistic opportunity for recovering individuals to become comfortable enough in sobriety to avoid relapse. See DePaul University NIAAA and NIDA research results showing Oxford House is the best practice to assure recovery without relapse at the Oxford House website: www.oxfordhouse.org.

Loan Approval

Once a suitable house has been lined up Oxford House can help individuals apply for a start-up loan where states have contracted with Oxford House World Services to provide such assistance.[19] Start-up loans may be granted within the following guidelines:

- The maximum amount of the loan is $4,000.
- Proceeds from the loan must be used for specific items, i.e. first month's rent, security deposit, beds and so on. (Oxford House will discuss with you the exact permissible uses of the loan.)
- The loan must be repaid within two years in twenty-four equal monthly installments. (It may be repaid sooner in order to put money back in the Revolving Fund so that other groups in the State can start more houses.)
- As a general rule four or more recovering individuals must apply for the loan (In some cases Oxford House, Inc. or participating state agencies will approve loans that meet all other conditions even though the number of loan applicants is less than four provided that once operational the house will provide room for at least six residents.
- In all cases the number of recovering individuals living in a group must be six or more and preference will be given to groups of between six and fifteen. An Oxford House CHARTER can be given only to groups of SIX or more recovering individuals. Fewer residents are not able to effectively function within the discipline democratic system of operation. History has shown that the best number of residents in a group is eight to twelve.
- Oxford House will provide technical assistance for meeting all requirements. It will also be available to provide advice about renting the house, lining up recovering individuals to live in the house, opening the checking account for the new house, getting utilities on, and getting organized to operate democratically and on a self-support basis.

An appropriate loan application can be obtained by calling the State Alcohol and Drug Agency[20] or Oxford House National Headquarters at (301) 587-2916. Oxford House will send you a copy of the current application, or tell you where to get one.

Once a loan is approved it is made to the recovery house group – not particular individuals. Therefore, you must have a group ready to go when the loan is approved and establish a checking account in the group's name. The group will need a federal tax identification number. Oxford House can help you get one.

The group getting the loan will be given a coupon book with each coupon showing the amount due and the due date. The repayment must be made on time each month that a payment is due. Failure to make timely repayment will result in a penalty being assessed. There is no interest on the loan but each group should work hard to avoid penalties by making its payment on time. Returning money to the revolving loan fund becomes available to start more houses.

The loan application process is not difficult if the individuals wanting to start a recovery house contact Oxford House early in the process. Oxford House can help make the loan application process a simple one. Potential applicants should write or call Oxford House World Services Office for assistance. Businesses, foundations, local church groups, state or local governments should inquire about outreach and technical service by Oxford House World Services Office. On-site technical service can be provided to start new houses and to help keep existing houses on track. The cost per recovery bed is only a fraction of the cost of the traditional halfway house bed or incarceration – less than a dollar per day versus a cost of between $23 to $52 a day.

[19] Experience has shown that on-site technical assistance within a state works best to establish Oxford Houses and to develop mutually supportive chapters and state associations to assure quality control – e.g. to keep houses on track once they are established.

[20] State agency telephone numbers are listed at website: www.oxfordhouse.org under "Links/State Gov".

Getting a CHARTER

Write or telephone (301-587-2916) Oxford House World Services about how to get a CHARTER for the new house. A conditional CHARTER will generally be granted within thirty days. The "conditional" CHARTER usually sets a specific time period for the new group to obtain a house and get organized. If it does not obtain a house or get organized during the conditional period it becomes void, but the group can reapply for the CHARTER. If a new house does get properly organized within the conditional period it is granted a regular permanent CHARTER.

It is important to obtain a CHARTER because it permits the new group to enjoy all the advantages of being part of the Oxford House network of recovery houses. As part of that network the new group is able to receive assistance to make sure that the new house works. Moreover, the new house is able to share the strength, experience and support of all other Oxford Houses. Together recovering individuals and recovery houses help each other help themselves.

There is no cost involved in getting a CHARTER from Oxford House and it contains only three conditions:

- **The recovery house must be operated on a democratic basis;**
- **The recovery house must be financially self-supported; and**
- **Individuals who use alcohol and drugs must be expelled.**

Compliance with the CHARTER assures that the recovery house, in fact, provides support for individuals to recover from addiction and begin productive lives unhampered by the ravages of addiction to alcohol and drugs. Oxford House, Inc. requires that a house demonstrate its understanding and application of the disciplined democratic system of operations before it is awarded a permanent charter.

Recovery without relapse is the theme and goal of every Oxford House. Each house also accepts the responsibility of expanding and strengthening the network of Oxford Houses so that all recovering individuals can achieve recovery without relapse.

This responsibility for affording a universal opportunity to recovering individuals for recovery without relapse is an outgrowth of the 1999 Oxford House World Convention. At that first convention Oxford Houses followed through on the Convention theme – "If Not Us, Who?." They accepted successful expansion as part of their responsibility and voted to contribute $50 a month per house to Oxford House World Services to improve both expansion and the ability of Oxford House, Inc. to provide technical services to help expand the national network of houses. In 2008 more than 250 Oxford Houses around the country voluntarily sent in $50 a month to help expand Oxford Houses for others.

The money provided by individual houses to the central Oxford House operation enabled the organization to expand into new territories. While Oxford Houses are now located in most states throughout the country, there are many areas still needing their first group of Oxford Houses. Thanks to the dedication and generosity of existing Oxford House residents and alumni modest funding is provided to pay trained outreach workers to help others establish to establish Oxford Houses.

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YOU can help your State establish as many self-run, self-supported Oxford recovery houses as are needed to provide an opportunity for every recovering individual who wants a supportive, alcohol and drug-free place to live... TAKE ACTION TODAY!

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Oxford House, Inc. is the winner of the 2005 Harry V. McNeill Award for Effective Community Service American Psychological Association

A review of our web site: www.oxfordhouse.org will provide additional information about Oxford House availability and how to start a new Oxford House.

Good Houses in Good Neighborhoods



Oxford House-Aycock, at the left, was established in 2001 in Greensboro, North Carolina. It is home to eight recovering men who had been homeless during their active addiction. Since established, more than 175 recovering men have lived in the house. Projecting the DePaul University study sponsored by NIAAA, more than 80 percent of the residents in this house have become clean and sober and will stay that way.

Creating an Effective National Recovery Network One House at a Time

National Oxford House Resident Profile[1]

Number of Women's Houses:	330	No. of Women Residents:	2,505
Number of Houses For Men:	1,030	No. of Men Residents:	8,024
National Network of Houses:	1,360	Total Number of Residents:	10,529
Number of States with Houses:	41	Cities with Houses:	386
Cost Per Person Per Week:	$94.25	Rent Per Group Per Month	$1,380
Percent Veterans	18%	Average Age	36.4 yrs.
Residents Working 6/15/07:	92%	Average Monthly Earnings:	$1,440
Percent Addicted To Drugs or Drugs and Alcohol:	73%	Percent Addicted to Only Alcohol:	27%
Race --		Marital Status --	
White;	54%	Never Married	45%
Black;	42%	Separated	18%
Other	4%	Divorced	33%
		Married	4%
Prior Homelessness:	56%	Average Time Homeless:	6 Mos.
Prior Jail:	76%	Average Jail Time:	13 Mos.
Average AA or NA Meetings Per Week:	5.1	Percent Going To Counseling and AA or NA:	43%
Average Length of Sobriety of House Residents:	16.1 Mos.	Residents Expelled Because of Relapse:	19.4%
Average Length of Stay In An Oxford House:	10.1 Mos.	Average No. of Applicants For Each Vacant Bed:	9

Together We Can

Theme of 11th World Convention
Washington, DC

[1] As of June 30, 2009 based on standard OHI survey and house reports – US Houses only.

Oxford House Highlights

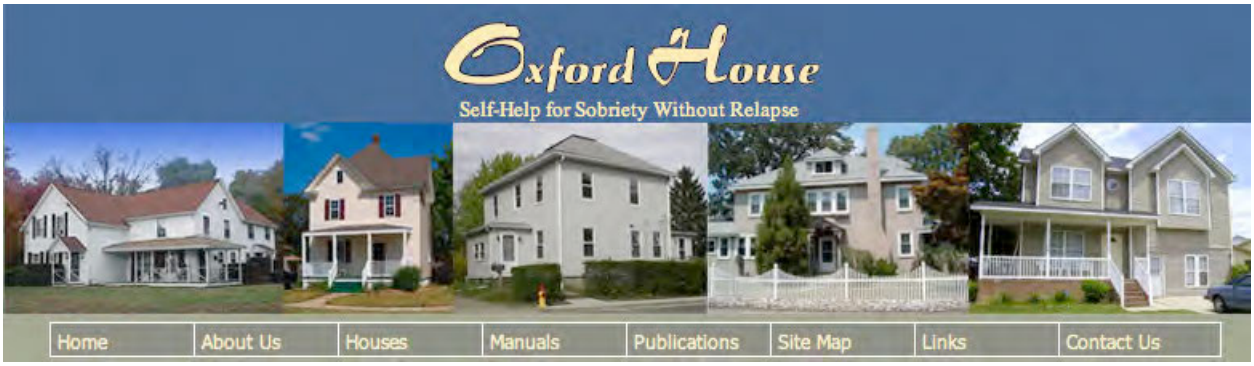
- **10,756 Number of Oxford Recovery Beds**
- **1,365 Number of Oxford Houses as of July 2009**
- **41 Number of States having Oxford House**
- **383 Number of towns or cities having Oxford Houses**
- **$1,440 average monthly income of residents**
- **$98.25 average weekly share of expenses paid by Oxford residents**
- **53% of Oxford House residents had been homeless for an average of 6 months**
- **73% addicted to drugs in addition of alcohol**
- **76% had done jail time connected to their addiction**
- **16.1 months average length of sobriety**
- **132 New Houses started CY 2008**
- **45 for Women; 87 for Men**
- **Total *Added* Recovery Beds: 1,058; Men: 710; Women: 348**

Outreach Workers Provide Frontline Development Expertise

Task	Action of Outreach Worker
1. Finding a suitable house	➢ The outreach worker has been trained to recognize the characteristics of suitable house to rent. ➢ The outreach workers know how to execute a legal lease between the landlord and the group or entity that is made up of ever changing residents. ➢ The outreach worker is able to answer zoning questions – in a general way – and is backed up by the expertise of the central service office in Silver Spring.
2. Obtaining a charter from Oxford House Inc.	➢ Outreach worker helps newly recovering individuals to fill out the charter application form and submits it to Oxford House, Inc. to get a "conditional" charter that is valid for up to six months. ➢ Outreach worker helps the new group to fulfill the requirements of the "conditional" charter so that the group can be granted a "permanent" charter.
3. Obtaining an FEIN [federal tax identification number] from IRS to enable the group to establish a checking account in the name of the group.	➢ Since the mid-eighties every bank account needs either a social security number [in the case of an individual] or a FEIN [in the case of a group, association, partnership or corporation]. The outreach worker processes the paperwork to obtain a FEIN and helps the group to establish a checking account in the name of the individual Oxford House™. ➢ Establishes the two-signature checking account and teaches the residents how to manage house finances.
4. Recruiting initial residents for the new house.	➢ Working with treatment providers and the recovery community to explain the value of Oxford House living to get referrals. ➢ Convincing a newly recovering individual that living in an Oxford House™ provides the time, peer support and living environment to gain comfortable sobriety without relapse.
5. Teaching residents in a newly established Oxford House the standard system of operations needed to effectively operate the house.	➢ Teaching new residents the need for a weekly business meeting and the procedures to follow. ➢ Helping the residents elect the five essential officers needed to operate each house and teaching each person the duties of each office holder. ➢ Helping the residents get the household furnishing needed for the house [from beds to brooms]. ➢ Story telling while living in the house to infuse the group with the belief and culture of Oxford House™ and its role in promoting recovery without relapse.
6. Instilling a dedication among house residents to reach out to other recovering individuals to share the benefits of Oxford House living.	➢ Teaching residents how to make presentations to providers to get new recruits. ➢ Promotion of expansion within an area to meet the need of newly recovering individuals and to organize a mutually supportive chapter. ➢ Building a habit of attending 12-step meetings and the encouragement of frequent contact between residents and Oxford House World Services to resolve house issues, promote expansion and to become an active participant in on-going expansion.

The chart above diagrams the tasks that Oxford House outreach workers undertake to develop statewide networks of houses. Once established one outreach worker is able to keep up to thirty or forty houses on track because of the system of organization – houses, Chapters and State Associations – and training workshops.

Using the Oxford House Website



The Oxford House website is an important tool for the recovery community – treatment providers, drug courts, churches, re-entry programs, AA/NA/CA members – individual Oxford Houses and the general public. It reflects the principle of transparency by showing everything that anyone wants to know about Oxford House from financial reporting and basic information about house locations and vacancies to leading edge research and legal precedents. Beginning last June, every Oxford House Chapter [mutually-supportive groups of individual Oxford Houses] began the process of educating the officers of each house to log onto the website immediately in order to accurately report vacancies and to keep data about their individual house up-to-date. Accurate data about each house – by having the Secretary for each house update the web immediately when there is a change in vacancies, house address or telephone number – is a goal that all Oxford Houses want to achieve by the end of 2008.

Quick links on the website include up-to-date house location and vacancies in three places: click "Vacancies" on home page for a pop up map showing location and current vacancy status; click "Directory" under heading "Houses" to get a listing by state of individual house location and vacancy data, or click "Vacancy Search" under houses.

Get an overview of Oxford House by viewing the 10-minute segment of the May 5, 1991 CBS "60 Minutes" program about Oxford House. Also download PDF documents about Oxford House by clicking "Publications/General" and scroll down to "Oxford House – The Model" or look at the 2007 Annual Report by clicking "About/Us/Finances" and scrolling down to the "2007 Annual Report." It presents a good description of how Oxford House World Services is able to help states and other develop and maintain strong, effective Oxford Houses, Chapters and State Associations. "About Us" also recounts the history of the Oxford House Movement.

House members and the public can download the basic manuals that set forth the concept and disciplined operating practices that make the network of nearly 1,300 Oxford House work by clicking "Manuals" and downloading the complete text. The basic manual is in either English or Spanish.

Under "Publications" three important categories are available – General, Legal or Evaluations. From the "General" category house residents and others can get basic forms, newsletters and manuals. Providers, researchers or the public will find the "Fifteen State Profile" showing data about who lives in Oxford Houses. Under "Legal" law review articles and lead cases can be downloaded showing the civil rights afforded Oxford House residents under the Federal Fair Housing Act [FHA] and Americans with Disabilities Act [ADA]. Under "Evaluations" both the independent selected studies of DePaul University in Chicago are available and as are selected state evaluations derived from internal research.

"Links" provides an easy access to separate websites maintain by various Oxford House State Associations, Treatment Providers throughout the country, key self-help program websites, and an up-to-date directory of state agencies dealing with substance abuse treatment and prevention.

Finally, there is a direct way to "Contact" Oxford House World Services with any question or issue of interest to residents or the public. All inquiries are responded to by World Services within a few hours.

Learn the many resources available from the Oxford House website and use them to join with the Oxford House family in its quest to provide every recovering individual with a realistic opportunity to live in an Oxford House to become comfortable enough in sobriety to avoid relapse – forever.

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Oxford Houses: Support for Recovery without Relapse

Feature Articles - Treatment Strategies or Protocols

Written by J. Paul Molloy and William L. White, MA

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Addiction professionals are painfully aware that addiction treatment is all too often followed by relapse, re-addiction and readmission to treatment. Of those individuals currently entering addiction treatment in the United States, 52 percent already have one or more prior admissions to specialty-sector addiction treatment, and 20 percent have three or more prior admissions (for those with opiates as a primary dependency, the figures are 74 percent and 42 percent respectively; OAS, 2007).



Of those discharged from addiction treatment, more than half will resume alcohol and/or drug use in the following 12 months, and 50 percent will be readmitted to addiction treatment within two to five years (For an extensive review of this data, see White, 2008). When clients, family members, referral sources, funding authorities and members of the larger community ask for an explanation of this cycle, they are often told that this pattern marks the very essence of a chronic, relapsing disorder. "Relapse is part of the disease" is prominently featured in the new litany of addiction treatment.

But a growing number of addiction professionals and recovery advocates are asking whether relapse is an inherent quality of addiction or the product of a design flaw in how addiction is treated and managed, or more specifically, treated and not managed. It has been suggested that relapse rates might decline precipitously if individuals who initiate recovery within the context of addiction treatment were afforded access to sustained monitoring, recovery support services and a post-treatment environment that is supportive of recovery maintenance.

For more than three decades, men and women seeking recovery have been involved in a living experiment that has tested this very proposition. This article will describe how Oxford Houses function as recovery support institutions, and review what scientific evaluations have concluded about the relapse and long-term recovery outcomes of Oxford House residents.

Oxford House history

Oxford Houses are self-run, self-supported recovery houses. Once voted in, residents can stay as long as necessary, as long as they do not drink or use drugs, pay their monthly share of expenses and expel any house member who uses drugs or alcohol. Started in 1975 by a group of men whose stay in a county-run halfway house was abruptly ended when the county decided to close the house, there are now more than 1,300 Oxford Houses providing recovery housing.

The first person voted into Oxford House was Jim Spellman. Like most of the other men in the first Oxford House, Jim attended a lot of recovery support meetings and was a popular speaker at open meetings. He would often tell a story — perhaps apocryphal — about Blue Cross-Blue Shield hiring one of the leading consulting firms to study the best solution for the alcoholism/drug addiction problem. He would describe all the surveys they conducted and the experts they consulted, and then he would announce the major finding of the study: "If you don't drink alcohol, you won't get drunk, and if you don't use drugs, you won't get high." Everyone hearing Jim's story would laugh, knowing the truth of the observation and the difficulty in achieving it. For Jim and tens of thousands of others who followed, the difficulty of becoming comfortable enough in sobriety to avoid relapse was overcome by living in an Oxford House.

In 1988, Congress recognized that Oxford Houses worked and included a section based on the Oxford House model in the Anti-Drug Abuse Act of 1988 (Section 2036 — Group Homes for Recovering Substance Abusers, now codified in the United States Code as 42 USC 300x-25). That law, along with a minimal amount of technical assistance provided by trained outreach workers, served as a catalyst for the expansion of Oxford Houses throughout the country. The network of Oxford Houses has grown from a handful of houses in the Washington, D.C., area in 1988, to more than 1,300 houses with a collective daily capacity of 9,922 recovering people across 44 states. As of November 2008, 314 of the homes are for women, and 54 are designed specifically for women and children.

The Oxford Houses are residential single-family houses segregated by gender. They are located in stable neighborhoods. In most cases, trained outreach workers employed by Oxford House, Inc. — the national nonprofit umbrella organization — help establish new houses and train the initial residents to use the time-tested system of disciplined democratic operation and self-support. These trained outreach workers also organize local clusters of houses into mutually supportive chapters and statewide associations.

Growth of the network of Oxford Houses over the last decade shows that clusters of Oxford Houses can be replicated readily at minimal cost. Since all Oxford Houses are rented, there is no need for substantial capital investment. Experience has shown that mass expansion requires utilization of trained residents and alumni to effectively establish clusters of houses in new geographic areas. A single outreach worker can open between three to five houses per year.

The most effective model for developing local clusters or statewide networks of Oxford Houses includes the involvement of the state addiction treatment authority in providing funding to pay outreach workers and to administer the recovery home revolving loan fund established pursuant to the provisions of the federal Anti-Drug Abuse Act [42 USC 300x-25]. Most of the existing 1,300 Oxford Houses have received and repaid $4,000 in start-up loans. These loans enable a new Oxford House group to pay a landlord the first month's rent and security deposit. These loans are then repaid over 24 months at the rate of $170 a month.

How Oxford Houses operate

The success of Oxford House is rooted in its simplicity and in the infrastructure that supports it. Oxford Houses provide a place for the recovering individual to heal and transform his or her life from one of destructive addiction to comfortable, productive, long-term sobriety. At the same time, Oxford Houses provide residents considerably more personal liberties (e.g., ability to bring belongings, personal choice of daily schedule, freedom to leave for weekends and "private time" with guests in their rooms) than would be found in therapeutic communities or traditional halfway houses (Ferrari, Jason, Davis et al., 2004).

First, a group of recovering individuals must get a charter from Oxford House, Inc. to establish and operate an Oxford House. There is no charge for the charter. Second, the house must be for either males or females — there are no co-ed houses. Third, the group home must have at least six beds. Fourth, the group must agree to the following three conditions:

1. The house must be democratically self-run.
2. The house must be financially self-supporting.
3. The group must immediately expel any resident who returns to using alcohol and/or drugs.

The umbrella organization, Oxford House, Inc., has sole authority to issue charters and initially issues a charter limited to six months. During that period of time, the group must take steps to show that it understands how to operate as an Oxford House by following the operational procedures in the Oxford House Manual© and submitting proof of performance to Oxford House World Services. The proof includes two letters of recommendation from active Alcoholics Anonymous (AA) or Narcotics Anonymous (NA) members. Then it is given a permanent charter and has equal membership in the network of all Oxford Houses. Oxford House Inc. thanks the recommending AA/NA members and asks them to contact World Services if they ever believe that the house has failed to expel a resident who has relapsed. This is but one part of the quality control mechanisms the central Oxford House organization uses to keep houses on track.

The operation of each Oxford House is based upon a standard system of operation, including: weekly house business meetings; election of five officers; and prompt payment of all household bills. Each officer has specific duties within the house and each resident is limited to service of six months in any one office. The forms and procedures are the same for each house. Among other duties, houses post their vacancies on the national website: www.oxfordhouse.org.

Prospective Oxford House residents are selected for membership following completion of an application; participation in an interview with existing house members; and approval by 80 percent of the residents living in the house. In many ways, getting into an Oxford House is similar to getting accepted as a member of a country club or some other exclusive organization. What this process says to the accepted newcomer is that his or her peers want him or her as a member of their family. Being accepted into an Oxford House — in and of itself — is often the new member's first success along the recovery path.

Once accepted as a member of an Oxford House, the recovering individual has an equal voice in the running of the house, including a vote at the regular weekly business meetings. In these meetings, which are run by disciplined parliamentary procedures, everyone in the house reviews the financial status of the house; discusses and votes on key issues facing the house; and participates in solving problems of daily living that arise

within the house. The predictability of everyday events in the house adds to the newcomer's transition from the turbulence of addiction to the stability of sobriety. The recovery process within the Oxford Houses has been aptly conceptualized as a transition from destructive drug dependencies to a positive dependence on recovering peers (Nealon-Woods, Ferrari & Jason, 1995).

Nationally, the average number of residents per house is 8.2. The best size house provides room for 8 to12 residents, with most bedrooms accommodating two individuals to help them avoid the isolation that can lead to relapse. Residents pay an average equal share of household expenses (rent to the landlord, loan repayment, utilities and house staples) of about $95 a week (range from $75 per week to $150 per week). Residents can live in an Oxford House for as long as they stay clean and sober and pay their equal share of expenses. There are no limits on length of residence in an Oxford House. While the average length of stay is about one year, some residents live in an Oxford House for many years. This open-ended residency is possible because when demand exceeds the supply of beds, the group simply rents another house to establish another Oxford House.

Oxford House evaluation studies

When they started the first house, the original group of residents had to prove that 'the inmates could run the asylum.' A full-time staff of three ran the traditional halfway house in which they had lived. The remaining houses not closed by the county also relied on a full-time staff who proclaimed that the Oxford House would soon become nothing but a flophouse for drunks and drug addicts. This voicing of doubt by "the Establishment" spurred the new Oxford House residents into a "We'll show you" attitude. As part of that attitude, the very first Oxford House invited observation by others, made its address public, and kept all records public with regard to its successes and failures. Evaluation was infused within the very bones of the Oxford House culture.

When Bill Spillaine, PhD, started teaching at Catholic University, after retiring from NIDA, he asked to review the outcome records of individuals who had lived in an Oxford House from its beginning, in 1975, through 1987. Everyone living in all 13 Oxford Houses at that time agreed to cooperate with him. Dr. Spillaine tracked down more than 1,200 former Oxford House residents to learn how many had stayed clean and sober. When he came to the leaders of Oxford House and reported that 80 percent had stayed clean and sober without relapse, the leaders asked, "What are we doing wrong to have 20 percent of our residents relapse?" Dr. Spillaine explained that the normal rate of sobriety without relapse was less than 20 percent and that the Oxford House resident outcome was exceptionally good.

Beginning in 1990, Oxford House residents entered into a sustained collaboration with DePaul University psychologists to evaluate all aspects of the Oxford House network. Since then, Leonard Jason and his colleagues have conducted dozens of studies that tracked residents and alumni and compared outcomes of Oxford House residents and control groups of recovering individuals not living in Oxford Houses. (Many of the DePaul Studies are available at www.oxfordhouse.org.) For the most part, Spillaine's early findings have held up, showing that sobriety without relapse is the norm for Oxford House residents.

More detailed findings from the studies conducted by Dr. Jason Leonard and his colleagues at DePaul University's Center for Community Research include the following (excerpted from White, in press):

- Oxford House residents present a profile of gender and ethnic diversity, high alcohol and drug problem severity and rates of co-occurring psychiatric disorders comparable to addiction treatment populations (Alvarez, Adebanjo, Davidson, et

al, 2006; Ferrari, Curtin-Davis, Dvorchak, & Jason, 1997; Jason, Davis, & Ferrari, 2007; Jason, Davis, Ferrari, & Bishop, 2001).

- AA is the dominant framework of recovery for Oxford House residents (76 percent), but other pathways of recovery are respected (e.g., 17 percent report individual psychotherapy as their primary recovery support medium; Nealon-Woods, Ferrari, & Jason, 1995).

- At two-year follow-up, residents who stayed in Oxford House for a minimum of six months following residential addiction treatment have superior recovery outcomes compared to those placed in traditional aftercare (15.6 percent rate of reported substance use compared to 64.8 percent). Oxford House residents also achieve higher rates of employment, higher incomes and a lower rate of arrest than do those in traditional aftercare (Jason, Olson, Ferrari et al., 2007; Jason, Olson, Ferrari, & Lo Sasso, 2006).

- The prospects of long-term recovery rise with length of stay in an Oxford House (Jason, Davis, & Ferrari, 2007).

- At extended follow-up, 69 percent of residents remain in residence or have left the house as planned in good standing (Majer, Jason, Ferrari, & North, 2002).

- Oxford Houses for women that accommodate children have a positive effect on both the mothers and on other women in the house (d'Arlach et al., 2006).

- The communal environment of the Oxford House has been found to be particularly congruent to African American men and women and members of other groups whose historical experience has created a distrust of authority figures (d'Arlach et al., 2006; Ferrari, Curtin-Davis, Dvorchak, & Jason, 1997).

- Community attitudes toward Oxford House are most positive among neighbors who live closest to the Oxford House (Jason, Roberts, & Olson, 2005).

Subsequent studies of Oxford House confirm the primary finding of the first study: the vast majority of Oxford House residents stay clean and sober without relapse.

A closing reflection

Congress has just mandated that health insurance companies must cover mental illness and substance abuse with the same standards they use to pay for other illnesses (The Paul Wellstone and Pete Domenici Mental Health Parity and Addiction Equity Act of 2008 (PL 107- 1434)). Passage of this legislation is, in some ways, a step "back to the future" since many health insurance companies in the 1970s and early 1980s covered addiction treatment as they covered payment for other illnesses. Such reimbursement was restricted or eliminated in the late 1980s and early 1990s because of treatment industry excesses (e.g., inappropriate admissions, excessive lengths of stay) and growing alarm about patterns of chronic relapse and treatment recycling. It is important in the face of this new legislation that the treatment field avoids replication of this earlier history. The use of Oxford Houses and other non-clinical, peer-based recovery support services can enhance the likelihood of recovery without relapse and can help prevent the future loss of the parity that has just been legislatively restored.

The website www.oxfordhouse.org contains material showing where Oxford Houses are located; studies showing how local development can take place; research reports verifying best practice for assuring recovery without relapse; and a real-time inventory of vacancies in existing houses. Visit this site to explore how this growing network of Oxford Houses may be of use to your clients who could benefit from such rich recovery support.

In 2005 the NIAAA and NIDA funded studies produced great results. The AP story below says it all!

Community - Based Homes Seem to Help Addicts

By THE ASSOCIATED PRESS
Filed at 12:41 p.m. ET; August 18, 2005
WASHINGTON (AP) -- Self-supporting group homes have high success rates in helping individuals recover from alcoholism and drug addiction, researchers from DePaul University reported Thursday. A pair of studies being presented at the annual meeting of the American Psychological Association found success rates of 65 percent to 87 percent for the homes.

The benefits of communal living include a lower relapse rate and help keep individuals as productive members of society, reported lead author Leonard A. Jason. In addition, he noted, the houses operate at little or no cost to the taxpayer. Jason and co-authors studied residents of Oxford House, a network of group homes across the country serving recovering addicts. Each resident pays a share of the costs and can be evicted if detected using drugs or alcohol. One study compared 75 people who went into anOxford House after detoxification with 75 others who went to halfway houses or returned to the community. After two years 65 percent of the Oxford House residents were still clean and sober compared to 31 percent of the others, Jason said.

The second study began with a national sample of 897 Oxford House residents. After a year 607 remained in the study and, of those, 87 percent reported they were still off alcohol and drugs. Those who dropped out of the study had previously reported higher rates of drug and alcohol use than those who stayed in, the report noted. It said those who dropped out were younger and had spent less time in the home than those who remained.

The program seemed to work equally well for men and women, the researchers said, and there were no significant differences among racial groups in the program. The Oxford House program was founded 30 years ago in Montgomery County, Md., and currently has 1,123 houses across the country and in Canada and Australia. While some states have loan programs to help get houses started, each house is otherwise self-supporting and is governed by its own residents.

In February 2006, the researches at De Paul University took the time to publish *Creating Communities for Addiction Recovery – the Oxford House Model*. It includes thirteen separate research papers growing out of the data about Oxford House accumulated over a dozen years. While it only scratches the surface of their findings, it is a quality endorsement of Oxford House that focuses on the many facets of recovery enhanced by Oxford House living.

Creating Communities For Addiction Recovery

The Oxford House Model

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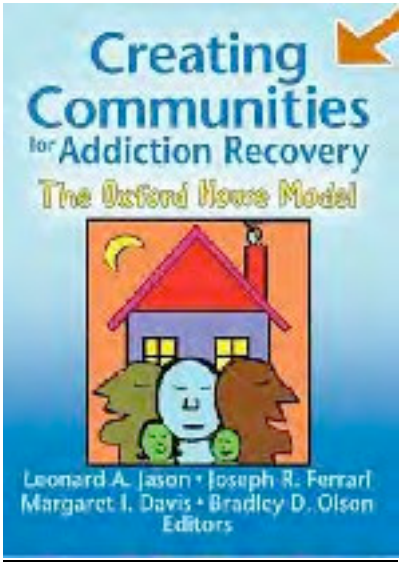
Reviews:

Keith Humphreys, PhD, Associate Professor of Psychiatry, Stanford University wrote the following about the book:

This informative book is at once a systematic evaluation of an important intervention for addiction and a vivid illustration of the value of strengths-based community psychology research. Along the way, the authors show how the process of community research and the amount of knowledge it uncovers are enhanced by a respectful, dynamic relationship between academic scientists and community-based organizations.

Greg Meissen, PhD, Director and Professor of Psychology, Self-Help Network: Center for Community Support and Research, Wichita State University wrote the following about the book:

An important book that will give communities and states greater confidence in supporting the creation of more Oxford Houses, which are critically needed especially now when there are fewer long-term alternatives for those with serious addictions. It is important that the larger addiction community and gatekeepers learn about Oxford Houses as they provide a critical element for those who are working to maintain their sobriety.



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Oxford House Recovery Homes: Characteristics and Effectiveness

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Abstract

One of the largest examples of a community-based, mutual-help residential community for high risk substance abuse individuals is *Oxford House*. In the U.S., over 9,800 people live in these self-run dwellings where they obtain jobs, pay utility bills, and learn to be responsible citizens. Beginning with one single rented residence in the mid 1970s, Oxford Houses now number over 1,300. These rented homes are helping to deal with drug addiction and community re-entry by providing stable housing without any limits on length of stay, a network of job opportunities, and support for abstinence. An exploration of the research on these unique settings highlights the strengths of such a community-based approach to addressing addiction. New roles for psychologists in working with these types of support systems are identified.

Keywords

Substance abuse; Recovery homes; Oxford House; ex-offender

After treatment for substance abuse, whether by prison, hospital-based treatment programs, or therapeutic communities, many patients return to former high-risk environments or stressful family situations. Returning to these settings without a network of people to support abstinence increases chances of relapse (Jason, Olson & Foli, 2008). As a consequence, alcohol and substance use recidivism following treatment is high for both men and women (Montgomery et al., 1993). Alternative approaches need to be explored, such as abstinence-specific social support settings (Vaillant, 2003). Self-governed settings may offer several benefits as they require minimal costs because residents pay for their own expenses (including housing and food). Recovering substance abusers living in these types of settings may develop a strong sense of bonding with similar others who share common abstinence goals. Receiving abstinence support, guidance, and information from recovery home members committed to the goal of long-term sobriety and abstinence may reduce the probability of a relapse (Jason, Ferrari, Davis & Olson, 2006). This experience might provide residents with peers who model effective coping skills, be resources for information on how to maintain abstinence, and act as advocates for sobriety.

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Oxford Houses are single-sex adult dwellings, yet some allow residents to live with minor children. Individual members are expected to pay monthly rent and assist with chores. They are one of the largest self-help residential programs in the US. Unlike other aftercare residential programs, such as halfway houses, Oxford House has no prescribed length of stay for residents and there is no professional staff. Each House operates democratically with majority rule regarding most policies, and an 80% majority for accepting membership (Oxford House Manual, 2006). Residents must follow three simple rules: pay rent and contribute to the maintenance of the home, abstain from using alcohol and other drugs, and avoid disruptive behavior. Violation of the above rules results in eviction from the House (Oxford House Manual).

As of 2008, there were 321 women's Oxford Houses with 2,337 women, and 982 men's Oxford Houses with 7,487 men, for a total of 1,303 houses serving 9,824 people (Oxford House, 2008). There were Oxford Houses in 42 states and 383 cities in the US. Of the residents, 18% were veterans, and 91% were working with average monthly earnings of $1,480. Most residents had been addicted to drugs or drugs and alcohol (73%) whereas 27% had been addicted to only alcohol. Regarding race, 54% were White, 42% were Black, and 4% were other. Regarding marital status, 45% had been never married, 18% were separated, 33% were divorced, and only 4% were married. Fifty-three percent of residents reported prior homelessness for an average time of 6 months. In addition, 76% had been in for an average of 13 months. The average length of stay in an Oxford House was 10.1 months. The average cost per person per week was $98.75.

There appear to be considerable standardization of locations of Oxford Houses as well as what occurs in these settings (Ferrari, Groh & Jason, 2009). Ferrari, Jason, Sasser et al. (2006) studied 55 Oxford Houses across three diverse regions of the U.S and found that regardless of geographic location, Oxford Houses were rather similar in size and amenities that were available to residents (e.g. room air-conditioners, a utility room for laundry, a communal lounge for televisions, comfortable furniture in communal living areas. Observers (with high inter-rater reliability) noted that public transportation was available near the houses, and the streets and neighborhoods were clean and well-lit. These results, in fact, were replicated in Australian Oxford Houses (Ferrari, Jason, Blake et al., 2006).

Jason et al. (2003) used interviews and observations to better understand governance issues in the Oxford Houses. They found that residents utilized a number of strategies to confront behavioral issues, including imposing fines for not completing house duties, discussing interpersonal conflicts and behaviors such as isolation at business meetings, and developing behavioral contracts. Houses also implemented rewarding events for achieving goals. The Oxford House model of treatment for substance abuse issues is an intriguing concept based on self-governance and mutual support. The self-governing policies described above help create and nurture abstinence-specific social support networks. In the absence of professional staff, residents are forced to develop rules and policies, learn to self-govern, and assume positions of leadership within their houses. The democratic feature of the Oxford House program differentiates it from other types of residential care settings and recovery homes, where rules and sanctions for infractions may exist, but with less explicit efforts to encourage a supportive milieu

Limited research, however, is available regarding how Oxford House settings compare to other treatments. Using cross sectional data, Ferrari, Jason, Davis, Olson, and Alvarez (2004) compared the operational policies of 55 Oxford Houses to those of 14 Therapeutic Communities (TCs). Neither type of facility permitted self-injurious behaviors (e.g., physical self-harm or misuse of medication) or destructive acts (e.g., destroying site property or others' possessions). Oxford Houses, however, were significantly more liberal in permitting residents personal liberties compared to the TC facilities. For example, Oxford Houses permitted greater

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flexibility in terms of residents' smoking in their rooms, sleeping late in the morning or staying out late at night, going away for a weekend, and having "private time" in their locked room with guests. Oxford Houses also were more likely than TCs to allow residents to have personal possessions (e.g., pictures, furniture) within the dwelling (Ferrari, Jason, Sasser et al., 2006).

Unfortunately, there have not been any outcome studies comparing TCs with Oxford Houses, although the first author currently has a NIDA funded study that is exploring this issue. There is considerable evidence for the effectiveness of TCs (DeLeon, & Rosenthal, 1989). Substantial reductions in recidivism rates have been found when in-prison Therapeutic Communities (TCs) are combined with community transition programs (Hiller, Knight, & Simpson, 1999; Wexler et al., 1996). As an example, Inciardi et al. (2004) found that at a five year follow-up, those individuals who participated in a combined TC and work release program had significantly less drug use and were significantly less likely to be re-incarcerated compared to those individuals in just the TC program or a no-treatment control group. Unfortunately, these TC programs often create a financial burden on society, and are not available to all that need them. Also, therapeutic community residents may stay only for a limited time before many return to former high-risk environments or stressful family situations (Goldsmith, 1992).

Limited research is also available comparing Oxford Houses versus more traditional recovery homes, which also tend to have supervising staff and less democratic self-governing principles. Harvey (2009) recently found that Oxford House residents had higher scores on social climate scales Involvement, Support, and Practical Orientation, Spontaneity, Autonomy, Order and Organization, and Program Clarity measures compared to a traditional recovery home. This study did not provide outcome data regarding residents' experiences living in these recovery communities. Few methodologically sound studies have emerged in the area of traditional recovery homes. In one of the few recovery home longitudinal studies, Polcin (2006) found that 51% of recovery home residents were abstinent from drugs and alcohol at a six-month follow-up. Regrettably, there are few studies reporting differential outcome data contrasting recovery home and therapeutic community residential treatments for substance abuse. In part, this is due to the fact that it is hard to provide systemic long-term outcome data on these hard to reach, highly recidivist populations.

The present article addresses the primary outcome studies conducted on one form of recovery home called Oxford House. We also examine whether settings such as Oxford Houses have an impact on their greater community. Finally, the implications for how clinicians might work with these types of community support settings will be reviewed.

Main Outcome Studies

Our NIAAA-Study

In a National Institute of Alcohol Abuse and Alcoholism (NIAAA) supported study, we successfully recruited 150 individuals who completed treatment at alcohol and drug abuse facilities in the Chicago metropolitan area. Over half of the individuals who participated in this study were women. Half the participants were randomly assigned to live in an Oxford House, while the other half received community-based aftercare services (Usual Care). We tracked over 89% of the Oxford House and 86% of the Usual Care participants throughout two years of the study. Results from this randomized study were encouraging, indicating significantly more successful outcomes including reduced recidivism for Oxford House than Usual Care participants 24 months after discharge from residential treatment (see Jason, Olson, Ferrari, & LoSasso, 2006).

Positive outcomes also emerged in terms of substance use (31.3% of participants assigned to the Oxford House condition reported substance use at 24 months compared to 64.8% of Usual

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Care participants), employment (76.1% of Oxford House participants versus 48.6% of Usual Care participants reported being employed at the 24 month assessment) and days engaged in illegal activities during the 30 days prior to the final assessment ($M = 0.9$, $SD = 4.43$ for Oxford House; $M = 1.8$, $SD = 6.12$ for Usual Care participants). In this study of 150 participants, 87% of the female participants had children, but 50% of these women reported having lost custody of their children due to their addictions. Two years after entering Oxford House, 30.4% of all the women assigned to the Oxford House condition had regained custody of their children while only 2% (1 woman) had lost custody. On the other hand, in the Usual Care condition, only 12.8% of all the women regained custody of their children, while 4% (2 women) lost custody.

In this same study, we examined the combined effects of 12-step involvement and Oxford House residence on abstinence over a 24-month period (Groh, Jason & Ferrari, 2009). Among individuals with high 12-step involvement, the addition of Oxford House residence significantly increased the rates of abstinence (87.5% vs. 52.9%). Results suggested that the joint effectiveness of these mutual-help programs may promote abstinence and extended our previous research indicating that OH residents frequently engage in 12-step program use (Nealon-Woods, Ferrari, & Jason, 1997).

Economic data also were supportive for participants in the Oxford House condition over the course of the two-year study. Oxford House participants earned roughly $550 more per month than participants in the usual care group. Annualizing this difference for the entire Oxford House sample corresponds to approximately $494,000 in additional benefits to those in the Oxford House condition. The lower rate of incarceration (3% versus 9%) in the study among Oxford House versus usual care participants corresponded to annualized savings for the Oxford House sample of roughly $119,000. Together, the productivity and incarceration benefits yield an estimated $613,000 in savings accruing to the Oxford House participants.

In 2007, the Oxford House organization received about $1.6 million in grants from state and local governments to pay outreach workers to develop and maintain networks of individual Oxford Houses in nine States and the District of Columbia. Only 6% of these costs were for general and administrative costs of Oxford House, Inc. During 2007, the inhabitants of Oxford Houses expended approximately $47,814,156 to pay the operational expenses of the houses. If the Oxford Houses had been traditional, fully staffed halfway houses, the cost to taxpayers would have been $224,388,000 (Oxford House Inc., 2007). In the current cost-conscious environment by local, state, and federal governments, Oxford House represents an important network of recovery homes that promote abstinence for individuals needing ongoing support after an initial episode of substance abuse treatment.

Our NIDA-Study

Our next large scale completed study received funding from the National Institute on Drug Abuse (NIDA). This study examined abstinence-specific social support and successful abstention from substance use in a national sample of over 900 Oxford House residents. Results were quite positive; only 18.5% of the participants who left Oxford House during the course of the one-year study reported any substance use (Jason, Davis, Ferrari, & Anderson, 2007). Additionally, over the course of the study, increases were found in the percentage of their social networks who were abstainers or in recovery. Finally, latent growth curve analyses indicated that less support for substance use by significant others and time in Oxford House predicted change in cumulative abstinence over the course of the study.

Within this large study, we analyzed psychiatric severity data such that we compared residents with high versus low baseline psychiatric severity (Majer, Jason, North, Davis, Olson, Ferrari et al., 2008). No significant differences were found in relation to residents' number of days in

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outpatient and residential psychiatric treatment, abstinence rates, and Oxford House residence status. These findings suggest that a high level of psychiatric severity is not an impediment to residing in self-run, self-help settings such as Oxford House among persons with psychiatric co-morbid substance use disorders.

Kim, Davis, Jason, and Ferrari (2006) examined the impact of relationships with parents, significant others, children, friends and co-workers on substance use and recovery among this national sample of Oxford House residents. They found that children provided the only type of relationship that was able to affect both substance use and recovery in a positive direction. D'Arlach, Olson, Jason, and Ferrari (2006) found that the children residents had a positive effect on the women's recovery, and this positive effect was identical for both mothers and non-mothers. It is possible that these positive effects are due to the fact that having children present leads to increased responsibility among all House residents, aiding in recovery. Women also reported that Oxford House residents helped one another with child care. Ortiz, Alvarez, Jason, Ferrari and Groh (2009) found that Houses with men and children had the highest rates of long term recovery, and perhaps men in recovery who take care of their children are in situations more advantageous to sustained recovery and have more resources compared to others.

Within this large national data set, we also examined ethnic differences. Within our sample, 58.4% were Caucasian, 34.0% were African American, 3.5% were Hispanic, and 4% were other. African-Americans were over represented in the sample. Flynn, Alvarez, Jason, Olson, Ferrari, and Davis (2006) found that African Americans in Oxford House maintain ties with family members yet develop supportive relationships by attending 12-step groups and living in Oxford House. These different social networks are able to provide support for abstinence to African Americans.

Less than 4% of our sample with Hispanic, and this led us to examine possible reasons for this under-representation. Alvarez, Jason, Davis, Ferrari, and Olson (2004) interviewed nine Hispanic/Latino men and three Hispanic/Latina women living in Oxford House. Only two individuals were familiar with Oxford House prior to entering residential treatment; the others had never heard about the program. Participants decided to move to an Oxford House based on information they received from counselors and peers indicating that Oxford House would facilitate their recovery. Prior to entering Oxford House, participants were concerned that House policies would be similar to those of half-way houses they had experienced (i.e., too restrictive).

Half the individuals interviewed also had concerns about being the only Hispanic/Latino House member. Despite their initial concerns, participants reported overwhelmingly positive experiences in Oxford House, with the majority of interviewees indicating that they "blended into the house" within their first few weeks. Most participants reported regular contact with extended family members and stated that family members supported their decisions to live in Oxford House. The most commonly endorsed suggestion for increasing Hispanic/Latino representation in Oxford House was to provide more information regarding this innovative mutual-help program. Residents indicated that personal motivation for recovery was a necessary component of their success in Oxford House (Alvarez, Jason, Davis, Ferrari, & Olson, 2007). Additionally, mutual help, social support, a sober living environment, and accountability emerged as strongly-endorsed therapeutic elements of the Oxford House model. Finally, consistent with a broad conceptualization of recovery, residents reported that living in Oxford House helped them remain sober but also facilitated the development of life skills and a new sense of purpose along with increased self-esteem.

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There were only seventeen American Indian participants in our national NIDA study (Kidney, Alvarez, Jason, Ferrari, & Minich, 2009). Nevertheless, American Indians were no more likely to report more severe substance use, psychological problems, criminal histories, or lower incomes than other groups. In addition, American Indians were more likely to report being on parole or probation and being referred for aftercare by the legal system. Moreover, American Indians reported greater disharmony within their recovery residences than Caucasians, but there were no significant ethnic differences in length of stay in Oxford House.

Finally, Mortensen, Jason, Aase, Mueller, and Ferrari (2009) studied this national sample of Oxford Houses for six years following the completion of our study in order to investigate factors related to whether the Oxford Houses remained open or closed. Results indicated a high sustainability rate (86.9%) during a six year period of time. Houses that remained open had significantly higher incomes of residents than houses that eventually closed. No other significant differences were found between the two groups of houses, including sense of community among residents, neighborhood or policy characteristics, and house age. It appears that adequate house income seems to be a necessary factor for houses continuing to function over time.

Impacts Beyond Oxford House: Community Perceptions

Because the Oxford House organization was frequently confronted with a variety of community reactions to the presence of an Oxford Houses, our team decided to explore attitudes of neighborhood residents toward Oxford Houses (Jason, Roberts, & Olson, 2005). We found that neighbors who lived next to an Oxford House versus those a block away had significantly more positive attitudes toward a) recovery homes, b) the importance of individuals in recovery to have the ability to live in residential neighborhoods, c) neighbors' roles in providing a supportive environment to those in recovery, and d) a self-run recovery home on their block. Oxford House residents are often considered good neighbors, and when neighbors get to know these residents, they often feel very positive about these homes. Many individuals who lived a block away did not even know that a recovery home existed in their neighborhood, and the attitudes of these individuals who did not know the Oxford House members was less positive in general about these types of recovery homes. In addition, property values for individuals next to recovery homes were not significantly different from those living a block away. These findings suggest that well-managed and well-functioning substance abuse recovery homes elicit constructive and positive attitudes toward these homes and individuals in recovery (Ferrari, Jason, Sasser et al., 2006).

We were also interested in exploring whether rates of crime increased in locations where there were Oxford Houses. We investigated crime rates in areas surrounding 42 Oxford Houses and 42 control houses in a large city (Deaner, Jason, Aase, & Mueller, 2009). A city-run Global Information Systems (GIS) website was used to gather crime data including assault, arson, burglary, larceny, robbery, sexual assault, homicide, and vehicle theft over a calendar year. Findings indicated that there were no significant differences between the crime rates around Oxford Houses and the control houses. These results suggest that well-managed and governed recovery homes pose minimal risks to neighbors in terms of criminal behavior.

We also designed a study to assess the types of contributions that Oxford House residents report making to their neighborhoods and communities. Jason, Schober and Olson (2008) found that Oxford House members reported participating in the community for about 10.6 hours per month. The majority of participants were involved in activities around their recovery. Sixty-three percent were involved in mentoring others in recovery. Forty-four percent of the sample was involved in administering and running support groups. Involvement around recovery also included involvement in large community initiatives, as 39% of participants reported involvement in informing or advising agencies or local leaders and 32% reported involvement

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in community anti-drug campaigns. For some, this involvement also included speaking at political events (16%), and attending community meetings (30%), and public hearings and forums (21%). Other general community activities reported by participants included working with youth (32%), fundraising (30%), and volunteering time with community organizations (23%). These findings indicate that Oxford House residents are not only working on their own recovery, but also working to make positive changes in their communities.

Group homes like Oxford House sometimes face significant neighborhood opposition, and municipalities frequently use maximum occupancy laws to close down these homes. Towns pass laws that make it illegal for more than 5 or 6 non-related people to live in a house, and such laws are a threat to Oxford Houses which often have 7–10 house members to make it inexpensive to live in these settings. Jason, Groh, Durocher, Alvarez, Aase, and Ferrari (2008) examined how the number of residents in Oxford House recovery homes impacted residents' outcomes. The Oxford House organization recommends 8–12 individuals residing in each House (Oxford House, 2006). Homes that allow for 8 or more residents may reduce the cost per person and offer more opportunities to exchange positive social support, thus, it was predicted that larger Oxford Houses would exhibit improved outcomes compared to smaller homes. Regression analyses using data from 643 residents from 154 U.S. Oxford Houses indicated that larger House size predicted less criminal and aggressive behavior. These data were used in 5 court cases, which were successful in arguing against closing down Oxford Houses that had more than 5 or 6 non-related residents.

Conclusion

Our overall findings that emerged from two large NIH-funded grants suggest that Oxford House provides an effective and inexpensive alternative for many individuals attempting to recover from addictions to alcohol and other drugs (Jason, Davis et al., 2007; Jason, Olson et al., 2006). Our findings from a number of other studies indicate that Oxford House may be appropriate for a variety of individuals recovering from substance abuse, including those with histories of legal involvement and co-occurring mental health conditions. Oxford House appears to provide a substance-free environment where recovering individuals may live without restrictions on length of stay, and residents report that residential settings devoid of relapse triggers help them remain substance-free (Jason et al., 1997; Alvarez et al., 2007). Given the high costs associated with professional treatment, it is critical to identify more affordable community-based models that might provide long-term support in order to break the cycle of relapse (for more details, see also Jason, Ferrari, et al. 2006; Jason & Ferrari, 2009).

Our research examined the nature and outcomes of the Oxford House model of substance abuse recovery. We worked with the needs of diverse groups, including ex-offenders, minority groups including Native Americans, and women and women with children. Our efforts involved a commitment to collaborative research with a grass-roots organization, assessing change at multiple levels with a multidisciplinary team of economists, biostatisticians, social, developmental, clinical and community psychologists.

For over 18 years, our research team used cross-sectional, operant (Jason, Braciszewski, Olson, & Ferrari, 2005), and longitudinal designs; employed quantitative and qualitative methods, and used self-report, observational (Jason, Ferrari, Freeland, Danielewicz, & Olson, 2005), and organizational data to assess Oxford Houses. We collected data at the individual, house, and state levels, and at times compared data over these different levels of analysis. We believe that selecting multi-level, multi-methods approaches allowed us to better clarify complex phenomena that we were studying.

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We also believe that Oxford Houses and other community-based support system provide social scientists with rich opportunities to explore a vast array of psychological and sociological constructs. Because of space constraints, we were not able to review other topics our Oxford House research group has explored, but they include criminal and aggressive behaviors (Aase, Jason, Olson, Majer, Ferrari et al., 2009), anxiety (Aase, Jason, Ferrari, et al., 2006–2007), hope (Mathis, Ferrari, Groh, & Jason, 2009), optimism (Majer, Jason, & Olson, 2004), tolerance (Olson, Jason, Davidson, & Ferrari, 2009), self-regulation (Ferrari, Stevens & Jason, 2009), social climate (Horin, Alvarez, Jason, & Sanchez, 2007), social support (Groh, Jason, Davis, Olson, & Ferrari, 2007), altruism (Viola, Ferrari, Davis, & Jason, 2009), sense of community (Bishop, Jason, Ferrari, & Huang, 1998; Graham, Jason, & Ferrari, 2009), employment issues (Belyaev-Glantsman, Jason, & Ferrari, 2009), and even specialized Oxford Houses for deaf residents (Alvarez, Adebanjo, Davidson, Jason, and Davis (2006). Clearly, psychologists with interests in community based support networks for substance abusers have ample research topics worthy of exploration, and this research may have public policy implications.

We currently have received NIH support to begin researching individuals leaving jail and prison with substance abuse problems. This line of research could be expanded to other levels or target groups, such as men and women with substance abuse returning from foreign wars in Iraqi and Afghanistan. Reports of post-traumatic illnesses and substance abuse among returning veterans suggests that cost effective programs like Oxford House need closer federal attention. Our work with African Americans suggests that the Oxford House model meets cultural needs of this group; but culturally-modified houses might need to develop to meet the needs of Spanish-speaking Latinos due to their lack of representation within Oxford Houses. Our group has recently received a federal grant to explore this new type of culturally modified recovery home.

Clearly, it is important to improve the quality of the data for outcomes research with residential substance abuse treatment. Both NIDA and NIAAA have health services research study sections that are willing to review these types of applications. It is hoped that more researchers will consider developing grant proposals in this area, particularly as research focusing on the solution of applied problems is becoming a larger priority area for the federal government. With adequate funding, large clinical trials can emerge and adequate personnel can be employed for the arduous task of tracking over time these at-risk samples.

Implications for Clinical Practice

Alcoholism and substance abuse affects over 20 million Americans, and thus is the most prevalent mental disorder facing our nation (Jason, Ferrari, Davis, & Olson, 2006). Many psychologists are involved in the delivery of services to those with substance abuse addictions. Each year, 600,000 inmates are released back into communities, and many are released with ongoing drug addictions (substance abuse within correctional facilities ranges from 74 to 82%; Keene, 1997). One of the strongest predictors of criminal recidivism is substance use (Bureau of Justice Statistics, 2005). According to Horgan, Skwara, Strickler, Andersen, and Stein (2001), societal costs attributed to substance abuse in the United States alone is greater that $500 billion, which includes substance abuse treatment and prevention, medical and criminal costs, accidents, and losses of earnings. Of those with substance use addictions/dependence, only about 10% even reach any type of substance abuse treatment. This suggests a large need for creative new types of screening methods to identify patients in need of treatment. Almost all medical problems are first identified by primary care and referred to specialists, but this is not the case with substance abuse disorders, where most individuals first approach specialist substance abuse treatment settings. The Office of National Drug Control Policy is currently considering recommending that primary care settings should identify people with substance

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abusers in primary care settings in order to refer more patients to detoxification and treatment. If this occurs, there will emerge unique opportunities for psychologists in both screening and referral.

For many individuals with substance abuse problems, entry into the existing continuum of services begins in a detoxification program. In the optimal case, an individual completes the detoxification process and then moves through a time-limited therapeutic program, but these programs are becoming briefer as federal, state and local sources of funding for these services has decreased (Jason, Olson & Foli, 2008). Detoxification program readmission represents a potential indicator that services received have not facilitated sustained recovery. It has been suggested that for a substantial portion of addicted persons, detoxification does not lead to sustained recovery. Instead, these individuals cycle repetitively through service delivery systems (Richman & Neuman, 1984; Vaillant, 2003). Recidivism rates within one year following treatment are high for men and women, and 52–75% of all alcoholics drop out during treatment (Montgomery et al., 1993). These kinds of programs are also expensive (Schneider & Googins, 1989).

These findings provide a challenge to psychologists working in the addiction field. The missing element for many patients is supportive settings following treatment for substance abuse, and the expansion of these types of settings is an important activity for psychologists. Vaillant (1983) noted that environmental factors may be key contributors to whether or not individuals maintain abstinence, and these factors include the support one receives for abstinence among their support networks. Moos (2006 Moos (2007) pointed to other individual, biological, and socio-environmental factors that predicted abstinence maintenance. Moos (1994) maintained that effective interventions for recovering individuals might be those that engage clients and promote naturally-occurring healing processes, such as self-help based treatments. Abstinence-specific social support may be critical to facilitating abstinence among persons with substance use disorders. Such social support is often acquired and utilized through participation in mutual-help groups (Humphreys, Mankowski, Moos, & Finney, 1999), where individuals are likely to develop peer networks consisting of abstainers and others in recovery. Investment in abstinence-specific social support was reported to be one of the best post-treatment prognostic indicators of recovery (Longabaugh et al., 1995; Zywiak, Longabaugh & Wirtz, 2002).

Oxford Houses represent one type of community support that psychologists could refer patients to, and this can be accomplished by reviewing the website for Oxford House, where all houses and current vacancies are listed (see http://www.oxfordhouse.org/locate_houses.php). Professional-practicing psychologists may make a referral to an Oxford House by asking the patient to call the Oxford House and set up an appointment with the house members for possible entry into that house.

Of course, no one particular type of treatment setting is appropriate for all individuals. Individuals early in their recovery or with particular interpersonal characteristics might need more of a structured and professionally-led milieu in order to maintain abstinence given the freedoms that are provided in Oxford Houses. In our national NIDA data set (Jason et al., 2007), 43% of participants had a history of psychological medications, 30% had attempted suicide, 46% had a history of physical abuse, 35% had a history of sexual abuse, 40% had one or more inpatient psychiatric treatments, and 40% had one or more outpatients treatments. In the past 90 days, the sample had an average of 1 day of residential treatment for psychiatric problems and an average of 3 sessions with a counselor for psychiatric problems. Certainly, it is clear that the sample of Oxford House residents do have significant mental health problems and that they do utilize mental health services outside of their Oxford Houses. Although there are no on-site clinical services, effective outreach can be accomplished by mental health

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professionals becoming aware of the existence of these abstinent specific settings, and informing residents that they are willing to provide supportive therapy services to residents.

Given the expanding federal deficit and obligations to fund social security, it is even more important for psychologists to consider inexpensive ways to remediate inequities within our society. The Oxford House model suggests that there are alternative social approaches that can transcend the polarities that threaten our nation (Jason, 1997). We believe that there is much potential in the Oxford House model for showing how intractable problems may be dealt with by actively involving the community.

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Size, Quality, and Cost of Residential Settings:

Policy Analysis of Literature and Large Data Sets

Submitted to:
Michigan Association Of Community Mental Health Boards

- and -

Department of Community Health
Mental Health & Substance Abuse Administration
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Executive Summary

This Policy Report is a summary of scientific evidence bearing on one issue:

What impact does bed size of a group home have on quality of life and cost?

Aspects of quality of life[1] and costs are both considered. We consider several kinds of data, including research literature from several fields and new research. The result of this multi-perspective approach can be considered a form of "meta-analysis" – an attempt to synthesize information from many sources to shed light on a single question.

The issue has risen to prominence many times over the past century, and this time it is primarily because of the poor economy that took hold at the end of the first decade of the 21st century. Policy makers nationwide, and in Michigan, seem to believe that putting people with intellectual and developmental disabilities into larger and larger group homes will save money - with no major decline in quality.

Is this true? The question is explored in this paper, through three general methods:

1. Theoretical review of the concept of "economy of scale" from economics
2. Reviews of related scientific literature from Sociology, Organizational Psychology, Education, and Developmental & Intellectual Disabilities
3. Analyses of some of the largest quality of life and cost databases in the field of developmental and intellectual disabilities.

This is a very important question at this time in our history. The pressures to achieve economies are enormous. The purpose of this Policy Report is to assist policy makers in wrestling with this very difficult issue – knowing that one size can never fit all, that variety and choice of kinds of settings are important, and yet to approach the question from the "meta" perspective – other things being equal, and on the average, is it wise to increase group size in residential settings?

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[1] Quality of life is composed of a complex of factors, such as comfort, freedom, good relationships, wealth, and security, that combine together in different ways and different priorties for different people. There is no single definition that satisfies all. Quality of life is best thought of as multiple dimensions of qualities of life. Many dimensions must be measured so that interested parties can draw their own conclusions about which qualities and which tradeoffs are "most important" to them. This is the strategy employed in this and related papers, e.g., *Conroy, J. (1986). Principles of quality assurance: Recommendations for action in Pennsylvania. Philadelphia, PA: Temple University Developmental Disabilities Center/UA*P.

The scientific literature review began with a thorough review of four kinds of scientific literature that was conducted in 1992.[2] These reviews were then updated with more recent quantitative (data-based) studies and findings, bringing the state of knowledge up to the present.

The quantitative analyses were made possible by the fact that the author of this Policy Report has conducted some of the largest and longest lasting studies of quality of life, costs, and outcomes in the field of intellectual and developmental disabilities. Most of these databases had never been specifically analyzed to explore the relationships between the size of community residential settings and their quality. Old analyses from the National Consumer Survey, the Pennhurst Longitudinal Study, and the Connecticut Applied Research Project were reviewed and refined based on the most recent analytical approaches. Then large data sets from California, Indiana, Michigan, Oklahoma were analyzed for size effects for the first time. In addition, recent analysis performed by the National Core Indicators project, now the largest national database on quality in developmental disabilities, is included.

For the purpose of this Executive Summary, here is what we can learn from the sources above in bullet form.

- **Very Large Settings (Institution versus Community)**: This issue is regarded as "settled science." From the 1909 White House Conference on Care of Dependent Children to the deinstitutionalization movement of the latter half of that century, we now know that very large settings, whether they are called orphanages or developmental centers, are not optimal places for people to grow, learn, and socialize. The largest settings are portrayed in the developmental disabilities literature as the least cost-effective, as well. The economy of scale argument is compellingly refuted[3] by the decades of scandals, evidence of poor quality, and the high cost of large institutions.
- **Economy of Scale**: Policy makers have often remembered the economy of scale phenomenon from elementary economics, but have not remembered the 'next page' of the textbooks – which described diseconomy of scale. Organizations that become too large show drop-offs in quality and productivity. This inevitably will happen in human residential groupings as

[2] Conroy, J. (1992). *Size and Quality in Residential Programs for People with Developmental Disabilities*. A Dissertation Submitted to the Temple University Graduate Board in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy. Philadelphia: Temple University.

[3] At least in part – for the comparison of very large to very small – but this Policy Report goes on to analyze outcomes and cost-effectiveness within the small range, usually called "community living" realm.

well. Given the national rejection of the very large scale groupings, i.e. institutions, the question becomes where the diseconomy of scale sets in within the range of 1 to 10 people receiving supports in a home. Literature evidence appears to imply that the turning point is around 4 people – going above 4 is not beneficial, and beyond 6 is sharply negative. New research analyses performed for this Report support this inference rather strongly.

- **Sociology**: Group sizes above roughly 4 to 6 people tend to show losses in individual participation, effort, communication, and satisfaction.
- **Organizational and Industrial Psychology**: The entire notion of Economy of Scale in industrial production is questioned, the application of industrial models to human service processes is challenged, and the evidence in favor of small groups for both productivity and member satisfaction is strong. Studies support the sociological evidence that group sizes are ideally kept small, meaning in the range near 5 people. With more people than that, diminishing returns set in.
- **Education and Classroom Size**: Class size in the range 15 to 40 students has some impact on their achievement, but it is quite small. Size in that range has a much larger impact on qualitative measures like enjoyment and morale. Large effects on student achievement are found only when the instructional group size shrinks to the very small, below 10 students. The truly dramatic benefits are only seen at the level of 1 to 3 students, which is more like tutoring situations, and appears to be explained by the heightened frequency of one to one interactions. This finding from more than 100 years of research, and hundreds of studies, merits very careful consideration for policy concerning residential program size – particularly if learning and behavioral development are desired outcomes of residential programs.
- **Analyses of the Largest Data Sets in the Field of Developmental and Intellectual Disabilities**: By combining old data with newly analyzed recent data, the pattern of declining quality with increasing size of community homes becomes more clear. Increasing the size of group homes is associated with considerable risk of losses in many dimensions of quality. The decline begins at 4 residents and above; beyond 6, the decline is sharper.
- **Money**: By simply looking at the average cost per person of community homes across the large data sets, we find only weak and conflicting evidence that making homes larger results in savings.[4] In the broad view, the conclusion is the exact opposite. The largest settings are, in fact, the most expensive human services in human history. In this Policy Report, we show

[4] This is a question that requires further study, however, because the kind of people assigned to larger and smaller settings tends to vary somewhat. This may complicate the cost findings.

evidence that, even in the range below 10 people in a home, the larger settings do not consistently show cost savings.

For policy makers and advocates in the field of developmental and intellectual disabilities, what is learned from the current state of the literature and most recent science strongly supports a few fairly simple conclusions:

Other things being equal, smaller homes are associated with higher qualities of life and better outcomes.[5]

The evidence that systems can 'save money' by putting people into larger group homes is extremely weak, and the common interpretation of 'economies of scale' has consistently neglected to include consideration of 'diseconomies of scale.' Moreover, careful review of decades of studies on the economy of scale arguments in industry and sociology strongly lead to doubt about the original assumptions of higher productivity in larger organizations.

There is no consensus on what constitutes the optimal number of people in a residence, but across an extraordinary variety of states and systems, qualities of life and outcomes drop measurably when there are 5 residents, and drop sharply when there are more than 6 residents.

[5] Some of the qualities of life and outcomes treated in the present research are individualized treatment, opportunities for control over one's own life (with support as needed), person-centered planning, physical quality of the home, integration, friendships, comfort, lack of loneliness, services delivered for specified needs, achievement of individual goals, and self-reported qualities of life.

The Notion of Economy of Scale

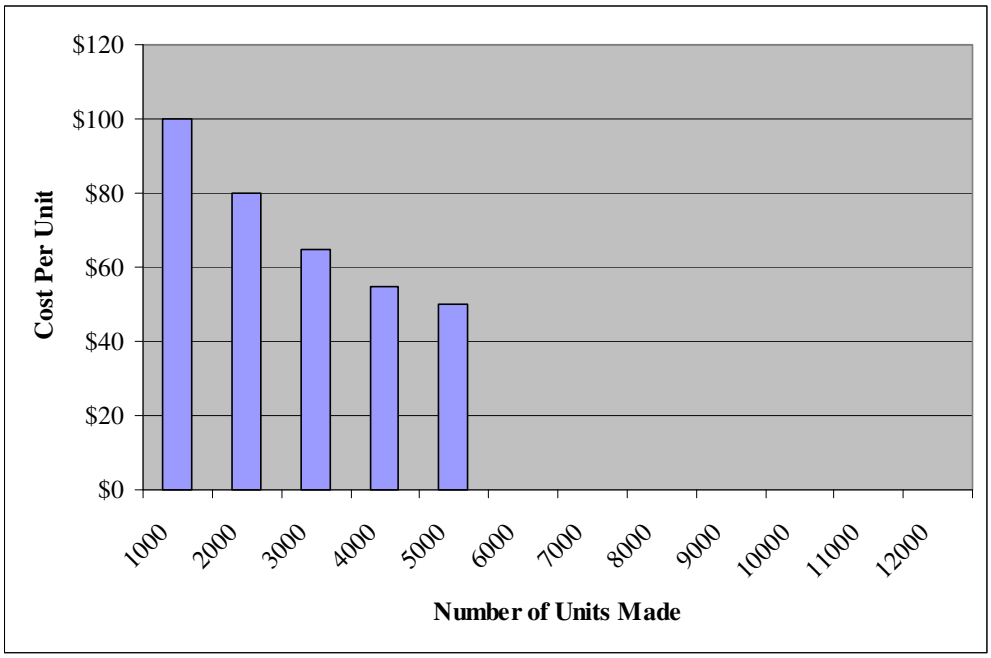
There is a great deal of pressure, during the current hard fiscal times, to move people with intellectual and developmental disabilities into larger and larger homes to save money. A great deal of the pressure to do this arises from the idea that it would be more "efficient." The notion of "Economy of Scale" is at the core of this kind of thinking. This is an idea from economics that is present in every elementary textbook. Unfortunately, the Economy of Scale idea is only half of the true picture – the other half is Diseconomy of Scale, which has usually been forgotten or ignored by proponents of larger settings.

The idea of Economy of Scale comes from the original 'assembly line' innovation of industrial production. The bigger the plant, the greater the 'per-worker' productivity was the belief – because bigger plants could keep all the resources for allied and ancillary needs in one place – instead of having separate administrative units and support operations for many small and separate units.

This kind of thinking helped create America's movement toward large scale institutions. Samuel Gridley Howe, who brought the model of a self-sufficient agrarian community (the original institutional model) to America in 1848, said soon after seeing the fruits of his innovation,

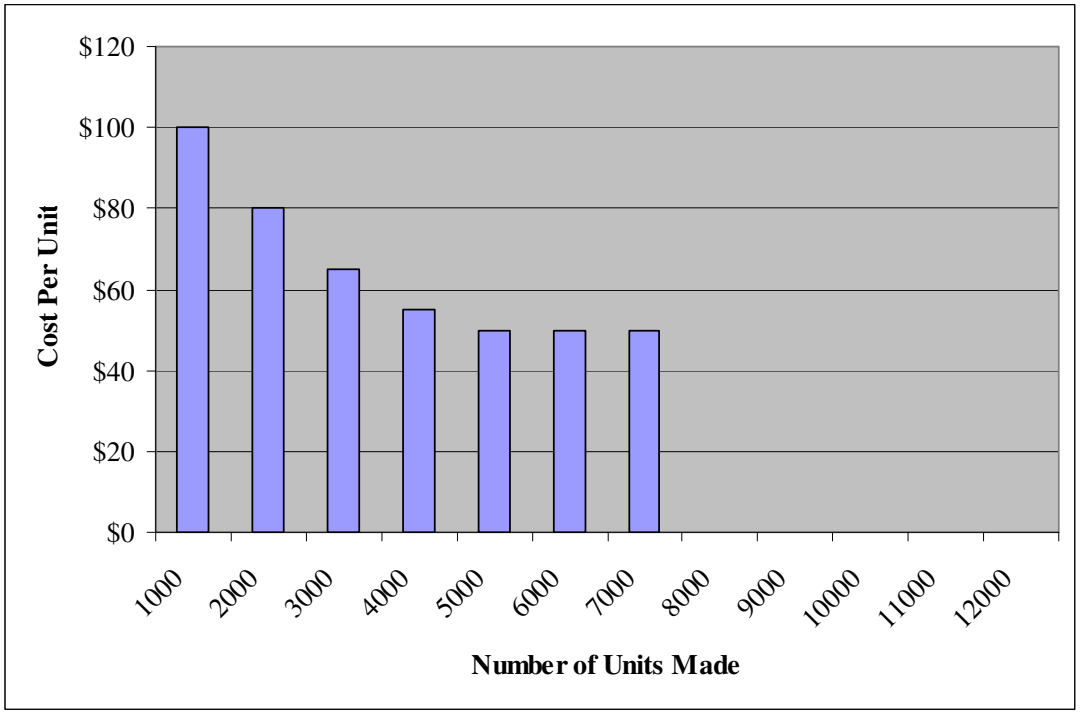
> As much as may be, surround insane and excitable persons with sane people, and ordinary influences; vicious children with virtuous people and virtuous influences; blind children with those who see; mute children with those who speak; and the like.
>
> **People run counter to this principle for the sake of economy**, and of some other good end, which they suppose cannot be had in any other way; as when they congregate the insane in hospitals, vicious children in reformatories, criminals in prisons, paupers in almshouses, orphans in asylums, blind children and mute children in boarding schools. Hence I begin to consider such establishments as evils which must be borne with, for the time, in order to obviate greater evils. I would take heed, however, against multiplying them unnecessarily. I would keep them as **small** as I could. I would take the most stringent measurements for guarding against those undesirable effects which lessen their usefulness; and for dispensing with as many of them as may be possible.

The general theory of Economy of Scale is simple. As the size of an organization increases, the ability to keep administration centralized will cause higher productivity per worker per hour. In graphic form, it looks like this:



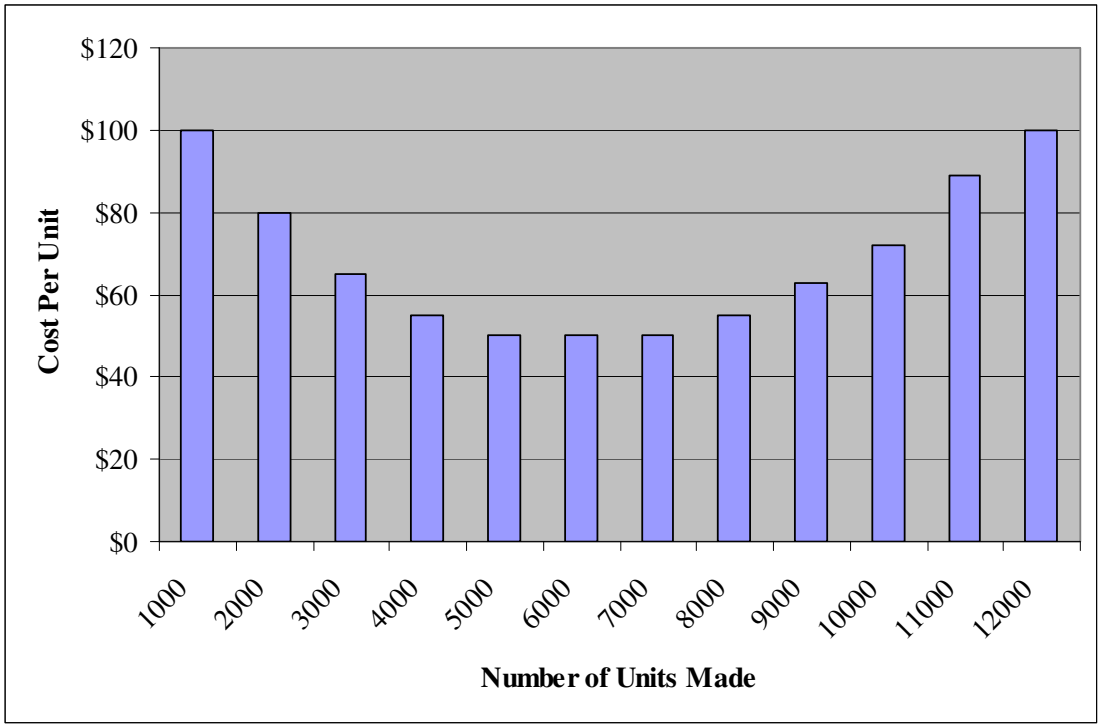
The graph shows the "Cost Per Unit" going down with the size of the operation – the total number of units manufactured. This was part of Henry Ford's greatest innovation with the 'assembly line' concept. Efficiency was the goal.

Of course, there had to be a limit to this gain in efficiency with size. That limit was called "Diminishing Returns" in many textbooks, and it looked like the graph below – as the size of the operation got even bigger, there were no further gains in efficiency.



As the size of the operation increased to higher levels, the Cost Per Unit stayed the same. This 'leveling off' of the theorized gains with size was the point of Diminishing Returns.

What is forgotten by most policy makers in the human services is that the economists long ago realized that there is also "Diseconomy of Scale." When organizations become too large, inefficiencies set in. This phenomenon is the subject of a very large literature in economics, reviewed in Appendix B of this Policy Report, but the salient point is that organizations that become too large not only lose the theorized Economy of Scale – they go the other way – into Diseconomy of Scale. That situation is graphically represented below.



When an organization gets too big, its efficiency suffers. On the right side of the graph, cost per unit goes right back up to where it began, when the organization gets bigger.

According to Shumacher (1973), that is a natural part of the ecology of organizations – and when they reach such counterproductive sizes, they tend to break up into smaller subunits.

Because the current fiscal climate drives policy toward economy, it is essential to know whether larger residential settings will indeed lead to cost savings without major losses in quality of life. The simple pattern of Economy of Scale, followed by Diseconomy when groups become too large, strongly suggests that homes for people with intellectual and developmental disabilities might fall into diseconomy if made too large. The question has become: Where is that point in size, beyond which quality may be impaired and costs may begin to rise back up?

The research literatures from Sociology, Organizational Psychology, and Education all shed considerable light on this issue. From multiple perspectives, the optimal size of human groupings tends to converge in the region below 10 people for most, if not all, important functional tasks. The latest literature in intellectual

and developmental disabilities on the issue of size, plus the new analysis of the largest databases, supports those perspectives.

The Group Size Issue in Sociology

The review of sociological interest and research shows that questions about group size have been a major concern in the development of modern sociology. Beginning with Simmel, continuing right into the content of the most recent introductory textbooks, and covering nearly 100 years, it is clear that group size has been a major concern of sociologists. The scientific evidence about group size and group effectiveness gives a complex picture, probably because of the many and varied approaches to measuring effectiveness. However, a consensus from the sociological literature does seem to emerge: human beings tend to prefer to live, work, and play in small rather than large groups. The preferred group size is clearly below 10 people, but beyond that, the evidence is not yet conclusive.

This sociological tradition and interest in group size is in some ways to be quite relevant to the issue of residential program size. In particular, these findings suggest useful insights into the question of group homes for citizens with disabilities, in that within the small group size range, as size increases,

- People spontaneously interact in very small groups, mostly dyads or one on one (as in the direct observation of natural interactions research of James)
- People spontaneously subdivide their groups, rarely allowing them to exceed 5 or 6 people (as in the party situation studies of Simmel)
- Participation via individual effort tends to decrease in a phenomenon often called 'free riding' (as in the tug of war studies of Kohler)
- Participation via communication tends to decrease and centralize, relying on increased leadership by the few, but allowing anonymity and silence by the many (as found by Bales et al.)
- Authoritarianism increases from group size four to eight, correlating with the emergence of leadership and of members becoming passive followers (in the work of Carter et al.)
- Satisfaction with group process may reach a 'saddle point' around five people (as in the famous and influential work of Slater)
- Satisfaction with group process falls off in groups above five, and keeps falling lower into the teens, where it levels off at a low state
- Increasing size is related to formalization, rulemaking, regimentation, bureaucratization, and decreases in personal relations (discussed by Clegg & Dunkerley)

Applying these sociological findings to the world of residential programs implies that small numbers of residents are beneficial to the quality of life and interactions of individuals However, there is insufficient evidence to draw conclusions about specific sizes of homes that are 'too big.' And, as is obvious from the beginning, there really cannot be an optimum number for all groups and all kinds of people. One size will never fit all. Nevertheless, our effort here is to think in policy terms, covering thousands of people, in thousands of homes, and considering the averages of well being and quality across them. With that perspective, the sociological body of knowledge suggests that there is probably a natural human break point somewhere between four and six people in a home. Group sizes that big can be tolerated, and can sometimes be effective and/or satisfying – but where there are more people than that, the most desirable qualities of intimate and rewarding human interaction are lost.

The Group Size Issue in Organizational and Industrial Psychology

Until the 1980s, the study of size and effectiveness in the organizational research literature was somewhat chaotic, and very difficult to interpret. In 1985, Gooding and Wagner reviewed the relationship between size and performance of organizations and their subunits. Gooding and Wagner screened nearly 200 published studies, and selected 31 that met consistent methodological criteria. From these 31 studies, they attempted to find an interpretable pattern. The remainder of this section is a review of their conclusions.

Gooding and Wagner noted that three kinds of scientists had been at work on the question:

1. Industrial-organizational economists had approached it through examination of organizational economies of scale. Most often, these analysts were searching for the size of organization or unit that would optimize the cost per unit of production. Findings in the literature were inconsistent.
2. Many, but not all, organizational theorists also approached the problem with an inherent belief that organization size would be associated with significant economies of scale. Others emphasized the ability of larger organizations to exert more control over the sources of resources. This and related perspectives predicted that larger organizations would produce more, but not necessarily more per worker.
3. Social psychologists approached the problem largely from the group, rather than organizational, level, and often reported an insignificant relationship between group size and indices of effectiveness, but sometimes reported decreasing effectiveness with increasing size. These analysts frequently hypothesized "free riding" as the culprit (in which group members, relatively anonymous in larger groups, could slack off with no one noticing), and also higher coordination costs with larger groups.

These three kinds of scientists had been approaching the question with different definitions and measurement techniques. Gooding and Wagner suggested that the reason the literature was confusing and often contradictory was that different kinds of scientists had been defining and measuring things differently. Gooding and Wagner specified three dimensions which had varied across studies:

1. The LEVEL OF ANALYSIS. Some studies had examined entire organizations, while others had analyzed subunits within large organizations.
2. The PERFORMANCE MEASURE. Some studies had used key informant ranking, others used organizational records, and others used physical output. Most importantly, some had used absolute output and others had used relative output (i.e., output per unit of size), potentially a very important difference.
3. The SIZE MEASURE. Some investigators had operationalized the size variable as the number of employees, others as the number of beds in a hospital or like facility, others as financial assets, and other as the magnitude of output transactions such as sales or number of clients served.

Gooding and Wagner concluded that these three variations could explain a major proportion of the differences across the studies. Employing a form of meta-analysis, as improved by Hunter, Schmidt, and Jackson (1982), Gooding and Wagner categorized each of the 31 studies according to the level of analysis, the performance measure, and the size measure. Their conclusions were clear:

> 1. Studies that used the organizational LEVEL OF ANALYSIS found that larger organizations were more productive in absolute terms, but not in ratio terms. That is, larger organizations produced more units, but did not produce more per worker. Gooding and Wagner concluded that there was actually no evidence for economies of scale in terms of worker efficiency. This finding was consistent across a variety of SIZE MEASURES.
> 2. Studies that used the subunit LEVEL OF ANALYSIS showed a negative relationship between size and productivity, both for absolute and relative measures of performance. This also held true across studies using a variety of SIZE MEASURES.

The group home size question is at the subunit LEVEL OF ANALYSIS. The typical situation is that a private service provider corporation operates several group homes. Thus each group home is a subunit of the larger organization. The group home PERFORMANCE MEASURES are related to the quality of life of the individuals in the group homes, and are therefore best thought of as efficiency measures. For example, growth in adaptive behavior/independent functioning per unit of staff time or per dollar would be useful measures of performance. The SIZE MEASURE in the group home situation is simple: the number of people living in the home.

According to Gooding and Wagner's meta-analysis, then, we should expect to find smaller group homes producing more positive outcomes.

The organizational literature reviewed here includes more than 100 pieces of primary research. From them, no clear consistent pattern of the organization size and effectiveness relationship emerged, until the meta-analysis of Gooding and Wagner (1985). They showed that prior studies had varied in their levels of analysis (organization or subunit), their performance measures (absolute or relative), and their size measures.

When these were examined via meta-analysis, a clear pattern did emerge. This pattern called the entire notion of Economy of Scale into serious question.

Whether approached from the perspective of the organization or the subunit, when confounding variables were controlled, larger organizations and larger subunits did not produce more per worker.

The contribution of Schumacher, in ***"Small Is Beautiful: Economics as Though People Mattered"*** is considerable in the present context. While Gooding & Wagner's brilliant meta-analysis brought order to the study of organizational size, it also called the traditional Economy of Scale assumptions into very serious question. At the same time, Schumacher was calling for consideration of outcomes other than economic. Our concern in the human services is precisely suited to this refreshing new perspective – and it came along at the same time that even the most rigorous scientists were questioning whether larger plants really produced more widgets per person per hour. Perhaps our assumptions about size and Economy of Scale, so easily imported from industry into the human services, were dangerously misleading.[6]

The organizational goals of group homes for people with intellectual disabilities are fundamentally human, not financial. They are primarily concerned with the quality of life experienced by the people who live in them.[7] Quality is multi-dimensional; it has dozens of aspects. Among them are developmental progress toward increased independence and socially appropriate behavior, integration, relationships, opportunities for choicemaking, satisfaction, individualization, services and supports intensity, attainment of individual goals, normalization, health, safety, and physical comfort. Hence indicators of each of these organizational goals must be explored. If the analyses are done properly, the quality and outcome indicators are likely to turn up to be strongly related to size, if the literature from organizational and industrial psychology is any guide.

For this Policy Report, we performed exactly that kind of analyses, across many states and many thousands of people in various kinds of homes and service milieus.

[7] And the direct support people who work in them – good research must take both into account as a synergistic and mutually reinforcing system.

The Group Size Issue in Education: The Class Size Debate

Just on the topic of academic achievement, illustrating the degree of conflict in 100 years of study of this issue, Slavin (1989) wrote:

> The search for substantial achievement effects of reducing class size is one of the oldest and most frustrating for educational researchers. The search is approaching the end of its first century; eventually, it may rival the search for the Holy Grail in both duration and lack of results. (Page 99.)

The situation had been substantially improved by application of the method called "meta-analysis," which means rigorously pooling the findings from a lot of studies, weighting them by how well they were designed, and coming up with the best summary of all of them put together. Glass and Smith (1978) produced the first such analysis. They performed a meta-analysis on the outcomes of 77 studies that included 725 comparisons of student achievement between smaller and larger class sizes. (Glass was, in fact, in the process of creating the concept of meta-analysis while working on the class size literature.) In sharp contrast to past narrative reviews, which had seen the literature as internally inconsistent and inconclusive, Glass and Smith's meta-analysis came to the relatively clear conclusion that smaller classes were associated with superior achievement outcomes.

Cooper (1989) suggested caution, coupled with a firm conviction that the weight of the evidence was on the side of smaller classes:

> Reviewers of the class size literature disagreed over whether a reduction in instructional group size has its intended effect ... However, some consensus did emerge ... Reduced class size appeared to be most efficacious with low-ability or disadvantaged students when reductions were in the range typically associated with Chapter 1 programs. Such reductions may not only lead to higher achievement but to better student and teacher attitudes and morale and to an enrichment of the core curriculum. (Page 98.)

Slavin (1989) was skeptical, and did the entire meta-analysis over again, calling his new approach "best-evidence synthesis." Using exactly the same studies as Glass and Smith, and even their own tables, Slavin showed that the average effect of the smaller class size on achievement was no more than about 13% of a standard deviation. In statistical terms, that is a very small effect.

Equally interesting, multiyear studies showed that initial gains faded after a year or two, suggesting that smaller class sizes might have, not only small benefits, but temporary benefits as well. The studies in his analysis reduced class sizes from an average of 27 to 16 students. Yet the effects were very small indeed. In trying to

explain why this might be so, Slavin's strongest suggestion was that *"teachers' behaviors do not vary very much with size of classes."* The implication was that behaviors might change slightly, but in the size range of real world classrooms, teachers really did not markedly change how they taught students whether they had 16 or 27 in their class.

Most importantly for our current concerns about residential homes, Slavin also showed that the major educational effects, even in Glass and Smith's own tables, occurred in the very small "classes" of size 1 to 3. From that, Slavin inferred that class size was the wrong focus for those concerned with national policy. For students such as those served by Title 1, what would be most beneficial was not smaller classrooms, but individual or extremely small group tutoring. This may be a key finding for the search for quality in residential settings for people with intellectual and developmental disabilities: we need to aim above all for situations that support frequent one-to-one interactions.

But academic achievement, while it is the primary purpose of schools, is not everything. Slavin made a major concession when he mentioned factors other than achievement:

> Of course, it is important to note that reductions in class size do seem to have significant effects on other variables, such as teacher and student morale (Glass et al., 1982). Reducing class size may be justified on morale and other quality-of-life grounds. However, as a means of increasing student achievement, even substantial reductions in class size have little apparent impact.

It is most intriguing that Slavin, who so strongly believes that the achievement claims are nonsense, is willing to consider the notion that smaller class sizes produce other kinds of significant benefits. He admits that the evidence is fairly clear that people <u>like</u> smaller classes better. They are <u>happier</u> in them. The <u>quality of life</u> may be superior in smaller classes. This may be an important clue for the present effort, which is concerned with quality of life as much as behavioral outcomes.

Moreover, Slavin agrees that the evidence supports a notion that size may become very important when class size drops to three or fewer, a conclusion that may be highly related to group home models. Pennsylvania limited group home size to three people for more than 20 years, but then began to approve larger ones – with quality impacts that have been widely suspected, but not studied with rigor.[8]

[8] Personal communication with leaders of three provider agencies, 2007.

In summary, the classroom size literature achieves consensus about only four findings: (1) smaller classes are usually found to be related to slightly better student achievement, but mostly in the lower grades; (2) smaller classes are consistently found to be "better" in terms of indicators of quality other than student achievement such as satisfaction and morale; (3) large differences in achievement and qualities of schooling are not found until class size drops below 10 students; and (4) dramatic improvements in student achievement are only found in the extremely small "tutoring" situations in which a single teacher is alone with just one or a very few students.

This fourth finding parallels a conclusion from the intellectual disabilities literature, that the best results come from situations in which single support workers are alone with a very small number of people.

The Group Size Issue in Residential Programs for People with Disabilities: Literature Review

This section provides a chronological review of the research concerning the size and quality of residential settings in the field of intellectual and developmental disabilities.

Klaber (1969) was among the first to suggest that setting size might be related to quality. He studied institutional settings in Connecticut, and concluded that living unit size was more influential than overall staff ratios in promoting quality. He suggested that 1 aide for 10 residents would result in much higher quality than 10 aides for 100 residents.

The next explicit treatment of the size issue in the intellectual disabilities field was that of King, Raynes, and Tizard (1971) in England. They developed a scale to measure the degree to which daily life was regimented and institution-oriented, as opposed to individualized and person-oriented, called the Resident Management Practices Inventory.[9] They applied the scale to mental deficiency hospitals (bed sizes from 121 to 1650), voluntary homes (bed sizes from 50 to 93), and group homes (bed sizes from 12 to 41). They found care practices to be more person-oriented in the smaller facilities. However, within any of the three types of facilities, size was not found to be significantly related to the quality indicator.

Their overall conclusion, which probably confused the size issue for years to come, was: *"Our hypothesis that management practices are not effected [sic] by institutional size was confirmed" (p. 184)*. What they meant to say was that the smaller types of facilities were always better than the larger types. Within a type, though, size did not matter; a 121 bed institution was just as regimented as a 1650 bed institution.

Advocates and program designers were already issuing opinions about optimal size. Bedner (1974), writing from the experience of programs in Denmark, Sweden, and Holland, wrote that:

> "The retarded person needs a small number of interpersonal relationships so that those relationships can be accepted as positive stimulation ... The sizes of group homes for children should be from four to six residents ... For adults, the same principles apply. Group homes should be of either three to four or seven to eight persons, but no larger." (p. 33)

[9] Several research groups are still using derivatives of this scale.

In 1974, Harris, Veit, Allen, and Chinsky (1974) performed studies in one large institution, using direct observation of staff-resident interactions. They started out with an interest in the impact of staff ratio on the amount of direct nurturing interaction between staff and residents. Surprisingly, they found essentially no differences across wards with widely varying ratios. Generally, aides did not interact very much at all with the people living on the wards; moreover, ***when the investigators actually added another aide to several wards, the people living there experienced absolutely no increase in interaction. The staff did, however, interact with each other a lot more***.[10]

Harris et al. did find one condition which was consistently associated with higher quantity and quality of interactions: when staff people were alone, working with a small group of consumers. They suggested that large wards should be broken down into smaller units, each staffed by a single aide. They speculated that creating small family-like living units within institutions of whatever size would create higher quality care. Interestingly, this is in effect what happens in small group homes.[11]

Balla (1976) attempted to summarize the state of knowledge about the relationship of institution size to quality of care by reviewing the literature. His review relied heavily on a cross-cultural study (McCormick, Balla, & Zigler, 1975) that used the same measure of quality as King, Raynes, and Tizard (1971), and that obtained similar results. Balla concluded:

> In summary, it seems that from the studies concerned with what may be called the quality of life dimension, care is more adequate in smaller community-based institutions, especially in those under 100 population. However, the number of studies upon which these conclusions are based is small indeed. In addition, the literature reviewed provides almost no indication of an answer to the critical question of whether there are structural aspects of large institutions that tend to coerce practices leading to poor quality of care. The most appropriate conclusion from this literature review would seem to be that the data base if far too scanty at this time to construct a social policy based on empirical evidence.

Balla's work considered only institutions – in no way did it compare quality in institutions versus small community settings. Although Balla found weak evidence that the quality of life in smaller institutions was better than larger

[10] This finding, that adding staff did not add quality interaction with residents, was parallel to Kohler's 1927 findings in the Tug of War experiments – adding pullers to Tug of War teams did not add the full strength of the new person, because the other team members tended to relax slightly when new members joined the team.
[11] This, in turn, relates to the Class Size finding that the large education achievement gains only occur in the smallest groups sizes – 1 to 3 – more in the nature of tutoring, with one to one interaction most prominent.

institutions, his work shed no light at all on the issue of very small or family scale community homes.

O'Connor (1976) took the next step, and did compare smaller homes to the larger institutions. Analyzing data from a national survey of community living situations, O'Connor reported that homes with fewer than 20 residents were more "normalized." In contrast to homes serving more than 20 residents, there were fewer security features, personal effects were more visible in peoples' rooms, and there was greater privacy. "Size" was the only factor that distinguished those group homes which were considered "normalizing."

Heiner and Bock (1978) were the first to attempt to relate setting size to individual behavioral growth and development. Using a large data base on Minnesota's group homes, all certified as ICFs/MR, they tested whether size made any differences in developmental growth, residential stability, and costs. They used data on 163 people from 1975 and 1976. The 250 people were living at 18 group homes, for an average size of 14 people. There were 4 homes of size 6, 8 of size 8, and 5 of size 15.

The behavioral measure was the Minnesota Developmental Programming System (Bock, 1974), a well known scale with inter-rater reliability of .84 and test-retest of .94. The best developmental progress was seen in the 8 bed homes. However, that finding may have been related to the fact that 5 of the 8-bed sites served young children, and their progress was much greater than that seen among the adults in all the other homes.

The authors checked these results against formal reports of functional improvement maintained by the Department of Health. Their data base included 141 people in 5-10 bed homes, 192 people in 11-16 bed homes, and 86 people in 20-26 bed homes. The data showed that people in facilities larger than 20 exhibited less progress than the other two groups. Reported progress in personal hygiene and emotional behavior was slightly higher in 11-16 than in 5-10 bed homes, and progress in communication was highest in the 5-10 bed homes. These differences were small and no tests of statistical significance were reported.

Heiner and Bock detected no variation in residential stability by size. They also performed multiple regression analyses on cost, individual, and programmatic data. They reported that group home costs did not vary systematically by size.

From the various threads of evidence, Heiner and Bock concluded that *"The data support the conclusion that smaller (8 bed) facilities tend to produce positive client changes at a better rate than larger ones; and, do so without significantly higher costs."*

Heiner and Bock also summarized their impressions of the advantages and disadvantages that might go with small and large group homes. Their impressions came from the small group literature, the organizational effectiveness literature, and their direct experience with group homes.

SMALLER GROUPS (2 TO 10 PEOPLE)

ADVANTAGES
1. Greater actual participation for all members
2. Participation is more evenly distributed throughout the group
3. Evaluated more positively by group members
4. Fewer signs of tensions
5. Less strict conformity to group norms
6. Better performance on basic skills (cognitive and sensorimotor) as a result of small group instruction
7. Better performance on conjunctive tasks
8. Higher staff expectations
9. Greater opportunity for people with intellectual disabilities to model normal staff behaviors

DISADVANTAGES
1. Limited human resources
2. May be more expensive in terms of maintenance costs

LARGER GROUPS (10 TO 20 PEOPLE)

ADVANTAGES
1. Greater number of human resources
2. Increased problem solving ability
3. Greater opportunity to meet attractive others
4. Better performance on additive and disjunctive tasks
5. Greater anonymity for shy individuals (this could also be considered a disadvantage)

DISADVANTAGES
1. Organization may be a problem
2. Subgroups are likely to form causing greater potential for conflict
3. Relatively fewer members participate. The group is often dominated by one or a few powerful individuals
4. Strict conformity to normative group pressures is more likely
5. Organizational and interpersonal effects may interfere with the effective use of resources
6. Disciplinary control is exercised more often

Raynes, Pratt, and Roses (1979) reported that the presence of more than one staff person on a residential unit systematically decreased the frequency of

informative remarks to consumers. They suggested either very small settings or settings with very small subdivisions, as did Balla (1976).[12]

Landesman-Dwyer, Sackett, and Kleinman (1980) studied the effects of size in group homes in the state of Washington. Clearly skeptical of the claims that "small is good," Landesman-Dwyer and colleagues conducted direct observation studies of 240 people with intellectual disabilities, and of 75 staff members, in 20 group homes. The people were relatively highly capable, in that only 20% were labeled severely or profoundly retarded. The smallest group home had 6 people, and the largest had 20.

The authors found that staff behavior was much the same across all sizes of home. This was a surprising finding, because the smaller homes had significantly higher staffing ratios. However, their finding corresponds to the earlier Harris et al. (1974) research. Enriching the staff ratio does not seem to lead to more teaching, nurturing, or interaction with the people in the home.

Resident behaviors did vary somewhat with size, but Landesman-Dwyer et al. concluded that most of the differences were either unimportant or explainable from things other than size. One difference they did emphasize was the people in larger group homes engaged in more social behavior by "about 4 to 5 percent" than did those in smaller homes. The people in the large group homes interacted with more peers, were more likely to have a "best friend," and spent more time with their best friends than did people in smaller group homes. These socially oriented findings mirrored their findings reported a year earlier from a different study (Landesman-Dwyer, Berkson, & Kleinman, 1979).

Landesman-Dwyer et al. concluded: *"We did not find evidence of any dramatic effects of group home size in community based facilities that ranged from 6 to 20 residents. Social relationships did appear significantly enhanced as the number of peers increased, suggesting that extremely small group homes may be socially limiting."* This article was then criticized by advocates of smaller settings from a variety of perspectives, primarily that the range of sizes excluded the family-like settings being developed widely in many states – that is, below size 6.

Baroff published a review article in 1980, which examined the same literature reviewed by Balla (1976). Baroff reached conclusions quite different from those of Balla. First examining the class of studies he called "resident-

[12] This finding paralleled findings from the Tug of War and other organizational psychology studies.

oriented versus institution-oriented care practices" studies, he noted that *"What we have then is the curious finding that size* is *and is not important."* He was referring to the fairly consistent finding that size made a difference between types of settings, but not within.

Baroff re-examined the finding of Klaber (1969), that a 1 staff to 10 residents ratio was inherently better than 10 to 100. Baroff suggested that it might be most reasonable to admit outright that this was exactly what small community settings accomplished. Furthermore, he questioned the then-common thinking that the smaller groupings should be achieved simply by subdividing existing institutions. Baroff claimed that this would still keep people isolated from the rest of society, and that would not be in keeping with modern values, particularly integration.

Baroff expressed the opinion that the small residential facilities offer individualization possibilities which are inherently more difficult to realize in larger group care settings. He also suggested an inherent difference in the way caregivers view their roles: *"The institutional attendant is commonly one of a large number of employees. He sees other attendants come and go and this conveys to him his own sense of interchangeability. He does not, in fact, have the same degree of personal responsibility for the residents in his care as the foster or group home parent" (p. 114).*[13]

Baroff's summary of the second type of literature, that which relates size to behavioral growth and development, was simpler than Balla's:

> The current literature consists of eight studies which relate behavior to size. Seven of them show some advantage to the smaller setting and one shows no difference. None show any advantage to the larger ones.

Baroff's overall conclusion was also simpler than Balla's:

> It does seem that size makes some difference. Smaller residential settings, typically serving not more than 10 persons, can necessarily be more responsive to individual needs. Moreover, their location in normal community residential neighborhoods allows for easy access to the range of community experiences that can enhance social, vocational, and recreational skills and can foster greater independence. These same experiences are much more difficult to provide in the more physically isolated and autonomous setting of the large institution.

It is of particular interest that Baroff's review still gave no guidance about the quality of the smaller settings. He urged that size stay below 10, but that was

[13] This is clearly related to the sociological finding of increasing anonymity in larger groups, and the organizational finding of the phenomenon of "free riding."

all. The literature up to this point had nothing to say about quality and size in the range of 1 to 10 beds. No one had compared one versus three, or three versus six, or six versus eight.

However, the earliest suggestions that quality could be enhanced simply by subdividing large institutions into smaller subunits had been strongly questioned. Up to this point, researchers said, there was little support for such a claim – and more importantly, there was a need for more evidence on relative quality within family-scale community homes.

Investigating the quality of staff-consumer[14] interactions in day programs in England, Dalgleish and Matthews (1981) found that engagement was likely to be lower in a large room and when a large number of consumers are present, but this was not related to the staff-consumer ratio. The key variable was size itself, not the ratio. They speculated that when two groups of consumers plus their associated staff are placed together, the staff from the two groups will talk between themselves, at the expense of communication directed toward consumers. This finding was, once again, consistent with the 1969 suggestion of Klaber and the 1974 finding of Harris et al.[15] But Dalgleish and Matthews further pointed out the disturbing fact that, while many people had moved their homes from institution to community, nearly all of them were spending their entire day in a very large room with dozens to hundreds of other people with intellectual disabilities.

There has been a strong and vocal component of the disability field working to defend large settings – even the very large ones. The "Voice of the Retarded" is the most prominent and influential among them.[16] McCann (1984), a policy-oriented ally of that group, wrote an advocacy document entitled "The Sanctity of Size" for circulation in Louisiana. In it, he strongly questioned the size evidence, although not very thoroughly. It was a direct response to a bill introduced by Senator Chaffee of Rhode Island. The bill contained a provision that group homes receiving federal support could not exceed three times the average family size in the area of service. This would limit group home size to between 9 and 12 people. McCann concluded that there was no hard evidence that size made any difference, no good evidence that community placement was associated with any benefits, and

[14] The terminology used in their article is maintained here for clarity. Modern customs utilize different terminology.
[15] This phenomenon has been reported in this and other literatures frequently. This author has satirically called it the "softball team effect" - meaning that as soon as there are enough staff to form a softball team, interactions with the people living in the home will drop precipitously. At some critical mass point, workers will tend to interact with one another rather than with the people served, many of whom do not use verbal forms of communication.
[16] http://www.vor.net/about-vor/general-information/why-we-still-use-mental-retardation

no reason to believe that the quality of care in institutions was anything less than excellent. The document was never published in any book or journal, but it was widely circulated among proponents of institutional care.

Felce, de Kock, and Repp (1986) studied changes in the lives of 12 people in England, 6 of whom moved from institution to small community homes, while the other 6 remained in the institution. The 12 people were the most severely handicapped in the service area. The results included major improvements in the adaptive behavior of the consumers who moved to the community. Results in the community settings also revealed greatly improved staff performance in terms of interacting in positive ways with consumers. The authors wrote,

> Life in the small homes was characterized by a substantially greater opportunity to run one's own life. Increased domestic activity and personal and leisure engagement more than doubled nonsocial participation. Considerable staff effort in delivering antecedents and consequences was directed to eliciting such activity levels, particularly among the most handicapped individuals. As a result, social interactions between clients and staff also showed substantial improvement.

The authors commented directly on the size issue, noting the continuing interest of researchers. They found it particularly significant that the small homes had smaller rooms, and more of them, than the institution. The number of rooms tended to favor creation of the situation described by Harris et al. (1974), in which one staff person was alone with just one or a few consumers. They believed the changes could be attributed to this reallocation of staff resources into very small groups, to the material enrichment of the environment and its free accessibility, and to job specifications and staff training. They concluded by restating the fact that these major benefits had been observed in the most severely handicapped, longest institutionalized, people.

Landesman (1987) studied the movement of 147 people from one kind of institutional environment to another. The old settings were traditional institutional wards of 40 to 60 beds, dormitory style bedrooms, open bathing and toileting areas, large common living rooms, and clearly identified staff offices, coffee rooms, and storage areas. The new living units were 14-bed duplexes constructed on the grounds of the institution.

The duplexes had 6 to 8 people on each side. People had "single or double bedrooms, places for their own clothes and personal possessions, and private bathing and toileting areas. Each side had its own kitchen (although meals were prepared in a centralized kitchen), dining area, and small living room. The furniture was more home-like and colorful. On the outside, the duplexes appeared

to be attractive single-story brick homes, identified by numbers rather than names, and surrounded by sidewalks, streets, and yards."

Landesman's conclusions were not strongly supportive of a size and quality relationship in terms of staff-consumer interactions:

> In the new duplexes where the assigned staff: resident ratios had been enriched considerably, there was no evidence that this led to increased interactions between staff members and residents. In fact, residents actually spent significantly more time totally alone or without any staff person present than they had in the old halls. (p.114)

Other measures, however, more closely paralleled prior research findings:

> Management practices in the new duplexes were rated as significantly more resident-oriented versus institutional. Similarly, the Caldwell HOME scores reflected significant, although quantitatively small, increases in stimulation. Despite these important changes, residents' daily behavior was not affected dramatically.

This article was of particular interest because it was, in essence, a study of the then-current theory that, if small was good, then subdividing a large segregated and isolated institution into smaller subunits should enhance quality of life. These sorts of "make-believe community homes" have been constructed on institutional campuses many times.[17] Landesman's 1987 study is certainly relevant to the size issue, but what it appears to show is that even size cannot make a definitive impact on quality, if the "homes" are still on the grounds of an institution.

This leads to the somewhat more important speculation that size per se really may not be enough to obtain the full benefits seen in studies of community placement. Genuine community placement includes the important dimension of integration, of being in the presence of people who do not have disabilities. Community placement also includes traveling in the real world, as every person in a group home goes away from the home every weekday, as do most Americans.

In the early part of the Pennhurst Longitudinal Study research,[18] it was found that people living at the institution made significantly more behavioral progress if they attended <u>any</u> kind of day program <u>away</u> from the places where they slept (Lemanowicz, Feinstein, Efthimiou, & Conroy, 1980). The difference was attributed to simple daily stimulation via changes of environmental conditions each day. Generally, at the institution, people who were lucky enough to be in a day activity program would simply walk across campus each day, spend a few hours in

[17] There is one such project under way
[18] Directed by the present author.

planned activities, and then walk back to the residential unit. This simple activity was associated with significantly greater developmental progress – people who had a 'day program' gained significantly in self-care and independent functioning abilities, while those with no day program did not make any gains at all.

In community living, however, the daily routine involves more than just a walk across campus. It involves taking a car, van, or bus ride every morning to a day program or employment site. Moreover, the vehicle must travel through the "real world," rather than the institutional campus. People must see and be seen to some degree by non-handicapped members of the general public. They see other peoples' homes and staff as they make their rounds. They tend to spend much more time at the day program than they did at the institution. Perhaps these factors, cumulatively, are having the same effect as the simple day activities did at Pennhurst, but more powerfully. It seems reasonable to believe that this more normalized rhythm and routine of daily life, combined with increased stimulation and integrative opportunities, should be associated with enhanced quality of life. The evidence is consistent with such an interpretation.

If this were true, then once again, size *per se* might not be the most important variable. However, the dispersed nature of the community service system, and its use of regular family-size housing stock, forges an inextricable link with size.

More recent literature, however, has significantly changed the picture.

Lakin, White, Hill, Bruininks, & Wright (1990) noted very large differences among states regarding residence size. They found that, although there was an overall trend toward smaller residence size, there was considerable disagreement about the appropriate size range. They were the first to call for a national policy to make community living in small settings more uniformly available across the states.

Burchard, Hasazi, Gordon, & Yoe (1991) examined lifestyle and adjustment in three community residential alternatives. The study included 133 adults with mild and moderate levels of intellectual disability living in small group homes, supervised apartments, and with their natural families. Results of questionnaires and structured interviews with care providers showed that the residence settings supported quite different lifestyles with respect to independence, lifestyle normalization, and integration. The authors inferred that size of the home was one of the important factors in life quality, engagement, and integration.

Felce & Repp (1992) studied the community home model in England. They compared the small home model to institutional settings and larger community units. The small homes were found to produce beneficial client functioning and high levels of staff/client interaction. The paper concluded that interaction effects were possibly more powerful than single effects, thus illustrating the continuing difficulty of disagreggating the impacts of size, staffing, and individual characteristics.

In 1992, this author completed a doctoral dissertation which included size-related analyses of three large databases: the National Consumer Survey (Conroy, Feinstein, Lemanowicz, Devlin, & Metzler, 1990), the Pennhurst Longitudinal Study (Conroy & Bradley, 1985), and Connecticut's CARC v. Thorne Longitudinal Study (Conroy, Lemanowicz, Feinstein, & Bernotsky, 1990). Those analyses revealed strong evidence of a relationship between size and quality, with qualities of life and service falling off significantly above 4 residents, and sharply above 6 residents. That study did not, however, include consideration of costs of care.

Schalock, Lemanowicz, Conroy, & Feinstein (1994) conducted a multivariate study of quality of life among deinstitutionalized people in Connecticut. They controlled mathematically for individual characteristics and other complicating variables, and found that smaller homes in the community were associated with higher ratings of quality. Later the same year, Schalock (1994) gave more detailed findings from the same database, and reported that size was an important variable but the level of residential supervision was not important beyond the simple factor of the size of the home.

Felce & Perry (1995) explored the complex relationships between staffing levels and size of the home, and were unable to uncouple the two factors. Taken together, smaller homes with richer staffing ratios were naturally superior. They studied 15 housing services in South Wales, and examined complex relationships among ecological variables and resident characteristics. They reported that *"The relative benefits of small, community-based housing services over institutional and larger community settings were confirmed by the Welsh data."*

Tossebro (1995) produced an important study entitled *"Impact of size revisited: Relation of number of residents to self-determination and deprivatization."* Working in three Norwegian countries, he analyzed the impact of number of residents in facilities for people with mental retardation on two quality

of care measures, deprivatization and self-determination. It was hypothesized that the size of the facility would make little or no difference, whereas the size of the living unit will have a significant impact, but only within a narrow size range. *[Subjects]* were 591 residents (aged 18-67 yrs) of 36 facilities in 3 Norwegian counties. Data were based on staff interviews. Results supported the hypotheses: Living unit size had a substantial impact on self-determination and deprivatization in the 1 to 5 bed size range but not among larger units. According to a later review by Stancliffe (1997),

> Tossebro (1995) has helped to clarify this somewhat confusing picture. He found no association between self-determination and ***facility*** size (a number of facilities were made up of multiple living units) but a linear relationship with ***living-unit*** size. There was a strong correlation (r=.48) between self-determination and living unit size for small settings of 1 to 5 individuals but no relation (r=.05) for larger units of between 6 and 16 persons.
>
> Tossebro's (1995) findings are of considerable importance in interpreting research on living-unit size and point to the need to expand the meager research base on size effects in the 1 to 6 person size range that is characteristic of small community settings. The generalizability of Tossebro's findings is limited because all of the living units he examined were classified as institutions. Some very small facilities (4 to 9 persons) were located on an ordinary street, but "the smallest living units were largely located on institution grounds" (J. Tossebro, personal communication, December 4, 1995). One other limitation was that Tossebro assessed self-determination using a single staff rating of each person's freedom of decision. If his findings can be replicated in a community setting, using a more detailed, psychometrically sound measure of choice that does not rely solely on staff perceptions, the generality of his conclusions will be greatly enhanced.

Conroy (1996) used a matched comparison design for 51 pairs of people in community homes in Pennsylvania, and showed that many qualities of life were higher in smaller community homes, other things being equal. Moreover, the total costs of services and support were lower in the smaller homes. The study was complicated by the fact that the settings were associated with different funding streams, and were regulated differently. The larger settings were generally in the ICF/MR,[19] funding stream, and the smaller ones were funded via the Home and Community Based Services Waiver program. Because of the mixture of size and funding variables, the study provided a useful piece of evidence, but could not be definitive.

Perhaps the most significant study of the 1990s was performed by Stancliffe (1997). His article, entitled *"Community living-unit size, staff presence, and residents' choice-making,"* examined the impact of size of residence on residents' opportunities for choice among Australian adults with mental retardation who lived in staff-supported community residences housing one to five residents. Significantly greater choice was exercised by individuals living in smaller settings,

[19] ICF/MR stands for Intermediate Care Facilities for [People With] Mental Retardation.

even when personal characteristics of individual residents were controlled statistically. Staff presence (number of waking hours when staff were present in the home) was confounded with living unit size. Analyses including both staff presence and living-unit size revealed strong effects of staff presence, with more choice displayed in settings with longer periods when no staff members were present. Size effects were less evident once the variability associated with staff presence had been accounted for. Results suggested that both staff presence and living-unit size are important predictors of choice. According to Stancliffe,

> "Together with the results reported by Burchard et al. (1991), Conroy (1992, 1996), Schalock (1994), and Tossebro (1994), the present findings provide a strong case for asserting that, for small community residences, smaller settings (which often have lower levels of staff presence) are associated with substantially better client outcomes, notably choice. Although size was confounded with staff presence and/or residence type (e.g. ICF/MR status) for some of the studies in this list, taken together they offer consistent support for the proposition that size matters in small community residences. Looking at the residence-size literature as a whole, one is struck by the almost complete absence of contrary evidence. Although a number of studies of larger residences have reported no significant size-related effects, almost none have reported better outcomes in larger settings (e.g., Landesman-Dwyer et al., 1980).

Stancliffe, Abery, & Smith (2000) performed a study in which they attempted to go "beyond living-unit size and type"[20] They investigated personal control, an indicator of quality based on self-determination, among 74 adults in Minnesota community homes. They used advanced mathematical techniques to try to tease out the potential effects of individual differences, characteristics and funding streams, and found a clear and rather simple hierarchy. Personal control was highest is semi-independent homes, next highest in Home & Community Based Services Waiver homes, and lowest in community homes funded via the Intermediate Care Facilities for [people with] Mental Retardation (ICF/MR) program. Moreover, the findings held up even within the smallest range of sizes, from 1 to 5 people.

A meta-analysis of behavioral outcomes of deinstitutionalization was reported by Kim, Larson, & Lakin (2001). Their review of more than 30 studies showed that people tend to grow and learn and develop independent functioning skills far more rapidly and effectively in small community homes than in large institutional ones. Their abstract stated:

> A summary of studies conducted between 1980 and 1999 on the changes in adaptive behavior (daily living skills) associated with leaving and staying in institutions. It reviews over 30 studies that followed people from 6 to 72 months after leaving, some

[20] Stancliffe, R.J., Abery, B.H., & Smith, J. (2000). Personal control and the ecology of community living settings: Beyond living-unit size and type. ***Mental Retardation, 105***, 131-154.

> with comparison groups that stayed, some just longitudinal and few that make both comparisons. The consistency of the findings to the benefit of the leavers is extremely impressive.

Cross (2002) reviewed the research on size, and reported to the Australian Capital Territory's Department of Disability, Housing, and Community Service that:

> There has been considerable debate within the literature as to whether 'size' is a key variable in successful and unsuccessful living outcomes. Generally size alone is not considered to be the powerful determinant of outcomes, however there is substantial evidence that size is a factor. Several major studies show that reduction in 'institutional' practices (by staff, and consequently by clients) is most likely to occur when size is small. In some studies this is considered to be 3 or less, in others 4 or less.

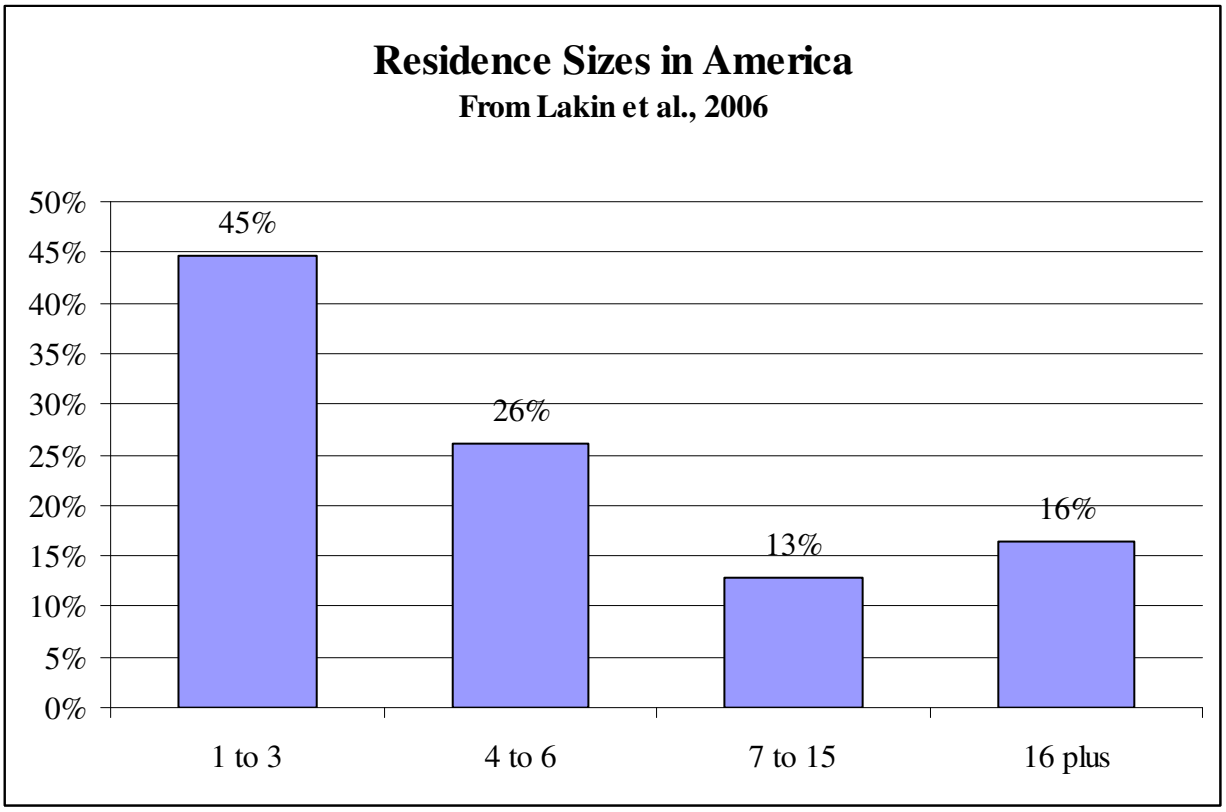
During the past decade, a new resource for databased analysis of the issue of size has been constructed. The National Core Indicator project[21] was designed to collect data on qualities of life and service among people with intellectual and developmental disabilities in residential settings. It gradually grew to include participation of more than 20 states.

Recent analyses, reports, and publications shed light on variations in setting size related to quality indicators including choicemaking, loneliness, and liking one's home. The NCI data have also been used to explore relative cost of two kinds of community funded settings, and this analysis was also related to the size of the home.

Because the NCI data are so new and significant, they are treated in some detail in the *"New Analyses from the National Core Indicators"* section of this report.

[21] See the National Core Indicators website at http://www2.hsri.org/nci/

That summarizes the research literature on the size of group homes in developmental and intellectual disabilities. Since 2000, there have been reports of trends, but we found no further research investigations. Lakin, Prouty, & Coucouvanis (2006) reported on 'changing patterns in size of residential settings,' updating their earlier reports. They had found that in 1977, the average residence for citizens with intellectual & developmental disabilities was 22.5. By 1994, it was 4.9. From the year 2000 to 2005, the preference for small settings continued. In 2000, 39% of people in residential settings were in size 1 to 3 person homes, and in 2005 this figure had increased to 45%. The figure below shows the most recent size distribution of residential settings for people with developmental and intellectual disabilities in America.



In 2005, the total number of people in these residential settings was 411,215. The average cost of the large institutional settings, above 16 people, was more than $200,000 per person per year. The average cost of the small community settings was approximately half of that figure. Clearly, this was an issue with considerable policy import.

The Group Size Issue in Residential Programs for People with Disabilities: New Research

In 1992, we analyzed data from the National Consumer Survey, the Pennhurst Longitudinal Study, and the Connecticut CARC v. Thorne Longitudinal Study with regard to size and quality (Conroy, 1992), and found strong evidence of a direct relationship. That investigation would have benefited from further analysis of small settings, and it did not include costs. Here we have analyzed newer data to explore the size-quality issue, and have included large scale data on costs.

The analyses presented here are primarily offered in graphic format, without complex statistical descriptions, although those are available and all the relationships depicted in the graphics are 'statistically significant' at very high levels. The aim of this presentation is to show whether or not there is a clear, simple, consistent relationship between qualities of life and the size of a group home.

To reveal the answer, we present graphs of quality by the size of the homes across the studies and across many indicators of quality – individualized and person-centered support practices, perceived quality of life, power & control, integration, physical quality of the home, normalization, and individual behavioral progress over time. The number of graphs presented could be overwhelming, but they are all designed to show whether qualities really do vary with size – and are therefore easy to interpret.

The evaluation, research, and quality assurance work we analyze here comes from long term projects in California, Indiana, Oklahoma, Michigan, and the National Core Indicators efforts now under way in more than 20 states.

We tracked the progress of deinstitutionalization in California from 1994 to 2002, and produced more than 30 formal scientific reports on quality. By the end of the 'Coffelt Quality Tracking Project' there were just over 2,400 people being visited annually, face to face, with collection of multiple measures of quality. The studies also included mail surveys of every known family every year, and a quality feedback system to alert local authorities both to situations of concern and situations of unusual merit.

Indiana's progress away from institutional models was tracked from 1997 to 2001, and included direct data collection with more than 600 individuals in their

homes, both before and after movement from institution to community. There were 10 formal research reports issued.

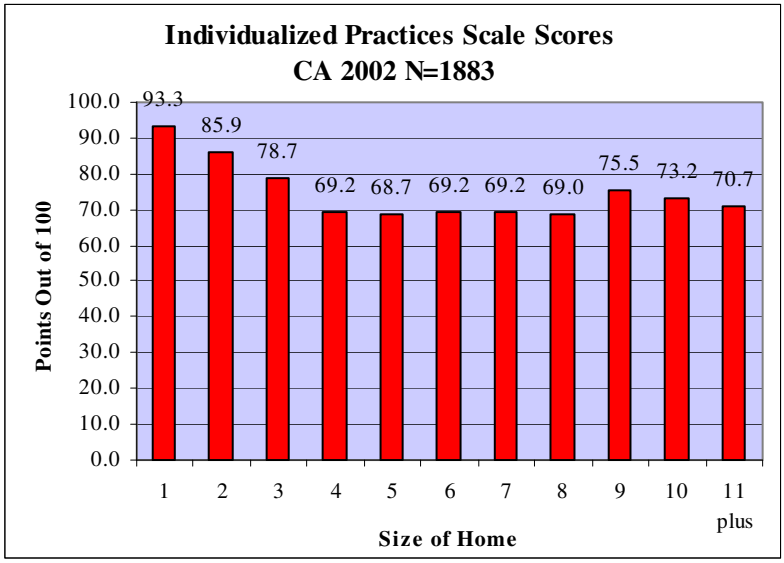
Oklahoma's Quality Assurance Project began in 1992, and continues to the present. It was focused on the approximately 1,000 people who moved out of the Hissom Memorial Center when it closed under court order, but at times included more than 3,500 Oklahoma citizens with disabilities in community settings. There have been more than 30 formal reports arising from this work, which is probably the largest and longest lasting effort to track community quality in the nation.

In Michigan, as part of our research on self-determination for the Robert Wood Johnson Foundation (Conroy et al., 2002), we visited more than 400 potential participants in 1998. Then in 2001 and 2002, we re-visited more than 200 of them, measuring many aspects of quality of life and service.

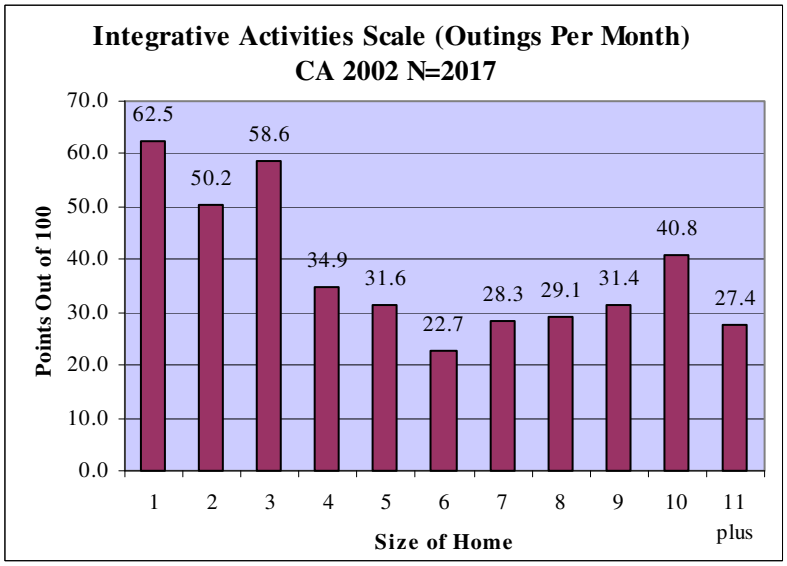
The National Core Indicators project (http://www2.hsri.org/nci/) is an attempt to collect consistent data on community residential settings across state lines. This is the first long lasting undertaking of its kind. It has recently reached the magnitude at which useful analyses of issues like the size of the home can be conducted. We report on the findings of the NCI team with regard to size here.

California's Coffelt Quality Tracking Project

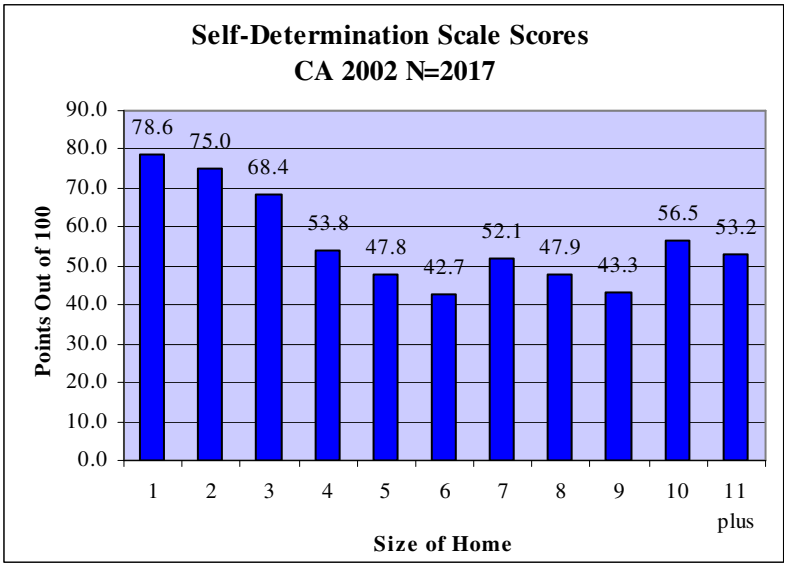
The California measures included a scale of individualized practices in the home. The scores on this scale do vary with size of the home. The data from 2002 show the pattern clearly, with larger homes showing less individualization.



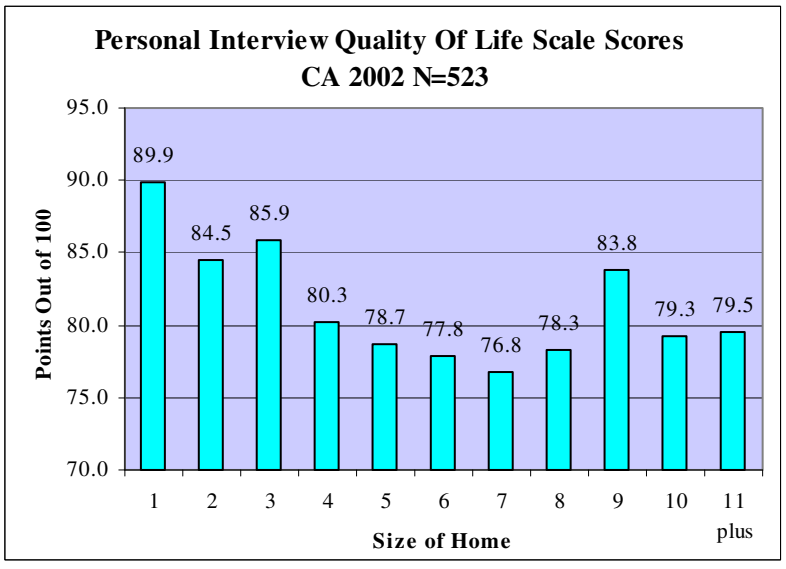
The frequency of integrative activities was measured simply as the number of times per month that each person 'got out' of the home for community outings. The size effect was evident.



A measure of individual power and control, the Decision Control Inventory, was developed for the research on self-determination, and is highly reliable. In California, opportunities to exercise choice were highest in the smallest homes.

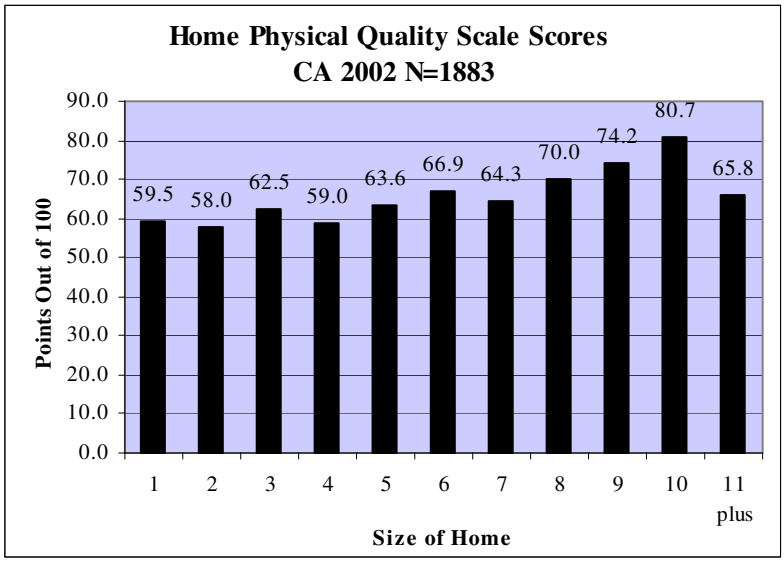


On every visit, an attempt was made by our data collection 'Visitor' to directly interview the focus person. Many people in community residential settings were unable to relate their experiences verbally, but for those who could, the data showed a clear pattern.

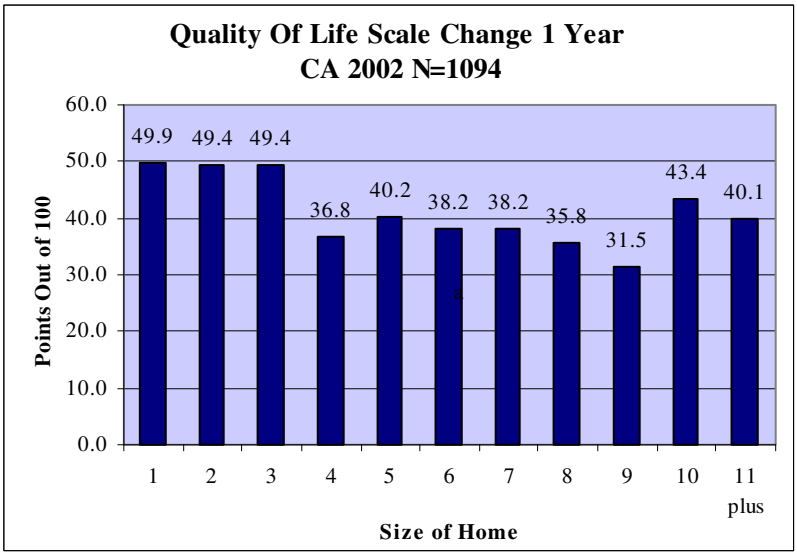


The California battery of instruments included a measure of the physical quality of the home. Here is our first contradictory finding. Our data collection

Visitors found, on the average, that larger settings were somewhat higher in qualities such as orderliness, cleanliness, and spaciousness. Taken all together into a single overall scale, the pattern showed a tendency for larger settings to score slightly higher.

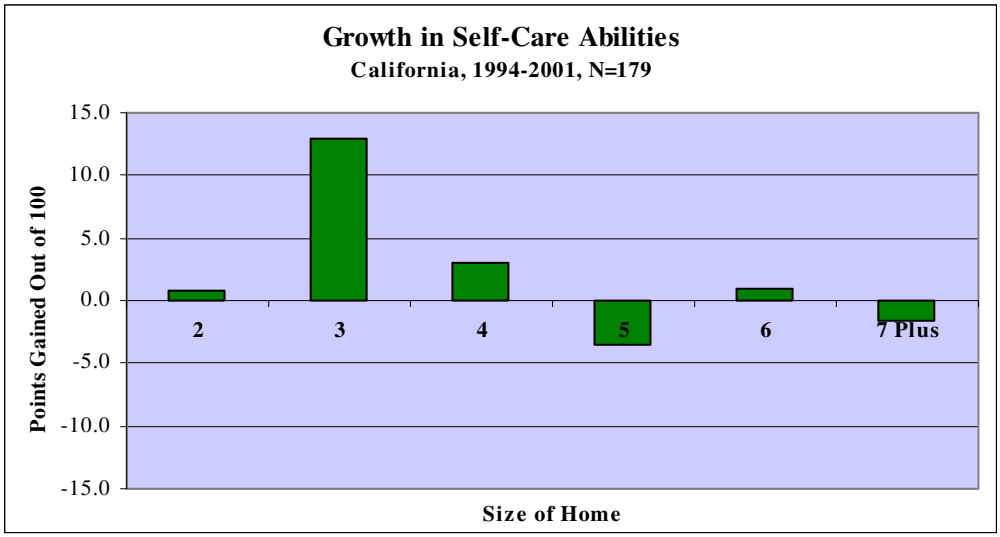


The California work also included our 14 item scale on perceived qualities of life. This simple one page scale asks individuals (and the support workers or family members who know them best) how good or bad their lives are – and also how good or bad their lives were before moving to their current home.



The graph shows perceived change in quality, from "Then" to "Now." The highest positive changes are in the smallest settings.

We also examined the longest possible time span in the California data, from people living in institutions in 1994 to community in 2001. There were 179 people with complete data from that long span of time. One of the classic indicators of quality of service is behavioral growth. In this case, we measured independent functioning (also called self-care or adaptive behavior) over the years. Breaking down growth in self-care abilities by size, we found that size 3 was associated with the largest positive change.



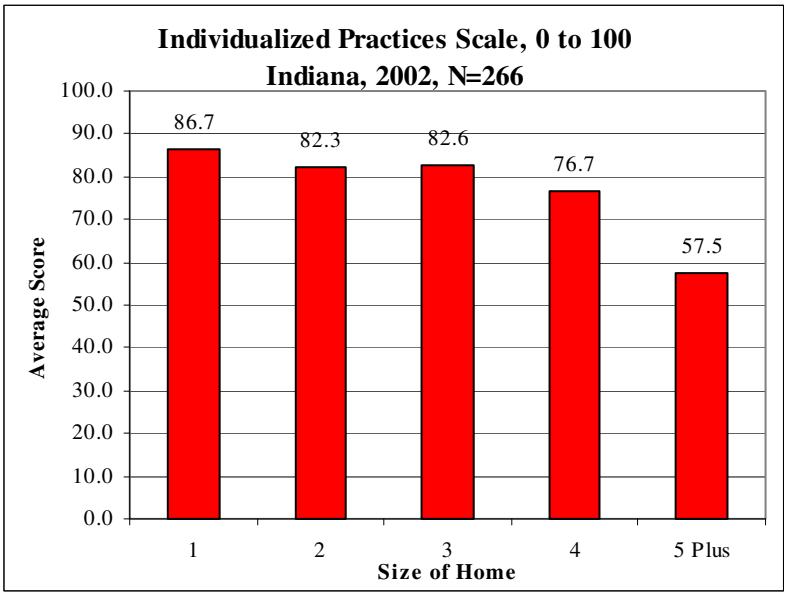
The smaller number of people in this analysis suggests greater caution in interpreting the graph. The suggestion is clear enough, that the smaller settings are associated with greater developmental progress, but the finding cannot be considered conclusive.

Taken as a whole, the California database, here analyzed for the first time about the size issue, leads to the inference that most indicators of quality are higher in smaller community homes.[22]

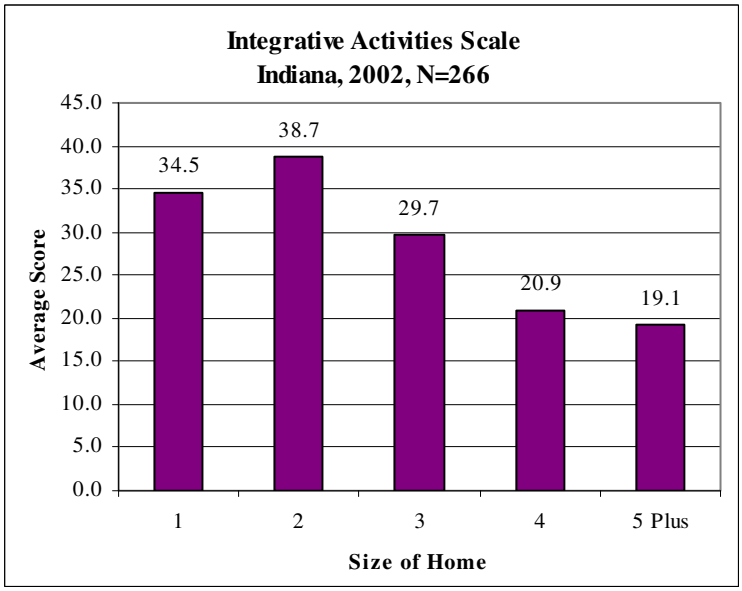
[22] The entire body of work in the Coffelt project also showed conclusively that people were 'better off' by practically every measure in the smaller community homes than they were in the large Developmental Centers.

Indiana's Quality Tracking Project

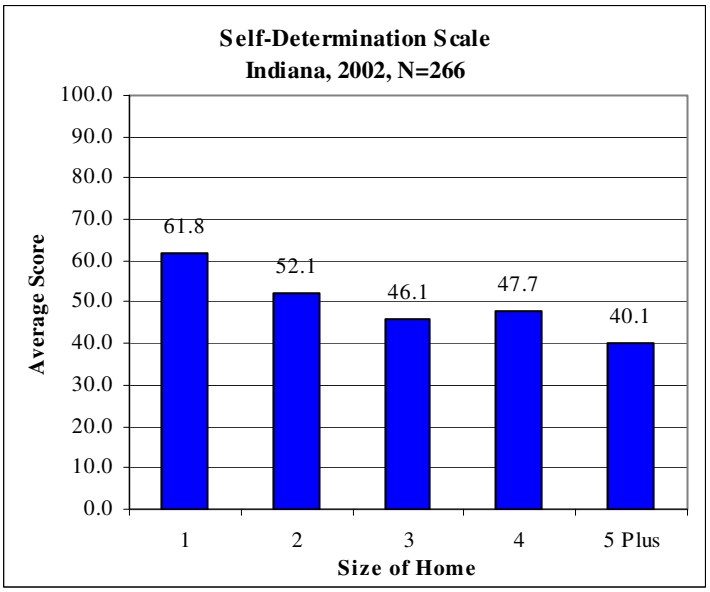
Just as in California, the Indiana work included a scale of individualized practices, and it clearly varied with the size of the home. Indiana was different in that settings above size 5 were almost non-existent, whereas in California, size 6 was commonplace. Hence the Indiana graphs reflect smaller homes.



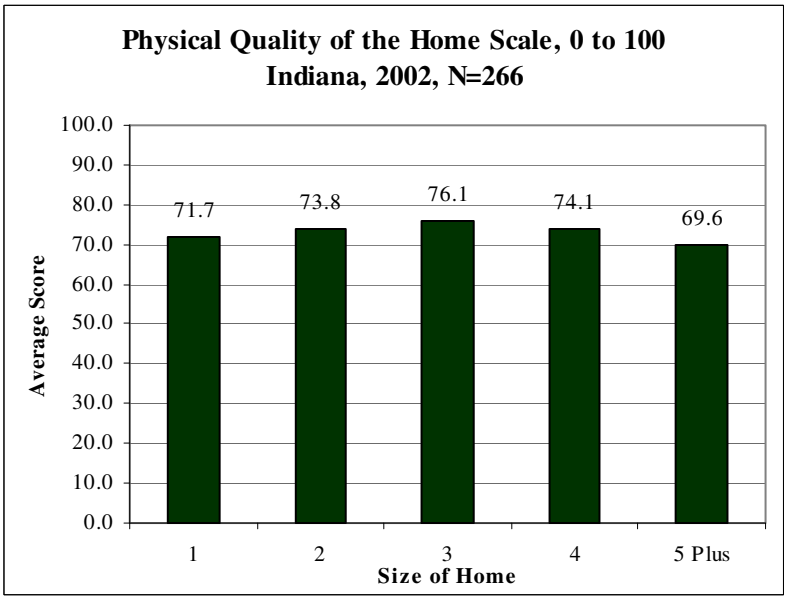
Integrative activities per month were higher in smaller homes:



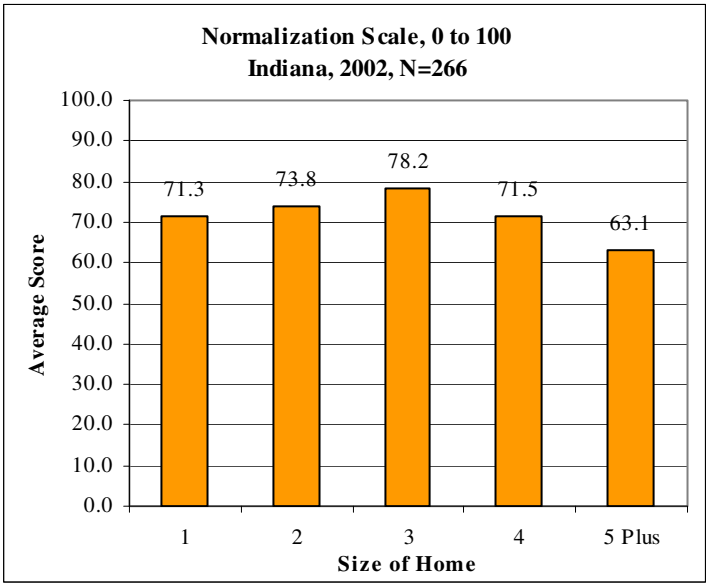
Our reliable scale of individual power and control showed higher scores among people in the smaller settings.



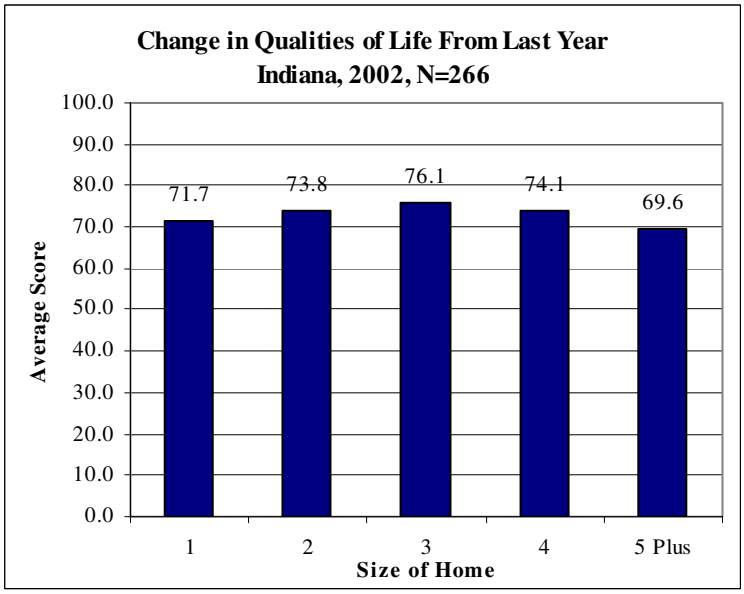
The physical quality of the homes varied slightly by size, but smaller was not consistently 'better,' just as we saw in the California data.



The Indiana work included a classic scale measuring an aspect of quality that was dominant in the field in the 1970s and 1980s, 'normalization.' It showed a pattern of increase up to size 3, and then a decrease as size went up.



Indiana data provided an opportunity to examine the Qualities of Life scale data across one year. Although this measure relied on memory, and was therefore less definitive than true pre-post data, it did show a pattern of highest improvement in the settings of size 3. Life quality improvements were actually lower in both the smaller and the larger settings – a finding much like the Normalization scale.



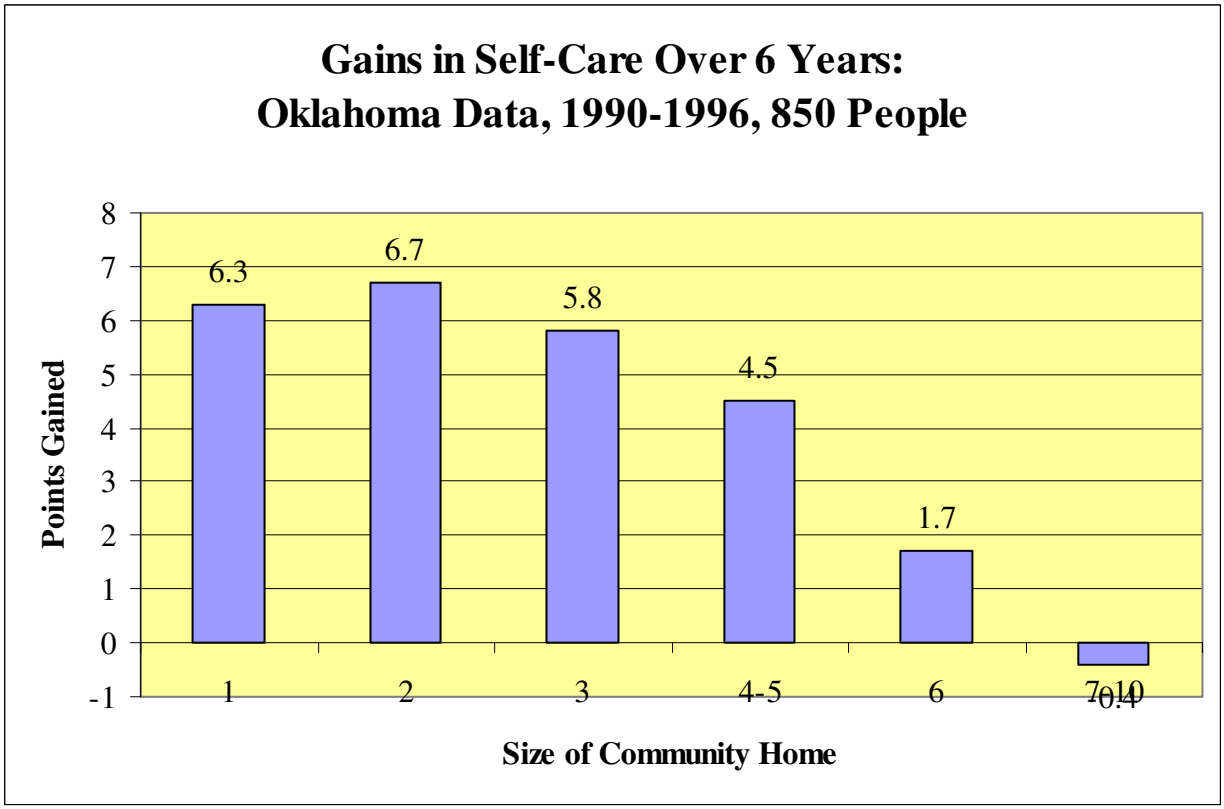
The data from the Indiana work showed a pattern of superior qualities in the smaller settings. Physical quality in terms of order, cleanliness, and roominess were again the exception. Two of the indicators suggested that size 3 was 'better' than smaller or larger settings.

This finding is not yet fully understood, but the next data set, from Oklahoma, should shed further light – because the closure of Hissom in Oklahoma was achieved by movement into the smallest settings yet studied. Instead of 'group homes,' the Oklahoma community settings were characterized as 'supported living.'

Oklahoma's Quality Assurance Project

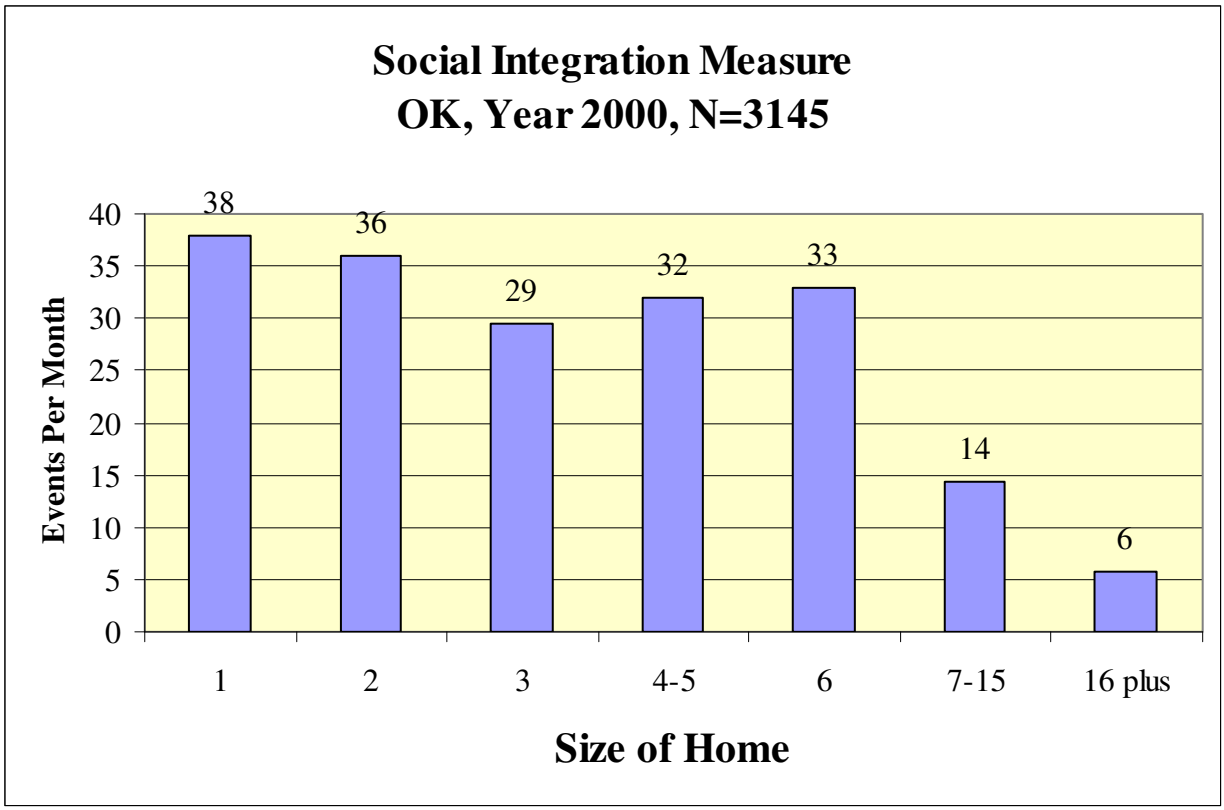
Oklahoma's deinstitutionalization efforts relied on the smallest community settings. This enabled the closest scrutiny yet on the issue of the size range below 6 beds.

In the 1990s, data from Oklahoma were utilized to construct this now fairly well known graph:



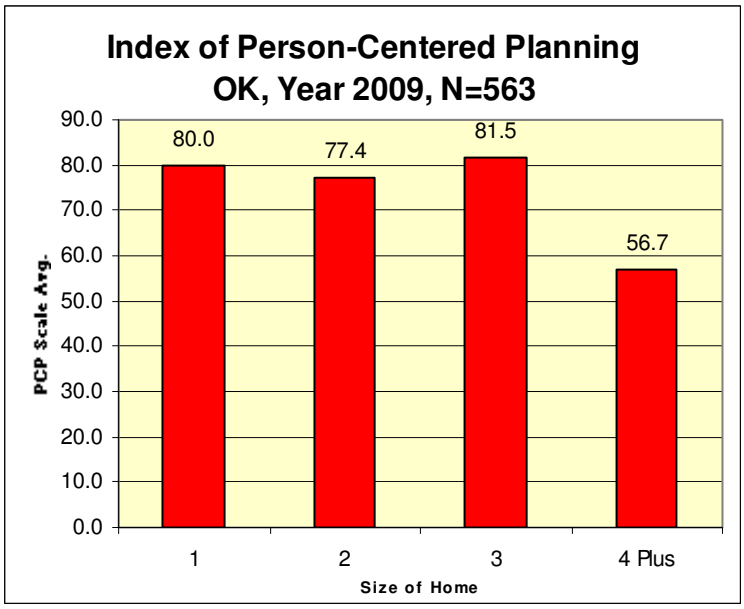
If developmental progress is a desired goal, then the Oklahoma data indicated that people in smaller homes made by far the greatest gains. Above 6 people, gains not only vanished – they tended to move toward losses.

In the year 2000, the Oklahoma data produced insight into the issue of community integration:

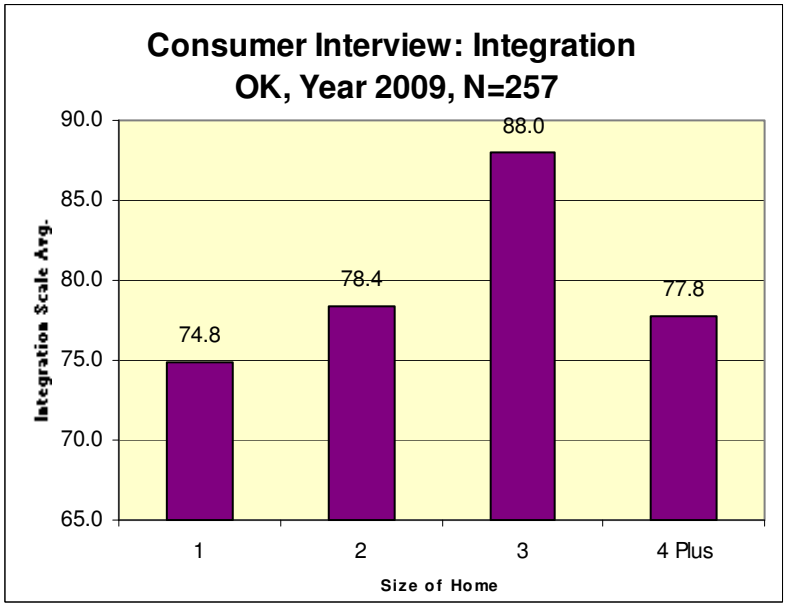


These findings made it very clear that the larger homes tended to cut off community integration.

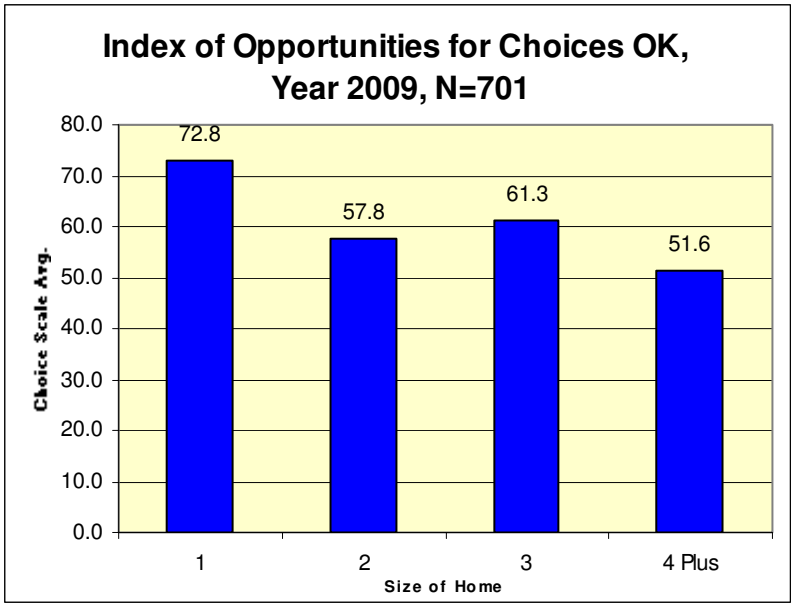
The most recent round of data collection in Oklahoma (2009) yielded equally powerful findings. The measure of the degree to which Person-Centered Planning was implemented, a strong indicator of individualized treatment, showed generally good practice in setting of 3 beds and below, with a sharp drop-off at 4 beds and above.



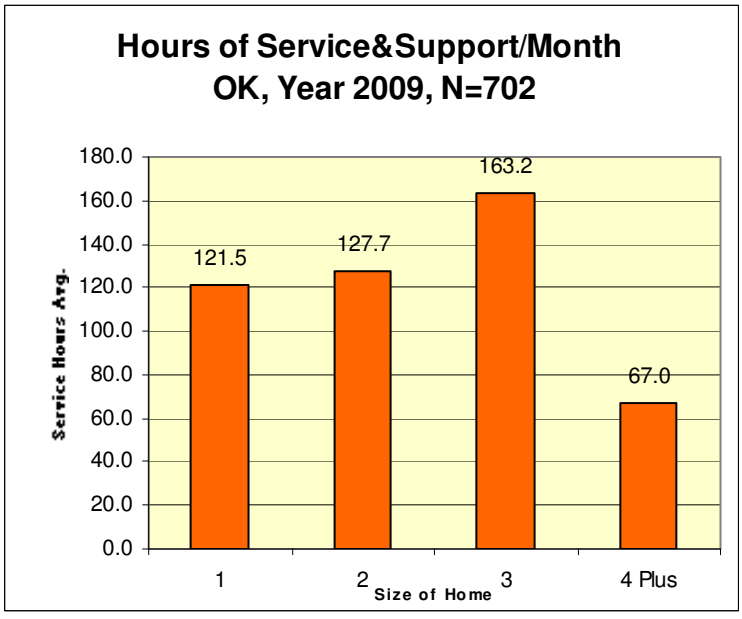
Data on opportunities for integrative activities revealed a peak at size 3, with settings both smaller and larger associated with lower levels of 'getting out and about.'



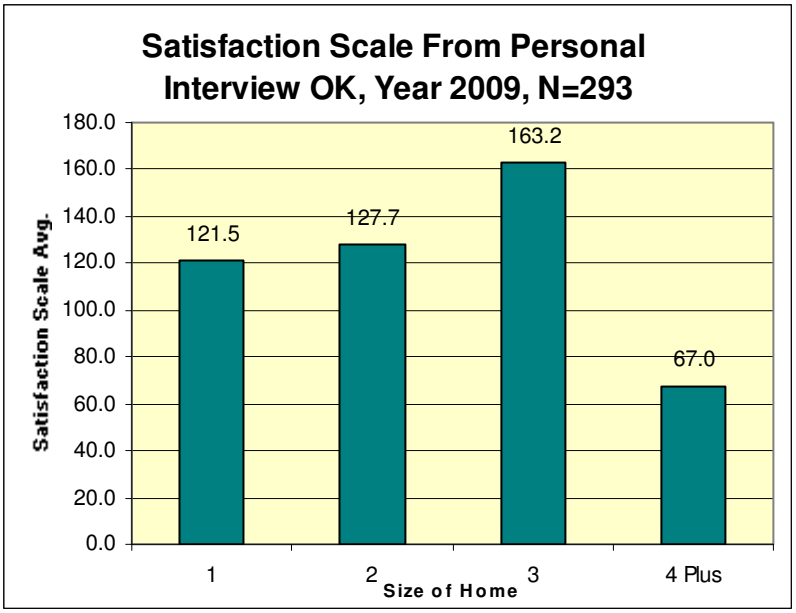
Power and control, or self-determination, was indexed by a shortened form of our Decision Control Inventory, and revealed higher scores in the smaller settings.



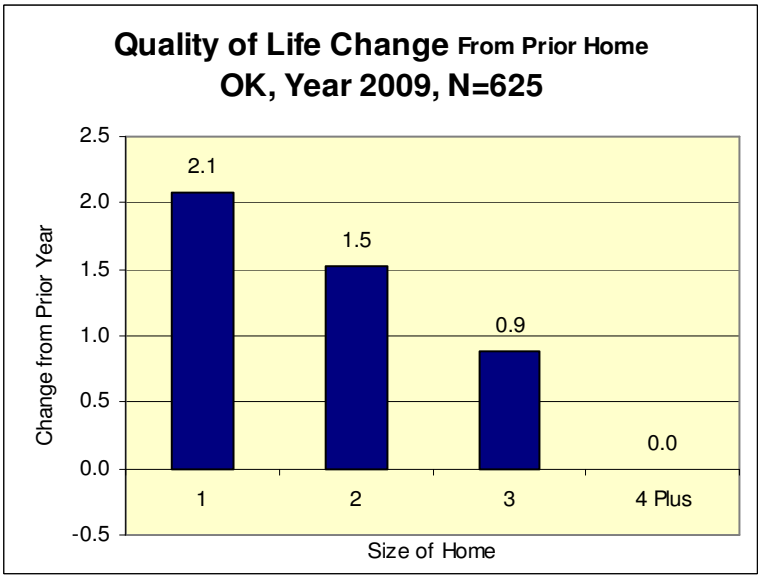
Another index of services was the amount of formally planned and scheduled "services," meaning any staff or professional activity aimed at goals in the person's individual plan. The high point was reached in settings of size 3, again with a sharp drop-off at size 4 and above.



Direct interviews were attempted with every person, on every data collection visit. For the people who were able and willing to respond, the satisfaction with life in the home data showed the highest scores at 3 people, with another sharp drop-off at 4 people and above.



The Oklahoma data included memory. People were asked about the qualities of their lives "Now" and also about quality in their previous homes – for most of the people, this meant the institution. The relation between improvement in life quality and the size of the home was dramatic, and the graph following shows.



The Oklahoma data tended to show a very strong relationship between community home size and quality. Because Oklahoma's deinstitutionalization efforts relied on very small 'supported living' models, this database provided very

important opportunities to examine quality at the smallest setting sizes. The results appeared to be compelling, in the direction of smaller being ‘better’ in every way.

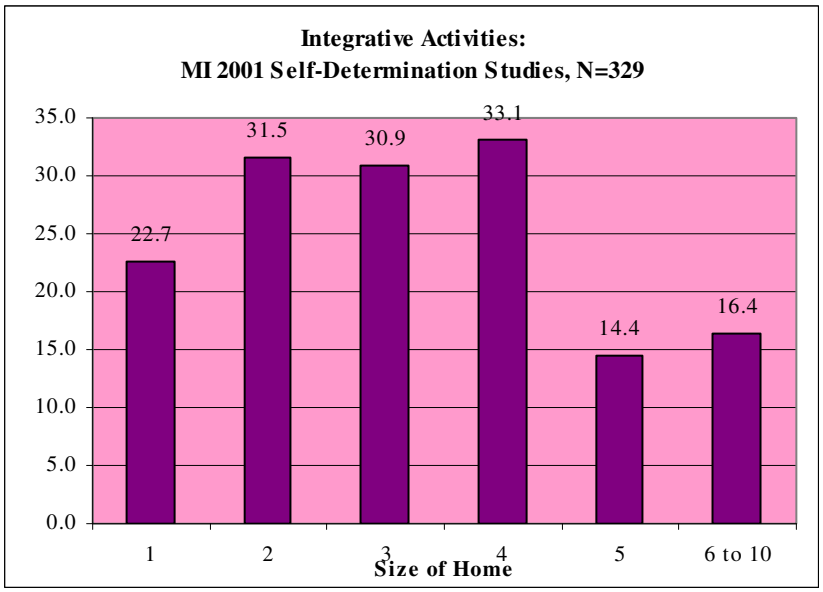
Michigan's Early Self-Determination Research

The original self-determination demonstration was conducted in New Hampshire from 1994 to 1996 (Conroy & Yuskauskas, 1996). The findings were strongly positive, and the question naturally arose: *"Could this model of supports 'work' in another kind of situation, a place larger and more urban?"* The first attempts to test that question were conducted in Michigan, beginning at the then named Wayne Community Living Services agency.

When the Robert Wood Johnson Foundation awarded 17 grants to state agencies to test self-determination, Michigan was one of the first to receive funding. The demonstration involved people at four pilot sites in the state. Our evaluation efforts began in 1998, and involved visiting all the potential participants "pre" self-determination. We collected data on multiple qualities of life before the people began working toward individual budgets, independent case management, and fiscal intermediaries. More than 400 people were included in the 'baseline' data collection.

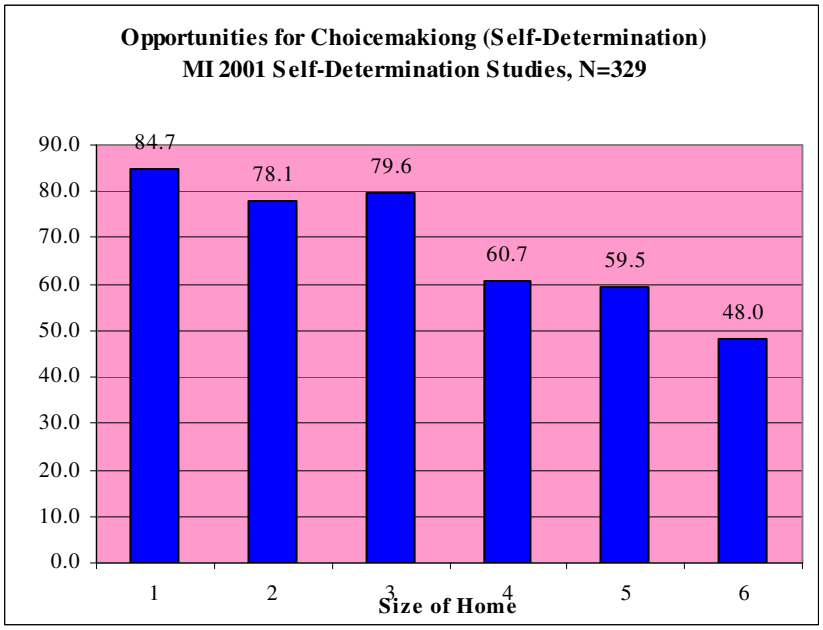
In 2001, most of the potential participants were visited again, and the same quality data were collected. This provided a database on quality for hundreds of people in Michigan – and these data have never before been analyzed with respect to the size of the community residence. What follows is entirely new research on the question of size and quality – and specifically among people in Michigan.

In 2001, we visited 329 people across the four pilot sites in Michigan, and one of the quality indicators was again integrative activities. The following graph shows the results.



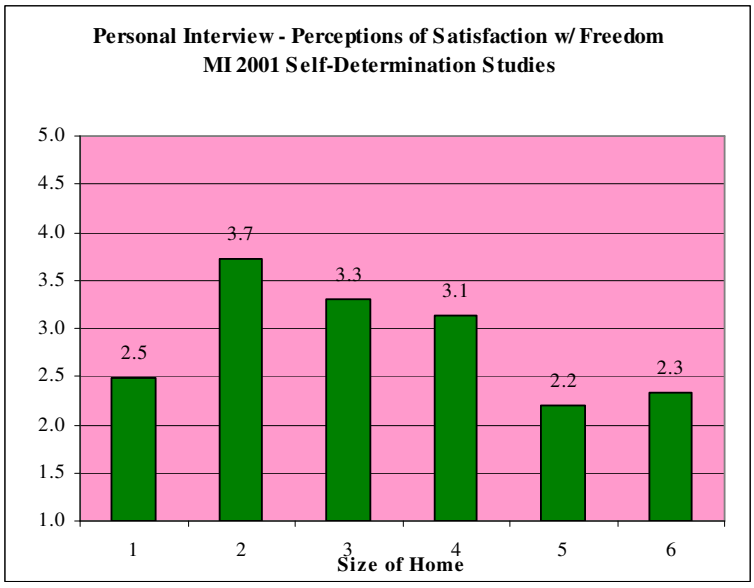
Clearly, the smaller community homes were associated with higher levels of community integration. The drop-off began at 5 people.

Power and control, the classic issues of self-determination, were explored. The next graph makes it obvious that opportunities for choicemaking fell sharply in the larger settings.

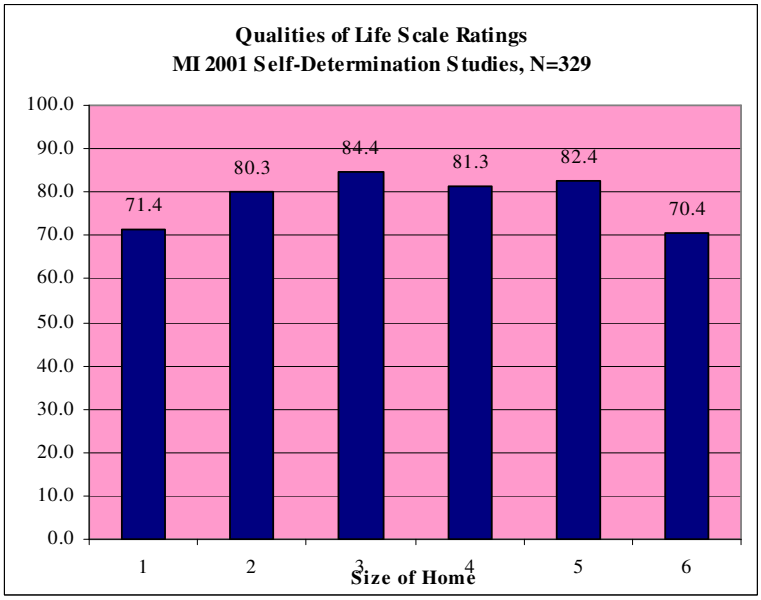


Once again, we attempted to directly interview every person visited. Not everyone was able or willing to respond, but for those who were, we were able to

ask whether they were satisfied with the amount of control and freedom they exercised over their own lives. The data showed superiority in the smaller settings, with a drop-off above 4 people.

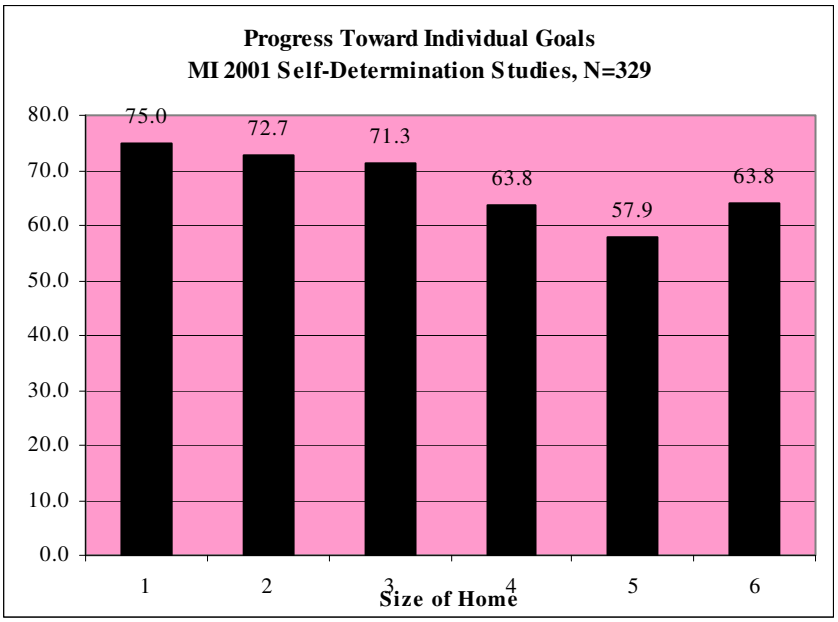


The overall qualities of life scale showed the highest scores in the small settings, with a drop-off above 5 people.



The data included ratings of the degree to which each person was making progress toward his/her individual program goals. The tendency here too was superior outcomes in the smaller settings, with the homes of size 1, 2, and 3 higher

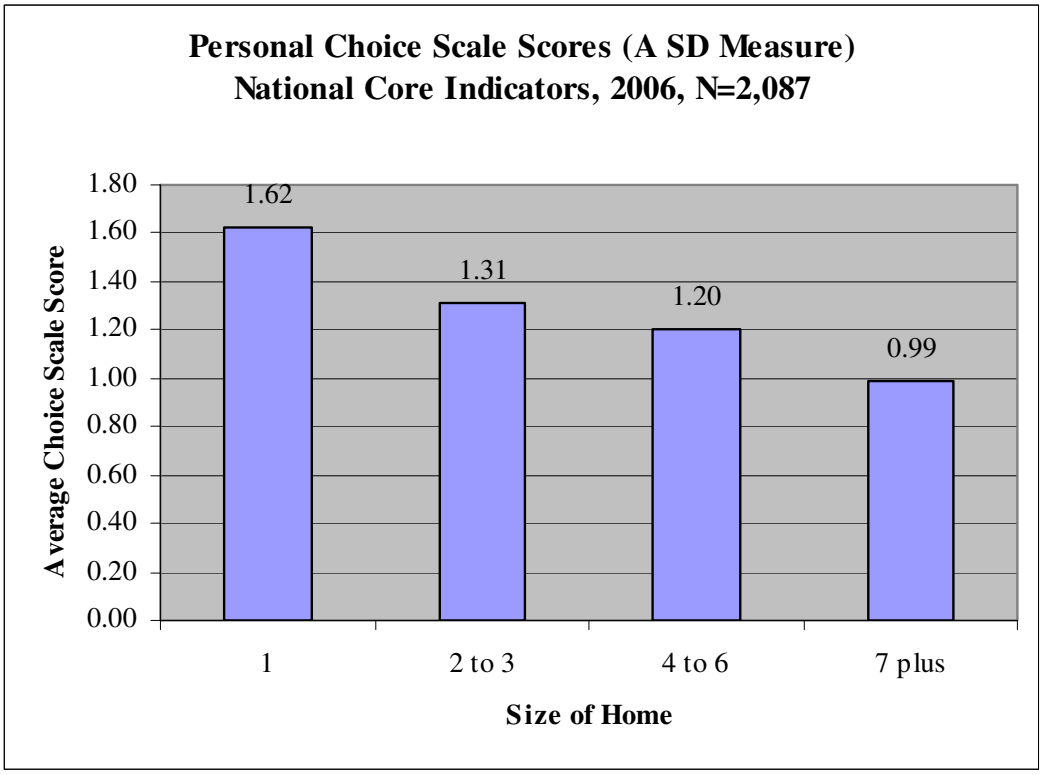
than homes of size 4, 5, or 6. Statistically, these data showed significant difference only between the smaller and the larger homes.



Overall, the data from the Michigan work supported the inference that smaller homes were connected with higher qualities of life and service. Several analyses showed a serious decline in quality when size rose above 4 beds.

New Analyses from the National Core Indicators Project

The NCI (National Core Indictors) project[23] is an attempt to acquire data on qualities of support and life across state lines. Using the most recent data from that project, investigators examined personal choice – an index composed from four simple items on control and power over one's own life. The 2006 data showed a strong pattern of declining choice in larger homes.



These data were explored in Lakin et al. (2008a) in an article entitled "Choice-Making Among Medicaid HCBS and ICF/MR Recipients in Six States."[24] According to the authors,

> Choice in everyday decisions and in support-related decisions was addressed among 2,398 adults with intellectual and developmental disabilities receiving Medicaid Home and Community Based Services (HCBS) and Intermediate Care Facility (ICF/MR) services and living in nonfamily settings in six states. Everyday choice in daily life and in support-related choice was considerably higher on average for HCBS than for ICF/MR

[23] See NCI website at http://www2.hsri.org/nci/ .
[24] This article was based partially on an earlier report submitted by the University of Minnesota to the Centers for Medicare & Medicaid Services: University of Minnesota, 2006.

> recipients, but after controlling for level of intellectual disability, medical care needs, mobility, behavioral and psychiatric conditions, and self-reporting, we found that choice was more strongly associated with living in a congregate setting than whether that setting was HCBS- or ICF/MR-financed.

Thus the data showed that, other things being equal, choice and self-determination were highest in the smallest settings.

The NCI database also permits analysis of the issue of loneliness. One common question about small settings, naturally, is "Won't people be lonely if they live by themselves or with just one or two others?"

The loneliness issue was explored in some detail, by Stancliffe et al. (2007) in an article entitled "Loneliness and Living Arrangements." The authors found among 1002 people in the NCI database that:

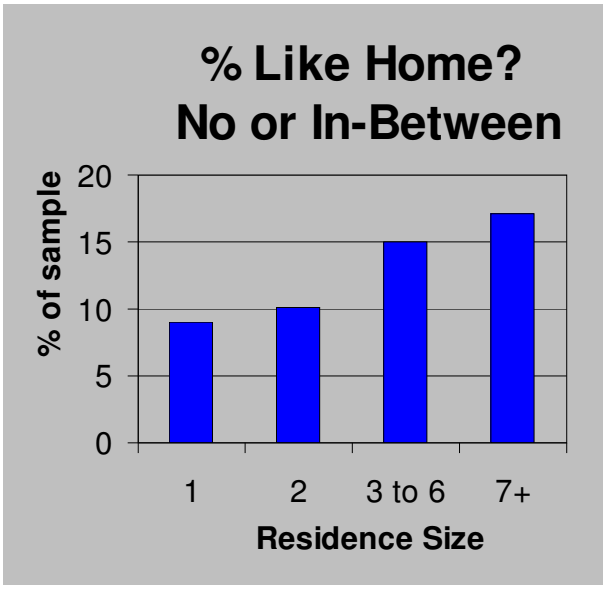
> …loneliness was not more common for people living alone or in very small settings. More loneliness was reported by residents of larger community living settings of 7 to 15 people.

Moreover, higher levels of 'social contact' and 'liking where one lived' were associated with less loneliness.

The most recent data, presented by Moseley, Bradley, & Lakin (2010), showed that loneliness actually increased in the larger settings.



In addition to freedom and loneliness, the NCI data enable some insight into the simple issue of how much people "like" their homes. The following graph was constructed to show how many people Don't Like their homes – and, organized by size, the results are dramatic.



Currently the largest database in the United States on quality of residential settings, the NCI reveals evidence that is entirely one-sided. Larger settings are very much the worse in terms of self-determination, loneliness, and simple satisfaction.

Most human services do not have such national databases with which to examine important issues. The existence of data from the NCI, and our own large studies, are extremely strong advantages in the scientific pursuit of policy. With regard to size and quality, the data overwhelmingly support the notion that small, family-scale settings are far superior to the larger, barracks-like group homes.

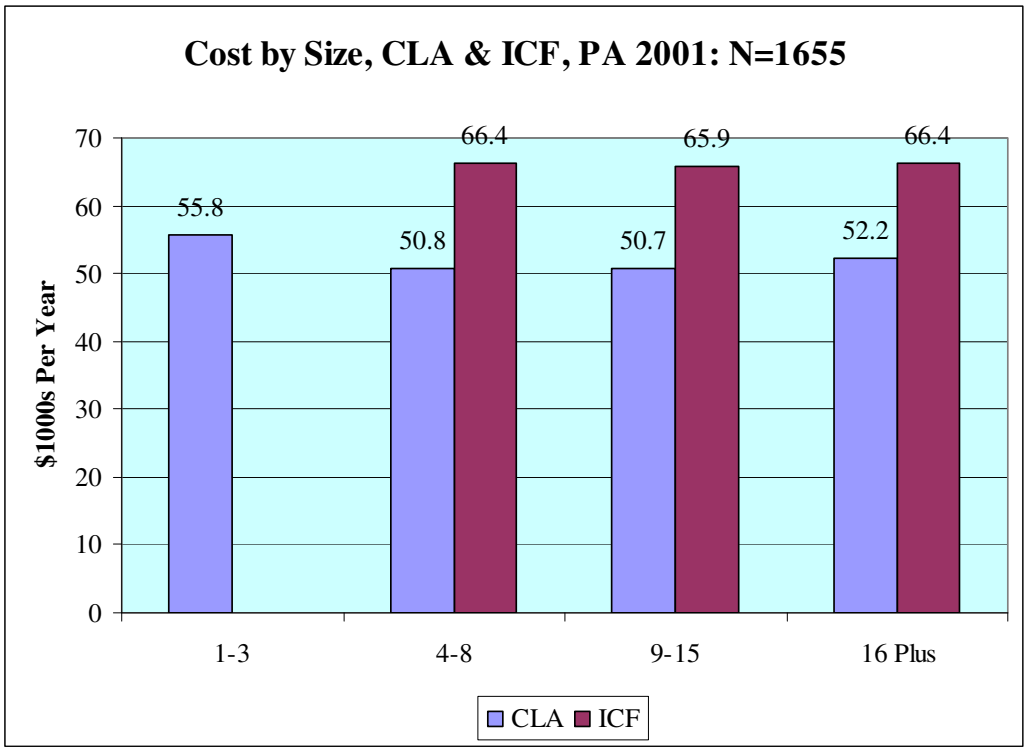
However, money has not yet been considered. The final section of this Policy Report examines what is available in that dimension of public services.

Cost Analyses by Size from Several Databases

The first point to be made about cost, quality, and size of residential settings is that the largest settings are associated with lower quality in the research literature, and yet they continue to be the most costly. The second point is that our usual assumptions about Economy of Scale may be wrong. The third point is that the data available to us right now are not conclusive – but they are consistent in that they tend to question the notion that moving people into larger group homes will "save money."

Before presenting these somewhat old data, it is important to stress that more research is urgently needed. We have not examined the costs of settings by size for nearly a decade.

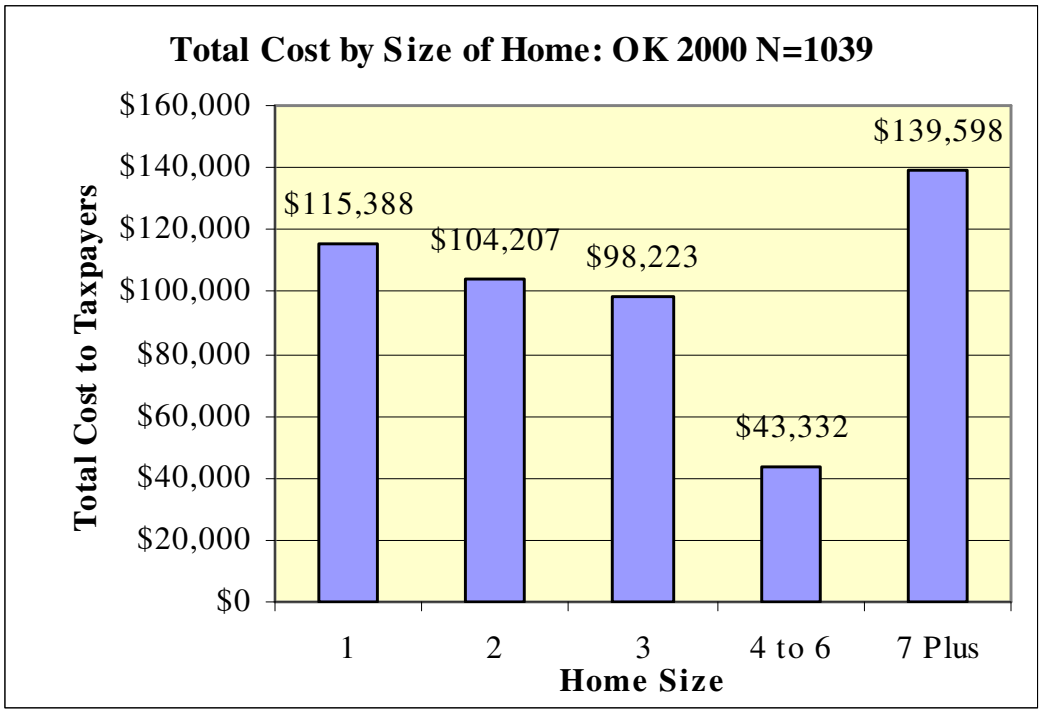
That being said, the first large scale analysis of cost by size is shown in the following graph from Pennsylvania data in 2001.



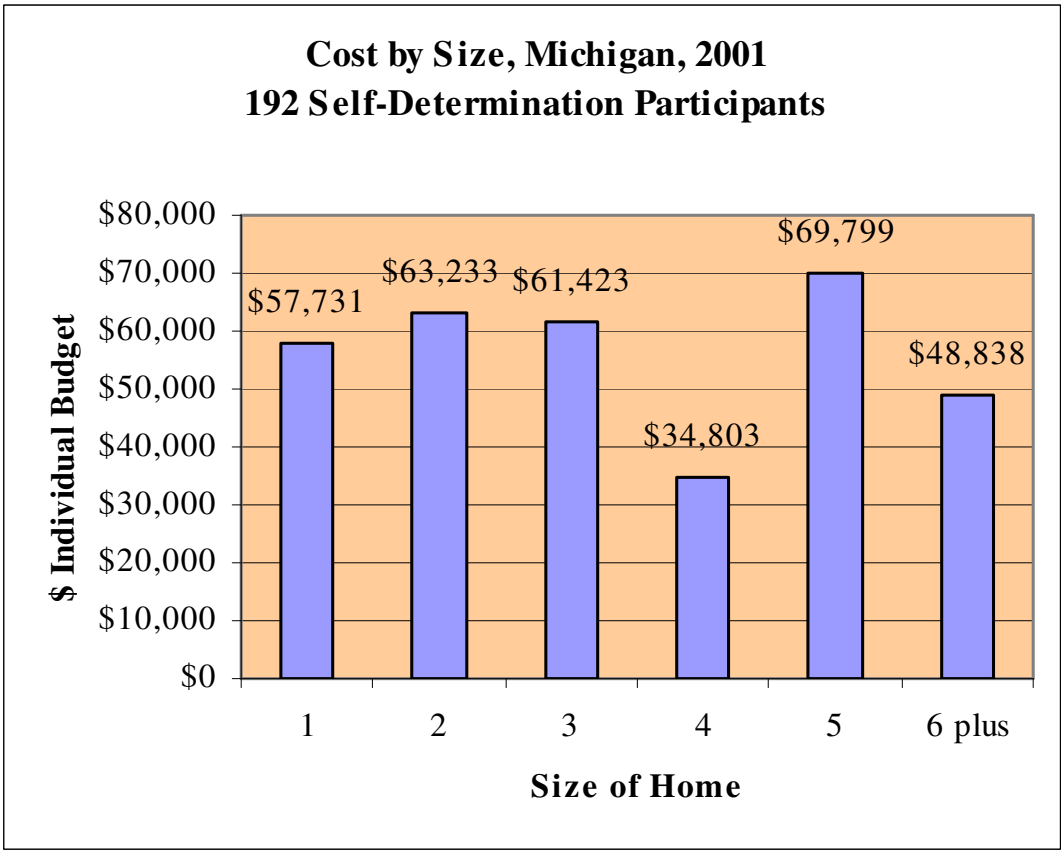
We broke out the data by type of funding stream. CLA stands for Community Living Arrangement, a model that rarely goes above 3 beds. ICF is the Intermediate Care Facilities or ICF/MR funding stream, which was defined in 1981

as “4 to 15 beds.” For the CLAs, costs fell slightly with settings over size 3. For the ICFs/MR, they did not.

In a study published in an academic journal, we investigated costs in Oklahoma in 2000. The graph following shows that the 4 to 6 person homes were less expensive than others, but when programs went above that size, costs escalated sharply.



Finally, in our 2001 studies in Michigan, we found that the amount in a person’s individual budget was inconsistently related to the size of the home.



This data set showed the lowest cost per person for the 4-person homes. The spike at 5-person, and the drop at 6 and more is not yet understood. More study will be necessary to explain these complex findings.

Referring once more to the National Core Indicators database, the most recent cross-state evidence on costs and size of homes is provided in Lakin et al. (2008b). In an article entitled *"Factors Associated With Expenditures for Medicaid Home and Community Based Services (HCBS) and Intermediate Care Facilities for Persons With Mental Retardation (ICF/MR) Services for Persons With Intellectual and Developmental Disabilities,"* these authors explored two kinds of community residential settings and their costs.

The so-called ICF/MR settings are funded via the Intermediate Care Facility/Mental Retardation (ICF/MR) program, which was defined as 4 to 15 beds, and was based firmly on old nursing home models and regulations. The other kind of community funding, the so-called Home and Community Based Services (HCBS) or 'Medicaid Waiver' settings were designed in reaction to the overly medicalized characteristics of the ICF/MR program. Waiver settings are expressly

designed to be smaller and more family-like than 'hospital-like' than the ICF/MR homes.

According to the authors in their Abstract,

> "This article examines expenditures for a random sample of 1,421 adult Home and Community Based Services (HCBS) and Intermediate Care Facility/Mental Retardation (ICF/MR) recipients in 4 states. The article documents variations in expenditures for individuals with different characteristics and service needs and, controlling for individual characteristics, by residential setting type, Medicaid program (ICF/MR or HCBS), and state. Annual average per-person Medicaid expenditures for HCBS recipients were less than those of ICF/MR residents ($61,770 and $128,275, respectively). HCBS recipients had less severe disability (intellectual, physical, health service needs) than ICF/MR residents. Controlling these differences, and for congregate settings, HCBS were less costly than ICFs/MR, but this distinction accounted for only 3.3% of variation in expenditures. Persons living with families receiving HCBS ($25,072) and in host families (including foster, companion, or shared living arrangements; $44,112) had the lowest Medicaid expenditures.

Thus, other things being equal, the smaller, more family-like Waiver or HCBS settings were associated with slightly lower costs than the larger, more institutional, ICF/MR settings.

All in all, the notion that larger settings are less costly is not clear from data in Michigan. We must therefore be cautious and tentative in our conclusions.

However, because the quality data from Michigan and all over the nation are so compelling, we must caution policy makers there is no evidence that moving people into larger group homes will save money, but there is a great deal of evidence that quality would be sacrificed.

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Appendix A: Sociological Literature on Group Size

Literature Review on Group Size from the Sociological Tradition[25]

People have always asked themselves major questions that are related to the issue of group size:

- How many roommates should I have in college?
- Which is better, a small family with one or two children, or a large one with more?
- Should I have a big wedding or a small one?
- Will I be happier working for a large company or a small one?
- How big can a club be before it needs to split up into two chapters?
- What is the best size group of laborers?
- How many soldiers should be in a combat unit?
- What is the best size committee for decision-making?
- What is the best size committee for member satisfaction and enjoyment?
- What really happens as groups get bigger - does specialization increase, and do interpersonal interactions become more formal?

In modern times, people have usually turned to the field of sociology for answers to questions of this kind. Indeed, there are treatments of group size in nearly all of the modern sociology textbooks.

Sociological interest in the question of group size is best traced to the work of German sociologist Georg Simmel (1858-1918). Most of his writings on the sociology of groups were completed around the turn of the century, but the translations of Kurt Wolff (Wolff, 1950) made Simmel's work widely accessible to English speaking sociologists.

The headings within Simmel's seminal essay "Quantitative Aspects of the Group" are illustrative of his interest in the size issue:

I. On the significance of numbers for social life
II. The quantitative determination of group divisions and of certain groups
III. The isolated individual and the dyad
IV. The triad
V. The importance of specific numbers for relations among groups

[25] Adapted and extended from Conroy, J. (1992). *Size and Quality in Residential Programs for People with Developmental Disabilities*. A Dissertation Submitted to the Temple University Graduate Board in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy. Philadelphia: Temple University.

In this essay, Simmel tried to write a "grammar of social life" (Coser, 1965) by considering one of the most abstract characteristics of groups, that is, the mere number of participants. He described the characteristics of dyads and triads, and showed how qualitative differences in interaction patterns inevitably occurred simply as the result of numbers.

Simmel noted that a dyad differs from all other groups in that its members have to interact directly with one another. If one member ceases to pay attention, interaction stops. If either member withdraws from the group, there is no group. The dyad can develop a sense of unity and intimacy not found in larger groups, but the dyad can be fragile, and requires continual efforts by both parties to be maintained.

Addition of another person to form a triad alters the situation significantly. Any one member can ignore the conversation of the others without destroying the group's interaction. The third member can function as a stabilizing and mediating influence for the other two; alternatively, the third member may become an "intruder." Two members can ally against the third, so that feelings of isolation and persecution are possible in a triad. In general, Simmel believed the triad was the most fragile sized group because of the almost inevitable "two against one" situations.

Simmel discussed the properties of interactions within dyads and triads in contexts as diverse as marriages (dyad), mothers-in-law with marriages (triad), neighboring serfdoms in Europe (dyads), and Rome, Sparta, and Athens (a triad in which Rome constantly destabilized the relationship between the two Greek cities.)

After the triad level, Simmel's treatment ceased to discuss specific numbers. He believed that it would be theoretically possible to describe the unique characteristics of each size group, up to the teens at least, but he also believed that the effort required, and the length of the descriptions, would be beyond feasibility. Ultimately, he concluded that group size would be related to group behavior no matter who was in the group or what its purpose was. Thus, for Simmel, size was truly a fundamental property of any group. Much of Simmel's effort on this topic was devoted to understanding why, and by what mechanisms, group size influenced group behavior, but stopped at the triad level.

Although Simmel stopped explicit group size descriptions at size three, it is interesting to note that certain religious writings have gone somewhat further. The Koran contains very specific advice about group size where wives are concerned:

> ...take in marriage of such other women as please you, two, or three, or four, and not more.

Williams (1961), the translator of this edition of the Koran, explained that the law required that a man treat each wife equally. However, the Prophet maintained that with two wives, equal treatment would be very difficult because of competition. In Simmel's terms, the triad would be unstable. With three wives, life would also be difficult because two of the wives would probably unite against the third, in another variation on Simmel's triad theme. With four wives, the odds were even for harmony. Two might side against the other two, but none would be completely isolated in most cases. Interestingly enough, this meant a total group size of five, a number that will appear again later in this section. The Koran analysis stops at total group size five, because more than four wives was simply forbidden as being "unreasonable" for one man. The fact that dogmatic statements about ideal group size were made more than a millennium ago is further evidence of the continuing interest in the size issue.

Although it was not possible for Simmel to demonstrate that each successive addition of a new member would produce a distinct sociological configuration (as he did for the dyad and the triad), he did show that there were crucial differences between small groups and larger ones. He contended that, as more and more members were added, the nature of interactions necessarily continued to change. Many of the changes were related to the phenomenon of division of labor.

Although Durkheim did not mention group size as an explicit consideration in the phenomenon of division of labor (Durkheim, 1933), Simmel did. He believed that division of labor inevitably increased with group size, and that the character of the interactions in the group changed as well. As translated by Wolff,

> It will immediately be conceded on the basis of everyday experiences, that a group upon reaching a certain size must develop forms and organs which serve its maintenance and promotion, but which a smaller group does not need. On the other hand, it will also be admitted that smaller groups have qualities, including types of interaction among their members, which inevitably disappear when the groups grow larger. (Page 87.)

> In the small group, the contribution of each to the whole and the group's reward to him are visible at close range; comparison and compensation are easy. In the large group they are difficult, especially because of the inevitable differentiation of its members, of their functions, and claims. A very large number of people can constitute a unity only if there is a complex division of labor. (Page 88.)

> In a similar manner, the large group gains its unity, which finds expression in the group organs and in political notions and ideals, only at the price of a great distance between all of these structures and the individual. In the social life of the small group, by contrast, the individual's views and needs are directly effective, are objects of immediate consideration. (Page 96-97.)

Simmel clearly perceived tradeoffs inherent in increasing group size. With greater size, he believed, came greater specialization of function, and correspondingly less "wholeness" of personal identities, less equality, and less warmth of interactions.

In small groups, members tend to be able to interact directly with one another. Once the group exceeds a relatively limited size, such interaction must be mediated through formal arrangements. In the words of Coser (1965):

> In order to come to grips with the increasing complexity of relationships among large numbers of individuals, the group must create special organs to help the patterning of interactions among its members. Thus, no large group can function without the invention of offices, the differentiation of status positions, and the delegation of tasks and responsibilities. This is why larger groups must be societies of unequals: in order to maintain themselves, they must be structurally differentiated.

Simmel was also apparently the first to discuss the phenomenon of subgroup formation. As a human group expands, there is a necessity for subgroups to form. Simmel explained this through the example of a "party." As Simmel evidently observed in his own experience, the first few people to arrive at a party tend to interact with each other in a single intimate cluster. But as people continue to arrive, some of the members come to dominate the discussion, and others do not speak at all. This is usually seen when about six to twelve people are present. The members who are not speaking become dissatisfied with their involvement, and strike up side conversations with the people next to them. As the party continues, the original group almost inevitably fragments into smaller groupings, within each of which, each member has a chance to participate verbally.

Although the party may not intuitively seem to be a representative social situation, it has one very crucial aspect: the people are usually there to enjoy themselves. Thus it is one of the best possible situations in which to see what people will do when following their own preferences. It seems clear that most people prefer to be in situations in which they can participate comfortably, and that generally appears to involve small numbers of associates rather than a large "audience."

It is worth noting that sociologists have concluded that the vast majority of our interaction with other human beings occurs in very small groups. Sociologist

John James (1951) and his students observed 7,405 informal interactions of pedestrians, playground users, swimmers, and shoppers, and 1,458 people in a variety of work situations. They found that 71 percent of both the informal and work interactions consisted of two people; 21 percent involved three people; 6 percent included four people; and only 2 percent entailed five or more people.

The crude question "Are small groups or large groups more effective?" can at best yield crude answers. The answer must depend on the type of task, the kinds of members, the time available, and other variables such as the characteristics of the environment in which the group meets. Kohler (1927) reported that in a tug of war, a bigger group can pull harder than a smaller group (not a great shock), but also found that the total team pulling power did not increase in direct proportion to the number of people on the team. As each new person up to 12 was added, each of the members pulled about 10% less energetically.

This simple finding implies that it is necessary to probe deeply into complex patterns of intervening variables to fully understand the why of the relationship between group size and any kind of effectiveness. We need to ask why the addition of another team member might have influenced the motivation of the other members, the group structure and cohesiveness, and/or the leadership of the team. What are the mechanisms through which size can affect other group variables?

This kind of finding is related to Olson's theoretical discussion of the fundamental variable that goes with size of groups, which he said is the visibility of each member's contribution to the common good (Olson, 1965). As he put it,

> ... any group or organization, large or small, works for some collective benefit that by its very nature will benefit all of the members of the group. Though all of the members of the group therefore have a common interest in obtaining this collective benefit, they have no common interest in paying the cost of providing that collective good. Each would prefer that the others pay the entire cost. (Page 21)

Olson then defined three kinds of group in relation to this variable: "privileged," "intermediate," and "latent." These three varied in the amount of incentive for each member to help pay the cost of obtaining the common good. He used these concepts in an analysis that concluded that "small groups are not only quantitatively, but qualitatively, different from large groups" (page 52).

For the current topic, the most germane implication of Olson's analysis was that, in general, the larger the group, the less the incentives for individual members to contribute to the common good. In the very large "latent" group, an individual "cannot make a noticeable contribution to any group effort, and since no one in the

group will react if he makes no contribution, he has no incentive to contribute" (page 50). This could apply to very large group living situations for people with intellectual disabilities. Each individual staff person in an institution would experience a weaker incentive (to work hard for the common good) than in a three person group home.

Simmel suggested that interactions within small groups would prove to be an important subject for future sociological research. This suggestion was neglected until after World War II, when Robert Bales and others initiated a tradition of laboratory studies of small group processes (Bales, 1950; Hare, 1952; Homans, 1950). Although such laboratory studies of primarily white male college students have been criticized for their lack of generalizability to other populations and to "real life," this body of research is still highly influential. Group size, while not a primary research concern in this tradition, was touched upon by nearly every small group researcher.

Bales, Strodtbeck, Mills, and Roseborough (1951) collected data on the distribution of participation among members of one kind of creative group, the discussion group. Their findings suggested that as the size of the group increased, the most frequent contributor assumed a more and more prominent role in the discussion. The bigger the group, the bigger the gap between the most and the least frequent contributors. Communication apparently tends to centralize in one person in larger groups. Moreover, the number of group members who contribute less than their proportionate share goes up as the size of the group increases (at least within the range from two to seven). Anonymity and invisibility become more feasible as group size increases from two to seven.

Gibb (1951) found that the total number of ideas produced by groups engaged in creative tasks increased with size, but not proportionately. Just as in Kohler's tug of war finding, there were diminishing returns from the addition of members. Gibb suggested that the mechanism of action for this phenomenon was the experience of inhibitions related to formalization and structure. As size increased, so did formal rules of participation. Gibb tested this by manipulating the rules of participation himself, and as formalization increased, fewer ideas were generated. The productivity of larger creative groups may suffer because of the shyness, inhibition, and resulting silence of the majority.

Both of these studies suggest that size influences member participation, which in turn influences one kind of effectiveness. Participation, then, is one

intervening variable that must be considered as a possible mechanism for relationships between size and effectiveness.

A second possible mechanism would involve leadership. The processes of leadership emergence and then of leadership style are almost certainly influenced by group size. Carter, Haythorn, Meirowitz, and Lanzetta (1951) found that the correlation between authoritarianism and leadership behavior increased as group size increased from four to eight. Hemphill (1950) compared leader behavior in groups above and below size 30. He found that in the larger groups there were greater demands upon the leaders, and that leader-centered behavior was tolerated by a higher proportion of the members.

Another possible mechanism mediating relationships between size and effectiveness is group cohesiveness and/or satisfaction. Worthy (1950) reported that surveys carried out by Sears, Roebuck and Company showed that both worker satisfaction and operating efficiency tended to decrease in larger administrative units. Seashore (1954) studied the cohesiveness of work groups in a large factory, and found that smaller groups (4 to 22) were more cohesive than larger groups. Mann and Baumgartel (1952) found that absenteeism increased with decreasing group cohesiveness among white collar workers. Hewitt and Parfit (1953) found that absenteeism in groups of 4 was one third of the rate in groups of 36, and one fourth the rate in groups of 128. Miller (1950) found large conference groups to be more disruptive than smaller ones. The feeling of a "sense of belonging" was correlated at -.44 with group size. Lack of opportunity to talk, which was correlated at .80 with group size, was associated with feelings of frustration.

Hare (1952) compared 5 and 12 person groups of Boy Scouts conducting a decision making task during a camping trip. Hare found that the 5 person groups arrived at higher levels of consensus. The larger group was felt to limit participation by leading some members to feel that their individual opinions were not sufficiently important to merit vocalizing.

In what appears to be the study that has been the most influential in the sociological literature on group size, Slater (1958) examined some correlates of group size in a sample of 24 "creative" groups of size four to size seven. After four meetings to discuss specific human relations problems and potential solutions, members were asked whether their group was too small or too large for maximum effectiveness.

Members of the five person groups expressed 100% satisfaction, never once saying their group was too large or too small. Members of larger groups said their groups were disorderly, wasted time, and some members were too aggressive or competitive. Larger group members sometimes called for more structure and central control, and sometimes called for less. Complaints about individuals dominating the entire group were common. In groups smaller than five, the sole complaint was that the group was too small. Direct observation suggested that members were inhibited from completely free expression of ideas because they were afraid of alienating one another and creating an unpleasant atmosphere.

The size issue was prominent in the 1980 examination of organizations by Clegg and Dunkerley (1980). Clegg and Dunkerley reviewed mentions of the size issue by Simmel, Merton, Selznick, Homans, James, and so forth. The flavor of the Clegg and Dunkerley treatment includes the notion of increasing "rulemaking" with increasing size, and regimentation along with that. In some sections of the book they substitute the word "formalization" for this tendency. Decreases in personal relations were also to be expected. They believed that bureaucracy was both more likely to appear and more appropriate for larger organizations. On page 223, they discussed the difficulties with operationalizing size, and noted that researchers had used widely different measures, which made it difficult to compare the results available in the literature. In the review of purely organizational literature of this paper, we will see this comment mirrored in the Gooding and Wagner (1985) meta-analysis of empirical studies.

The sum of these sociological studies seems to be that people tend to be happier in smaller groups. However, for some tasks, groups can be too small, even when satisfaction/happiness is the index of effectiveness.

At the same time that these pioneering post-War sociological studies explored the effects of group size upon a variety of variables related to effectiveness, an organizational literature, more oriented toward business and practical concerns, developed concerning size and "productivity." A full review of the organizational research literature will be presented next, in the literature review labeled Organizational and Industrial Psychology.

The review of sociological interest and research shows that questions about group size have been a major concern in the development of modern sociology. Beginning with Simmel, continuing right into the content of the most recent introductory textbooks, and covering nearly 100 years, it is clear that group size has been a major concern of sociologists. The scientific evidence about group size

and group effectiveness gives a complex picture, probably because of the many and varied approaches to measuring effectiveness. However, a consensus from the sociological literature does seem to emerge: human beings tend to prefer to live, work, and play in small rather than large groups. The preferred group size is clearly below 10, but beyond that, the evidence is not yet conclusive.

This sociological tradition and interest in group size is in some ways to be quite relevant to the issue of residential program size. In particular, these findings suggest useful insights into the question of group homes for citizens with disabilities, in that within the small group size range, as size increases,

- People spontaneously interact in very small groups, mostly dyads or one on one (as in the direct observation of natural interactions research of James)
- People spontaneously subdivide their groups, rarely allowing them to exceed 5 or 6 (as in the party situation studies of Simmel)
- Participation via individual effort tends to decrease in a phenomenon often called 'free riding' (as in the tug of war studies of Kohler)
- Participation via communication tends to decrease and centralize, relying on increased leadership by the few, but allowing anonymity and silence by the many (as found by Bales et al.)
- Authoritarianism increases from group size four to eight, correlating with the emergence of leadership and of members becoming passive followers (in the work of Carter et al.)
- Satisfaction with group process may reach a 'saddle point' around size five (as in the famous and influential work of Slater)
- Satisfaction with group process falls off in groups above five, and keeps falling lower into the teens, where it levels off at a low state
- Increasing size is related to formalization, rulemaking, regimentation, bureaucratization, and decreases in personal relations (discussed by Clegg & Dunkerley)

Applying these sociological findings to the world of residential programs clearly implies that 'small is good.' However, there is insufficient evidence to draw conclusions about specific sizes of homes that are 'too big.' And, as is obvious from the beginning, there really cannot be a magic number for all groups and all kinds of people. One size will never fit all. Nevertheless, our effort here is to think in policy terms, covering thousands of people, in thousands of homes, and considering the averages of well being and quality across them. With that perspective, the sociological body of knowledge suggests that there is probably a

natural human break point somewhere between four and six. Group sizes that big can be tolerated, and can sometimes be effective and/or satisfying – but above that, we tend to lose the most desirable qualities of intimate and rewarding human interaction.

Appendix B: Organizational Psychology Literature on Group Size

Literature Review on Group Size from Organizational and Industrial Psychology[26]

Another area that must be examined for relevant clues is the organizational effectiveness literature. Without doubt, the pyramid builders of ancient Egypt gave serious thought to the relationship between the size of a work group and its productivity. And before there were builders, there were warriors, who were probably even more concerned about how to "split up" to be "most effective."

However, modern management and organizational theory do not extend their bibliographies so far back in history. Here we will trace some of the high points of a huge body of work on organizational size and effectiveness and administrative intensity, which has arisen mainly since 1951. This body of work incorporates a major scientific debate around a concept called the A/P ratio, the relative size of Administrative versus Production personnel within industries. Next we describe the methods and conclusions of what is arguably the "best" summary of the entire body of modern empirical research. In a summary, we interpret the relevance of this body of research for practical interests about the size of community residential programs.

First, a general comment: it seems that any relationship one cares to find, can be found, in the empirical literature. This is probably because of the bewildering variety of measures of size and effectiveness that have been used, and possibly for other reasons, such as varying theoretical frameworks and disciplines of the researchers. Only in the 1980s did significant clarity emerge via the application of meta-analysis (Hunter, Schmidt, & Jackson, 1982).

Melman (1951), interested in the relationship between organization size and "administrative intensity," or the proportion of effort the organization devotes to self-maintenance, reviewed literature as far back as 1934 (Robinson,1934). Melman examined data on American manufacturing industries from 1899 to 1947, and was evidently the first to identify the A-P ratio (the ratio of Administrative to Production personnel) and make the case that larger organizations have a relatively lower proportion of resources devoted to administrative functions than do smaller ones: *"... the largest asset-size firms have a manifest advantage with respect to*

[26] Adapted and extended from Conroy, J. (1992). *Size and Quality in Residential Programs for People with Developmental Disabilities*. A Dissertation Submitted to the Temple University Graduate Board in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy. Philadelphia: Temple University.

lower administrative expenditures per dollar of production expense than was the case for the smaller firms ..." (Page 90).

Soon after that article was published, the A-P ratio became the topic of one of the great debates in organizational theory, spilling over into management science, economics, social psychology, and sociology. According to one of the most recent analyses of the debate, *"The theory of size as a cause of administrative intensity (the A-P ratio) is perhaps the most heavily researched topic in the history of the study of organizations"* (Marsh & Mannari, 1989, page 83). The question of the A-P ratio is closely related to the question of effectiveness, because of the possibility that as administrative intensity increases, it may increase past the point of diminishing returns, and organizations may become "top-heavy" and wasteful rather than "lean" and efficient. It is therefore useful to review the A-P debate, albeit briefly, in responding to the question at hand.

Not long after the Melman article, Terrien and Mills (1955) published evidence that larger organizations had larger proportions devoted to administrative duties. Their conclusion was founded on analysis of 732 school districts in California. It was remarkably weak evidence for such a broad interpretation; but Terrien and Mills themselves never generalized beyond their narrow school district interpretation in the text of their article.

‘; In a review article that attempted to summarize a number of the empirical studies that had been generated in the period after Melman's initial article, Caplow (1957) chose "group size" as a unifying concept. He considered simple mathematical interaction possibilities (combinations and permutations of the number of members of the group), and distinguished small, medium, large, and giant groups. He claimed that each had distinct characteristics. His analysis of the available evidence led him to the conclusion that size was correlated with the A-P ratio, and also with group stability, uniformity of organizational design, and the incidence of communication problems.

Caplow noted that *"There is an almost universal belief that the administrative and overhead components of any organization increase out of proportion to increases in its size" (page 504).* Caplow also made an intriguing observation on the length of the chain of command in large organizations, saying that downward and upward communication becomes awkward when there are "more than six or seven echelons" to be traversed. His choice of "six or seven" was not substantiated in the article, but was interesting in view of later management beliefs about the span of control.

Caplow's specific contribution to the quantitative debate was of limited value. As noted in the closing paragraph: *"We know just enough, in sum, about the effects of size on organizational structure to perceive that size is an important element in determining the way any human organization adapts to its environment and that the whole subject deserves closer study"* (page 505). Nevertheless, in later work, Caplow was almost always cited.

Slater (1958) concerned himself solely with group member satisfaction as his primary measure of group effectiveness. Although it should be considered a tenuous indicator of group effectiveness, for many kinds of tasks, group member feelings are critical for success. His group tasks involved collection and exchange of information about a situation, the coordination, analysis, and evaluation of this information, and a group decision about the best administrative decision in the situation. By interviewing and observing participants, he was able to describe what they felt were the major disadvantages of groups that were too small or too large.

Slater found that groups larger than size four were "never felt to be too small," and groups smaller than six were "never felt to be too large." Slater concluded that group size five was the most effective according to the dual criteria of successful task completion and member satisfaction. Slater's studies are among the most widely cited in the entire size literature. This is remarkable in view of the narrow nature of Slater's measure of group effectiveness, which was member satisfaction, and in view of the very restricted nature of the participants in the studies, i.e., white male college students.

Thomas and Fink (1963) reviewed 31 empirical studies of small groups in which group size was related to group performance, distribution of participation, nature of interaction, group organization, member performance, conformity, consensus, and satisfaction. Unfortunately, the studies were generally of such poor methodological quality, and used such different samples, procedures, and measures, that the conclusions were trivial:

> Many variables were found to be significantly affected by group size, but methodological shortcomings characterizing this group of studies preclude the assertion of broad generalizations. Several dependable and nondependable intervening variables are suggested which may help to account for many of the observed effects. Conclusions are: group size is an important variable which should be taken into account in any theory of group behavior, and future research on group size should proceed more systematically than in the past. (Page 383.)

Or, in idiomatic English: A lot of studies seemed to show that size was related to different kinds of effectiveness, but they were all scientifically mediocre, and better studies are needed.

Steiner (1966) argued that the effects of group size depended on the task. He classified task types in an effort to make predictions about group size and "potential productivity." He conceived of "actual" productivity as potential productivity minus losses due to poor coordination among members. His classification scheme was at least interesting: additive tasks, in which members' abilities add together arithmetically, as in a tug of war; disjunctive tasks, in which the entire enterprise depends on the ability of the most able member; conjunctive tasks, which depend on the least able member; and so on. His analysis rested entirely on reviews of previous studies of group size.

Frank and Anderson (1971) performed an empirical test of Steiner's (1966) notion that the relationship between size and group performance depended on the type of task. Their findings with group sizes of 2, 3, 5, and 8 confirmed the differential effects of size depending on task type, and in the directions predicted by Steiner: increases in group size enhanced performance on disjunctive tasks (where performance depends on the most competent member), and decreased performance on conjunctive tasks (where performance depends on the least competent member). This may have been an obvious and trivial revelation. For a task that depends on the smartest member, larger groups are probabilistically more likely to have one really smart member than smaller groups, so the more the merrier; and vice versa. Nevertheless, later literature referred frequently to this Frank and Anderson study.

Then, in 1970, Blau became interested in the problem, and his influence was strongly felt (Blau, 1970a, 1970b; Blau & Schoenherr, 1971; Blau & Schoenherr, 1973). According to a succinct review of Blau's contributions by Freeman and Hannan (1975), the central point of Blau and colleagues was that larger organizations were more complex, and more complex organizations had more coordination problems, for which the organizations would hire more administrative personnel. However, this did not result in a higher A-P ratio, because larger organizations already had in place a functional and well-understood administrative system. As Blau (1972) put it:

> If the volume of administrative work increases less than proportionately as the volume of operations increases; and if the volume of work governs the number of persons needed to accomplish it, in administration as well as in operations, it follows that the number of persons in administration increases

> less than that in operations; and hence that the proportion of administrative personnel decreases as the total number of employees increases. (Page 18.)

In other words, the position taken by Blau and colleagues was that increases in organization size did lead to more administrators, but not proportional to the size increase. "Economies of scale" more than counteracted the administration increases, via efficient differentiation and assignment of administrators to known and well-defined roles.

In the spirit of a footnote, it was during this historical period that the accomplished and respected economist E. F. Schumacher published a book entitled ***"Small Is Beautiful: Economics As Though People Mattered."*** He emphasized the importance of human feelings within the economic arena (Schumacher, 1973). This intriguing little treatise became a countercultural resource in rapid order. For those who tended toward distrust of the Western establishment, it was easy to jump aboard the simplistic interpretation of Schumacher's work and oppose all "bigness": big government, big industry, big insurance companies, big military-industrial complex, and so on.

However, most interpretations of Schumacher's insightful writing were overly simplistic. His insights, particularly if we extend into the economics of the human services, were quite deep and compelling. Despite the fact that he was not writing for scholars, his work was founded firmly in an understanding of classical and modern economics, and was also blended with a grasp of individual psychology and humanism. Schumacher saw that all of the literature on size, the A-P ratio, and effectiveness had implicitly accepted the notion that the ultimate and only goal of the organization was effectiveness, however measured. Common sense suggested that this was an incomplete view, and one in which humanitarian values might easily become lost. Schumacher traced his economic training as follows:

> I was brought up on an interpretation of history which suggested that in the beginning was the family; then families got together and formed tribes; then a number of tribes formed a nation; then a number of nations formed a "union" or "United States" of this or that; and that, finally, we could look forward to a single World Government. ... Second, I was brought up on the theory that in order to be prosperous a country had to be big - the bigger the better. ... And third, I was brought up on the theory of the "economies of scale" - that with industries and firms, just as with nations, there is an irresistible trend, dictated by modern technology, for units to become ever bigger. ... Even today, we are generally told that gigantic organizations are inescapably necessary; but when we look closely we can notice that as soon as great size has been created there is often a strenuous attempt to attain smallness within bigness. The great achievement of Mr. Sloan of General Motors was to structure this gigantic firm in such a manner that it became, in fact, a federation of fairly reasonably sized firms. (Page 63-64.)

Schumacher's points are still persuasive. Moreover, much of the literature since his book has questioned the old assumptions about economies of scale and the inevitable trend toward huge organizations. He also suggested one thing not seen elsewhere in the literature: the notion that organizations become large for non-rational reasons. Although he did not explicitly state it in anthropological terms, he suggested that the real motivating force behind the creation of vast organizational empires might be, not efficiency or productivity or effectiveness, but simple human territoriality. This drive, which has been clearly documented and studied all the way from insects to humans, aims toward individual "control" of more and more "turf," and "turf" can be spatial or social. Territoriality is a survival trait among species functioning at instinctual levels; whether it is a survival trait for creatures with language and tools and weapons of mass destruction is still an open question.

Schumacher went on to consider human needs on an equal footing with organizational needs. He expressed the opinion that humans needed both freedom, which was strongest in lots of small, autonomous units, and order, which was strongest in larger units with clear rules and predictable actions. In his words:

> What I wish to emphasize is the duality of the human requirement when it comes to the question of size: there is no single answer. For his different purposes man needs many different structures, both small ones and large ones. ... Yet people find it most difficult to keep two seemingly opposite necessities of truth in their minds at the same time. ... For constructive work the principal task is always the restoration of some kind of balance. Today, we suffer from an almost universal idolatry of giantism. It is therefore necessary to insist on the virtues of smallness - where this applies. (If there were a prevailing idolatry of smallness, irrespective of subject or purpose, one would have to try and exercise influence in the opposite direction.) ... For every activity there is a certain appropriate scale, and the more active and intimate the activity, the smaller the number of people that can take part, the greater is the number of such relationship arrangements that need to be established. (Page 65-66.)

Schumacher offered the example of teaching. Some kinds of teaching take place only in small intimate interchanges, while other kinds are best done in mass media or in huge crowds. The first question is always, what are we trying to teach? In the best summary paragraph of his book, he says:

> What scale is appropriate? It depends on what we are trying to do. The question of scale is extremely crucial today, in political, social, and economic affairs just as in almost everything else. What, for instance, is the appropriate size of a city? And also, one might ask, what is the appropriate size of a country? ... We cannot directly calculate what is right; but we jolly well know what is wrong! We can recognize right and wrong at the extremes, although we cannot normally judge them finely enough to say: "This ought to be five per cent more," or "that ought to be five per cent less." (Page 66-67.)

Schumacher forces us to continually wonder, "What are we trying to do?" as we contemplate the size of goal-oriented groups. It seems sensible that goals and

values should shape the desired forms and sizes of organizations, because different goals would be better served by different types of organizations.

Back in the mainstream of the literature, Snyder (1975) performed an experimental study on whether there was an "optimum group size" to accomplish a task and to be most personally satisfying to its members. He used groups of size 4, 5, 6, 7, 8, and 9. His findings indicated that size did make some difference, but relatively little. He concluded that the notion of an optimum group size was not supported by the analysis, although there was a trend for the group sizes 4 and 5 to be considerably more satisfying than sizes 8 and 9. Snyder's finding did not fully confirm that of Slater (1958) that group size 5 was ideal, but they did not reject it either.

In addition to reviewing the literature, Freeman and Hannan (1975) explored the often-raised idea that conclusions drawn from cross-sectional data might be systematically different from those arising from longitudinal data. They pointed out that the bulk of literature on administrative intensity was cross-sectional. They suggested that the relationship between size and administrative intensity might be quite different depending on whether the organization was growing or declining. If so, then cross-sectional analyses would obscure that fact. They developed a conceptual and mathematical model, and tested it with California school districts data, in the tradition established by Terrien and Mills (1955). Their analyses of the data suggested that they were right, and also that the A-P ratios were too complex to be useful in many analyses. They believed that cross-sectional analyses of organizational demography would often be quite misleading.

Freeman and Hannan's major conclusion could be stated as: when an organization is growing, the administrative component is always trying to "catch up" and is disproportionately "lean," but when the organization is declining, the administrative employees tend to be able to hold onto their jobs beyond their usefulness, making the organization look "fat" during decline.

In 1980, Dalton and colleagues published a review of the literature regarding organizational structure and performance (Dalton, Todor, Spendolini, Fielding, & Porter, 1980). The abstract of their article was rather strongly worded:

> Reviewing the research literature available on the relationship between structure and performance in an organization reveals a deficiency of sound research in all areas essential for serious study. Too little research and the inconclusiveness of studies that have been done both demand further research in the area. Distinctions are made between hard and soft performance criteria, the structuring and structural dimensions of structure, and subgroup and organization units of analysis.

Specifically, Dalton et al. reported that most investigators had failed to find a significant size – performance relationship at the organizational level. At the subunit level, they concluded that the majority of studies found that smaller groups were associated with better performance, across a variety of measures; however, a minority found better performance in larger subunit groups.

Despite their failure to substantiate any unambiguous relationship between size and performance, the Dalton et al. analysis was at least useful to the next generation of analysts, in that they suggested that level of analysis might be a very important source of confusion across studies. This led to the notion that one should distinguish studies of organizational size from studies of the size of subunits within an organization.

Until the 1980s, the study of size and effectiveness in the organizational research literature was somewhat chaotic, and very difficult to interpret. In 1985, Gooding and Wagner reviewed the relationship between size and performance of organizations and their subunits. Gooding and Wagner screened nearly 200 published studies, and selected 31 that met consistent methodological criteria. From these 31 studies, they attempted to find an interpretable pattern. The remainder of this section is a review of their conclusions.

Gooding and Wagner noted that three kinds of scientists had been at work on the question:

> 1. Industrial-organizational economists had approached it through examination of organizational economies of scale. Most often, these analysts were searching for the size of organization or unit that would optimize the cost per unit of production. Findings in the literature were inconsistent.
> 2. Many, but not all, organizational theorists also approached the problem with an inherent belief that organization size would be associated with significant economies of scale. Others emphasized the ability of larger organizations to exert more control over the sources of resources. This and related perspectives predicted that larger organizations would produce more, but not necessarily more per worker.
> 3. Social psychologists approached the problem largely from the group, rather than organizational, level, and often reported an insignificant relationship between group size and indices of effectiveness, but sometimes reported decreasing effectiveness with increasing size. These analysts frequently hypothesized "free riding" as the culprit (in which group members, relatively anonymous in larger groups, could slack off with no one noticing), and also higher coordination costs with larger groups.

These three kinds of scientists had been approaching with different definitions and measurement techniques. Gooding and Wagner suggested that the reason the literature was confusing and often contradictory was that different kinds of scientists had been defining and measuring things differently. Gooding and Wagner specified three dimensions which had varied across studies:

1. The LEVEL OF ANALYSIS. Some studies had examined entire organizations, while others had analyzed subunits within large organizations.
2. The PERFORMANCE MEASURE. Some studies had used key informant ranking, others used organizational records, and others used physical output. Most importantly, some had used absolute output and others had used relative output (i.e., output per unit of size), potentially a very important difference.
3. The SIZE MEASURE. Some investigators had operationalized the size variable as the number of employees, others as the number of beds in a hospital or like facility, others as financial assets, and other as the magnitude of output transactions such as sales or number of clients served.

Gooding and Wagner concluded that these three variations could explain a major proportion of the differences across the studies. Employing a form of meta-analysis, as improved by Hunter, Schmidt, and Jackson (1982), Gooding and Wagner categorized each of the 31 studies according to the level of analysis, the performance measure, and the size measure. Their conclusions were clear:

1. Studies that used the organizational LEVEL OF ANALYSIS found that larger organizations were more productive in absolute terms, but not in ratio terms. That is, larger organizations produced more units, but did not produce more per worker. Gooding and Wagner concluded that there was actually no evidence for economies of scale in terms of worker efficiency. This finding was consistent across a variety of SIZE MEASURES.
2. Studies that used the subunit LEVEL OF ANALYSIS showed a negative relationship between size and productivity, both for absolute and relative measures of performance. This also held true across studies using a variety of SIZE MEASURES.

The group home size question is at the subunit LEVEL OF ANALYSIS. The typical situation is that a private service provider corporation operates several group homes. Thus each group home is a subunit of the larger organization. The group home PERFORMANCE MEASURES are related to the quality of life of the individuals in the group homes, and are therefore best thought of as efficiency measures. For example, growth in adaptive behavior/independent functioning per unit of staff time or per dollar would be useful measures of performance. The SIZE MEASURE in the group home situation is simple: the number of people living in the home.

According to Gooding and Wagner's meta-analysis, then, we should expect to find smaller group homes producing more positive outcomes.

The organizational literature reviewed here includes more than 100 pieces of primary research. From them, no clear consistent pattern of the organization size and effectiveness relationship emerged, until the meta-analysis of Gooding and Wagner (1985). They showed that prior studies had varied in their levels of analysis (organization or subunit), their performance measures (absolute or relative), and their size measures.

When these were examined via meta-analysis, a clear pattern did emerge. This pattern called the entire notion of Economy of Scale into serious question. Whether approached from the perspective of the organization or the subunit, when confounding variables were controlled, larger organizations and larger subunits did not produce more per worker.

At the same time that Gooding & Wagner's brilliant meta-analysis called the traditional Economy of Scale assumptions into very serious question, Schumacher's ***"Small Is Beautiful: Economics as Though People Mattered"*** made a compelling case for consideration of outcomes other than economic. Our concern in the human services is precisely suited to this refreshing new perspective – and it came along at the same time that even the most rigorous scientists were questioning whether larger plants really produced more widgets per person per hour. Perhaps our assumptions about size and Economy of Scale, so easily imported from industry into the human services, were dangerously misleading.[27]

The organizational goals of group homes for people with intellectual disabilities are fundamentally human, not financial They are primarily concerned with the quality of life experienced by the people who live in them.[28] Quality is multi-dimensional; it has dozens of aspects. Among them are developmental progress toward increased independence and socially appropriate behavior, integration, relationships, opportunities for choicemaking, satisfaction, individualization, services and supports intensity, attainment of individual goals,

[27] Such mistakes have been made before. One of the worst in history was the importation of biological models into the social realm. The emergence of Social Darwinism in the late 19th century could be argued to have done as much harm as any of the pernicious ideas that have arisen in the modern world. It led to justification of the abandonment, segregation, isolation, underfunding, and forgetting of people with disabilities, both here and abroad – not to mention the rise of the Eugenics Movement, which fostered sterilization and lent support to the National Socialist movement of Germany.

[28] And the direct support people who work in them – good research must take both into account as a synergistic and mutually reinforcing system.

normalization, health, safety, and physical comfort. Hence indicators of each of these organizational goals must be explored. If the analyses are done properly, the quality and outcome indicators are likely to turn up to be strongly related to size, if the literature from organizational and industrial psychology is any guide.

Appendix C: Educational Literature on Group Size (Class Size)

Literature Review on Group Size in Education - i.e., Classroom Size[29]

An issue that may be closely related to the effectiveness and quality of congregate living (group homes) is the effectiveness of instruction in groups of various sizes. Most studies concerned student achievement (academic outcomes, or simply learning). As we will see, however, it is also important to consider other things – such as which situations produce other important things like student happiness, satisfaction, and morale.

Just on the topic of academic achievement, illustrating the degree of conflict in 100 years of study of this issue, Slavin (1989) wrote:

> The search for substantial achievement effects of reducing class size is one of the oldest and most frustrating for educational researchers. The search is approaching the end of its first century; eventually, it may rival the search for the Holy Grail in both duration and lack of results. (Page 99.)

The situation had been substantially improved by application of the method called "meta-analysis," which means rigorously pooling the findings from a lot of studies, weighting them by how well they were designed, and coming up with the best summary of all of them put together. Glass and Smith (1978) produced the first such analysis. They performed a meta-analysis on the outcomes of 77 studies that included 725 comparisons of student achievement between smaller and larger class sizes. (Glass was, in fact, in the process of creating the concept of meta-analysis while working on the class size literature.) In sharp contrast to past narrative reviews, which had seen the literature as internally inconsistent and inconclusive, Glass and Smith's meta-analysis came to the relatively clear conclusion that smaller classes were associated with superior achievement outcomes.

Cooper (1989) suggested caution, coupled with a firm conviction that the weight of the evidence was on the side of smaller classes:

> Reviewers of the class size literature disagreed over whether a reduction in instructional group size has its intended effect ... However, some consensus did emerge ... Reduced class size appeared to be most efficacious with low-ability or disadvantages students when reductions were in the range typically associated with Chapter 1 programs. Such reductions may not only lead to higher achievement but to better student and teacher attitudes and morale and to an enrichment of the core curriculum. (Page 98.)

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[29] Adapted and extended from Conroy, J. (1992). *Size and Quality in Residential Programs for People with Developmental Disabilities*. A Dissertation Submitted to the Temple University Graduate Board in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy. Philadelphia: Temple University.

Slavin (1989) was skeptical, and did the entire meta-analysis over again, calling his new approach "best-evidence synthesis." Using exactly the same studies as Glass and Smith, and even their own tables, Slavin showed that the average effect of the smaller class size on achievement was no more than about 13% of a standard deviation. In statistical terms, that is a very small effect.

Equally interesting, multiyear studies showed that initial gains faded after a year or two, suggesting that smaller class sizes might have, not only small benefits, but temporary benefits as well. The studies in his analysis reduced class sizes from an average of 27 to 16 students. Yet the effects were very small indeed. In trying to explain why this might be so, Slavin's strongest suggestion was that *"teachers' behaviors do not vary very much with size of classes."* The implication was that behaviors might change slightly, but in the size range of real world classrooms, teachers really did not markedly change how they taught students whether they had 16 or 27 in their class.

Most importantly for our current concerns about residential homes, Slavin also showed that the major educational effects, even in Glass and Smith's own tables, occurred in the very small "classes" of size 1 to 3. From that, Slavin inferred that class size was the wrong focus for those concerned with national policy. For students such as those served by educational programs aimed at children in poverty, what would be most beneficial was not smaller classrooms, but individual or extremely small group tutoring. This may be a key finding for the search for quality in residential settings for people with intellectual & developmental disabilities: we need to aim above all for situations that support frequent one to one interactions.

But academic achievement, while it is the primary purpose of schools, is not everything. Slavin made a major concession when he mentioned factors other than achievement:

> Of course, it is important to note that reductions in class size do seem to have significant effects on other variables, such as teacher and student morale (Glass et al., 1982). Reducing class size may be justified on morale and other quality-of-life grounds. However, as a means of increasing student achievement, even substantial reductions in class size have little apparent impact.

It is most intriguing that Slavin, who so strongly believes that the achievement claims are nonsense, is willing to consider the notion that smaller class sizes produce other kinds of significant benefits. basically, even he admits that the evidence is fairly clear that people <u>like</u> smaller classes better. They are

happier in them. The quality of life may be superior in smaller classes. This may be an important clue for the present effort, which is concerned with quality of life as much as behavioral outcomes.

Moreover, Slavin agrees that the evidence supports a notion that size may become very important when class size drops to three or fewer, a conclusion that may be highly related to group home models. Pennsylvania limited group home size to three people for more than 20 years, but then began to approve larger ones – with quality impacts that have been widely suspected, but not studied with rigor.[30]

In summary, the classroom size literature achieves consensus about only four findings: (1) smaller classes are usually found to be related to slightly better student achievement, but mostly in the lower grades; (2) smaller classes are consistently found to be "better" in terms of indicators of quality other than student achievement such as satisfaction and morale; (3) large differences in achievement and qualities of schooling are not found until size drops below 10; and (4) dramatic improvements in student achievement are only found in the extremely small "tutoring" situations in which a single teacher is alone with just one or a very few students.

This fourth finding parallels a conclusion from the intellectual disabilities literature, that the best results come from situations in which single support workers are alone with a very small number of people.

[30] Personal communication with leaders of three provider agencies, 2007.

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The need for substance abuse after-care: Longitudinal analysis of Oxford House

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Abstract

Aims: There is a need to explore the processes of social support and self-efficacy change over time among individuals in recovery homes, and to assess the extent to which residents remain abstinent, obtain and maintain employment, refrain from criminal activity, and utilize health care systems both while within the and after leaving such settings.
Design: Residents were recruited and interviewed at an initial baseline phase and then re-interviewed at three subsequent 4-month intervals.
Setting: Oxford Houses are recovery home residences for individuals with substance abuse and dependence problems who seek a supportive, democratic, mutual-help setting.
Participants: A national US sample of Oxford House residents ($n=897$: 604 men, 293 women).
Measurements: Information was gathered on abstinence, social support, self-efficacy, employment, criminal history, and medical care utilization.
Findings: Change in cumulative abstinence was predicted by support for alcohol use, abstinence self-efficacy, and length of residency in OH (i.e., less than versus ≥ 6 months), even after controlling for initial time spent in OH.
Conclusions: Results suggest that receiving abstinence support, guidance, and information from recovery home members committed to the goal of long-term sobriety may enhance residents' abstinence self-efficacy and enable persons recovering from alcohol and other drug addiction to reduce the probability of a relapse.
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Keywords: Recovery homes; Substance abuse; Social support; Self-efficacy; Oxford House

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1. The need for substance abuse after-care

Substance-related disorders pose serious health threats and exact significant costs to individual users, their families and friends, and society. Despite increased knowledge regarding the harmful consequences that result from substance abuse, as well as persistent efforts to combat these problems, data from the 2003 National Survey on Drug Use and Health (SAMHSA, 2004) reveals that rates of use and abuse of legal and illicit psychoactive-substances have remained relatively stable. Acute treatments help patients achieve abstinence, but relapse rates following treatment are substantial. An important component of relapse appears to be immediate re-exposure to risks associated with one's ongoing living situation (e.g., high substance availability, family and peers non-supportive of recovery, interpersonal conflict, poorly structured time). Drug-free housing that supports recovery, risk avoidance, and employment might heighten one's chances of recovery (Jason, Olson, Ferrari, & Davis, 2004).

There is currently a rising interest in mutual-help groups and in self-help influenced treatments that offer an alternative to professional treatment and after-care. A mutual-help initiative that combines 12-step support within a network of community-based recovery homes for substance abuse is called *Oxford House* (OH). OH was established in 1975 for persons who seek a supportive, mutual-help, residential setting with recovering peers in order to develop long-term sobriety skills. To date, there are over 1200 OHs across the USA, as well as over 30 homes in Canada and eight in Australia. Each house is a rented, multi-bedroom dwelling for same-sex occupants, located in low-crime, residential neighborhoods, and each operates democratically by majority rule and residents govern by electing house officers (e.g., President, Secretary, Treasurer) every 6 months. Houses are not over-crowded and rarely are there more than 12 people in a house. Similar to AA, they are financially self-supported and there are no professionals involved. However, unlike AA there is no single, prescribed course for recovery that all members must follow. Similar to AA, members of an OH receive abstinence support from peers, which has been shown to be an important factor for successful outcomes (Longabaugh, Beattie, Noel, Stout, & Malloy, 1993).

Longabaugh et al. (1993) have proposed that the presence or absence of social support that advocates abstinence support may be related to recovery from substance abuse. That is, successful substance abuse outcomes might be most likely when one has social support networks that discourage substance use and advocate abstinence. In addition, the development of self-efficacy has been implicated as a critical factor in resisting the urge to use drugs and alcohol in high-risk situations after treatment (Solomon & Annis, 1990), and in maintaining long-term abstinence (Rychtarik, Prue, Rapp, & King, 1992). Thus, social factors or environments that promote the development of self-efficacy should reduce the likelihood of substance abuse relapse. Given the peer-based mutual-support approach to addiction recovery that OH might promote, it is possible that residents of OH gain both abstinence social support and abstinence self-efficacy in these environments, which might lead to more successful maintenance of abstinence over time.

Prior studies with Oxford House on client-demographic profiles that generally match the typical profile characteristics reported on recovering substance abusers from more traditional programs (e.g., Jason et al., 2004). In a cross-sectional study of 87 residents, Davis and Jason (2005) found that length of residency in OH was significantly related to decreased social support for alcohol and drug use and increased self-efficacy for abstinence; however, social support for alcohol/drug use fully mediated the link between length of residency and abstinence self-efficacy for women, but not for men. There is a need to examine abstinence social support and abstinence self-efficacy among larger longitudinal samples of OH residents.

The aim of the present study was to explore the processes of social support and self-efficacy change over a 1-year period of time among a national sample of OH residents. In addition, we examined the

extent to which OH residents remain abstinent, obtain and maintain employment, refrain from criminal activity, and utilize health care systems both while within the OH and after leaving such settings. Length of time was considered an important predictor, as it has been found that a six or more month stay in OH is considered optimal for residents to obtain the most benefits from this recovery home experience (see Jason, Olson, Ferrari, & Lo Sasso, in press). It was hypothesized that change in cumulative abstinence would be predicted by support for alcohol use, abstinence self-efficacy, and length of residency in OH (i.e., less than versus $\geq$6 months). We also examined whether support for substance use played a direct role in abstinence or whether its influence was mediated by abstinence self-efficacy.

2. Methods

2.1. Procedure

Analyses of records provided by Oxford House, Inc. (OH) using a geographical information systems program (GIS) indicated that the majority of OHs across the United States clustered in five regions. These cluster areas included: Washington/Oregon, Pennsylvania/New Jersey, North Carolina, Illinois, and Texas. Therefore, in the present study, participants were recruited from OHs clustered in these five geographic regions (total houses assessed=170).

Participants for this study were recruited through two methods. The method soliciting the most participants (n=797, 88.9% of the sample) utilized an announcement that was published in the monthly OH newsletter distributed by OH, Inc. The announcement indicated that we were conducting a national study and provided contact information. We then contacted OHs within the target geographic areas via letters addressed to House Presidents, conducted follow-up phone calls to the houses, and where possible members of the research team arranged to visit houses. Of 189 houses that were approached, 169 (89.4%) houses had at least one individual who agreed to participate in the study and the average number of participants per house was 4.7 (there were an average of 7.1 individuals per house). For the second method, 100 individuals filled out the baseline questionnaires at an annual OH Convention. There were approximately 300 people at this convention, and the authors attempted to secure a sample of those attending the Convention (a table was set up in a room where individuals could complete the questionnaires with our research staff). We recognize that this is a convenience sample of those who attend the conference and elected to participate, and self-selection factors were presumably in operation. However, analyses of data collected at the Convention versus data collected using the first method did not reveal significant differences in outcome variables.

In each case, the longitudinal nature, purpose, and goals of the study were explained to the potential participants. Staff members also explained that participation was entirely voluntary, withdrawal from participation without pressure was possible at any time, and the consent form was reviewed in detail with each participant. After completing the baseline surveys, each participant received a $15 payment. There were three subsequent waves of data collected at 4-month intervals (i.e., at 4, 8, and 12 months) and $15 payments were made to participants following each survey. Data were gathered by research staff who primarily administered questionnaires in person to the participants. Some data were collected by telephone, particularly when an individual had left an Oxford House. As a measure of reliability of participants' self-reports of alcohol and drug use, upon completion of the final surveys, research staff interviewed a random sample of the fourth wave participants' *Important Person*, who was a person

identified by each participant (at the first interview) as someone who would be knowledgeable about the participant's alcohol and drug use.

2.2. Measures

2.2.1. Addiction severity index

The *Addiction Severity Index-lite* (ASI; McLellan et al., 1992) is a reliable and well validated instrument that assesses problem areas commonly related to substance abuse including medical status, drug use, alcohol use, illegal activity, family relations, family history, and psychiatric condition. We administered the entire scale at the baseline and portions of it (viz. related to employment and criminal involvement) at the final, fourth follow-up assessment. McLellan et al. (1992) indicate that it is appropriate and psychometrically sound to administer only sub-sections of this scale. The following information was derived from the ASI along with socio-demographic data: substance abuse history, physical and mental health information, and criminal activity. In each area, objective questions measure the number, extent, and duration of problem symptoms in the person's lifetime and in the past 30 days.

2.2.2. Alcohol and substance abuse

At the baseline and at each of the subsequent follow-up waves, participants were administered a modified version of Miller and Del Boca's (1994) *Form 90 Timeline Follow-back*, which measures general health care utilization and residential history, and past 90-day alcohol and drug use. The Form 90 has been reported to have good reliability for all key summary measures of alcohol consumption and psychosocial functioning and moderate reliability for most frequently used illicit drugs. Consistency of self-reported drinking has not been found to suffer across test–retest interviews (Tonigan, Toscova, & Miller, 1996). Even though the intervals in the present study were 4 months, the instrument was used to capture alcohol and drug usage during the last 90 days of the 4-month period.

2.2.3. Important people and activities inventory

At baseline and at each follow-up assessment, participants also completed a modified version of Clifford and Longabaugh's (1991) *Important People and Activities Inventory* (IPA) that solicited information regarding individuals' social support networks related to substance use and abstinence. This scale provides detailed information regarding the composition and utilization of individuals' support networks. In the first section of the IPA, respondents list the names of persons (>12 years old) who have been important to them in the past 3 months. Respondents also provide information on how often others use alcohol or drugs during activities that are important to the participant (Beattie et al., 1993). This measure yields 11 indices, including an overall *Composite Support Index* (CSI) and a *support for drinking/drug use* score representing the extent to which an individual's network is supportive of substance use versus abstinence. While the original IPA scale elicits information with respect to alcohol use only, in the present study, additional items were added to assess support for drug use (independent of alcohol use). We also used an index capturing the percentage of abstainers and recovering individuals in respondents' social networks (calculated by dividing the number of abstinent and recovering persons identified in an individual's network by the total number of persons in one's social network).

2.2.4. Alcohol and drug abstinence self-efficacy

At baseline and each of the three follow-up sessions, all participants were administered the 20-item *Alcohol Abstinence Self-Efficacy* scale (AASE; DiClemente, Carbonari, Montgomery, & Hughes, 1994) and a slightly modified version with 20 items to measure *Drug Abstinence Self-Efficacy* scale (DASE). The AASE is a self-report measure derived from Bandura's (1986) cognitive-behavioral self-efficacy theory and based on empirical studies of high-risk situations for relapse (e.g., DiClemente, Fairhurst, & Piotrowski, 1995). Instructions for the AASE asked respondents to imagine themselves in each of 20 situations and to indicate how confident they were that they would not drink in each situation. Individuals rated their level of confidence to not use alcohol on a 5-point Likert scale (1=*not at all confident*, 5=*extremely confident*). The DASE version was identical to the AASE except that the words "drink alcohol" were replaced by the words "use drugs" in order for respondents to answer regarding their confidence that they would not to use drugs in each of the 20 situations. The alphas for the AASE and DASE were 0.98 and 0.99, respectively.

2.2.5. Statistical analysis

Latent growth curve analysis was used to model trajectories of variables related to participants' rate of change in abstinence during the time of their participation in the current 1-year longitudinal study (baseline, 4-month, 8-month, and 1-year assessments). Latent growth curve analysis is a form of multilevel modeling in which separate growth curves are estimated within individuals. Latent growth curve analysis has been applied to the study of substance use outcomes in preventive interventions (Brown, Catalano, Fleming, Haggerty, & Abbott, 2005), variations in drinking trajectories (Greenbaum, Del Boca, Darkes, Wang, & Goldman, 2005), the structure of aggression and drug use (Farrell, Sullivan, Esposito, Meyer, & Valois, 2005), and normative beliefs and substance initiation (Lillehoj, Trudeau, & Spoth, 2005). The widespread use of growth curve models reflects the advances made in longitudinal analysis in the previous two decades (Shadish, 2002).

The dependent measure for the present growth curve analysis was the variable *cumulative days abstinent*. This variable had the following properties: (a) ratio-scaled, (b) showing systematic change (regular, time-related increases or decreases), and (c) having increasing variability over time. These properties were necessary in order for a model to identify a common growth factor. In other words, to examine change over time it is necessary that a variable reflect "growth over time," such as height or weight. Rate of change in abstinence represents the most accurate history of substance use available. The repeated assessments provide greater sensitivity to detect departures from complete abstinence. In addition, as this is a large sample, there is adequate power to detect small effects.

Because residents in this sample had lived in an OH ranging from a period of only a few days to 9 years at baseline data collection, it was most appropriate to analyze only the 1-year prospective data, rather than rely on retrospective recall regarding substance use prior to the commencement of the study. Thus, rate of change was calculated as a function of the cumulative numbers of days abstinent from alcohol or drugs, beginning with the time of the first survey.

In regression analyses, we calculated an observed rate of change in sobriety. This variable examined a rate of change calculated by the number of actual days sober divided by the total possible days sober. A rate of change, or slope, equal to 1.00, indicates that the individual remained alcohol- or drug-free during each day of the 12-month study (i.e., number of days abstinent is equal to number of days participating in the study). A trajectory with a slope less than 1.00 indicates some substance use during their participation in the current study.

3. Results

Statistical analyses were performed in two stages: descriptive analyses exploring the sample and latent growth curve analysis investigating model trajectories of variables related to abstinence. Results of data analyses indicated no significant differences between participants based on data collection method (in person versus by telephone). Of the random sample of collateral informants who were contacted regarding participants who reported they were abstinent from drugs throughout the study ($n=114$), 98% reported consistently regarding participant's drug abstinence and 97% furnished collateral reports that were consistent with participants' reports of abstinence from alcohol ($n=111$).

3.1. Descriptive analyses

Characteristics of the sample at baseline are presented in Table 1, reported separately for females and males. We felt that it was important to examine these data based on possible gender differences, as Davis and Jason (2005) found that gender moderated the relationship between social support and abstinence self-efficacy. Furthermore, there is considerable evidence that women and men react differently to after-care services (DeLeon, 1997). At baseline, the sample consisted of 293 female and 604 male residents. Participants were ethnically diverse, with 58.4% being Caucasian, 34.0% African American, 3.5% Hispanic, and 4% other. Regarding marital status, 49% were single/never married, 46.2% were divorced/widowed or separated, and only 4.8% were married. On average, 69.3% of the respondents report being employed full-time and 13.9% part-time, while 11.6% reported being unemployed and 3.8% were retired or disabled. The average age of sample participants was 38.4, and the average total monthly income was $981.80. Most participants reported multiple alcohol and drug dependencies, as well as prior participation in numerous substance abuse treatment programs. Thus, it is evident by their substance use and treatment histories that this sample represents a chronic substance abusing population.

As noted in Table 1, the women and men in this sample reported fairly similar profiles in terms of ethnicity, marital status, and current legal status. However, women in comparison to men were younger and had significantly less employment, employment income, education, time in OH, and number of alcohol treatments, but women reported significantly more use of psychological medications, attempted suicide, and physical and sexual abuse. Additionally, although the men in this sample had used various substances for significantly longer lengths of time than the women, the pattern of lifetime abuse of drugs was similar for women and men (e.g., alcohol was used for the longest amount of time, followed by cannabis, cocaine, and amphetamines respectively). Further, on average, both women and men reported histories of numerous charges, convictions, and having spent time incarcerated. Although men had significantly higher rates with respect to historical legal issues, a slightly higher percentage of women were currently on probation or parole, awaiting charges, trial, or sentencing, and who entered Oxford House based on prompting by the legal system.

3.2. Outcome characteristics across waves 1 through 4

Descriptive variables related to the key outcome areas for the sample across the four survey waves are presented in Table 2. These variables depict participants' use of alcohol and drugs, employment, involvement with the legal system, utilization of the health care system for medical, psychological, and

Table 1
Baseline mean frequencies and percentages of sociodemographic characteristics by gender

Descriptor variable	Sample *percentage*	Women *percentage*	Men *percentage*	Statistical significance
Ethnicity				
Caucasian	58.4	57.7	58.8	
African American	34.0	34.5	33.8	
Hispanic/Latino	3.5	2.4	4.0	
Other	4.2	5.5	3.5	
Marital status				
Never married	49.0	48.8	49.2	
Divorced, widowed, or separated	46.2	44.7	46.8	
Married	4.8	6.5	4.0	
Employment status [a]				
Full-time	69.3	60.6	73.5	**
Part-time	13.9	17.8	11.9	**
Unemployed	11.6	17.4	8.8	**
Retired/disabled	3.8	2.1	4.6	
Psychological status [b]				
History of psych meds	43.0	55.0	37.1	**
Attempted suicide	30.1	42.5	24.0	**
History of physical abuse	46.1	65.1	20.7	**
History of sexual abuse	35.3	72.4	33.3	**
1 or more inpatient treatments	40.1	44.9	37.8	
1 or more outpatient treatments	40.0	45.3	37.6	
Legal status				
On probation/parole [c]	30.3	32.3	29.3	
Awaiting charges, trial, sentencing [c]	9.0	10.6	8.3	
OH entry prompted by legal system [c]	13.7	14.1	13.4	

Descriptor variable	Sample	Women	Men	Statistical significance
	Mean (S.D.)	Mean (S.D.)	Mean (S.D.)	
Age [d]	38.4 (9.2)	36.5 (8.5)	39.4 (9.4)	**
Education [d]	12.6 (2.1)	12.4 (2.3)	12.8 (1.9)	**
Income ($)				
Employment [e]	794.0 (887.6)	563.8 (655.4)	903.3 (960.2)	**
Illegal activities [e]	2.7 (53.6)	.5 (7.5)	3.8 (64.8)	
Total income [e, f]	981.8 (867.5)	750.7 (734.9)	1087.8 (918.0)	**
Time in OH [g]	10.8 (15.6)	8.6 (13.2)	11.9 (15.6)	**
Time since last alcohol use [d]	1.7 (2.2)	1.2 (1.6)	1.9 (2.4)	**
Time since last drug use [d]	1.8 (2.8)	1.4 (2.4)	2.0 (3.0)	**
Lifetime substance use [d]				
Alcohol	18.3 (10.3)	15.0 (9.5)	19.9 (10.3)	**
Alcohol to intoxication	14.4 (10.9)	11.7 (10.1)	15.7 (11.1)	**
Heroin	2.6 (6.6)	2.3 (5.4)	2.7 (7.1)	
Methadone	0.4 (2.2)	0.5 (2.3)	0.4 (2.1)	
Other opiates/analgesics	2.3 (6.0)	2.3 (5.7)	2.2 (6.1)	
Barbiturates	1.9 (5.4)	1.9 (5.3)	2.0 (5.5)	
Sedative/hypnotics/tranq	2.5 (6.1)	2.9 (6.1)	2.4 (6.1)	
Cocaine	8.3 (8.1)	7.5 (7.6)	8.7 (8.3)	

(continued on next page)

Table 1 (*continued*)

Descriptor variable	Sample	Women	Men	Statistical significance
	Mean (S.D.)	Mean (S.D.)	Mean (S.D.)	
Lifetime substance use [d]				
Amphetamines	4.1 (7.0)	4.3 (7.0)	4.1 (7.0)	
Cannabis	10.5 (10.5)	8.0 (9.2)	11.7 (10.9)	**
Hallucinogens	3.2 (6.1)	2.5 (5.3)	3.5 (6.5)	*
Inhalants	1.1 (4.2)	1.2 (4.6)	1.0 (4.0)	
More than 1 substance	10.4 (10.5)	8.6 (9.2)	11.3 (10.3)	*
Substance abuse treatments [b]				
# of alcohol treatments	2.8 (4.2)	2.3 (3.8)	3.0 (4.4)	*
# of drug treatments	2.9 (3.5)	2.8 (2.6)	2.9 (3.9)	
Legal history [b]				
Times charged	10.3 (15.0)	8.3 (14.5)	11.3 (15.2)	**
Times convicted	3.1 (5.8)	2.5 (4.6)	3.4 (6.3)	*
Months incarcerated	15.8 (36.5)	7.6 (18.6)	19.7 (41.9)	**
n	897	293	604	

[a] Within the past 3 years.
[b] Lifetime data.
[c] Currently.
[d] In years.
[e] In the past 30 days.
[f] Total income comprises dollars received from employment, unemployment compensation, DPA, pension, benefits or social security, mate, family or friends, and illegal activities.
[g] In months.
* $p \leq 0.05$, two-tailed.
** $p \leq 0.01$, two-tailed.

substance abuse treatment, self-efficacy for abstinence from alcohol and drugs, and abstinence social support over the span of the study. Repeated measures statistical tests reported in Table 2 are based on similar numbers across waves.

Table 2 shows that 607 participants from the initial measurement wave (68% of the sample) remained in the study at wave 4,[1] and of this group, only 13.5% reported having *used either drugs or alcohol* at the

[1] Using baseline data, we examined if there were any differences between those who were interviewed versus those who were not interviewed at wave 4. *Independent sample t-tests* and *chi-square analyses* indicated that there were no significant differences for ethnicity, marital status, and years of education, employment status, income, psychological status, or prior alcohol/drug treatments between those participants who completed wave 4 versus those individuals who did not complete wave 4. However, those who were not available to be interviewed compared to those who were interviewed at wave 4 had higher baseline substance use [percent who used any substances in the past 90 days = 22.1% versus 12.6%, $\chi^2(1, N=895)=13.52, p<0.01$; percent who used drugs in the past 90 days = 19.4% versus 10.4%, $\chi^2(1, N=895)=13.55, p<0.01$; and percentage who used alcohol in the past 90 days = 14.2% versus 8.1%, $\chi^2(1, N=895)=7.96, p<0.01$], had a shorter total length of alcohol sobriety, 1.4 versus 1.8 years, $t(2, 895)=-2.98$, $p<0.01$, and a shorter total length of drug sobriety, 1.4 versus 2.0 years, $t(2, 895)=-3.27$, $p<0.01$, although they had less total lifetime years using alcohol, 12.7 versus 15.2 years, $t(2, 870)=-3.11$, $p<0.01$. Additionally, those unable to be surveyed compared to those surveyed at wave 4 were more likely to be awaiting charges, trial, or sentencing, 7.6% versus 12.1%, $\chi^2(1, N=895)=4.78$, $p<0.05$, respectively, and more likely to have been incarcerated within 90 days prior to baseline, 12.2% versus 5.3%, $\chi^2(1, N=895)=13.19, p<0.01$. Those who did not complete the study were also younger [36.8 versus 39.2 years, $t(2, 891)=-3.71, p<0.01$], had less time living in an OH [7.8 versus 12.3 months, $t(2, 886)=-4.25, p<0.01$], and had lower AASE [78.4 versus 81.8, $t(2, 885)=-2.24, p<0.01$] and lower DASE [78.3 versus 81.4, $t(2, 885)=-1.93, p<0.01$] scores.

Table 2
Outcome characteristics across study waves 1 through 4

Descriptor variables	Wave 1	Wave 2	Wave 3	Wave 4
	Mean (S.D.)	Mean (S.D.)	Mean (S.D.)	Mean (S.D.)
Alcohol/drug use[1]				
% who used alcohol or drugs	15.7	10.5	9.7	13.5
% who used alcohol	10.1	5.0	7.7	10.3
% who used drugs	13.3	9.0	7.0	9.8
Days consumed alcohol	2.2 (9.1)	1.4 (8.9)	1.8 (9.5)	3.7 (14.9) **
Days used drugs	5.5 (20.5)	3.7 (15.6)	2.3 (11.0)	5.6 (24.0) **
Employment				
% employed [a]	81.5	86.6	83.3	79.5
Days paid for work [a]	42.0 (28.0)	49.8 (26.5)	50.5 (27.0)	48.4 (40.4) **
Employment income [b]	794.0 (887.6)			941.9 (960.8) **
Total monthly income [b]	981.8 (867.5)			1133.7 (970.6) **
Legal status [a]				
% incarcerated	7.5	3.4	3.4	4.8
Days in jail	1.3 (7.0)	0.7 (6.1)	0.7 (6.3)	2.0 (12.7)
Days in prison	0.6 (6.3)	0.2 (3.5)	0.5 (6.0)	1.44 (11.0)
Medical status [a]				
Days in hospital for medical problems	0.5 (3.4)	0.3 (1.5)	0.8 (4.4)	0.8 (6.3)
Visits to doctor, nurse, p.a., etc.	2.6 (7.9)	2.4 (7.2)	2.1 (5.9)	2.0 (5.7)
Days taking Rx for medical problems	21.3 (36.1)	22.4 (38.7)	21.7 (36.8)	22.6 (37.2)
Psychological status				
Days experienced psyc problems [b]	3.6 (8.0)			3.9 (8.2)
Days taking Rx for psyc problems [b]	0.4 (0.5)			0.2 (0.4)
Days in residential Tx for psyc problems [a]	1.1 (7.1)	0.4 (5.3)	0.5 (4.6)	0.4 (5.2)
Sessions with counselor for psyc problems [a]	2.9 (10.1)	1.8 (6.5)	1.4 (6.7)	1.6 (5.7) **
Alcohol/drug treatment [a]				
Days attended 12-step meeting	44.9 (28.1)	40.5 (26.9)	35.1 (27.0)	33.4 (29.4) **
Days in residential drug treatment	7.1 (20.3)	1.6 (10.4)	1.1 (8.1)	1.1 (8.6) **
Days in residential alcohol treatment	6.5 (19.4)	1.1 (8.7)	.7 (5.7)	1.0 (7.8) **
Sessions with counselor for alc. problems	4.9 (14.0)	2.2 (7.8)	1.4 (7.5)	1.6 (7.8) **
Sessions with counselor for drug problems	5.4 (14.9)	2.3 (7.7)	1.6 (8.0)	1.4 (8.1) **
Days in hospital for detox	0.6 (3.5)	0.1 (1.1)	0.2 (1.4)	0.1 (0.7) **
Days in residential detox	0.3 (2.4)	0.1 (0.9)	0.1 (1.6)	0.0 (0.4)
Self-efficacy—alcohol [a]	80.7 (21.2)	80.4 (23.8)	79.3 (25.2)	84.6 (20.1) **
Self-efficacy—drug [a]	80.4 (22.3)	80.8 (23.8)	81.1 (25.0)	84.6 (21.3) **
% of network abstinent/in recovery [a]				
For alcohol use	75.0	79.0	79.0	77.0 **
For drug use	90.0	94.0	94.0	93.0 **
n	897	685	588	607

[a] In the past 90 days.
[b] In the past 30 days.
** $p \leq 0.01$, two-tailed, based on repeated measures analyses.

final assessment, and the average number of days they consumed alcohol or used drugs was 3.7 and 5.6, respectively. It appears that the highest rates of substance use for this sample occurred during waves 1 and 4, with lower rates at waves 2 and 3, but overall, the rates were relatively low across waves. Throughout

the study, the rate of *employment* for participants ranged from a high of 86.6% to a low of 79.5%. At wave 4, their average monthly income from employment was $941.90, which was a significantly higher than their baseline employment-related income.

In regard to *legal status*, there was a directional decrease in the percentage of participants incarcerated between the start and end of the study. In contrast, the *medical status* of participants, which included number of days spent in hospital, visits to the doctor, and days taking prescription drugs, remained relatively stable across the four waves. With respect to *psychological status*, as evident in Table 2, over the course of the study, there were directional decreases in the days spent in residential treatment and significant decreases in sessions with a counselor for psychological problems. Participants evidenced a significant decrease over the four waves with respect to *alcohol and drug treatment*, which included the number of days that participants attended 12-step meetings, days in residential and outpatient treatment, as well as sessions with substance abuse counselors and days spent in hospital detoxification programs. At the final assessment, participants' *self-efficacy for remaining abstinent from alcohol and from drugs* had significantly increased. Significant increases were also noted with the percentage of participants' social network members who were abstinent/in recovery from alcohol use and the percentage of participants' social network members who were abstinent or in recovery from drug use.

3.3. Models of abstinence

As noted above, latent growth curve analysis was used to model trajectories of variables related to participants' rate of change in abstinence during the time of their participation in the current 1-year longitudinal study, and a trajectory with a slope less than one indicates some substance use during their participation in the current study. Of the 748 cases in which a slope could be calculated (i.e., participants in which we collected more than one wave of assessment data), 79.4% of the alcohol abstinence trajectories and 80.5% of the drug abstinence trajectories have slopes equal to 1. The observed slopes from these trajectories were treated as dependent variables in OLS regression analyses. Sample size for this analysis is reduced somewhat further by missing data on some of the predictors. Results from these analyses for cumulative alcohol sobriety are presented in Table 3.

Our first hypothesis was that change in cumulative abstinence would be predicted by support for alcohol use, abstinence self-efficacy, and length of residency in OH (i.e., less than versus ≥ 6 months; length of residency in OH was the variable that assessed the participant's residency in the OH during the course of the 1 year longitudinal study). We selected these constructs to be tested based on theoretical issues described in the introduction and findings in Table 3. Before testing for these effects, we controlled for a series of socio-demographic and other key variables. Model 1 includes the following control covariates: participant age, years of education, gender, never married versus ever married, African American versus non-African American, lifetime months incarcerated at wave 1, composite alcohol use score on the ASI at wave 1, and initial length of stay in OH (i.e., number of months individuals had resided in OH prior to the wave 1 assessment). Only this last variable was significantly related to the slope of cumulative abstinence.

In Model 2, we entered a contrast that indicated whether an individual left OH prior to 6 months versus stayed at least 6 months. In this model, leaving OH prior to 6 months was associated with a significant reduction in the slope of cumulative abstinence, and the significance of the length-of-initial-stay predictor dropped from a significance of $p<0.001$ to $p<0.05$. Support for alcohol use was added in Model 3. This variable was the mean score across available longitudinal assessments of the support for alcohol use

Table 3
Regression models predicting longitudinal slope of cumulative alcohol sobriety (N=642)

Parameter	Model 1: covariates only	Model 2: add stayed in OH ≥ 6 months	Model 3: add support for alcohol use	Model 4: add abstinence self-efficacy
Age	0.08	0.05	0.05	0.04
Education	0.03	0.02	0.03	0.02
Sex (female)	0.04	0.08*	0.07	0.05
Never married	−0.01	−0.03	−0.01	−0.04
African American	0.03	0.02	−0.01	−0.01
Lifetime months incarcerated	0.00	−0.01	−0.02	−0.01
Initial alcohol ASI	−0.06	−0.04	−0.03	−0.02
Length of time in OH at w1	0.14***	0.08*	0.08	0.06
Stayed in OH ≥ 6 months	–	0.29***	0.28***	0.24***
Support for alcohol use	–	–	−0.19***	−0.15***
Alc. abstinence self-efficacy	–	–	–	0.25***
R	0.202	0.343	0.392	0.456
R^2	0.041	0.118	0.154	0.208
R^2 change	–	0.077	0.036	0.054
F change	–	54.9***	26.8***	43.2***
NDf	8	9	10	11
DDf	633	632	631	308
F	3.37***	9.36***	11.45***	15.02***

ASI=Addiction Severity Index; OH=Oxford House; *p<0.05; **p<0.01; ***p<0.001.

(using the CSI from the IPA).[2] This predictor also added significantly to the model (R^2 change=0.036, p<0.001) and predicted lower alcohol sobriety. The final model includes the measure of abstinence self-efficacy. As shown in Table 3, this variable also added significantly (R^2 change=0.054, p<0.001) and predicted greater cumulative sobriety. Results of predictions of cumulative drug sobriety were similar. (Findings for drug abuse were similar, and these findings can be obtained by writing the first author.)

We next examined whether support for substance use played a direct role in abstinence or whether its influence was mediated by abstinence self-efficacy using a *latent growth curve model* (LGM). It is possible that residents of OH gain both abstinence social support and abstinence self-efficacy, which might lead to more successful maintenance of abstinence over time, and it is also possible that the effects of the abstinence social support on successful maintenance are mediated by self-efficacy. The LGM provides a method for representing individual growth curves as latent variables in a structural equation model. Repeated-measures data are organized into latent intercepts (or "levels") and latent slopes that can be treated as dependent variables in a structural model. In this model, support for alcohol use and abstinence self-efficacy were represented as latent variables with four indicators corresponding to the four repeated assessments. These constructs were fit as single-variable factors rather than as bivariate intercept

[2] Social support was averaged across the three time points because there was no systematic increase in social support over time and a latent growth curve of social support could not be identified. This is in large part due to the fact that the measure was created as an individual difference measure. In other words, it is designed to describe differences across individuals rather than change within an individual over time. Individual difference measures tend to have high test–retest reliability by definition, and this can be a problem when the intent is to measure a variable that changes over time. However, the lack of identified change does not necessarily mean that OH residents are not experiencing change in support over time. Because a measure is designed to have high stability does not mean that the construct itself is not changing.

and slope factors. Parameter estimates for the structural model for alcohol are given in Fig. 1. The χ^2 (chi-square) for this model was 179.0 with $df=74$; a number of fit indices suggested acceptable fit to the data (NFI=0.98, RFI=0.98, CFI=0.99, RMSEA=0.04). Results indicated that change in cumulative abstinence, represented by the latent slope variable, was predicted by support for alcohol use, abstinence self-efficacy, and length of residency in OH (i.e., less than versus ≥6 months) even controlling for initial time spent in OH. It should be noted that initial time spent in OH was associated with higher levels of abstinence self-efficacy, although there was no significant relation between time and support for alcohol use. Additionally, length of residency in OH predicted increased abstinence self-efficacy as well as continued abstinence. (Similar findings occurred for drug usage and these data are available by contacting the first author.).

3.4. Staying versus leaving OH

Examining differences between the participants who remained living in an OH throughout the entire study (32.6% of the sample) versus those of those who left by waves 2, 3, or 4 (67.4% of the sample), there were no significant differences for ethnicity, employment status, total income, or psychological status, based on independent sample *t*-tests or chi-square analyses. Compared to participants who stayed in OH across all four waves, individuals who left OH had higher rates of any substance use over the last

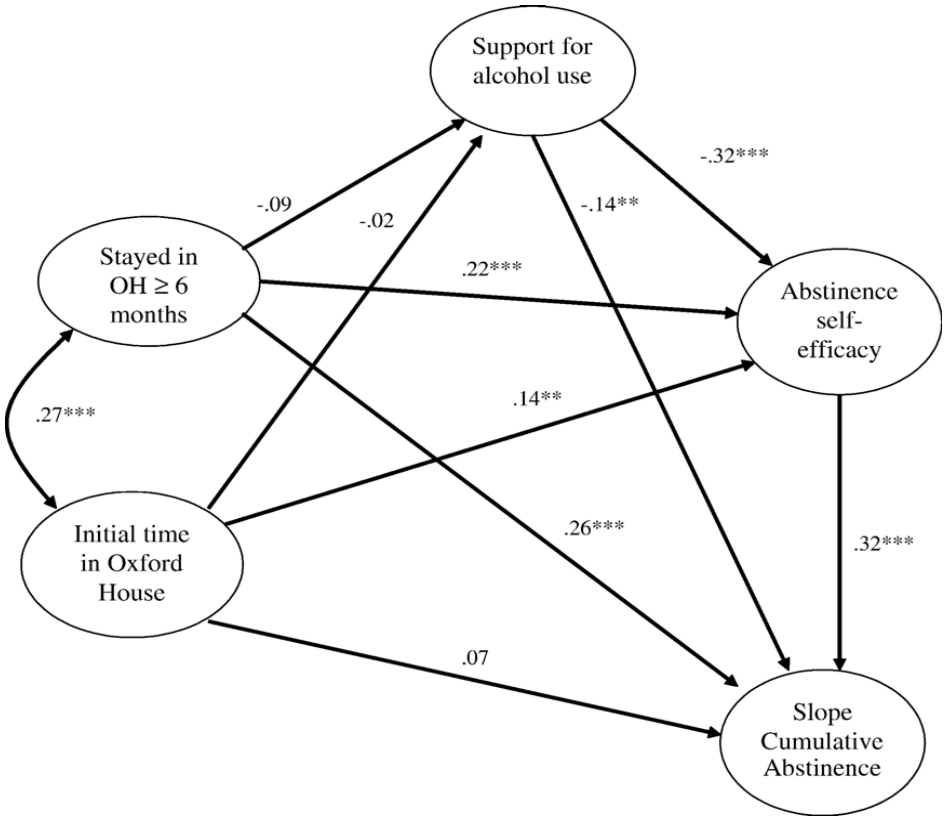


Fig. 1. Results of testing latent growth model regarding alcohol abstinence. Notes: *$p<0.05$; **$p<0.01$; ***$p<0.001$.

90 days at wave 4 [18.5% versus 3.1%, respectively, $\chi^2(1, N=595)=26.43$, $p<0.01$]; however, these findings indicate that 81.5% of those who left the house and were interviewed at the final wave remained consistently alcohol- and drug-free.

Those individuals who were no longer living in an OH at wave 4 compared to continued residents had spent less time in OH at baseline [9.8 versus 17.5 months, $t(2, 593)=5.59$, $p<0.01$] and were younger [38.0 versus 41.6 years, $t(2, 593)=4.49$, $p<0.01$]. Examining wave 4 data, those who had left versus those who remained in an OH spent more days in hospitals for medical problems over the past 90 days [1.2 versus 0.1 days, $t(2, 594)=-1.96$, $p<0.05$], spent more days in residential treatment for drug use in the past 90 days [6.3 versus 5.8 days, $t(2, 593)=-2.14$, $p<0.05$] as well as more time in residential treatment for alcohol use in the past 90 days [1.4 versus 0 days, $t(2, 592)=-2.06$, $p<0.05$], had lower self-efficacy for abstinence from alcohol [82.9 versus 88.7, $t(2, 596)=3.23$, $p<0.01$] and lower self-efficacy for abstinence from drugs [82.8 versus 89.4, $t(2, 596)=3.62$, $p<0.01$], and lower percentage of network members in abstinence or recovery for alcohol use [74.8% versus 80.0%, $t(1, 585)=2.19$, $p<0.05$] and drug use [92.6% versus 95.7%, $t(1, 584)=2.37$, $p<0.05$].

4. Discussion

Our data analytic approach was based on a theoretical framework which posited that change in cumulative abstinence would be predicted by social support for alcohol (or drug) use, abstinence self-efficacy, and length of residency in OH (i.e., less than versus ≥ 6 months). These hypotheses were confirmed, and the results were consistent with research indicating that substance abusers are more likely to maintain abstinence in abstinent supportive settings (Longabaugh, Mattson, Connors, & Cooney, 1994; Longabaugh, Wirtz, Beattie, Noel, & Stout, 1995). It is likely that OH settings promote abstinent support systems, as the present study found that the networks of OH members were mostly composed of individuals who were abstinent or in recovery. An OH recovery home experience of communal living may help develop a sense of bonding with similar others who share common abstinence goals (Ferrari, Jason, Davis, Olson, & Alvarez, 2004; Jason et al., in press). The OH communal living experience also appears to increase self-efficacy to refrain from using alcohol and other drugs. Facilitating this personal resource is important given indications that abstinence self-efficacy is related to more successful abstinence and coping activities during recovery maintenance (DiClemente et al., 1995). Receiving abstinence support in a setting that promotes abstinence self-efficacy may reduce the probability of a relapse among substance abusers.

It was also important to explore the 6-month length of stay in OH criterion given DiClemente et al. (1995) claim that efficacy expectations, which are related to addictive behavior change, stabilize after 6 months of abstinence in accordance to process of change theory (Prochaska & DiClemente, 1992). In addition, other evidence suggests that it may take approximately 6 months for OHs to adequately exert their effects on recovery (Jason et al., submitted for publication). Our results support that staying in OH at least 6 months was related to increased self-efficacy and maintaining abstinence. This outcome suggests that maintaining residency for at least 6 months of time might be a critical factor in promoting positive outcomes. However, it should be noted that, if residents who are found to be using substances are asked to leave Oxford House, some of the association may be a consequence of substance use. But, the theory of abstinent social support networks indicates that residents need to be in the OH environment a certain minimal amount of time to obtain the maximal effects.

The present study suggests that Oxford House is a network of abstinent support settings that is associated with maintenance of abstinence while living in the setting and post-residence. At the final wave 4, only 13.5% of participants reported using either alcohol or drugs, and of those who had left the OH, only 18.5% indicated using any substances. These findings are supportive of the Oxford House model, although the data need to be cautiously interpreted as there was some attrition over the course of the year-long study and there was no control group. Nevertheless, in a separate study (Jason et al., in press), individuals completing substance abuse treatment were randomly assigned to either an OH or usual after-care condition. At a 24-month follow-up, significantly lower substance use rates were found for those in the OH (31%) versus the usual after-care condition (65%). Taken together with the findings of that study, the present study suggests that the OH model may reduce substance abuse relapse rates. The public health implications of these findings are heightened because these OH homes are self-governing and require minimal costs with residents paying their own expenses for housing and food.

Results from the present study also indicate a general trend toward increased employment and income, and low levels of involvement in the legal system related to residency in OH. This result was in contrast to the finding that individuals with substance abuse disorders are more likely to be unemployed (Treatment Improvement Protocol 38, 2000) and have involvement with the criminal justice system. Those individuals with substance abuse problems often lack the benefits of employment, which provides a source of income, requires managing the use of time, improves self-esteem, and is associated with reductions in substance use (Copeland & Hall, 1992). In the present study, employment income significantly increased over time from $794 to $942 per month and 80% of participants reported being employed by the last assessment. In addition, the percentage of incarceration remained at low levels throughout the study (less than 5% were incarcerated by the wave 4). In part, these findings may reflect other forms of support that may be operating with the house systems (e.g., where peers encourage and help fellow residents to find work) that might help residents obtain stable employment. Additionally, residing in OH may support individual behavior changes that lead to low levels of involvement with the criminal justice system. Residents' successes with respect to maintaining abstinence likely bolster and are bolstered by their heightened ability to obtain and maintain employment, and their reduced association with criminal systems while living within these recovery settings.

4.1. Limitations and future directions

There are several limitations in the present study. For instance, we used a naturalistic follow-up of residents recruited from a large sample of facilities located in states where clusters of OHs are found. There was a considerable range in the study sample with respect to how long participants had been residing in OH at the start of the study. While much outcome research has a standard practice of recruiting participants at roughly the same point in treatment, and another study with OH used such a design (Jason et al., in press) interviewing individuals who just arrived in OHs. However, the present research design allowed the investigators to enroll a larger sample by including all available residents, and then statistically controlling for length of time living in OHs prior to the study start.

Attrition did occur between the baseline and last wave of data collection, and there were a number of differences between those who ultimately dropped out of the study and those who continued to participate.[1] Still, the tracking rates were relatively good for this national sample, and on the primary outcome data, there were only small differences between those who remained in and those who attrited. In addition, we did not use a control group to assess what might occur had residents not been provided this

abstinent supportive environment. However, as noted, a randomized study of Oxford Houses (Jason et al., in press) had findings on substance abuse indices that were in line with present study, and these convergent findings increase confidence in the overall validity and reliability of these results regarding effectiveness.

Finally, there might have been some selection bias in the recruitment effort, with only more motivated residents expressing an interest in participating in this study. As all participants were abstinent at the time of baseline assessment, participants who might have had a negative initial reaction to Oxford House might have left early, and therefore might not have been included in the sample. Clearly, some selection bias did occur with the current sample, and this possibly contributes to the low rates of substance use at the 12-month assessment in the current study (13.5%).

Typically, after treatment for substance abuse, whether in hospital-based treatment programs or therapeutic communities, many patients return to former high-risk environments or stressful family situations. Returning to such settings without a network of people to support abstinence increases chances of relapse (McCusker, Willis, Vickers-Lahti, & Lewis, 1998). As a consequence, alcohol and substance use recidivism following treatment is high for both men and women (Hubbard, Flynn, Craddock, & Fletcher, 2001). It is possible that non-treatment factors may be the best predictors of future recovery status (Vaillant, 1983; Westermeyer, 1989). Programs like OH that provide naturally occurring abstinent social supportive settings might represent effective ways to promote abstinence. Future research is needed to identify whether certain types of residents might have less positive outcomes in OHs, as well as better understanding those person–environment matches that either facilitate or impede recovery.

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What Did We Learn from Our Study on Sober Living Houses and Where Do We Go from Here?

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Abstract

Lack of a stable, alcohol and drug free living environment can be a serious obstacle to sustained abstinence. Destructive living environments can derail recovery for even highly motivated individuals. Sober living houses (SLHs) are alcohol and drug free living environments for individuals attempting to abstain from alcohol and drugs. They are not licensed or funded by state or local governments and the residents themselves pay for costs. The philosophy of recovery emphasizes 12-step group attendance and peer support. We studied 300 individuals entering two different types of SLHs over an 18 month period. This paper summarizes our published findings documenting resident improvement on measures of alcohol and drug use, employment, arrests, and psychiatric symptoms. Involvement in 12-step groups and characteristics of the social network were strong predictors of outcome, reaffirming the importance of social and environmental factors in recovery. The paper adds to our previous reports by providing a discussion of implications for treatment and criminal justice systems. We also describe the next steps in our research on SLHs, which will include: 1) an attempt to improve outcomes for residents referred from the criminal justice system and 2) a depiction of how attitudes of stakeholder groups create a community context that can facilitate and hinder the legitimacy of SLHs as a recovery modality.

Keywords

Sober Living House; Residential Treatment; Recovery House; Social Model; Communal Living

Introduction

Research continues to document the important role of social factors in recovery outcome (Polcin, Korcha, Bond, Galloway & Lapp, in press). For example, in a study of problem and dependent drinkers Beattie and Longabaugh (1999) found that social support was associated with drinking outcome. Not surprising, the best outcomes were predicted by *alcohol-specific* social support that discouraged drinking. Similarly, Zywiak, Longabaugh and Wirtz (2002) found that clients who had social networks with a higher number of abstainers and recovering alcoholics had better outcome 3 years after treatment completion. Moos and Moos (2006) studied a large sample of 461 treated and untreated individuals with alcohol use disorders over a 16 year period to examine factors associated with relapse. They found that social support for recovery was important in establishing sustained abstinence. Finally, Bond, Kaskutas and Weisner (2003) reached a similar conclusion in a 3-year follow up

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study on 655 alcohol dependent individuals who were seeking treatment. Abstinence from alcohol was associated with social support for sobriety and involvement in Alcoholics Anonymous.

A critically important aspect of one's social network is their living environment. Recognition of the importance of one's living environment led to a proliferation of inpatient and residential treatment programs during the 1960' and 70's (White, 1998). The idea was to remove clients from destructive living environments that encouraged substance use and create new social support systems in treatment. Some programs created halfway houses where clients could reside after they completed residential treatment or while they attended outpatient treatment. A variety of studies showed that halfway houses improved treatment outcome (Braucht, Reichardt, Geissler, & Bormann, 1995; Hitchcock, Stainback, & Roque, 1995; Milby, Schumacher, Wallace, Freedman & Vuchinich, 2005; Schinka, Francis, Hughes, LaLone, & Flynn, 1998).

Despite the advantages of halfway houses, there are limitations as well (Polcin & Henderson, 2008). First, there is typically a limit on how long residents can stay. After some period of time, usually several months, residents are required to move out whether or not they feel ready for independent living. A second issue is financing the houses, which often includes government funding. This leaves facilities vulnerable to funding cuts. Finally, halfway houses require residents to have completed or be involved in some type of formal treatment. For a variety of reasons some individuals may want to avoid formal treatment programs. Some may have had negative experiences in treatment and therefore seek out alternative paths to recovery. Others may have relapsed after treatment and therefore feel the need for increased support for abstinence. However, they may want to avoid the level of commitment involved in reentering a formal treatment program. Sober living houses (SLHs) are alcohol and drug free living environments that offer peer support for recovery outside the context of treatment.

Characteristics of Sober Living Houses

Sober Living Houses are structured in a way that avoids some of the limitations of halfway houses. The essential characteristics include: 1) an alcohol and drug free living environment for individuals attempting to abstain from alcohol and drugs, 2) no formal treatment services but either mandated or strongly encouraged attendance at 12-step self-help groups such as Alcoholics Anonymous (AA), 3) required compliance with house rules such as maintaining abstinence, paying rent and other fees, participating in house chores and attending house meetings, 4) resident responsibility for financing rent and other costs, and 5) an invitation for residents to stay in the house as long as they wish provided they comply with house rules (Polcin & Henderson, 2008).

SLHs have their origins in the state of California and most continue to be located there (Polcin & Henderson, 2008). It is difficult to ascertain the exact number because they are not formal treatment programs and are therefore outside the purview of state licensing agencies. However, in California many SLHs are affiliated with coalitions or associations that monitor health, safety, quality and adherence to a peer-oriented model of recovery, such as the California Association of Addiction Recovery Resources (CAARR) or the Sober Living Network (SLN). Over 24 agencies affiliated with CAARR offer clean and sober living services. The SLN has over 500 individual houses among it membership.

While some SLHs use a “strong manager” model where the owner or manager of the house develops and enforces the house rules, contemporary SLH associations such as CAARR and SLN emphasize a “social model approach” to managing houses that empowers residents by providing leadership position and forums where they can have input into decision making

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(Polcin & Henderson, 2008). Some houses have a "residents' council," which functions as a type of government for the house.

Recovery Philosophy in Sober Living Houses

Central to recovery in SLHs is involvement in 12-step mutual help groups (Polcin & Henderson, 2008). Residents are usually required or strongly encouraged to attend meetings and actively work a 12-step recovery program (e.g., obtain a sponsor, practice the 12 steps, and volunteer for service positions that support meetings). However, some houses will allow other types of activities that can substitute for 12 step groups, provided they constitute a strategy for maintaining ongoing abstinence.

Developing a social network that supports ongoing sobriety is also an important component of the recovery model used in SLHs. Residents are encouraged to provide mutual support and encouragement for recovery with fellow peers in the house. Those who have been in the house the longest and who have more time in recovery are especially encouraged to provide support to new residents. This type of "giving back" is consistent with a principle of recovery in 12-step groups. Residents are also encouraged to avoid friends and family who might encourage them to use alcohol and drugs, particularly individuals with whom they have used substances in the past (Polcin, Korcha, Bond, Galloway & Lapp, in press).

Purpose

There are several primary aims for this paper. First is to summarize key outcomes from our study, "An Evaluation of Sober Living Houses," which was a 5- year study funded by the National Institute on Alcohol Abuse and Alcoholism (NIAAA) (i.e., Korcha, Polcin, Bond & Galloway, 2010; Polcin, 2009; Polcin & Henderson, 2008; Polcin, Korcha, Bond & Galloway, 2010; Polcin, Korcha, Bond & Galloway, in press; Polcin, Korcha, Bond, Galloway & Lapp in press). Second is to expand on these findings by considering potential implications of our research for inpatient and outpatient treatment and for criminal justice systems. Third is to describe the next steps in our research on SLHs. These include plans to study the community context of SLHs by examining attitudes of community stakeholder groups (e.g., neighbors, local government officials, mental health therapists, criminal justice professionals and practitioners in substance abuse treatment programs). We also describe plans to conduct studies of resident subgroups, such as individuals referred from the criminal justice system.

Data Collection Sites

The study was designed to assess outcomes for 300 individuals entering two types of SLHs: 1) Options Recovery Services (ORS) in Berkeley, California was an adapted model of SLHs in that the houses were associated with an outpatient treatment program. 2) Clean and Sober Transitional Living (CSTL) in Sacramento County, California consisted of freestanding houses that were not affiliated with any type of treatment. The descriptions of CSLT and ORS that follow are summaries of Polcin and Henderson (2008), Polcin (2009) and Polcin, Korcha, Bond, Galloway & Lapp (in press).

Clean and Sober Transitional Living (CSTL)

CSLT is located in Sacramento County California and consists of 16 houses with a 136 bed capacity. Residency at CSTL is divided into two phases. Phase I lasts 30 to 90 days and is designed to provide some limits and structure for new residents. Residents must agree to abide by a curfew and attend at 12-step meetings five times per week. The purpose of these

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requirements is to help residents successfully transition into the facility, adapt to the SLH environment, and develop a stable recovery program.

The second phase allows for more personal autonomy and increased responsibility for one's recovery. Curfews and requirements for 12-step attendance are reduced. All residents, regardless of phase, are required to be active in 12-step recovery programs, abide by basic house rules, and abstain from alcohol and drugs. A “Resident Congress” consisting of current residents and alumni helps enforce house rules and provides input into the management of the houses. Although the owner/operator of the houses is ultimately responsible, she/he defers to the Residents Congress as much as possible to maintain a peer oriented approach to recovery. In order to be admitted to CSTL prospective residents must have begun some type of recovery program prior to their application.

Options Recovery Services (ORS)

ORS is an outpatient substance abuse treatment program located in Berkeley, California that treats approximately 800 clients per year. Most of the clients are low income and many have history of being homeless at some point in their lives. Because a large number do not have a stable living environment that supports abstinence from alcohol and drugs, ORS developed SLHs where clients can live while they attend the outpatient program. Currently there are 4 houses with 58 beds. The houses are different from freestanding SLHs, such as those at CSTL, because all residents must be involved in the outpatient program. Most residents enter the houses after residing in a short term homeless shelter located near the program. At admission, nearly all residents are eligible for some type of government assistance (e.g., general assistance or social security disability) and use those funds to pay SLH fees. To help limit social isolation and reduce costs residents share bedrooms. Like other SLH models of recovery, residence are free to stay as long as they wish provide they comply with house rules (e.g., curfews, attendance at 12-step meetings) and fulfill their financial obligations. Also like other SLH models, each house has a house manager who is responsible for ensuring house rules and requirements are followed. ORS does not have any type of Residents Council, but house managers meet regularly with the executive director and have input into operation of the SLHs in during these contacts.

Procedures

Participants were interviewed within their first week of entering a sober living house and again at 6-, 12-, and 18-month follow up. To maximize generalization of findings, very few exclusion criteria were used and very few residents declined to participate. Primary outcomes consisted or self report measures of alcohol and drug use. Secondary outcomes included measures of legal, employment, medical, psychiatric and family problems. Some measures assessed the entire 6 months between data collection time points. Others, such as the Addiction Severity Index, assessed shorter time periods of 30 days or less.

Measures

1) Demographic Characteristics—included standard demographic questions such as age, gender, ethnicity, marital status, and education.

2) Addiction Severity Index Lite (ASI)—The ASI is a standardized, structured interview that assesses problem severity in six areas: medical, employment/support, drug/alcohol, legal, family/social and psychological (McLellan et al., 1992). Each of the six areas is scored for 0 (low) to 1 (high).

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3) Psychiatric symptoms—To assess current psychiatric severity we used the Brief Symptom Inventory (Derogatis & Melisaratos, 1983). This 53-item measure assesses severity of psychiatric symptoms on nine clinical scales as well as three global indices. Items are rated on a 5-point scale and ask about symptoms over the past 7 days. We used the Global Severity Index (GSI) as an overall measure of psychiatric severity.

4) Six month measures of alcohol and drug use—These measures were taken from Gerstein et al. (1994) and labeled Peak Density and 6-month abstinence. *Peak Density* is the number of days of any substance use (i.e., any alcohol or drug) during the month of highest use over the past 6 months (coded 0-31). *Six-month abstinence* was a dichotomous yes/no regarding any use of alcohol of drugs over the past 6 months.

5) Arrests—This measure was taken from Gerstein et al. (1994) and was defined as number of arrests over the past 6 months.

Two additional measures were included as covariates because they assess factors emphasized by as important to recovery in SLHs.

6) Alcoholics Anonymous Affiliation Scale—This measure includes 9 items and was developed by Humphreys, Kaskutas and Weisner (1998) to measure the strength of an individual's affiliation with AA. The scale includes a number of items beyond attendance at meetings, including questions about sponsorship, spirituality, and volunteer service positions at meetings.

7) Drinking and drug use status in the social network—These measures were taken from the Important People Instrument (Zywiak, et al., 2002). The instrument allows participants to identify up to 12 important people in his or her network whom they have had contact with in the past six months. Information on the type of relationship (e.g., spouse, friend), amount of contact over the past 6 months (e.g., daily, once or twice a week) and drug and alcohol use over the past 6 months (e.g., heavy user, light user, in recovery) was obtained for each person in the social network. The drinking status of the social network was calculated by multiplying the amount of contact by the drinking pattern of each network member, averaged across the network. The same method is applied to obtain the drug status of the network member; the amount of contact is multiplied by the pattern of drug use and averaged across network members.

Hypotheses

Hypotheses suggested that we would find two types of longitudinal outcomes: 1) Individuals entering the houses with higher severity of problems would show significant improvement between baseline and 6 months and those improvements would be maintained at 12 and 18 months and 2) Individuals entering houses with low severity would maintain low severity at all follow up time points. It was expected that measures of social support for sobriety and 12-step involvement would be associated with primary outcomes.

The study design used repeated measures analyses to test how study measures varied over time. Because the two types of houses served residents with different demographic characteristics, we conducted disaggregated longitudinal analyses for each. For a more complete description of the study design and collection of data see Polcin et al. (2010), Polcin et al. (in press) and Polcin, Korcha, Bond, Galloway and Lapp (in press).

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Data Collection

At CSTL we recruited 245 individuals within their first week of entering the houses. Most were men (77%), white (72.5%) and middle age (mean=38, se=0.65). Over 75% had at least a high school education or GED. The most common referral source was self, family or friend (44%) followed by criminal justice (29%) and inpatient treatment (15%). Over a third (35%) of the sample indicated that jail or prison had been their usual housing situation over the past 6 months and few reported any type of stable housing over the past 6 months. Just 7% reported renting an apartment as their primary housing, while 23% reported staying with family or friends and 12% reported homeless as their primary living situation

ORS had 4 houses, where we recruited 55 participants. Most were African American (59%), while 30% were white. The mean age was 43 years (se=1.2). Most residents had completed high school or a GED (73%). Nearly half of the residents had been self referred of referred by family or friends. About 24% were criminal justice referrals and a third had spent some time in a controlled environment during the month before entering the house. Many of the residents had histories of homelessness. When asked to indicate their usual housing situation the past six months, a third indicated homeless or in a shelter.

Follow up rates for CSLT were 72% at 6 months, 71% at 12 months ad 73% at 18 months. However, 89% of the sample (N=218) participated in at least one follow up interview. The proportions successfully followed up at ORS were similar at 12 and 18 months (76% and 71% respectively) but higher at 6 months (86%). To address the issue of missing data from individuals who we were not able to locate for follow up interviews, we used analytic methods that did not require participants to complete 0interviews at all time points to be include in the analysis. These included generalized estimated equations (GEE) and mixed model regressions. In addition, when we compared baseline characteristics of individuals successfully located and interviewed with those lost at follow up we did not find significant differences. However, individuals who we were not able to follow up did have shorter lengths of stay in the SLHs.

Main Findings

Detailed descriptions of analytic methods and statistical results have been reported in Polcin, Korcha, Bond, & Galloway (2010), Polcin Korcha, Bond, & Galloway (in press), and Polcin Korcha, Bond, Galloway & Lapp (in press). Our purpose here is to summarize the most salient and relevant findings for SLHs as a community based recovery option. We then expand on the findings by considering potential implications of SLHs for treatment and criminal justice systems. We also include a discussion of our plans to study the community context of SLHs, which will depict how stakeholder influences support and hinder their operations and potential for expansion.

Retention

Retention of residents in the sober living houses was excellent. Average lengths of stay in both types of sober living houses surpassed the National Institute on Drug Abuse recommendation of at least 90 days to obtain maximum benefit. The average length of stay at ORS was 254 days (se=169 days) and at CSLT it was 166 days (se=163).

Primary Outcomes

As hypothesized, there were two patterns of outcome for our primary outcome variables. One pattern was that residents reduced or stopped their substance use between baseline and 6 month follow up and then maintained those improvements at 12 and 18 months. This was the case for both substance use measures that assessed 6 month period of time: 1) complete

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abstinence over the 6 months and 2) maximum number of days of any substance use during the month of highest use. For example, at ORS 6-month abstinence rates improved from 11% at baseline to 68% at 6- and 12-months. At 18 months abstinence was a bit lower, (46%) but still significantly better than the time period before they entered the houses. For CSLT, abstinence improved from 20% at baseline, to 40% at 6 months, 45% at 12 months and 42% at 18 months. Maximum number of days of use per month at ORS on average declined from 19 days per month at baseline, to 3 days at 6 months, 4 days at 12 months and 7 days at 18 months. CSLT declined from 19 days at baseline, to 11 days at 6 months, 9 days at 12 months and 13 days at 18 months.

Findings on the ASI alcohol and drug scales measuring the past 30 days reflected different patterns. At CSLT, residents entered with low alcohol (mean=0.16, se=0.02) and drug (mean=0.08, se=0.01) severity. Because severity was low there was limited room to improve on these measures. Nevertheless, we found significant improvement at 6 months for both alcohol (mean=0.10, se=0.02) and drug (mean=0.05, se=0.01). Those improvements were maintained at 12 and 18 months. At ORS, residents entered with even lower alcohol (mean=0.07, se=0.02) and drug (mean=0.05, se=0.01) severity that was maintained at 6, 12 and 18 month follow up. Potential reasons for low alcohol and drug severity at baseline included large proportions spending some time in a controlled environment during the 30 days before they entered the houses. In addition, many residents had begun working on a recovery program shortly before they entered the houses (e.g., attending 12-step meetings). In fact, the ORS program typically required 30 days of abstinence before being eligible to enter the residence.

It was noteworthy that a wide variety of individuals in both programs had positive outcomes. There were no significant differences within either program on outcomes among demographic subgroups or different referral sources. In addition, it is important to note that residents were able to maintain improvements even after they left the SLHs. At 12 months 68% had left ORS and 82% had left CSLT. By 18 months nearly all had left, yet improvements were for the most part maintained.

Secondary Outcomes

There were also improvements noted on the secondary outcome measures. At CSTL these included improvements on employment, psychiatric symptoms, and arrests. The pattern was again significant improvement between baseline and 6 months that was generally maintained at 12 and 18 months. The percent arrested 6 months pre-baseline was 42%, which dropped to 26% at 6-month follow up and 22% at 12 months. There was a light increase at 18 months (28%), which was still significantly lower than pre-baseline. Employment severity on the ASI improved from a mean of 0.76(se=0.02) at baseline to a mean of 0.53(se=0.02) at six months. At 12 months the mean was 0.54(se=0.03), which increased only slightly at 18 months (mean=0.59, se=0.02). Psychiatric symptoms improved from a mean of 0.83(se=0.05) at baseline to 0.69(se=0.05) at 6 months. By 18 months there was a bit of an increase (mean=0.72, se=0.06), which was no longer statistically significant but was still a statistical trend ($p<.10$).

At ORS there were similar patterns of improvement on employment and arrests. From baseline to 6 months the average score on the ASI employment scale improved from 0.61 (se=0.02) to 0.51 (se= 0.03) and was maintained at 12 and 18 months. The odds of being arrested were reduced from baseline to 6 months by 80% and even further reduced at 12 and 18 months.

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Factors that Predicted Outcome

In addition to documenting longitudinal outcomes, we were interested in assessing factors that predicted outcomes. Using GEE models that assessed a variety of factors across data collection time points we found involvement in 12-step groups to be the strongest predictor of our primary outcomes. For CSLT, 12-step involvement was associated with being abstinent for at least 6 months ($p<.001$), lower maximum days of substance us per month ($p<.001$, and fewer arrests ($p<.01$). For ORS, 12-step involvement was associated with abstinent for at least 6 months ($p<.05$), lower maximum days of substance us per month ($p<.01$), and lower ASI legal severity ($p<.05$).

We also examined how drinking and drug use in the participant's social network related to outcomes. At CSLT we found heavier drinking and drug use in the social network was related to worse outcome on all alcohol and drug outcome measures ($p<.01$ for all variables). At ORS the findings were mixed. There was a significant relationship between maximum number of days of substance use per month and drinking in the social network ($p<.05$) and drug use in the social network ($p<.01$). However, there were no significant relationships between social network variables and abstinence. In addition, for the ASI alcohol and drug scales at ORS, the only significant association with social network variables was heavier drug use in the social network predicting ASI alcohol outcome ($p<.01$).

In a recent analysis of CSTL residents we looked at psychiatric severity as a predictor of alcohol and drug outcome using growth curve models (Korcha et al (2010). We found that a subgroup of about a third of the residents had significantly higher psychiatric severity than other residents and had significantly worse outcomes. Our work on identifying and describing these residents with worse outcome is continuing.

Limitations

There are several limitations to the study that are important to consider. First, we could not directly compare which type of SLH was most effective because there were demographic and other individual characteristics that differed between the two types of houses. Second, individuals self selected themselves into the houses and a priori characteristics of these individuals may have at least in part accounted for the longitudinal improvements. Although self selection can be viewed as a weakness of the research designs, it can also be conceived as a strength, especially for studying residential recovery programs. Our study design had characteristics that DeLeon, Inciardi and Martin (1995) suggested were critical to studies of residential recovery programs. They argued that self selection of participants to the interventions being studies was an advantage because it mirrored the way individuals typically choose to enter treatment. Thus, self selection was integral to the intervention being studied and without self selection it was difficult to argue that a valid examination of the invention had been conducted. In their view, random assignment of participants to conditions was often appropriate for medication studies but often inappropriately applied when used to study residential services for recovery from addiction.

Significance of the Study

Our study represents the first examination of sober living house residents using a longitudinal design. To date, our papers have looked at study findings in terms of the types of improvements residents make and factors associated with outcome, the substance of which has been summarized above. One of our aims here, however, is also to look at significance from the perspective of how SLHs might impact various service systems in the community. The promising outcomes for SLH residents suggest that sober living houses

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might play more substantive roles for persons: 1) completing residential treatment, 2) attending outpatient treatment, 3) seeking non-treatment alternatives for recovery, and 4) entering the community after criminal justice incarceration.

Treatment Systems

The two types of recovery houses assessed in this study showed different strengths and weaknesses and served different types of individuals. Communities and addiction treatment systems should therefore carefully assess the types of recovery housing that might be most helpful to their communities. Several considerations are reviewed below.

Outpatient programs in low income urban areas might find the Options Recovery Services model of SLHs helpful. Relative to the other housing programs, this model was inexpensive and the houses were conveniently located near the outpatient facility. Typically, residents entered these SLHs after establishing some period of sobriety while they resided in a nearby shelter and attended the outpatient program. A significant strength of the Options houses was that residents were able to maintain low alcohol and drug severity at 12-month follow up.

There are several significant advantages of establishing SLHs associated with outpatient treatment as apposed to traditional halfway houses. First, residents in SLHs are free to stay as long as they wish after completing the outpatient program as long as they abide by program rules. This eliminates arbitrary discharge dates determined by the program, a procedure often used by halfway houses to free up beds. Rather, the resident is able to decide when he or she is ready to transition to more independence. Among other things, this eliminates the need to move to questionable living environments that might not support recovery due to time limitations. SLHs are also less costly than halfway houses, which are usually funded by treatment programs.

SLHs combined with outpatient treatment may be especially valuable to resource poor communities that do not have funds to establish residential treatment programs or have the income levels that could support freestanding sober living houses which are more expensive. Most of the rent for the Options SLHs was paid by General Assistance or Social Security Income, so a variety of low income residents could be accommodated. While the level of support is less intensive (and less expensive) than that offered in residential treatment, it is more intensive than the relative autonomy found in freestanding SLHs. Some residents probably benefit from the mandate that they attend outpatient treatment during the day and comply with a curfew in the evening. For some individuals, the limited structure offered by freestanding SLHs could invite association with substance using friends and family and thus precipitate relapse. This could be particularly problematic in poor communities where residents have easy access to substances and people who use them.

Freestanding SLHs

The roles that freestanding SLHs can play in communities are different from SLHs that are associated with outpatient treatment. First, freestanding houses are often used by individuals who have some previous experience with residential treatment. While some of these individuals transition directly from the inpatient program to the SLH, others enter the houses after some post-treatment period in the community. They may slip, relapse or feel vulnerable to relapse, but for a variety of reasons not want to reenter a formal treatment program. Nevertheless, they may feel the need to take action and get support for reestablishing abstinence. Freestanding SLHs can be a good match for these individuals because they offer support for sobriety outside the context of formal treatment.

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Freestanding SLH's offer a limited amount of structure and no formal treatment services. Thus, they are optimal for residents who are capable of handling a fair amount of autonomy and who can take personal responsibility for their recovery. Despite these limitations, CSLT appeared to benefit many different types of residents who were referred from an array of personal and institutional sources (i.e., self, family, criminal justice systems, and inpatient treatment programs). Expansion of freestanding SLHs in communities might therefore ease the burden on overwhelmed treatment systems. In communities that are unable to fund a sufficient number of treatment programs for individuals with substance use disorders, freestanding SLHs might be a clinically and economically effective alternative. The availability of treatment slots for individuals released from jail or prison or particularly lacking. For some those offenders who are motivated for abstinence and capable of handling some degree of autonomy SLHs might be a viable and effective option for recovery that is currently underutilized.

Criminal Justice Systems

Prison and jail overcrowding in the U.S. has reached a crisis point. Each year more than 7 million individuals are released from local jails into communities and over 600,000 are released on parole from prison (Freudenberg, Daniels, Crum, Perkins & Richie, 2005). Although the need for alcohol and drug treatment among this population is high, very few receive services during or after their incarceration. In California, studies show that few offenders being released from state prisons have adequate housing options and in urban areas such as San Francisco and Los Angeles up to a third become homeless (Petersilia, 2003). Housing instability has contributed to high reincarceration rates in California, with up to two-thirds of parolees are reincarcerated within three years. In a study of women offenders released from jails in New York City 71% indicated that lack of adequate housing was their primary concern.

Despite the enormous need for housing among the offender population, SLHs have been largely overlooked as a housing option for them (Polcin, 2006c). This is particularly concerning because our analysis of criminal justice offenders in SLHs showed alcohol and drug outcomes that were similar to residents who entered the houses voluntarily. However, as reviewed elsewhere (i.e., Polcin, 2006c), SLHs need to carefully target criminal justice involved individuals so that they select offenders that have sufficient motivation to remain abstinent and are able to meet their financial obligations.

Where do We go from Here?

There are multiple directions one could go in pursuit of additional research on SLHs. For example, studies comparing different living situations for individuals in early recovery could help highlight the relative strengths and weaknesses of SLHs. In addition, longer follow up time periods could be assessed as well as outcomes for a wider variety of subgroups. These might include minority groups, larger samples of women, and a variety of individual level characteristics not assessed here (e.g., self efficacy and interpersonal skills). However, we have opted to look at two topics that we think are of immediate relevance to communities: 1) documenting and improving outcomes for criminal justice referred residents and 2) understanding the community context within which SLHs operate.

Improving Outcomes for Criminal Justice Referred Residents

Findings from our study suggested that alcohol and drug outcomes for residents referred from the criminal justice system were equivalent to that of voluntary residents. However, offenders did not fare as well as others in two areas: finding and maintaining employment and avoiding arrests. In addition, the numbers of criminal justice referred residents was

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relatively small and an examination of a larger sample of offenders is warranted. Among other things, the larger sample would enable us to identify predictors of outcome among offenders. The field would therefore be better equipped to identify those offenders who are more likely to do well in SLHs.

In addition to studying a larger number of offenders, we hope to explore an innovative intervention designed to improve outcomes for these residents in terms of employment, arrests, and other areas. Toward that end, we are in the process of developing a Motivational Interviewing Case Management (MICM) intervention designed to help offenders successfully transition into SLHs, avoid rearrest by complying with the terms of probation or parole, and succeed in activities that support successful transition into the community (e.g., employment). Our intervention modifies motivational interviewing to address the specific needs of the offender population (Polcin, 2006b). Specifically, it helps residents resolve their mixed feelings (i.e., ambivalence) about living in the SLH and engaging in other community based services. Thus, the intervention is a way to help them prepare for the challenges and recognize the potential benefits of new activities and experiences.

Assessing the Impact of the Community Context

The fact that residents in SLHs make improvement over time does not necessarily mean that SLHs will find acceptance in the community. In fact, one of the most frustrating issues for addiction researchers is the extent to which interventions that have been shown to be effective are not implemented in community programs. We suggest that efforts to translate research into treatment have not sufficiently appreciated how interventions are perceived and affected by various stakeholder groups (Polcin, 2006a). We therefore suggest that there is a need to pay attention to the community context where those interventions are delivered.

As a next step in our research on SLHs we plan to assess how they are viewed by various stakeholder groups in the community, including house managers, neighbors, treatment professionals, and local government officials. Interviews will elicit their knowledge about addiction, recovery, and community based recovery houses such as SLHs. Their perceptions of the strengths and weaknesses of SLHs in their communities should provide data that can be used to modify houses to improve acceptance and expand to serve more drug and alcohol dependent persons. We hypothesize that barriers to expansion of SLHs might vary by stakeholder groups. Different strategies may be needed for those who lack information about SLHs, have beliefs that they are not effective, have allegiances to other treatment approaches, have views that minimize social factors in recovery, and live in communities where public policy hinders expansion of SLHs. Drug and alcohol administrators and operators of houses might therefore need different strategies to address the concerns of different stakeholders.

Conclusion

Many individuals attempting to abstain from alcohol and drugs do not have access to appropriate housing that supports sustained recovery. Our study found positive longitudinal outcomes for 300 individuals living in two different types of SLHs, which suggests they might be an effective option for those in need of alcohol- and drug-free housing. Improvements were noted in alcohol and drug use, arrests, psychiatric symptoms and employment. Owners and operators of SLHs should pay attention to factors that predicted better alcohol and drug outcomes, including higher involvement in 12-step meetings, lower alcohol and drug use in the social network, and lower psychiatric severity. Although criminal justice referred residents had alcohol and drug use outcomes that were similar to other residents, they had a harder time finding and keeping work and had higher rearrest rates. Areas for further research include testing innovative interventions to improve criminal

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justice outcomes, such as Motivational Interviewing Case Management (MICM) and examining the community context of SLHs. Recognizing stakeholder views that hinder and support SLHs will be essential if they are to expand to better meet the housing needs of persons suffering from alcohol and drug disorders.

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