ORDINANCE 2024-3

AN ORDINANCE AMENDING THE PLEASANT VIEW CITY GENERAL PLAN TRANSPORTATION MASTER PLAN, IMPACT FEE FACILITIES PLAN AND IMPACT FEE ANALYSIS.

WHEREAS, Pleasant View City desired to amend its General Plan by adding the Transportation Master Street Plan;

WHEREAS, Pleasant View City desired to add an Transportation Impact Fee Facilities Plan and along with the Impact Fee Analysis;

WHEREAS, Pleasant View City finds that such an amendments and associated fees are in the best interest of the City and promotes the health, safety and general welfare of residents; and

WHEREAS, The Pleasant View City Planning Commission made a positive recommendation for approval of this General Plan Transportation Master Plan.

NOW THEREFORE, Be it hereby ordained:

SECTION ONE: The Pleasant View City General Plan Transportation Master Plan, Impact Fee Facilities Plan and Impact Fee Analysis as part of the General Plan is hereby adopted as follows in 'Exhibit A', 'Exhibit B' and 'Exhibit C' attached:

ATTACHMENTS
'Exhibit A' - Transportation Master Plan, Parametrix, 2023
'Exhibit B' - Transportation Impact Fee Facilities Plan, Parametrix, 2023
'Exhibit C' - Transportation Impact Fee Analysis (Draft), Zions Public Finance, Inc., 2023 *(draft to be replaced with final)*

SECTION TWO: This ordinance shall take effect immediately upon approval and posting.

DATED this 23rd day of January 2024.

PLEASANT VIEW CITY, UTAH

Leonard M. Call, Mayor

Attest:

Laurie Hellstrom, City Recorder

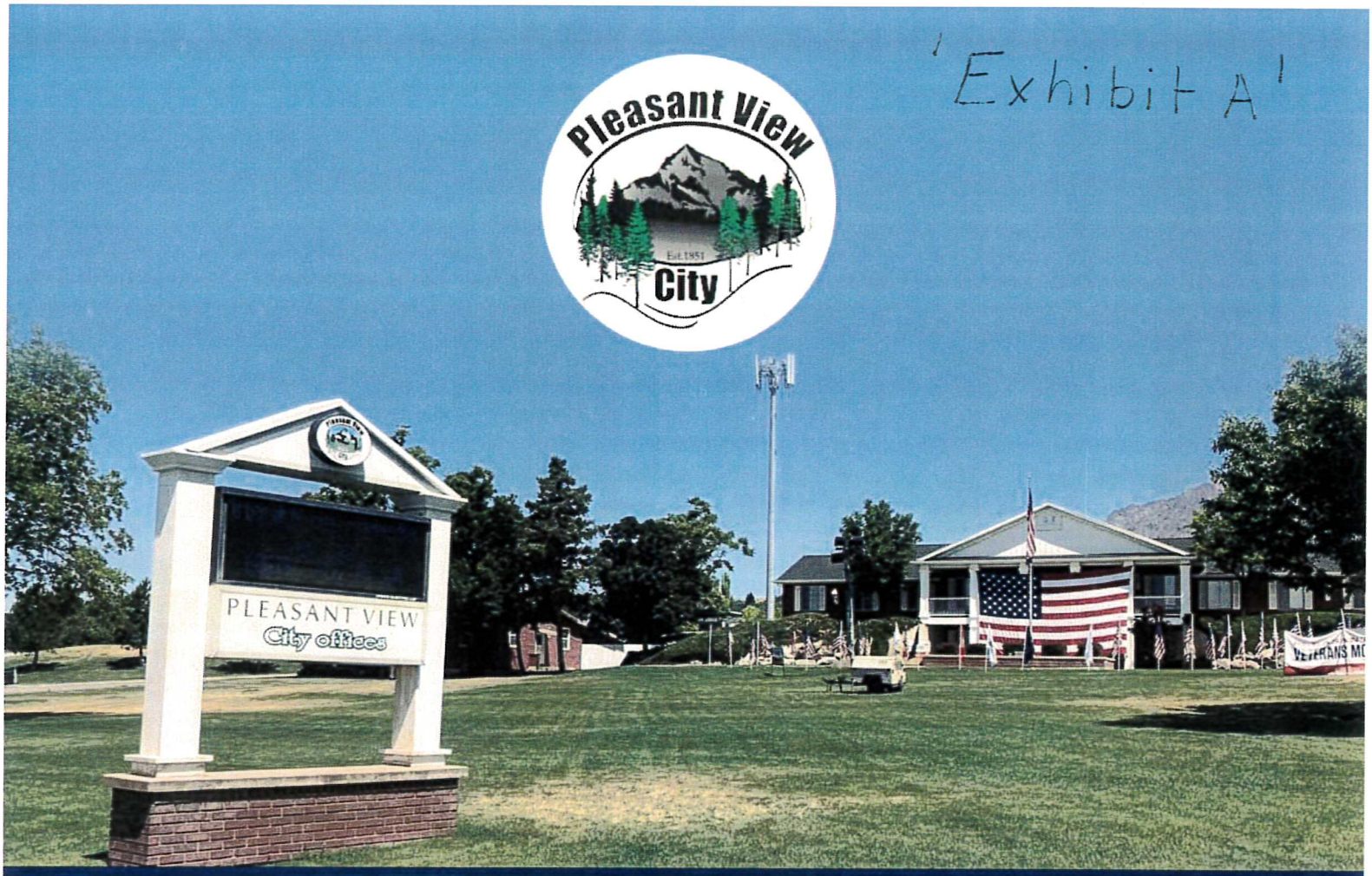
Posted this 25th day of January 2024

This ordinance has been approved by the following vote of the Pleasant View City Council:

CM Arrington	Yes
CM Gibson	No
CM Marriott	Yes
CM Nelsen	Absent
CM Urry	Yes

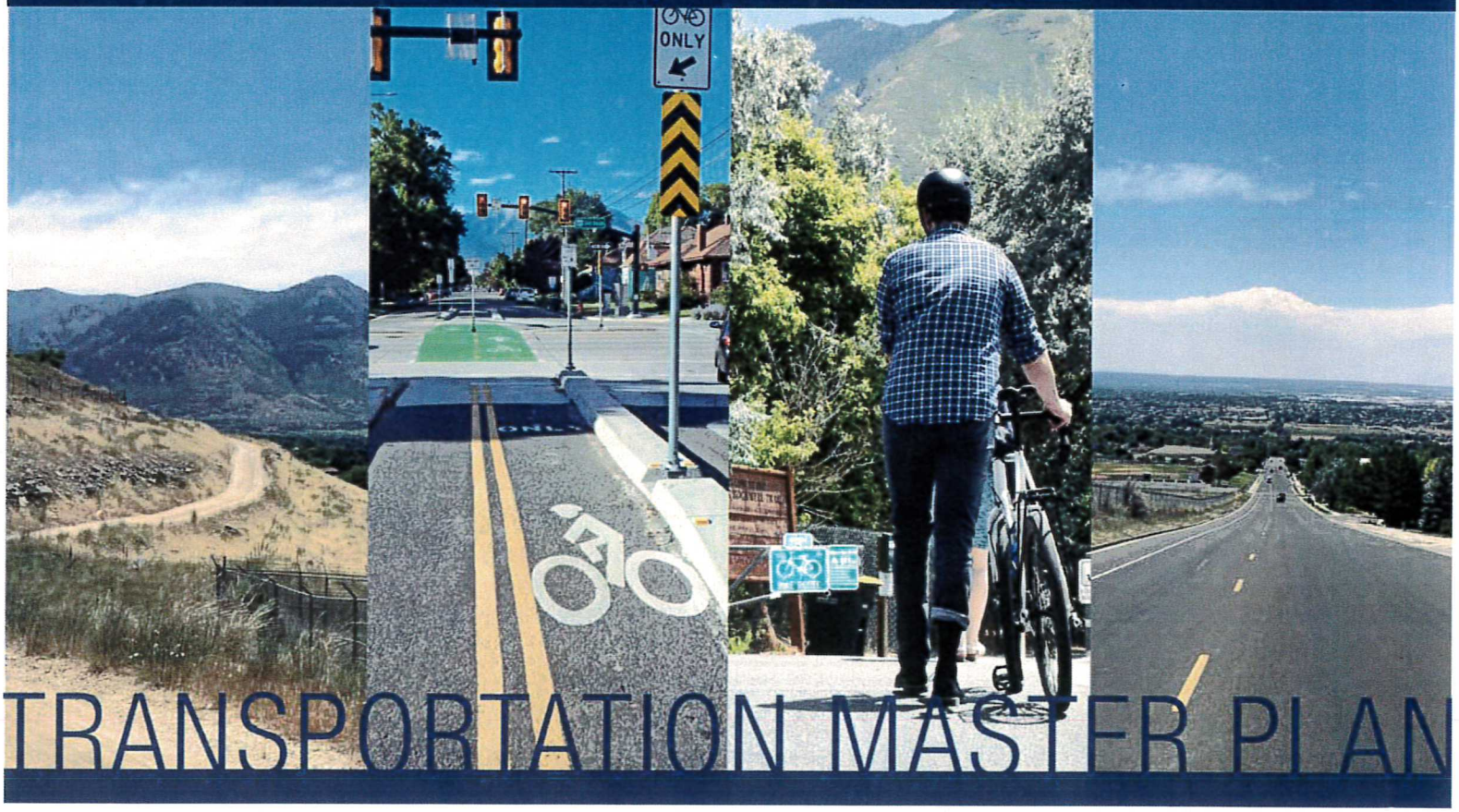
PLEASANT VIEW CITY INCORPORATED Seal WEBER COUNTY, UTAH

'Exhibit A'



2023 Transportation Master Plan

December 2023

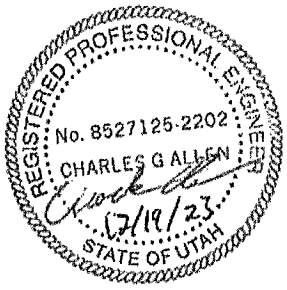


TRANSPORTATION MASTER PLAN

Transportation Master Plan

Prepared for

Pleasant View City
520 West Elbert Drive
Pleasant View, UT 84414



Prepared by

Parametrix
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Salt Lake City, UT 84123
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December 2023 | 344-8684-001

TABLE OF CONTENTS

TABLE OF CONTENTS (CONTINUED)

TABLE OF CONTENTS (CONTINUED)

LIST OF FIGURES

TABLE OF CONTENTS (CONTINUED)

LIST OF TABLES

APPENDIX

ACRONYMS

AASHTO	American Association of State Highway and Transportation Officials
ACS	American Community Survey
AADT	Average Annual Daily Traffic
CFP	Capital Facilities Plan
LOS	Level of Service
MAG	Mountainland Association of Governments
MPH	Miles Per Hour
MUTCD	Manual on Uniform Traffic Control Devices
RTP	Regional Transportation Plan
S.R.	State Route
TAZs	Traffic Analysis Zones
TRB	Transportation Research Board
UDOT	Utah Department of Transportation
U.S.	United States
USBR	United States Bike Route
UTA	Utah Transit Authority
WFRC	Wasatch Front Regional Council

1. INTRODUCTION

The purpose of the Pleasant View Transportation Master Plan is to create a transportation plan that maintains its identity as a community with a small-town feel, while effectively managing an increasing need for transportation infrastructure. This plan responds to current and future demands on the City's vehicular transportation systems while retaining safe and active streets for active, non-motorized travel. This plan has been organized into six main sections which cover the components of the transportation plan, including: existing conditions, future conditions, vehicle network recommendations, railroad crossing analysis, active transportation recommendations, and a final capital facilities plan.

1.1 Planning Process

Pleasant View City contracted with Parametrix to develop a comprehensive transportation plan, with elements for vehicular and active transportation improvements. Major efforts to create this plan began in November of 2021.

Coordination between city staff and Parametrix was key to the process. Frequent internal coordination meetings occurred as well as email and phone communication. This coordination was to ensure that the development of the plan was on course and on schedule. The meetings hosted key discussions on all aspects of the plan including: population and employment forecasts, street alignments and cross-sections, maintenance, plan phasing and long-term funding solutions for projects.

1.1.1 Stakeholder Interviews

In order to produce a successful plan that follows the general direction of the region and meets the needs of the city, a series of stakeholder interviews and meetings were conducted. The city and its consultants completed interviews towards the beginning of the project in alignment with the existing conditions analysis.

- Regional Partners: WFRC, UDOT Planning, UDOT Region 1, Weber County, March 2, 2022
- Weber School District, June 16, 2022
- Trails foundation of Northern Utah, March 8, 2022
- City of Harrisville, March 16, 2022
- Farr West City, March 9, 2022
- North Ogden, May 31, 2022

1.1.2 Area Focused Stakeholder Meeting

An area focused stakeholder meeting was held on Monday, August 22, 2022, to engage property and business owners of the industrial area that is west of U.S. 89. This provided an opportunity to engage property owners as the area is presently developing, in addition to addressing challenges due to proximity to Highway 89 and the railroad right of way. The consultant team and city staff presented draft plans for the area to attendees and took feedback. Attendees were encouraged to visit the project website and fill out the community survey.

1.1.3 Public Event

In August 2022, the project team set up a series of display boards at a weekly food truck event in the park. The materials presented included the proposed vehicle network, active transportation network, street cross-sections, and phased project maps. This enabled Pleasant View residents, particularly those who might not be civically engaged otherwise, to review the proposed plan, ask questions, and interact with city staff. Participants were encouraged to provide feedback using a survey that was available in online and hardcopy form. The relaxed environment, supplemented with dinner, enabled a large number of residents to review the proposed plan and interact. There were dozens of people who interacted at the public event, including local developers, Planning Commissioners and City Council Members. Overall sentiments were very positive about the proposals when expressed verbally.

1.1.4 Community Survey and Public Comment

Online and hardcopy surveys enabled the general public and open house participants to provide feedback on the materials presented during the open house. A copy of the survey is located in the Appendix. Five total responses to the survey were received. To receive feedback about specific facilities, online interactive maps enabled participants to connect their comments to a specific location in Pleasant View. A statistically valid analysis of feedback is not feasible given the limited number of responses. However, general sentiments can be gleaned from these results.

Two online maps enabled feedback on the proposed vehicle and active transportation networks to be linked to specific locations.

1.1.4.1 Proposed Vehicle Network

Individuals feel positive about the network and that the quantity of new roads is sufficient. When asked what phrases describe the network, the most commonly selected were "promotes a good quality of life," "improves access to destinations in Pleasant View," and "improves safety.

Some of the verbal discussions included comments about improving the quality of existing roads. This is something that has been particularly challenging with funding and staffing availability, but nonetheless the feedback is helpful in understanding that transportation facility maintenance is a priority amongst residents. Priorities were also provided in this dialogue.

1.1.4.2 Active Transportation Network

General sentiments about the active transportation network were mixed to very positive. The most common phrases used to describe the network were "more multi-use trails are needed" and "promotes a good quality of life." Participants varied in sentiments from there being enough to too few bike lanes in the proposed network.

Three comments were received on the active transportation network map. One comment spoke very favorably of multi-use trails and said that improvements and possibly paving the canal trail should be

moved to a higher priority. The second comment asked if the multi-use pathway on Elberta Drive would be the same as Pleasant View Drive and wondered what impact it might have on speed limits. The third comment felt that multi-use pathways were the most effective way to address safety issues that resulted in the deaths of two bicyclists. This comment spoke favorably about having a new route (4300 North) out of the community and that the speed limits on 500/600 West should be studied due to being too slow.

1.1.4.3 Roadway Cross-Sections

Bike lanes in different configurations had the highest levels of support out of the cross-section elements. There were few elements of a cross-section that were opposed.

2. EXISTING CONDITIONS

2.1 Demographics

As of the 2020 Census, there were 11,083[1] residents living in Pleasant View. The population has grown by 43% over the past decade, as shown in Figure 1. This population is characterized by a relatively low poverty rate of 6.1 percent, (Weber County: 9.7%, State of Utah: 9.3%) and a more aged population than comparable communities with a median age of 35.2 (Weber County: 32.7 State of Utah: 30.8)[2].

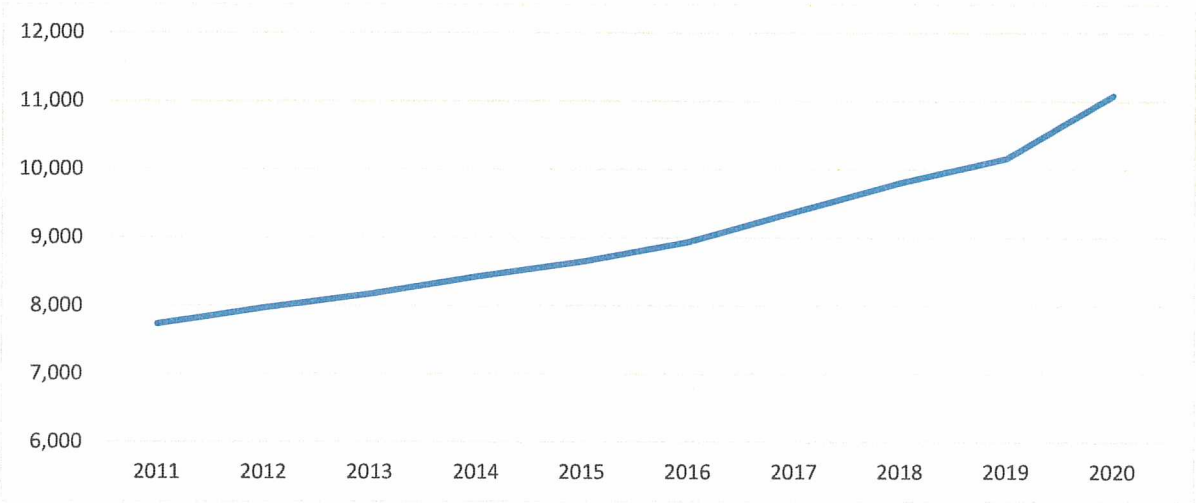


Figure 1– Pleasant View Population 2011-2020

The City's racial and ethnic makeup is primarily White, non-Hispanic, with this group making up 81.9 percent of the population. Hispanic or Latino is the largest minority group, comprising 12.7 percent of the population. While the largest non-Hispanic racial minority is Asian at 3.7 percent[3].

Census data also reveals interesting information regarding the trip to work. Table 1 and Table 2 show the means of transportation to work and vehicles available respectively. Rates of driving alone are on par with Weber County, and slightly higher than the statewide average. Rates of walking and bicycling to work are very low, with less than one percent walking and zero percent bicycling. This is consistent with information on vehicles available to residents, with only 0.9 percent without access to a vehicle and over 90 percent with access to two or more vehicles. Rates of working from home are relatively high at 7.4 percent.

Table 3 shows information on travel time to work. The mean travel time to work at 22.9 minutes is consistent with the County and State, while travel times of less than 10 minutes are relatively low at 10.8 percent.

[1] US Census, 2020 Decennial Census
[2] US Census, 2019 American Community Survey
[3] US Census, 2019 American Community Survey

TABLE 1 – Means of Transportation to Work	Pleasant View City	Weber County	Utah
Car, truck, or van	89.1%	90.0%	86.8%
Drove alone	80.9%	80.2%	76.0%
Carpooled	8.2%	9.7%	10.8%
in 2-person carpool	4.6%	7.3%	8.1%
in 3-person carpool	2.7%	1.4%	1.5%
in 4-or-more person carpool	0.9%	1.0%	1.2%
Workers per car, truck, or van	1.06	1.06	1.07
Public transportation (excluding taxicab)	2.6%	1.7%	2.4%
Walked	0.7%	1.3%	2.5%
Bicycle	0.0%	0.5%	0.7%
Taxicab, motorcycle, or other means	0.2%	1.2%	1.0%
Worked from home	7.4%	5.4%	6.6%
Source: US Census, 2019 American Community Survey			

TABLE 2 – Vehicles Available	Pleasant View City	Weber County	Utah
No vehicle available	0.9%	2.5%	1.7%
1 vehicle available	5.6%	14.3%	13.7%
2 vehicles available	35.4%	36.8%	38.8%
3 or more vehicles available	58.1%	46.5%	45.8%
Source: US Census, 2019 American Community Survey			

TABLE 3 – Travel Time to Work	Pleasant View City	Weber County	Utah
Less than 10 minutes	10.8%	13.7%	16.4%
10 to 14 minutes	17.3%	17.1%	16.4%
15 to 19 minutes	16.0%	20.7%	17.9%
20 to 24 minutes	14.2%	17.1%	15.7%
25 to 29 minutes	13.3%	6.2%	6.7%
30 to 34 minutes	13.6%	9.1%	11.4%
35 to 44 minutes	2.6%	4.0%	5.3%
45 to 59 minutes	5.7%	5.4%	5.4%
60 or more minutes	6.5%	6.8%	4.7%
Mean travel time to work (minutes)	22.9	22.6	21.9
Source: US Census, 2019 American Community Survey			

2.2 Existing Facilities

2.2.1 Pedestrian Network

An inventory of sidewalks in Pleasant View was performed using aerial imagery. The results of the inventory are displayed in the map in Figure 2. The inventory identifies roadways that have sidewalks on both sides of the pavement, one side of the pavement, no sidewalks, and is restricted to pedestrian traffic. S.R. 134/2600 North is the only major east-west corridor that crosses the city and has consistent sidewalks on both sides of the street. U.S. 89, on the other hand, has no sidewalks north of S.R. 134 and on only one side to the south. Newer developments tend to feature sidewalks on both sides of the street.

Other streets that link the different neighborhoods of Pleasant View—such as Pleasant View Drive, 1000 West, 900 West, 600 West, and 500 West—all have sidewalks on only one side or intermittently on both. A segment of Pleasant View Drive between 1100 West and Evergreen Drive has no sidewalks. This inconsistency can create a challenge to pedestrian mobility and discourage walking to neighborhood destinations such as church or school. When confronted with a dead-end sidewalk, pedestrians must choose to walk on the shoulder next to the travel lane or cross to a sidewalk on the other side of the street, if available. Depending on traffic volumes or speeds, this can be a hazardous choice for pedestrians. Sidewalk consistency can be improved if connectivity is linked to roadway expansion or maintenance projects.

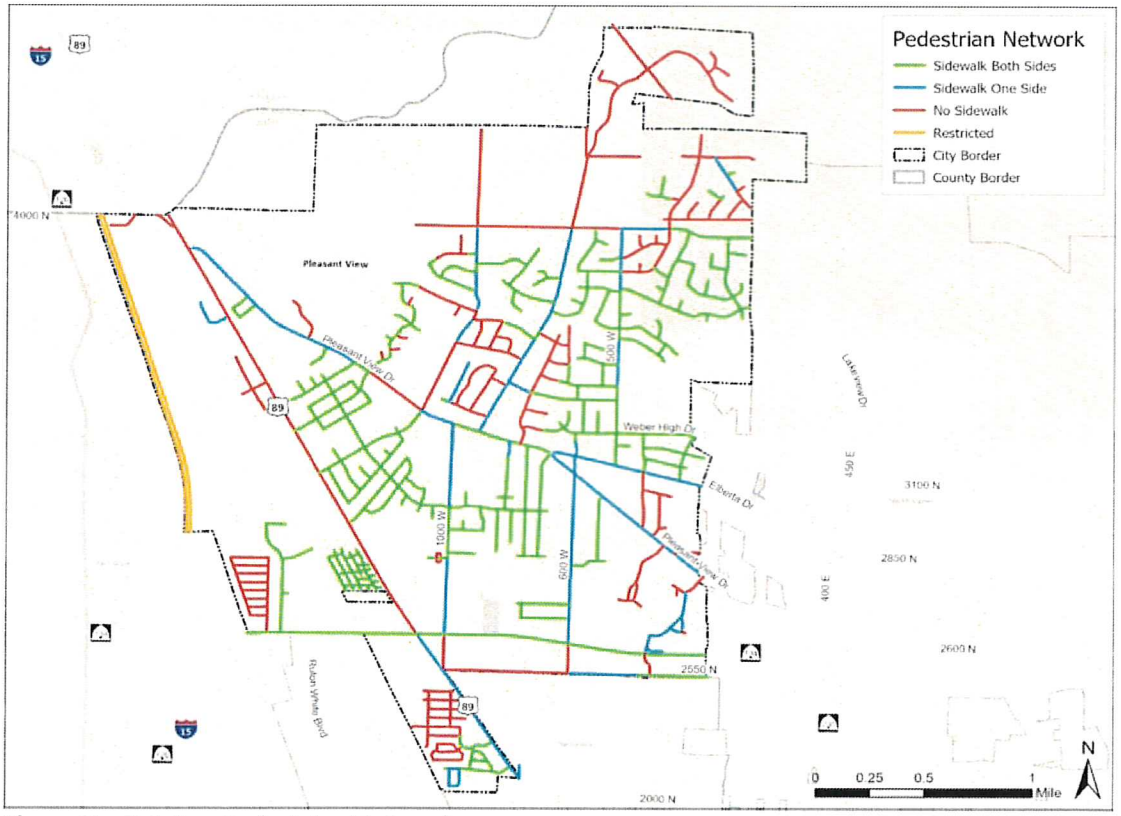


Figure 2 – Existing Pedestrian Network

2.2.2 Bicycle Network

The bicycle network in Pleasant View, shown in Figure 3, is currently fragmented and limited in scope. A segment of Pleasant View Drive and 600 West have an on-street bicycle lane. The unpaved canal trail is the lone option for east-west connectivity across the city. Additional trails link the northern neighborhoods to the trails on the mountainside above the city. Bicycle riders must currently choose between riding on the sidewalk or in the travel lane. Only proficient bicyclists accustomed to riding with vehicle traffic can ride on roads in most of the city. If it is a goal to increase the appeal of bicycling to a larger segment of the population, a more comprehensive network of different bicycle facility types will be required. In addition to dedicated bicycle infrastructure, U.S. Bike Route (USBR) 77 is designated through the city along Pleasant View Drive.

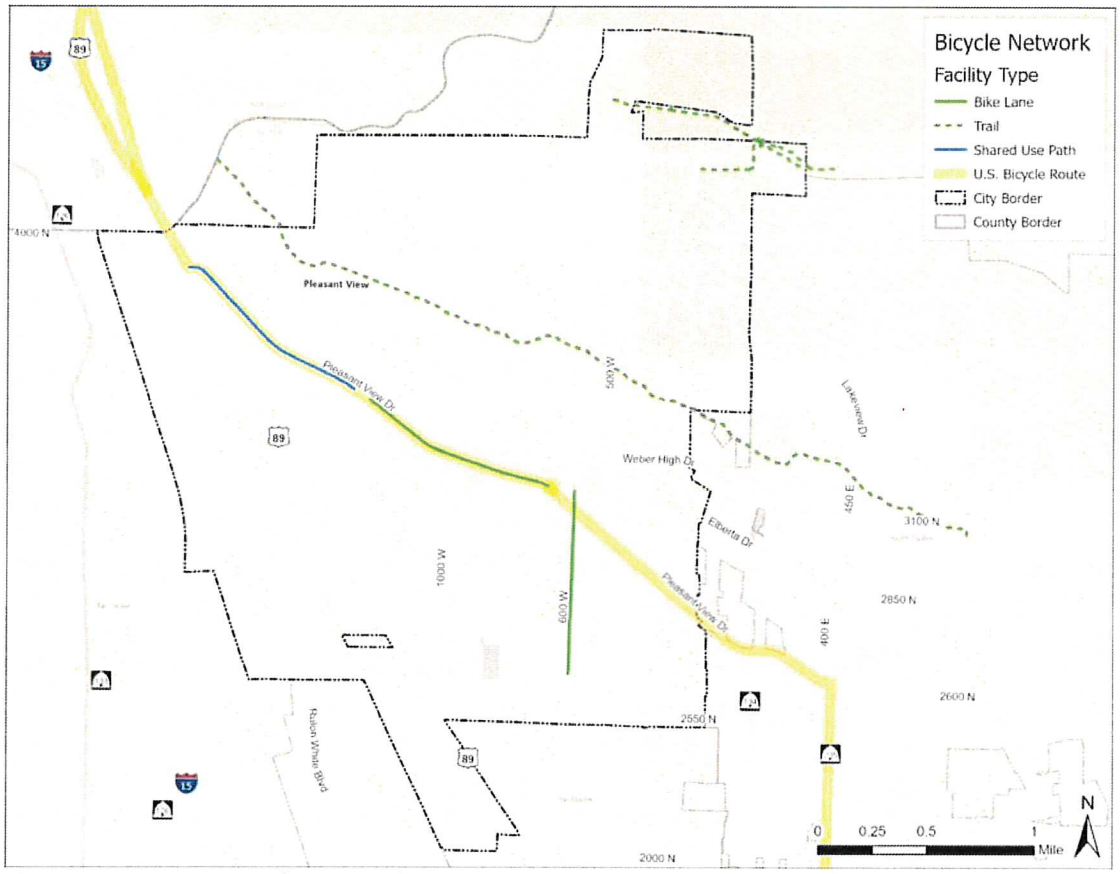


Figure 3 – Existing Bicycle Network

2.2.3 Vehicle Network

Figure 4 shows the existing vehicle network by functional classification. Prominent major arterials within the city include U.S. 89 running north to south along the west of the city and 2700 North that runs east to west along the southern city boundary. Interstate 15 runs along the western edge of the city with interchanges just outside city limits both to the north and south. Pleasant View drive provides the primary access through the center of the city as a minor arterial running diagonally from the northwest to the southeast. A system of collector streets connects major facilities and provide access to neighborhoods throughout the city.

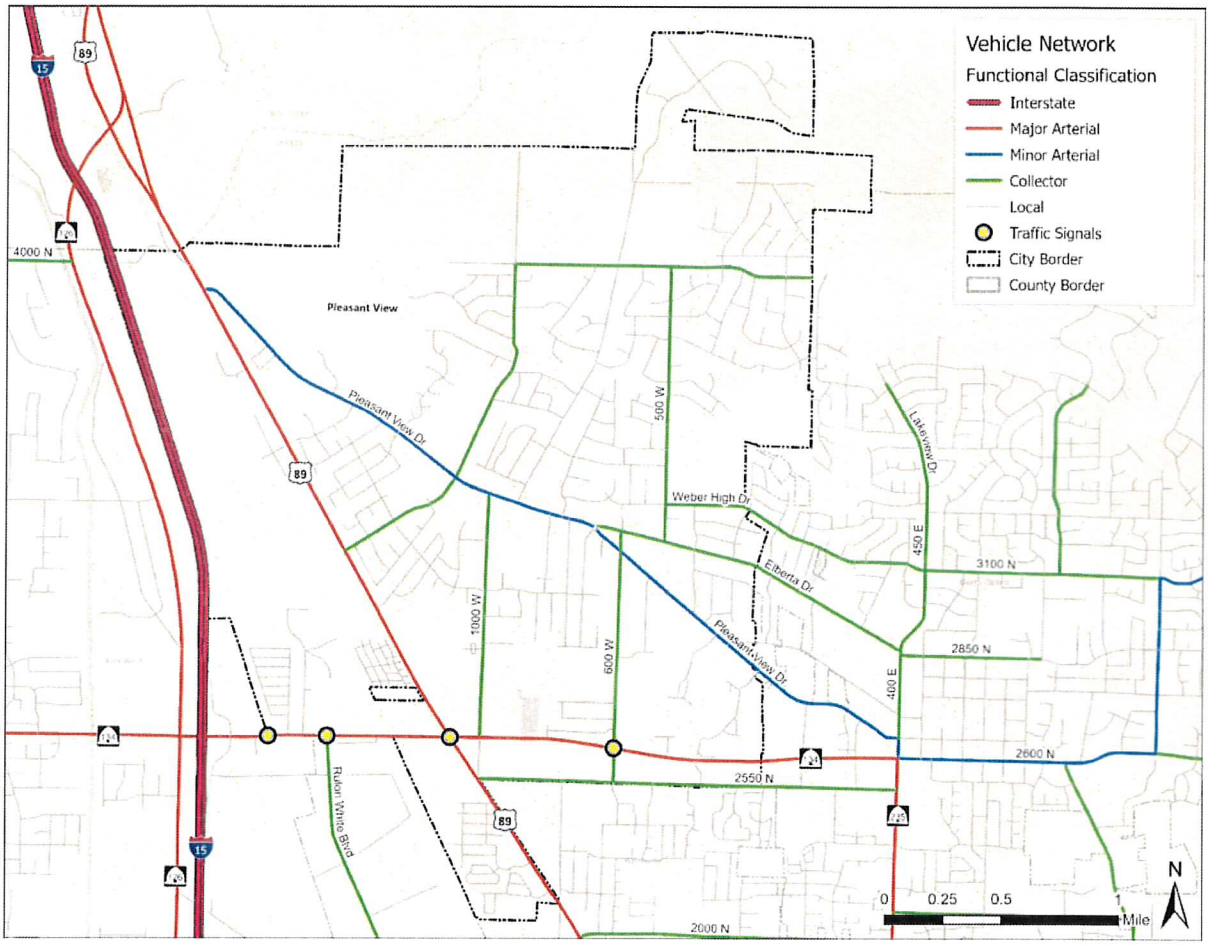


Figure 4 – Existing Vehicle Network

2.2.4 Transit Network

Figure 5 shows existing transit service within and adjacent to the city. Utah Transit Authority (UTA) service within the city is currently limited to route 630. With 30-minute headways, the route travels through Pleasant View along U.S. 89, connecting Brigham City to Ogden Station. Routes 613 and 612 provide service adjacent to the city, with Route 613 touching the southwestern city boundary. Route 613 connects a Park and Ride location on 2700 North, just outside the city limits, to Ogden Station and Route 612 connects North Ogden to South Ogden.

Service to the Pleasant View FrontRunner station was suspended indefinitely in 2018 due to cost limitations and challenges in coordinating rail use with Union Pacific, limited service resulting in low ridership, and new federal requirements that would be costly to implement from Ogden to Pleasant View.

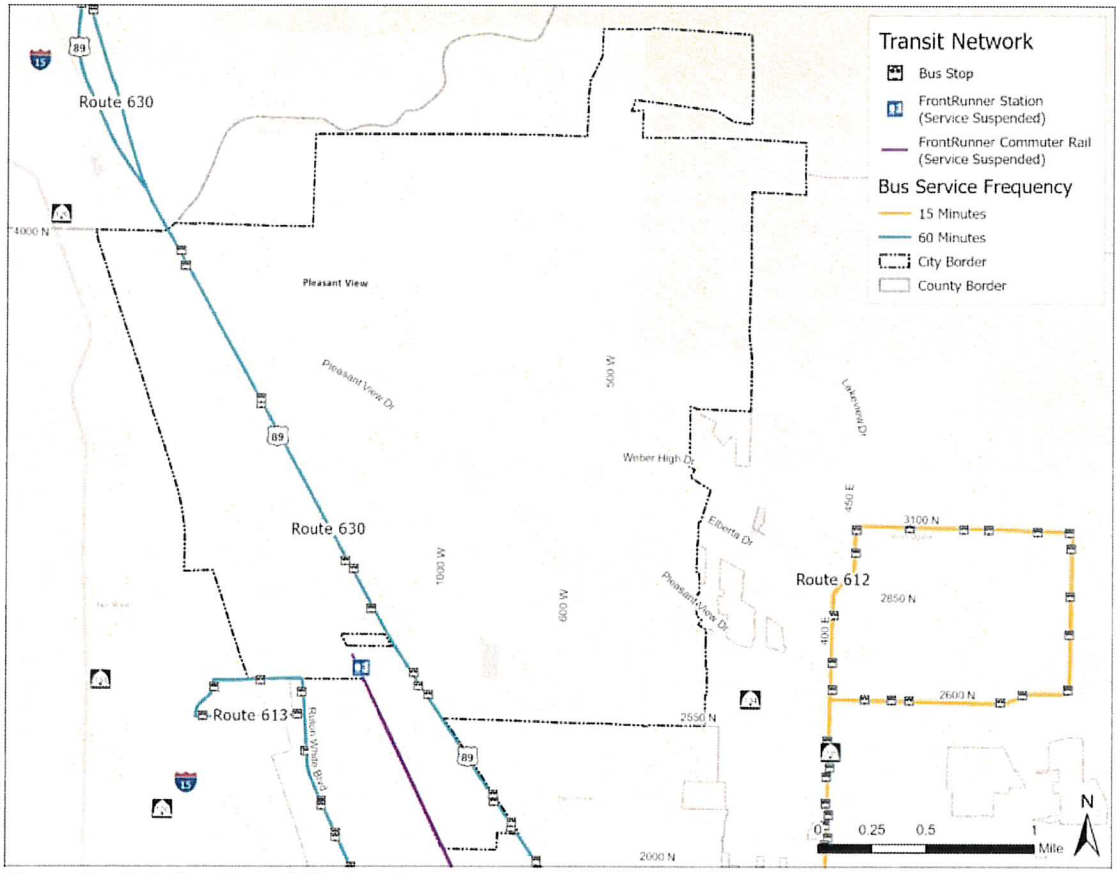


Figure 5 – Existing Transit Network

2.3 Traffic

2.3.1 Utah Department of Transportation (UDOT) Traffic on Utah Highways

UDOT establishes Average Annual Daily Traffic Volumes (AADT) for all State and Federal Aid roads. The latest year of published data is 2019 and is shown in Figure 6. Not including I-15, the most heavily trafficked roadway in the city is 2700 North, peaking at 28,000 AADT. Elsewhere throughout the city, volumes consistently stay below 10,000 AADT with other prominent corridors being U.S. 89 and Elberta Drive.

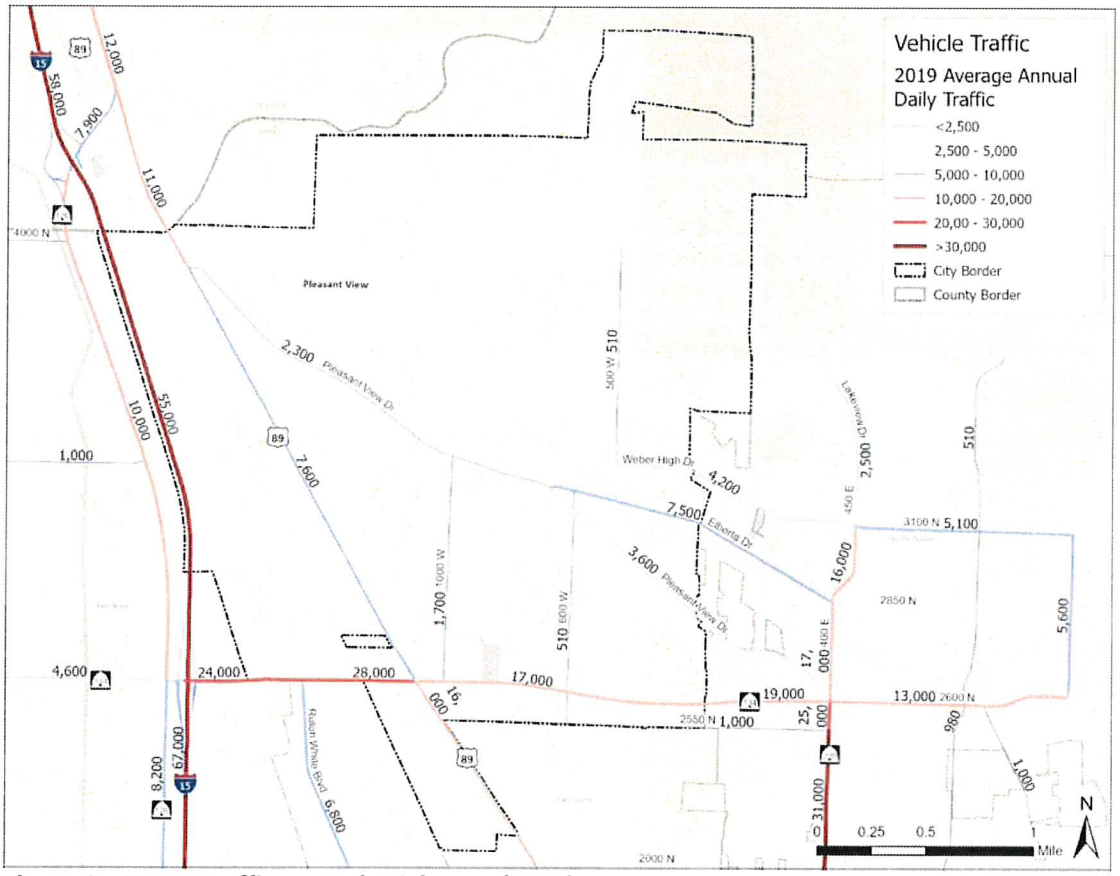


Figure 6 – UDOT Traffic on Utah Highways (2019)

2.3.2 Traffic Counts

Traffic counts were collected at ten locations throughout the city, shown in Figure 7. The counts were collected on January 27, through February 3, 2022, from 4:00 p.m. to 6:00 p.m., to establish PM peak hour. Detailed count summaries for each location with turn movements are found in the Appendix.

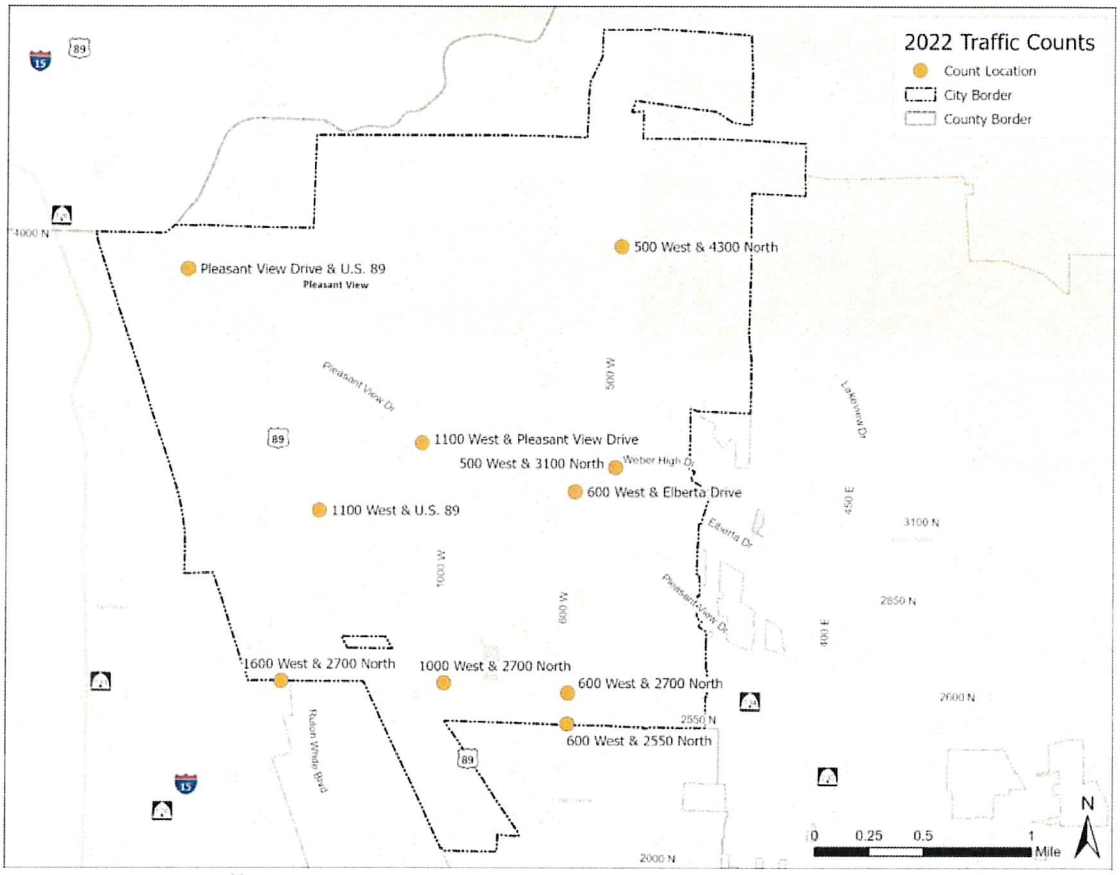


Figure 7 – 2022 Traffic Count Locations

2.3.3 Existing Volume and Level of Service

Figure 8 below shows the daily traffic volumes derived from the traffic counts collected in 2022 and UDOT AADT. Where duplicative, the new traffic count information supersedes UDOT AADT in Figure 8. Additionally, a level of service (LOS) analysis was performed based on these volumes and existing roadway capacities.

Level of service is a measure used to rate the quality of traffic service. LOS is determined by categorizing traffic flow and assigning quality levels of traffic based on performance measures such as speed, travel lanes, truck traffic, etc. Utah's Unified Transportation Plan states that "LOS standards for urban areas are typically 'D' or better while LOS standards for rural areas are typically 'C' or better." In keeping with a desire to uphold a rural feel within Pleasant View, the City has opted to maintain LOS C. Level of service standards are defined in the American Association of State Highway and Transportation Officials (AASHTO), A Policy on Geometric Design of Highways and Streets, 2011 (6th Edition) where LOS C is defined by traffic levels which represent "stable flow." This level can be measured by methods

included in the Transportation Research Board (TRB), Highway Capacity Manual HCM2010, October 2010.

Existing LOS throughout the city is well below capacity. Apart from 600 South, which currently is at 50% - 75% capacity, all city streets are below 50% capacity. UDOT's 2700 North, west of U.S. 89, is beginning to approach capacity at this threshold.

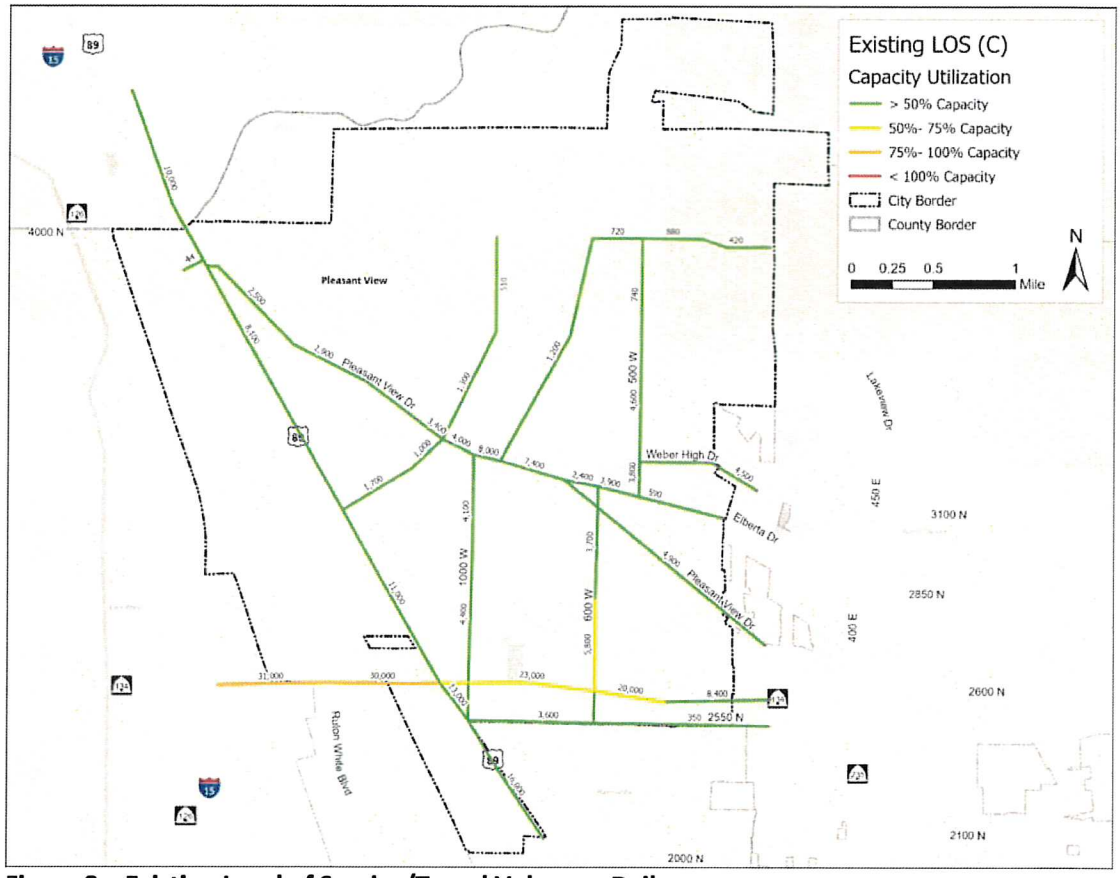


Figure 8 – Existing Level of Service/Travel Volumes, Daily

2.4 Activity

Activity data is derived from the trips recorded by users of a GPS-based smartphone app called Strava. This app is popular with recreational and competitive bicyclists, hikers and runners to track their training progress. Although this group of users tends to be comfortable riding on busier roadways than more casual bicyclists, their presence can indicate the frequency of use of certain routes.

2.4.1 Bicycle Trips

Figure 9 shows the bicycle trips recorded within the city during 2021. Pleasant View Drive is the most popular road within the city. Off-road, the Bonneville Shoreline Trail also experiences relatively high usage. Other corridors of note include U.S. 89, 600 West, and Weber High Drive.

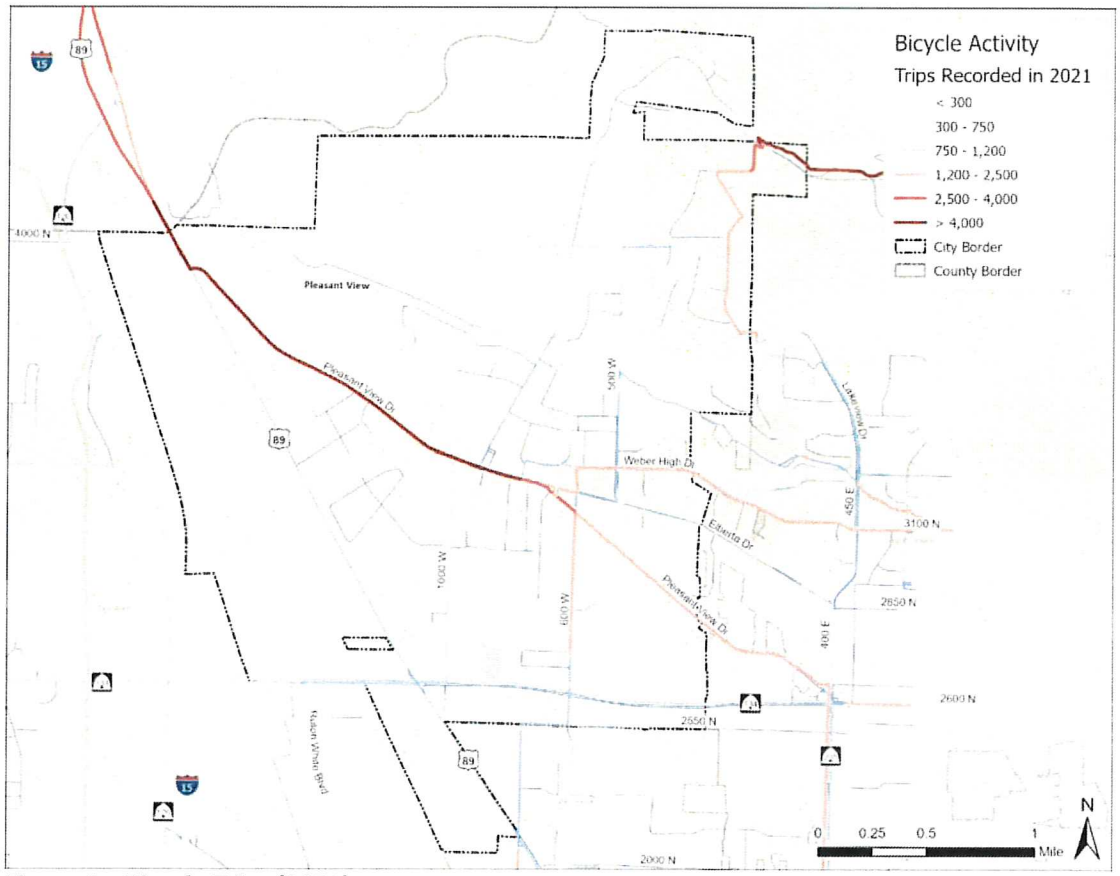


Figure 9 – Bicycle Trips (2021)

2.4.2 Pedestrian Trips

Figure 10 shows the recorded run, walk, and hike trips in 2021. The most popular place to log these activities within the city is the canal trail. Central and eastern Pleasant View Drive is also a popular corridor. Heading eastward exiting the city, the Bonneville Shoreline Trail and Weber High Drive are also popular.

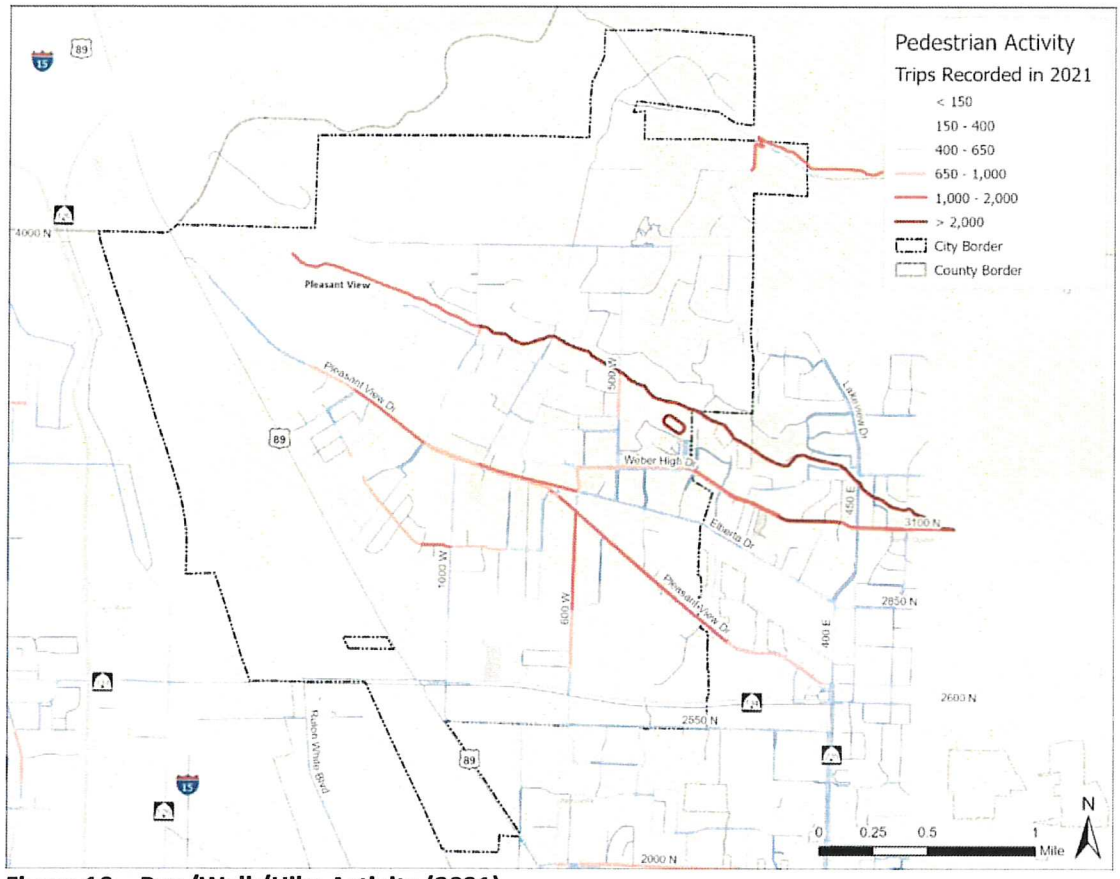


Figure 10 – Run/Walk/Hike Activity (2021)

2.5 Existing Plans

Two existing plans at the local and regional levels involve transportation improvements within Pleasant View. The Wasatch Front Regional Council's (WFRC) 2019 Regional Transportation Plan (RTP) principally envisions transportation projects that improve the connections between Pleasant View and neighboring communities. WFRC's RTP outlines the next 30-years of transportation improvement projects for roads, transit, and active transportation. These corridor-wide as well as point projects are broken into three ten-year phases. Additional projects that do not yet have identified funding sources are also displayed in an "unfunded" phase: only present in Figure 11. As time progresses and unique circumstances arise, projects can be accelerated a phase nearer to the present.

Meanwhile, Pleasant View's Master Streets Plan—adopted in 2017—primarily focuses on improving street connectivity and vehicle mobility within the city's borders.

2.5.1 Roadway Projects

2.5.1.1 WFRC's 2019-2050 RTP

Figure 11 shows the planned roadway projects of WFRC's 2019-2050 RTP. Phase 1 of the RTP proposes an extension of Skyline Drive to U.S. 89, creating a new east-west connection across the city. The alignment of the Skyline Drive extension is currently being investigate by the city and will likely not follow that shown in Figure 10. Also, corridor preservation will occur to establish a future northern connection to Box Elder County. It is worth noting, that this project does not yet have a phase for the construction of this link.

Phase 2 contains a grade-separation of the railroad tracks at 2700 North. Operational improvements on I-15 will improve mobility between Pleasant View and destinations to the south.

Finally, Phase 3 contains a new north-south roadway between the U.S. 89/Skyline Drive intersection and 2700 North. These improvements will continue south with a widening project to add additional travel lanes. Crossing that project is a new east-west connection across I-15 from 3300 North to U.S. 89. 2550 North is also planned to include additional travel lanes. Although outside of city boundaries, the I-15/S.R. 126 interchange is slated for improvements that will improve mobility for Pleasant View.

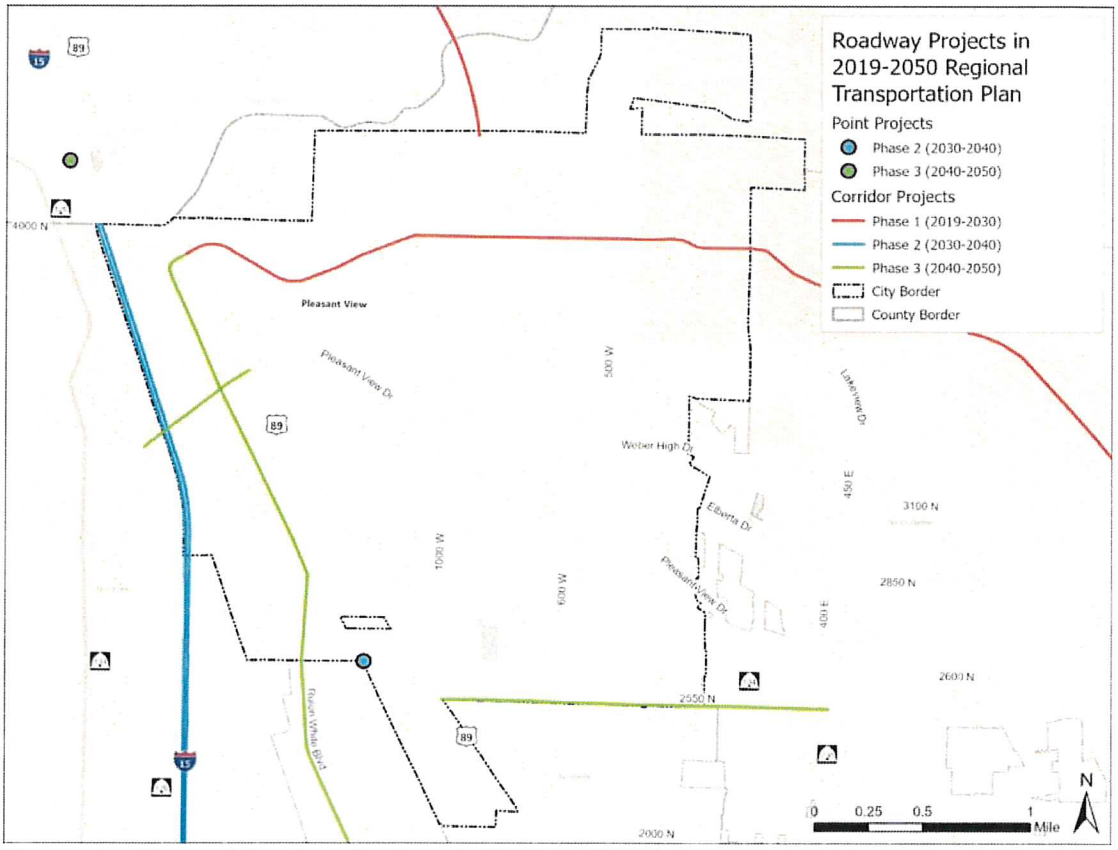


Figure 11 – Planned Roadway Projects in 2019-2050 RTP

2.5.1.2 Pleasant View's Master Street Plan

Pleasant View City's 2017 Master Street Plan is displayed in Figure 12 and proposes new roadway connections as well as spot improvements. To the east of U.S. 89, the plan details a new minor arterial, a

minor collector, and an array of smaller local streets. The minor collector is proposed to span the gap between 4600 North and 4300 North. The smaller local streets are proposed to further improve neighborhood connections between larger roadways and subdivisions.

The minor arterial—proposed to connect 4300 North to U.S. 89, I-15, and S.R. 126—will establish a new, major east-west connection in Pleasant View. The roadway would involve two new traffic signals and a grade separated crossing at the Union Pacific Railroad. Greater coordination will be required with WFRC to reconcile these proposed freeway interchanges. The RTP plans improvements to the S.R. 126 interchange located just north of the border with Box Elder County, see Figure 12, while the local plan proposes a new northern interchange within Pleasant View boundaries. It is uncertain if the latter would supplant the former or if these are in fact the same project displayed in different locations.

Between U.S. 89 and I-15, the city is proposing a network of minor arterials and major collectors to serve the proposed economic development slated for the area. A new minor arterial is planned to connect 1100 West to the I-15 frontage road and a new intersection on S.R. 134 near 1700 West. A new major collector will intersect this minor arterial, providing a northern link to 1325 West. Several other major collectors are proposed to run parallel to the west of U.S. 89, improving north-south mobility. Between the proposed interchange and S.R. 134 there are three planned roadways that will need to cross the railroad tracks.

Union Pacific Railroad policy requires a community to close three at-grade crossings before opening a new one. Hence, unless these roadways are proposed to include costly grade separated bridges, the viability of the proposed facilities in this area will require additional study.

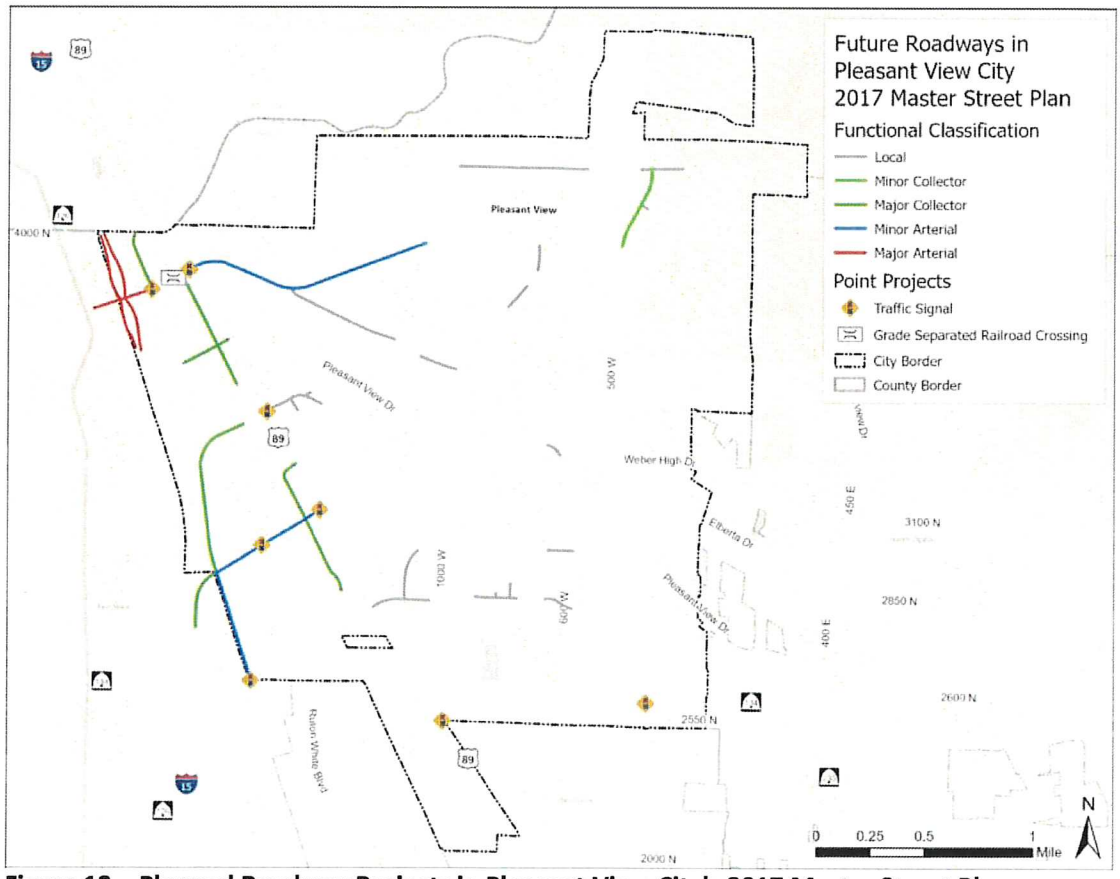


Figure 12 – Planned Roadway Projects in Pleasant View City's 2017 Master Street Plan

2.5.1.3 Active Transportation Projects

Figure 13 displays the AT projects proposed in the RTP. In Phase 1 a new bike lane is planned to connect the east side of Pleasant View to North Ogden Canyon Boulevard.

Phase 2 includes a new shared used path at approximately 4000 North connecting U.S. 89 and 2000 West and including a grade separated crossing at I-15. Another shared-use path is planned to be added near Pleasant View Drive that improves connections to North Ogden. Bike lanes are planned to be added to the following roadways:

- U.S. 89
- 2600/2700 North
- 2550 North
- Rulon White Boulevard/Parkland Boulevard
- 1100 West

Finally, the regional Bonneville Shoreline Trail is planned to be extended, crossing a portion of Pleasant View and establishing another connection to Box Elder County.

Phase 3 includes a bike lane planned for Skyline Drive, establishing a northern east-west AT connection across the city to U.S. 89.

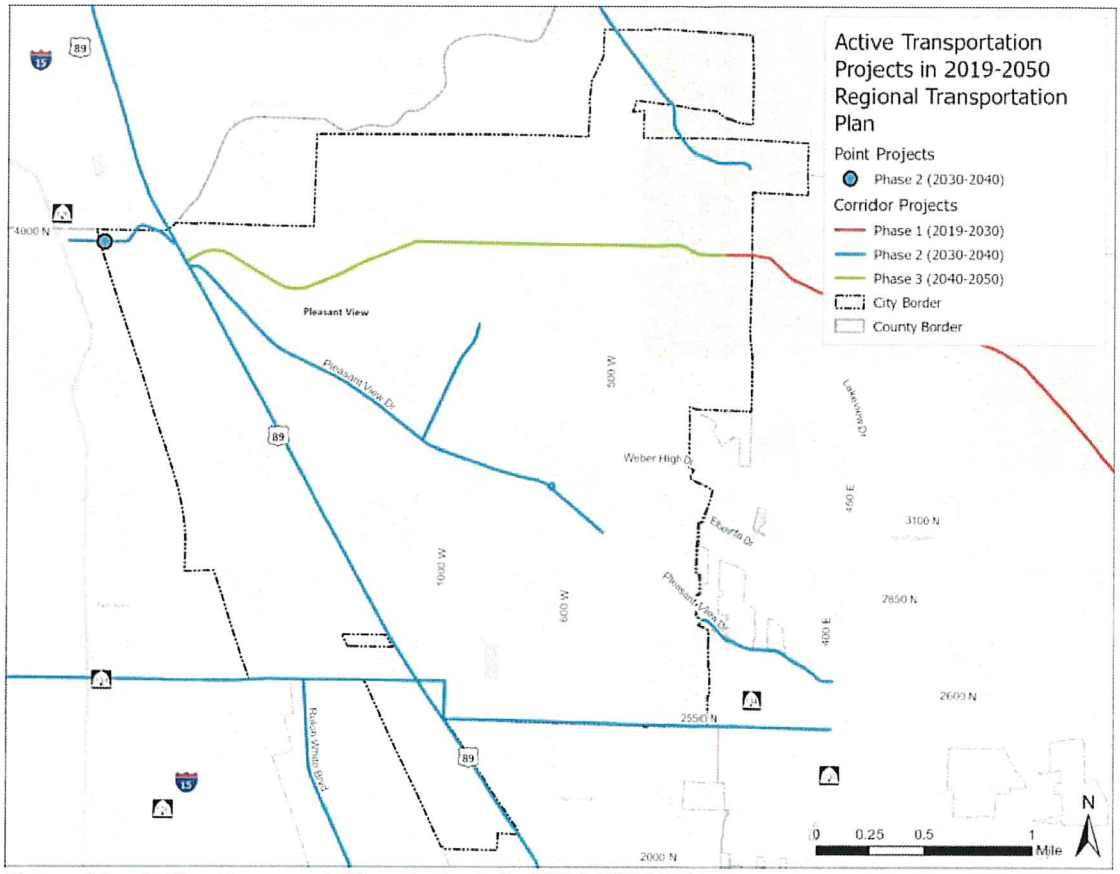


Figure 13 – Active Transportation Projects in 2019-2050 RTP

2.5.1.4 U.S. Bicycle Route 77

The recently designated U.S. Bicycle Route (USBR) 77 connects the Idaho border to the town of Torrey and USBR 90. The route passes through Pleasant View entering the city from the north along U.S. 89, forks east onto Pleasant View Drive where it eventually exits the city. The USBR network utilizes existing AT routes as well as roadways conducive to bicycling to provide contiguous, signed routes across the state and eventually the country. Although USBR 77 designation does not involve specific project recommendations, the network will be further strengthened by any AT projects implemented along the route. Furthermore, the route designation has the potential to provide new economic development opportunities to communities that provide services and amenities for route users.

2.5.2 Transit Projects

Although FrontRunner Commuter Rail service to Pleasant View was discontinued in 2018, many projects in the RTP are designed to eventually restore this service and improve bus connections to destinations beyond the city. These proposed facilities are displayed in Figure 14. This includes the following projects across three actionable phases from 2030 to 2050.

- Corridor preservation for FrontRunner from Pleasant View to Brigham City as well as to Ogden Station. This will accommodate the planned addition of a second FrontRunner track to the Weber County portion of the system, enabling more frequent service. Finally, a
- High frequency bus that departs every 15 minutes is planned to improve connections between Pleasant View, other communities along Washington Boulevard, Ogden Station, and continuing south to access Davis County.
- New express bus service linking Brigham City to Ogden Station.
- Funding to resume FrontRunner service to Pleasant View is identified in this phase.

Finally, although unfunded, there is a planned project to eventually convert the commuter rail system to utilize electric locomotives.

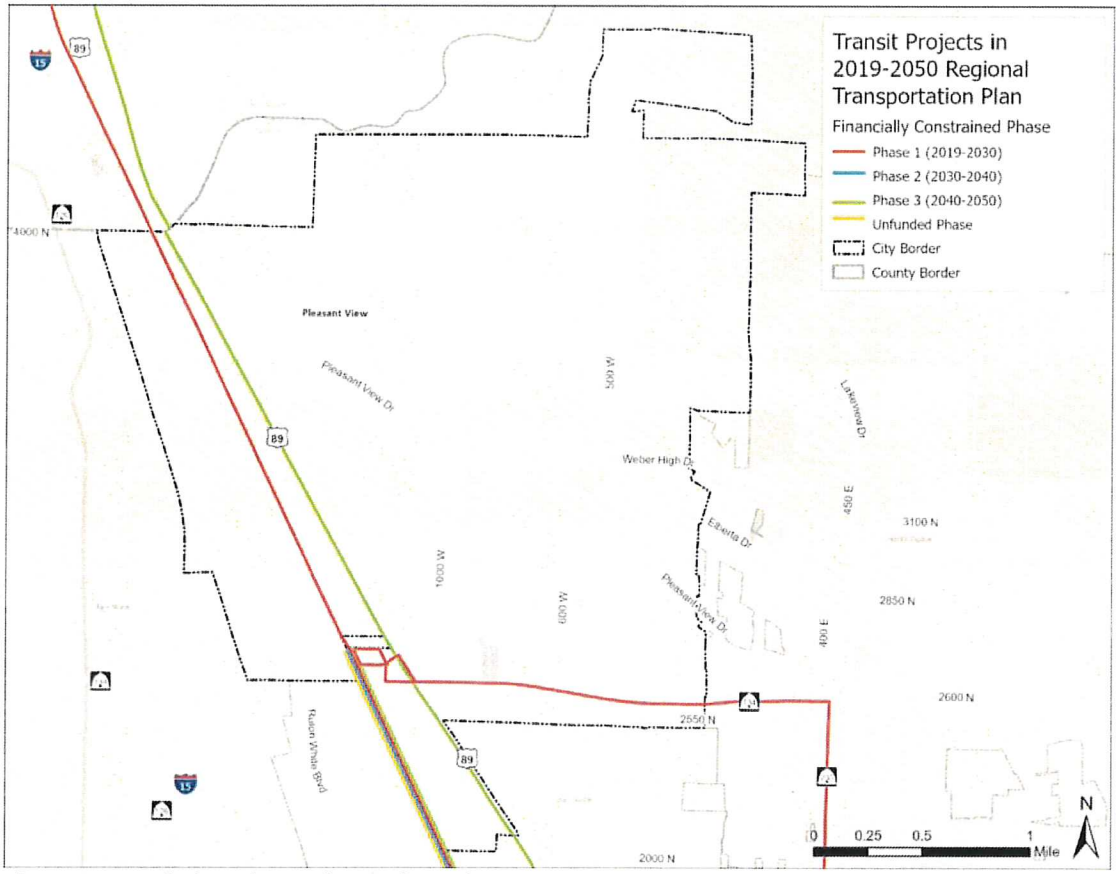


Figure 14 – Existing Planned Transit Projects

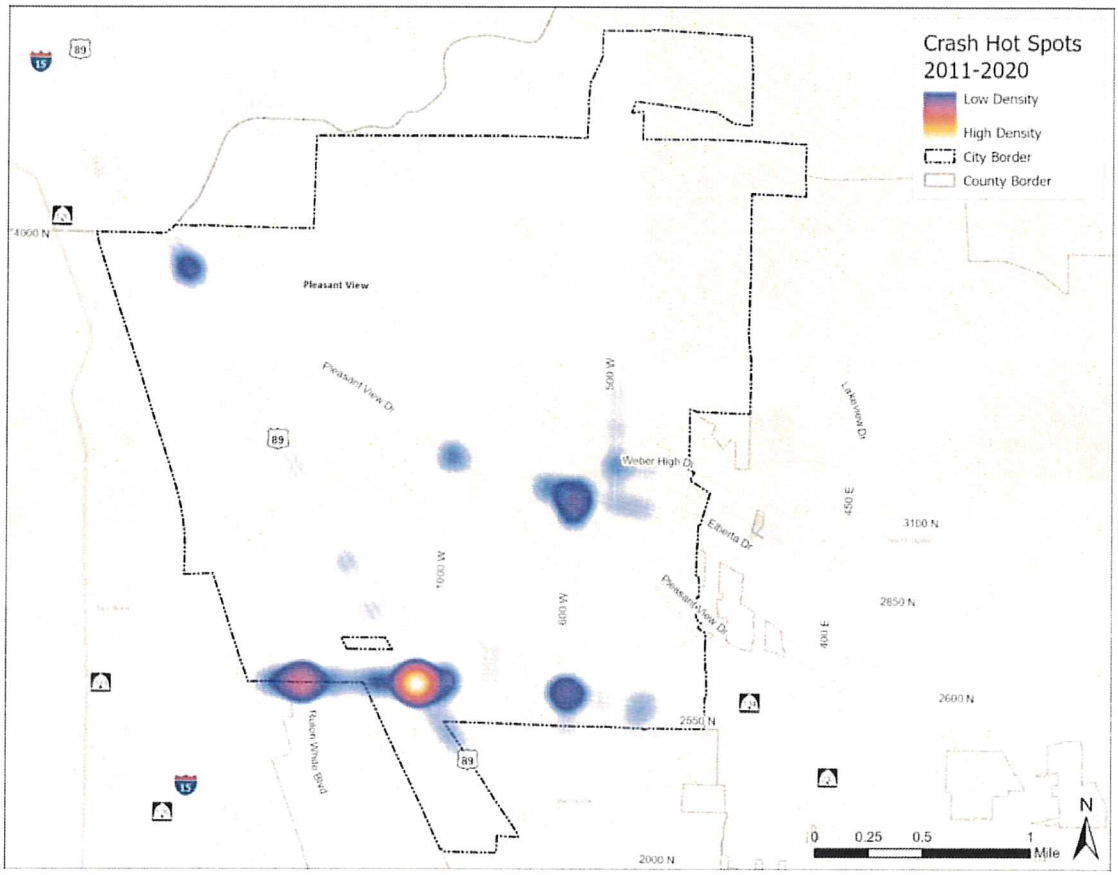
2.6 Safety

Safety data is protected under 23 USC 409. Due to the fortunately limited numbers of active transportation-involved vehicle crashes, 10 years of vehicle crash data were analyzed.

Figure 15 displays the concentration of all crashes during a ten-year period (2011-2020).

Intersections with notable crash concentrations (approximate crash count):

- U.S. 89 and 2700 North (~165)
- Rulon White Boulevard and 2700 North (~65)
- 600 West and 2700 North (~30)
- 600 West and Elberta Drive (~19)
- 600 West and Pleasant View Drive (~17)



Crash data protected under 23 USC 409.

Figure 15 – Crash Hot Spots

2.6.1 Severe Crashes

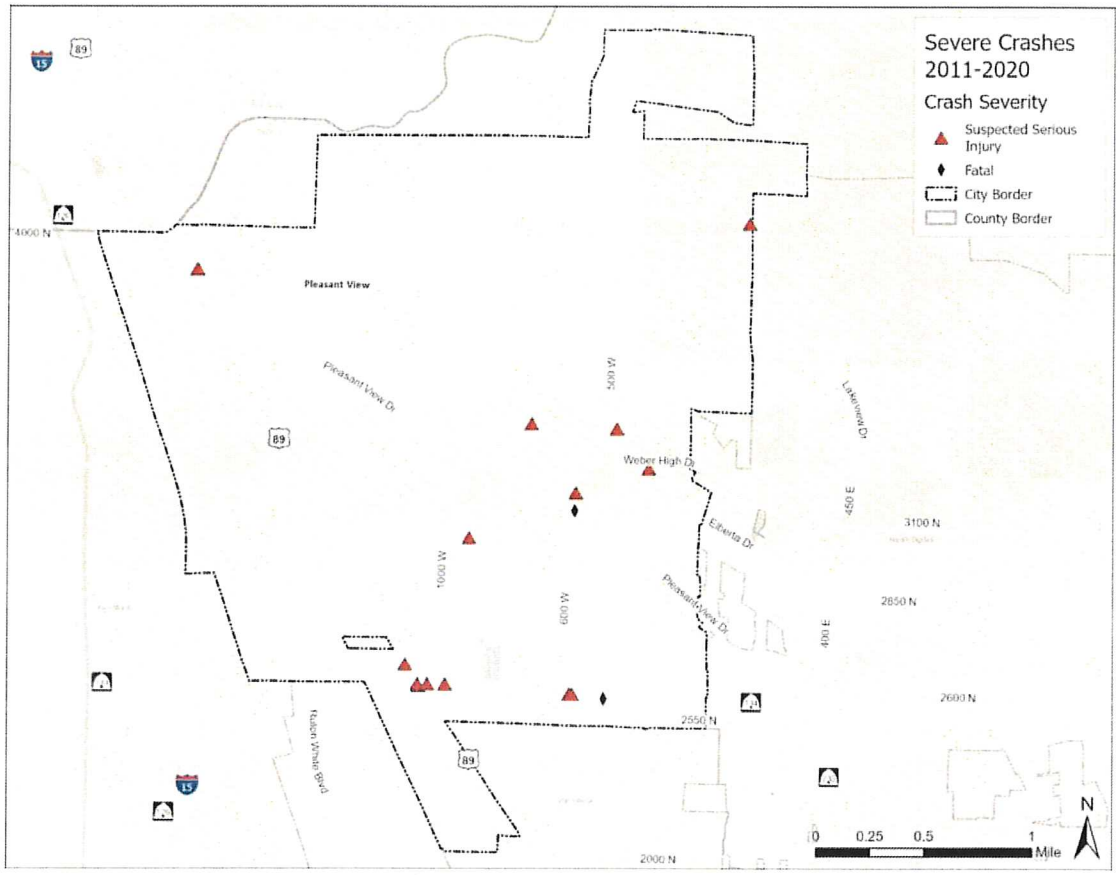
The severity of injuries related to a crash are described on a five-step scale:

- No injury/property damage only
- Possible injury
- Suspected minor injury
- Suspected serious injury
- Fatality

When a crash is described as "severe" it relates to crashes involving a suspected serious injury or fatality. Research has found that as vehicle speeds increase the likelihood of a pedestrian or bicyclist fatality also increases.

In the last ten years, 19 severe crashes have occurred. Two crashes resulted in a fatality while the remaining resulted in a severe injury. The locations of these crashes are displayed in Figure 16.

The greatest concentration of severe crashes (5) is located at the intersection of 2700 North and U.S. 89. Two severe injury crashes occurred at the intersection of 600 West and 2700 North.



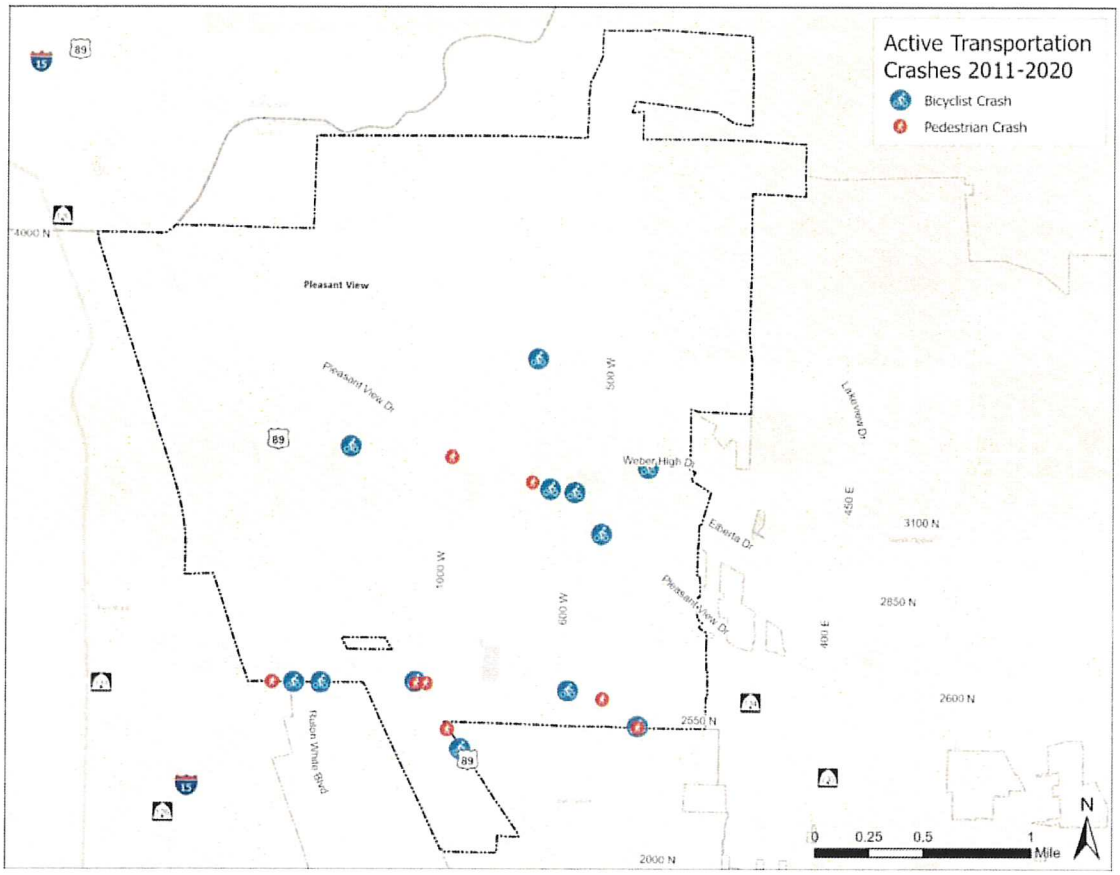
Crash data protected under 23 USC 409.

Figure 16 – Severe Crashes

2.6.2 Active Transportation Crashes

In the last ten years, 20 crashes have involved a vehicle and either a pedestrian or bicyclist. Figure 17 displays the location of these crashes. Eight crashes have involved a pedestrian while the remaining 12 crashes involved a bicyclist.

The only intersection with multiple AT crashes is U.S. 89 and 2700 North.



Crash data protected under 23 USC 409.

Figure 17 – Active Transportation Involved Crashes

3. FUTURE CONDITIONS

3.1 Land Use

WFRC estimates population, household size, and employment for Davis, Morgan, Salt Lake, Tooele, and Weber County municipalities out to the year 2050. In Pleasant View, WFRC estimates the 2050 population to grow by 38% to 14,047. The 2017 Pleasant View General Plan provides population forecasts based on census information and average building permits issued from 2017-2021. The plan does not have a 2050 forecast but does provide a 2040 forecast of 24,611. For the purposes of this plan the 2040 forecast was used for our 2050 forecast, and interim years were developed based on linear growth factors and input from the city.

Table 4 shows projections for population, households, and employment from WFRC and Pleasant View City. Pleasant View City is expecting more households, jobs, and population than WFRC estimations predict.

Table 4 – Existing and Revised Socioeconomic Data

	Current WFRC	Pleasant View Revisions	WFRC Projections			Pleasant View Projections		
	2019	2022	2030	2040	2050	2030	2040	2050
Population	10,188	11,083	11,995	13,290	14,047	15,592	20,102	24,611
Households	3,364	3,659	4,211	4,898	5,275	5,493	7,414	9,215
Employment	2,338	2,338	3,290	3,536	3,731	3,346	4,130	4,885

The number of estimated 2050 households by Traffic Analysis Zone (TAZ) is shown in Figure 18. The city is primarily residential east of U.S. 89 and will remain so into 2050. The highest concentrations of households in 2050 will be in the south-central portions of the city, in TAZ's 179 and 195. The number of estimated 2050 employment by TAZ is shown in Figure 19. Much of the employment will center along the U.S. 89 and 2700 North corridors and in the planned industrial area east of I-15.

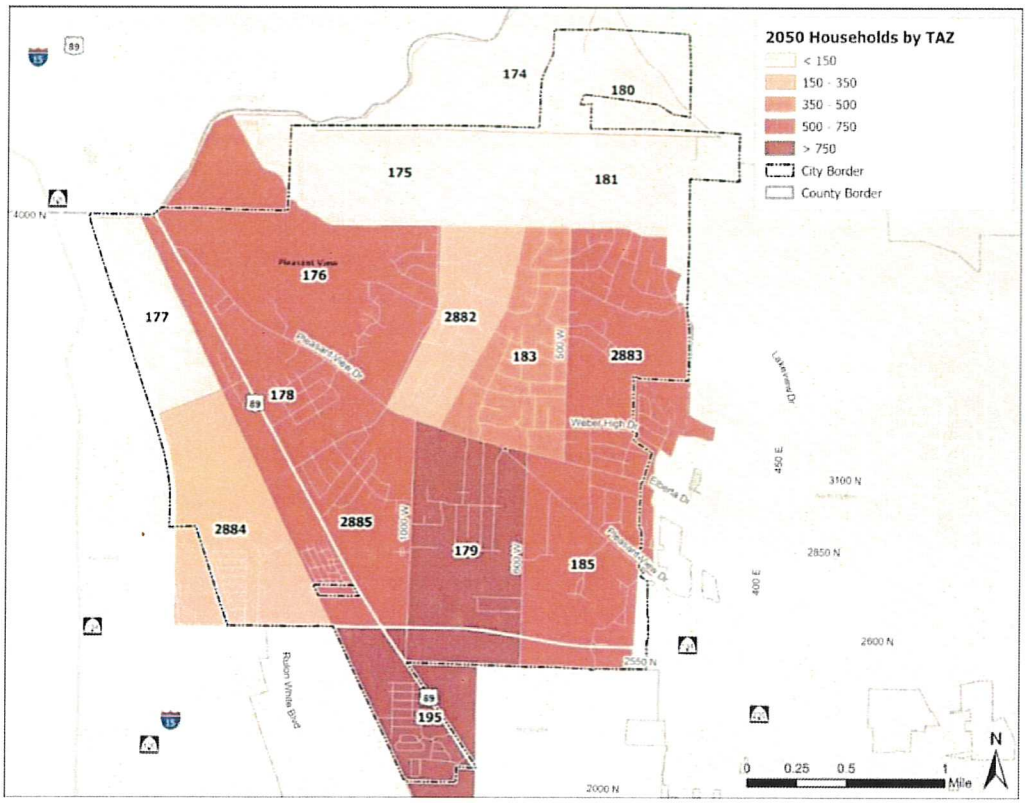


Figure 18 – 2050 Households by TAZ, Pleasant View Forecast

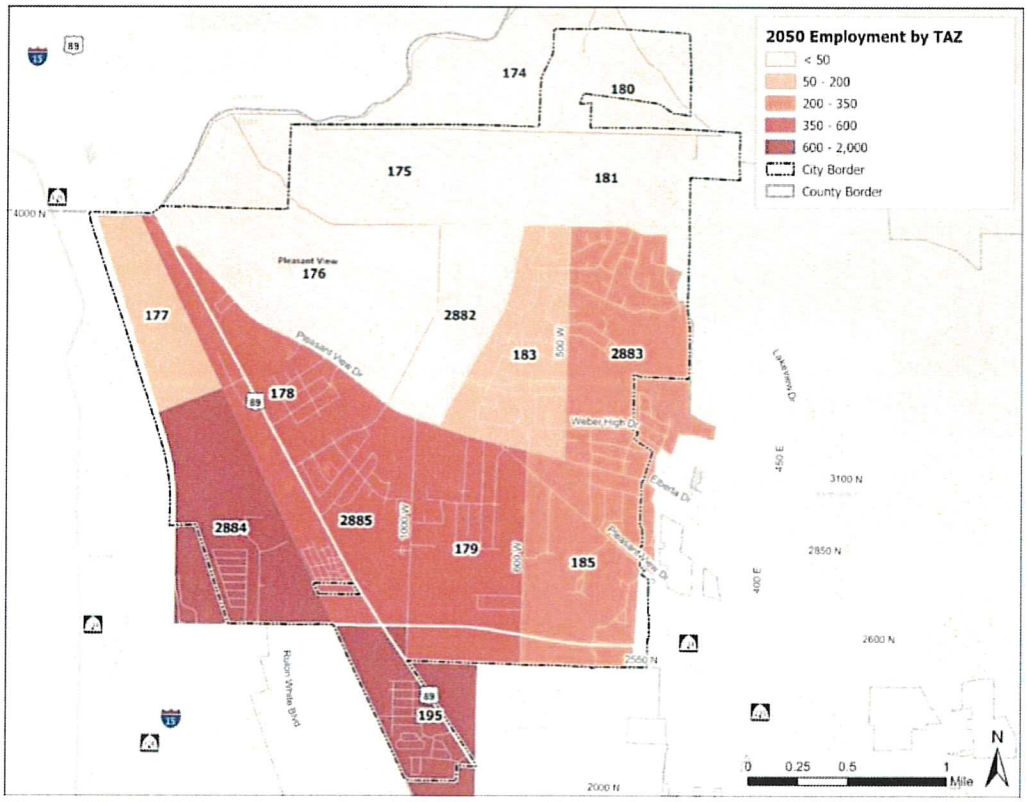


Figure 19 – 2050 Employment by TAZ, Pleasant View Forecast

3.1.1 2019 to 2030 Projected Growth

Looking at population and employment growth over the next 10 years is insightful, as impact fee analysis is based on growth and projects within this time frame. Figure 20 and Figure 21 below illustrate the projected growth in households and employment from 2019 to 2030. Household growth is concentrated in TAZ 195 in the southernmost portion of the city, along with TAZ's 176 and 178 to the northwest. Employment growth is concentrated west of U.S. 89 in TAZ's 177 and 2284 and further east along 2700 North.

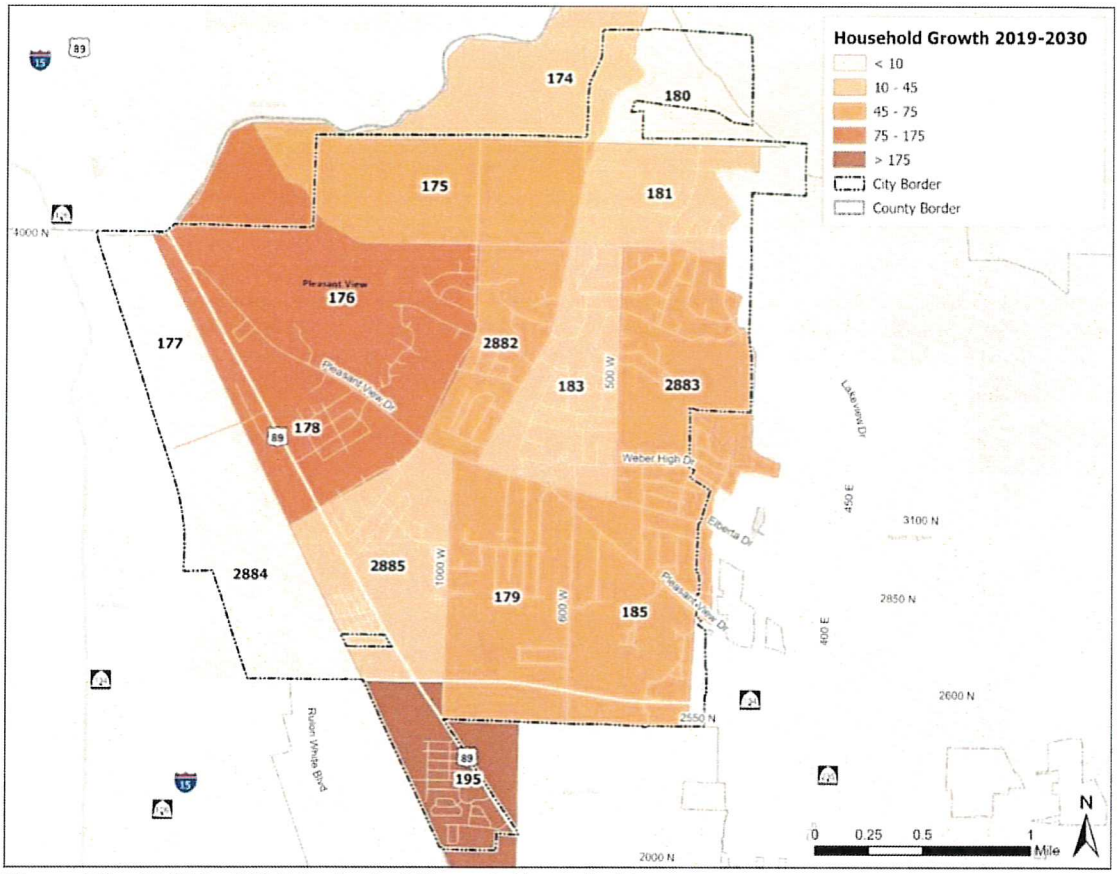


Figure 20 – 2019 to 2030 Projected Growth Households

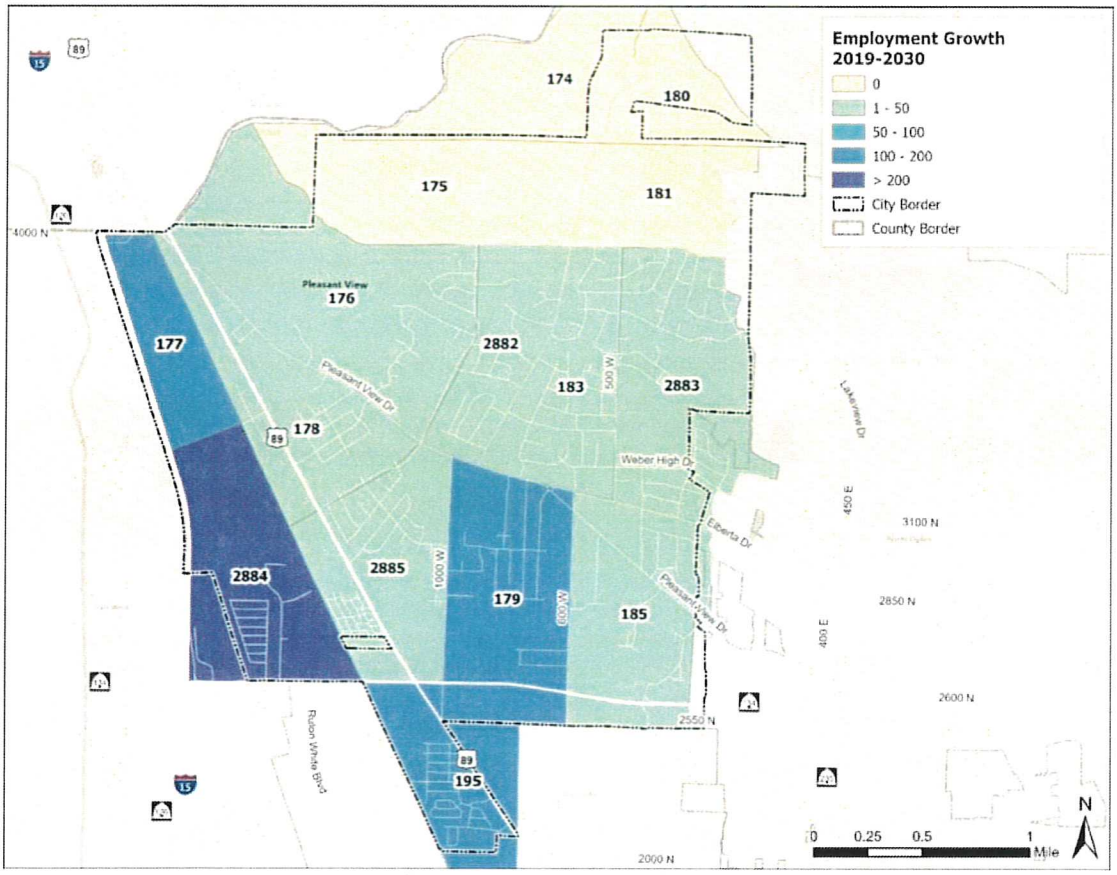


Figure 21 – 2019 to 2030 Projected Growth Employment

3.1.2 Future Land Use Plan

Pleasant View's future land use plan (see Figure 22), found in their General Plan adopted in 2017, positions employment centers west of U.S. 89, and commercial south of 2700 North. Most all residential land use occurs north of 2700 North and east of U.S. 89, with exception of some pockets of medium and high-density residential areas.

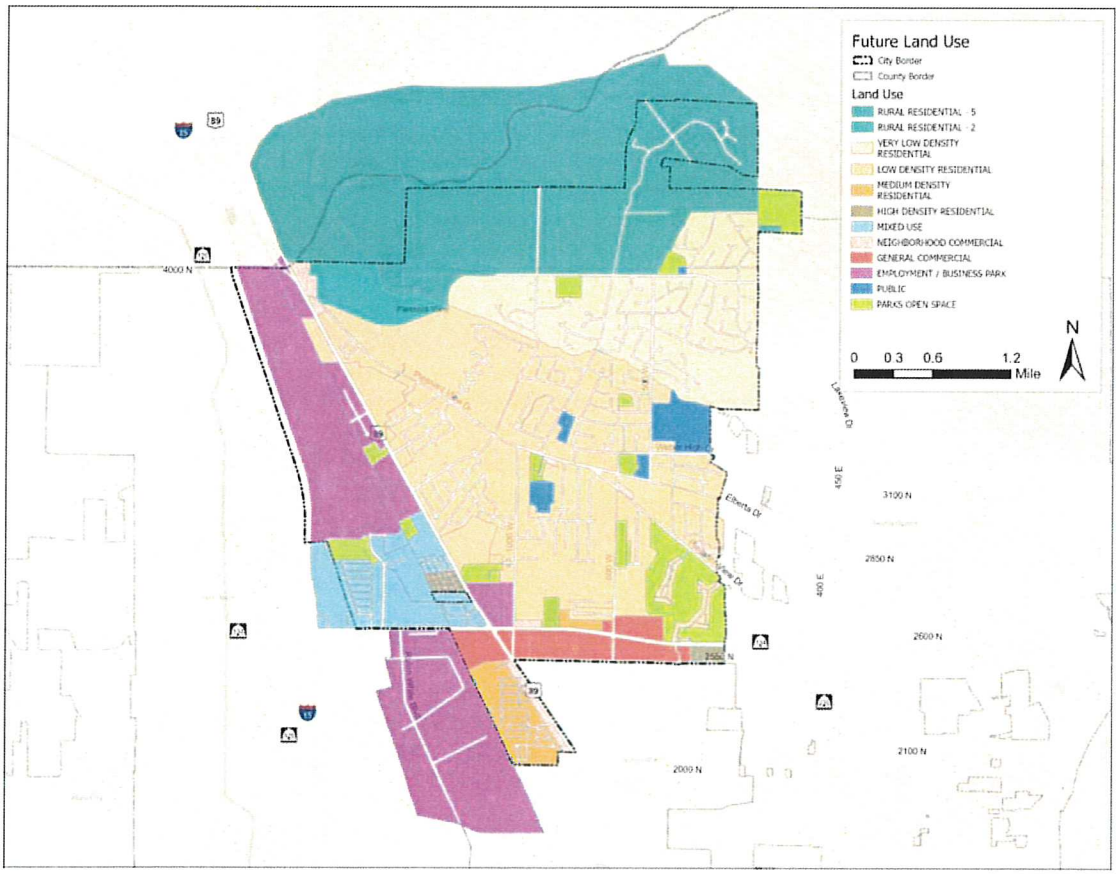


Figure 22 – Future Land Use Plan

3.2 Travel Demand Modeling

Future traffic conditions were forecasted using the WFRC – MAG regional travel demand model version 8.3. The model base year was 2019 and future conditions were forecast through 2050, with base year and future year socioeconomic data for Pleasant View City updated as part of the calibration process. For the 2030, 2040, and 2050 model runs, socioeconomic data for Pleasant View City was generated with input by city staff, while WFRC projections were used for the surrounding areas. The existing network in the model accurately reflected the current network, however changes to the socioeconomic data were needed. This data was reviewed and updated by city staff (detailed in the Appendix).

3.2.1 Future Volumes and Level of Service

Once the base model was calibrated to best reflect current conditions, future population, household and employment data were used with a future roadway network to model future 2030, 2040 and 2050 travel volumes. Figure 23, Figure 24 and Figure 25 show projected volumes and percent of capacity utilized for 2030, 2040 and 2050 respectively.

In 2030, 2700 North west of 1000 West is approaching capacity. By 2040 and into 2050 this facility in this area exceeds the LOS C threshold this analysis is based on. Elsewhere volumes and LOS remain relatively low through 2050. Volumes on 1000 West and 600 West begin to test capacity by 2050.

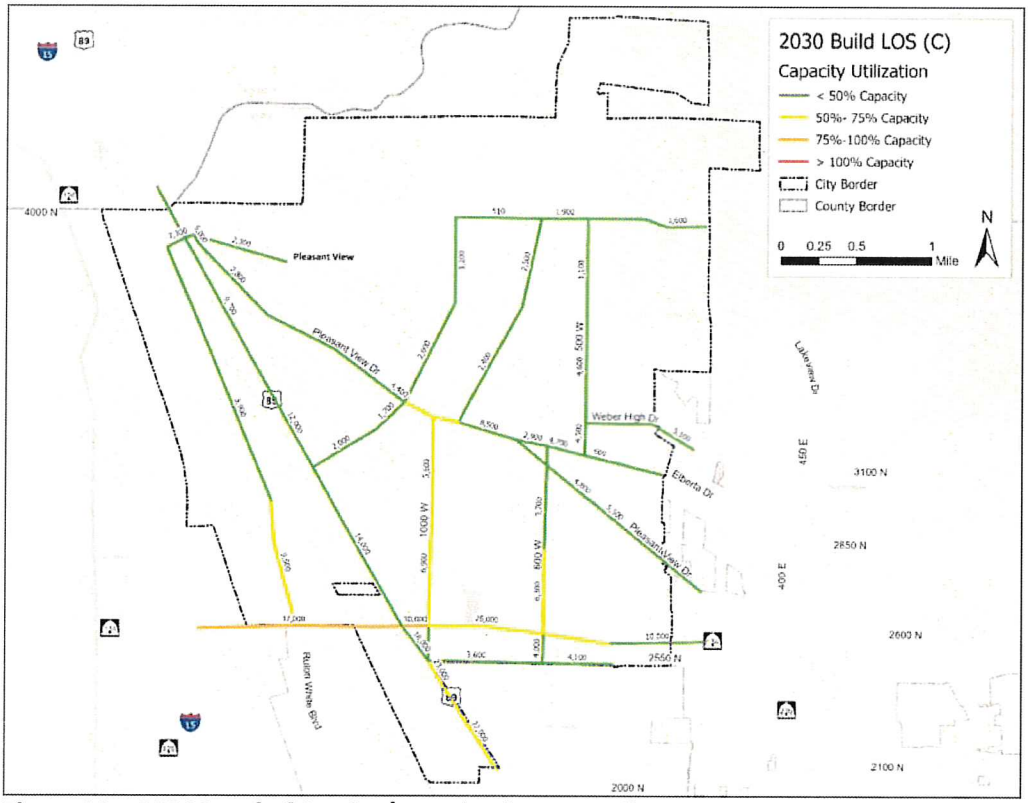


Figure 23 – 2030 Level of Service/Travel Volumes, Daily

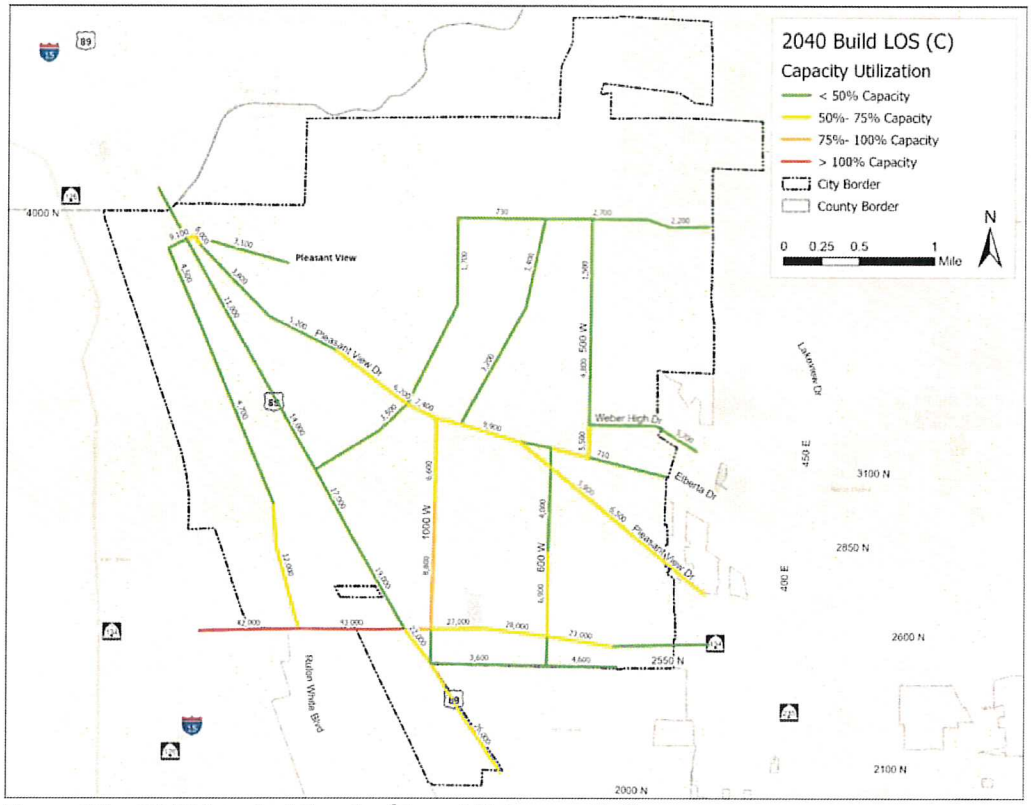


Figure 24 – 2040 Level of Service/Travel Volumes, Daily

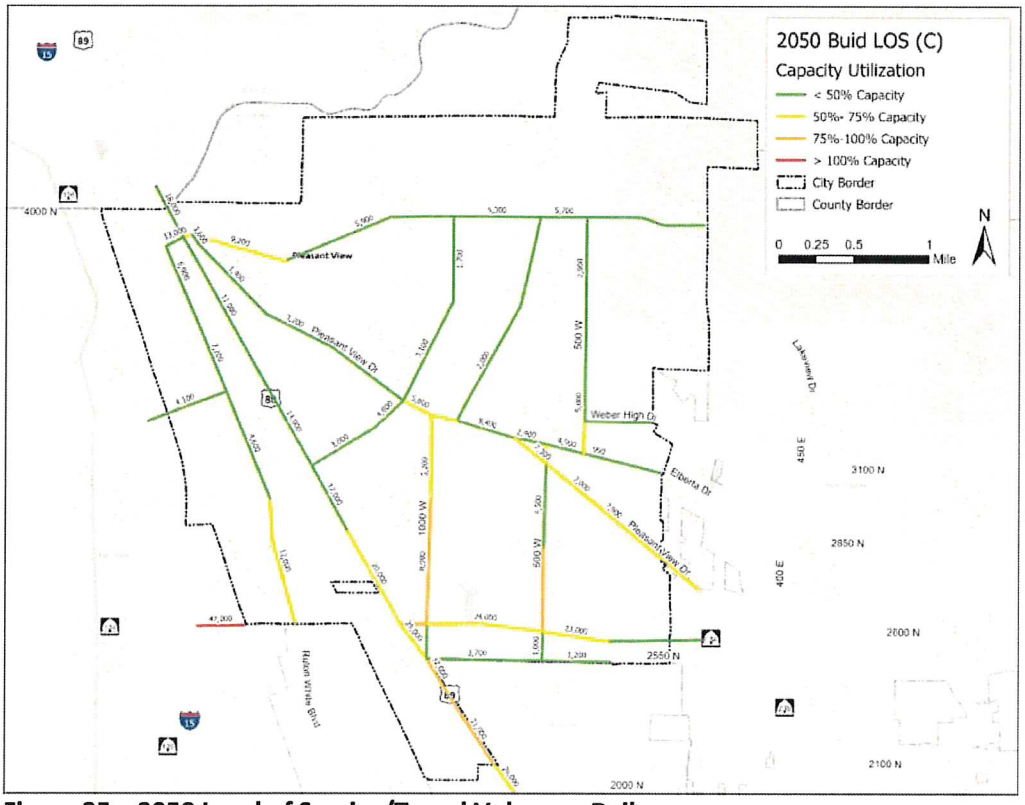


Figure 25 – 2050 Level of Service/Travel Volumes, Daily

4. VEHICLE RECOMMENDATIONS

4.1 Functional Classification

A Functional Classification of streets is used to group roadways into classes according to the character of traffic they are intended to serve. The classes are based upon the degree of mobility (speed and trip length) and land access that they permit. 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 26 summarizes the hierarchy of the functional classification of streets based upon mobility and access, and Figure 27 shows a map of the Pleasant View future (2050) network by functional classification.

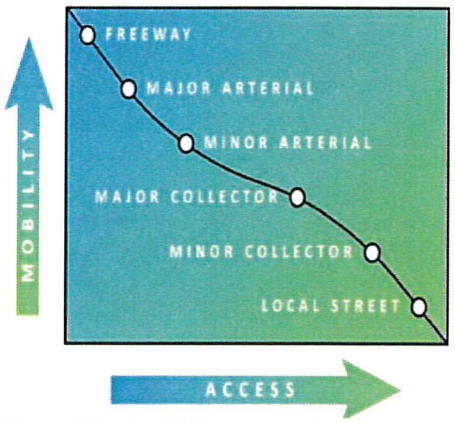


Figure 26– Mobility versus Access

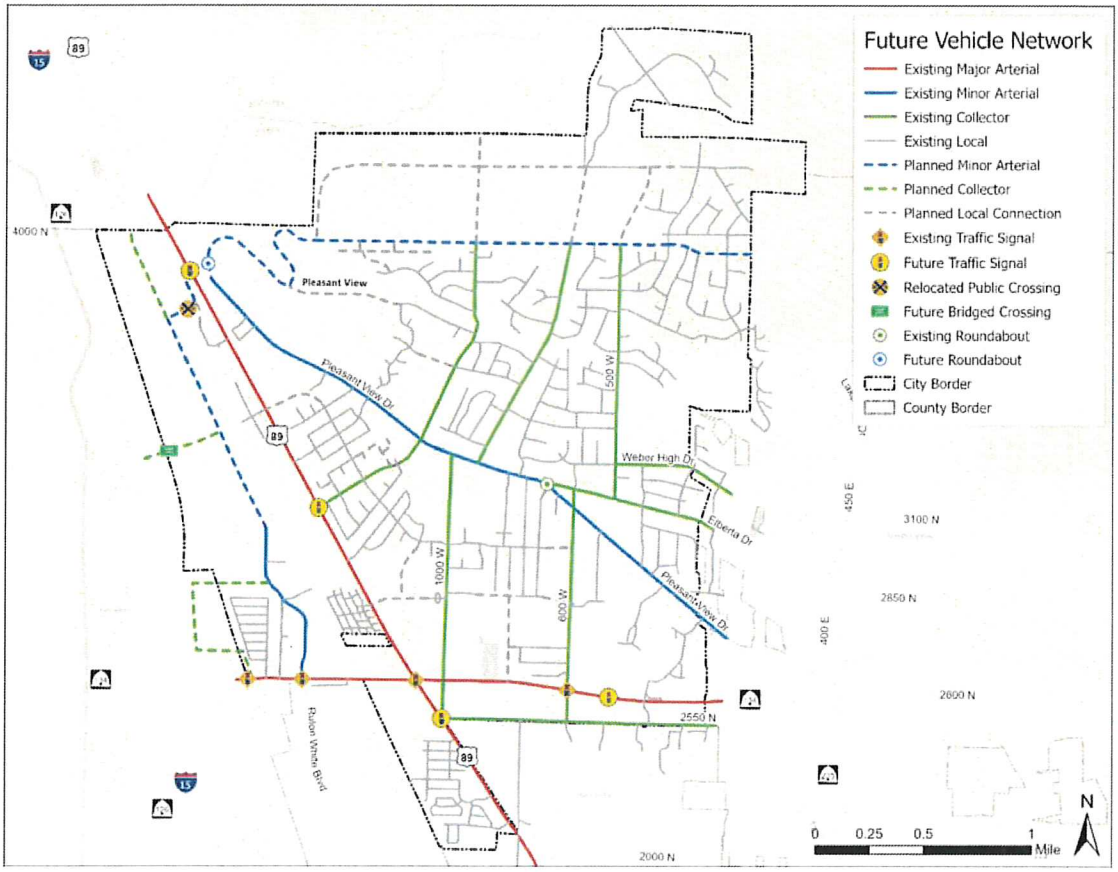


Figure 27 – Map of Future Network by Functional Classification

Table 5 provides general characteristics for the traffic operations of each functional classification. The definitions outlined include speed, average trip length, accident rate, and access control. Access control refers to the number of intersections, driveways, etc., interrupting the roadway.

Table 5 – **Functional Classification Summary**

Functional Group	Speed (miles per hour [mph])	Average Trip Length (miles)	Expected Accident Rate (accidents per million vehicle miles)	Access Control
Arterial	45+	3-15	3 to 5	Significant
Collector	25-45	1-5	2 to 4	Moderate
Major Local/Local	<30	<0.5	Varies	None

4.1.1 Residential

Residential streets are designed to offer access from residences to the roadway network. These streets serve many driveways and provide a collection point to collector or arterial roadways. Residential streets should be designed to minimize speed and cut-through traffic while meeting the requirements of emergency vehicles. Residential 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 provide 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. Figure 28 shows the 37-foot standard residential street, which contains 37 feet of road width, park strips and sidewalks, and curb and gutter. Additionally, the city allows for a special residential street section (Figure 29) for roadway that qualify for additional width:

- To address specific traffic flow constraints at an intersection, mid-block crossings, or other areas;
- To address an applicable general or master plan improvement, including transportation, bicycle lanes, trails, or other similar improvements that are not included within an impact fee area;
- To address traffic flow constrains for service to or abutting higher density developments or uses that general higher traffic volumes, including community centers, schools, and other similar uses;
- AS needed for the installation or location of a utility which is maintain by the municipality and is considered a transmission line or requires additional roadway width;
- For third-party utility lines that have an easement preventing the installation of utilities maintained by the municipality within the roadway;
- For utilities over 12 feet in depth;
- For roadways with a design speed that exceeds 25 miles per hour;
- As needed for flood and stormwater routing;
- As needed to meet fire code requirements for parking and hydrants; or
- AS needed to accommodate street parking

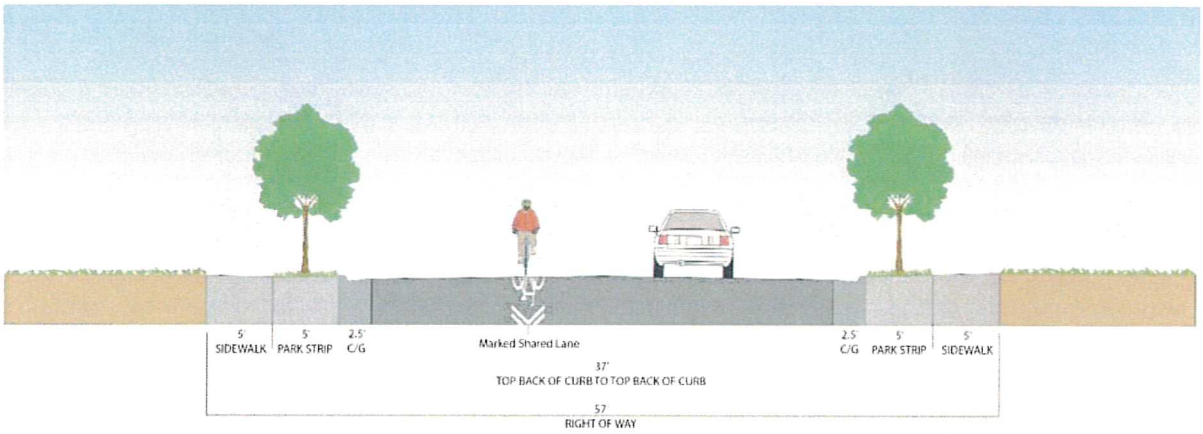


Figure 28 – 57-Foot Standard Residential

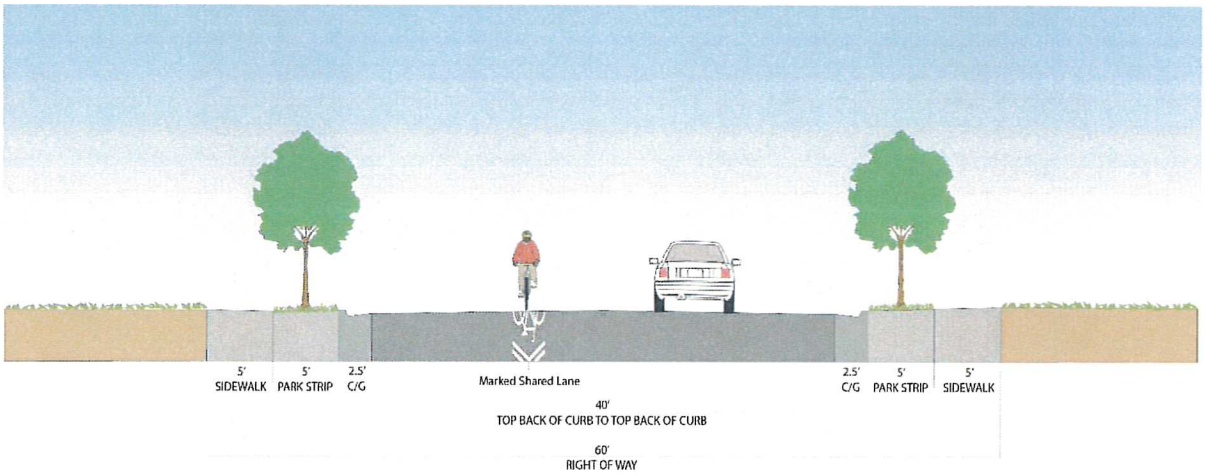


Figure 29 – 60-Foot Special Residential

4.1.2 Minor Collector

Collector streets connect users from local neighborhood streets to arterial streets and other collectors. The 66-foot Minor Collector cross-section has 11-foot travel lanes in each direction. It can accommodate either a 9.5-foot shoulder or a 6-foot bike lane and 3.5-foot shoulder. This cross-section features high-back curb and gutter, park strips, and sidewalks on either side.

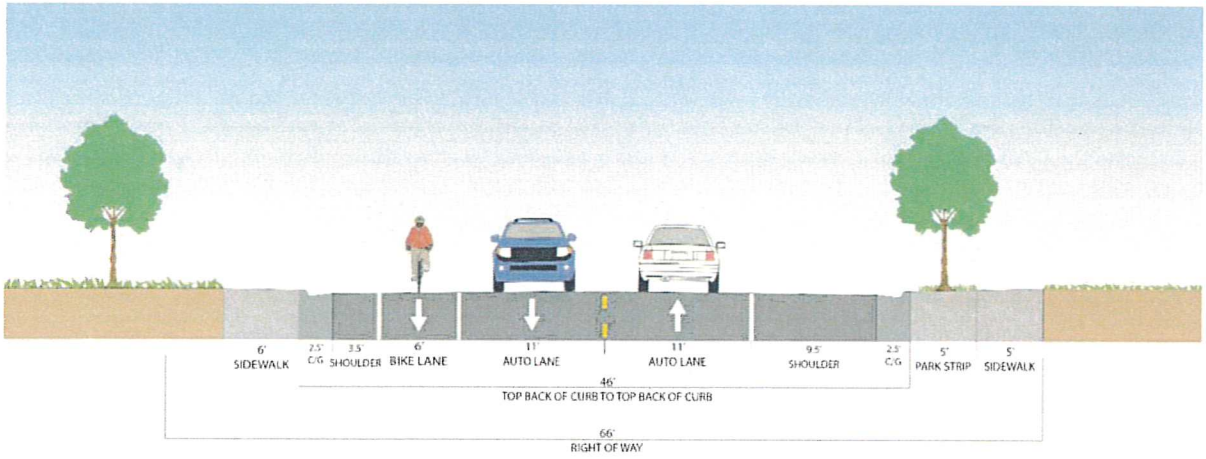


Figure 30 – 66-Foot Minor Collector

4.1.3 Major Collector

Major Collector streets also connect users from local neighborhood streets to arterial streets and other collectors and provide additional capacity to accommodate higher vehicle volumes. The 70-foot Major Collector cross-section has 11-foot travel lanes in each direction with a 13-foot center turn lane. It can accommodate either a 5-foot shoulder or a 5-foot bike lane. This cross-section features park strips and sidewalks on either side.

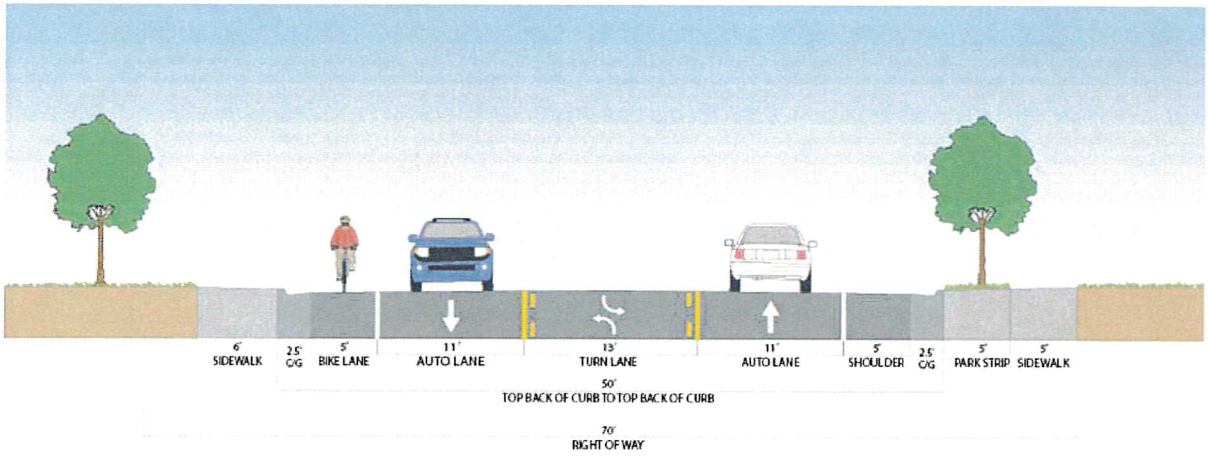


Figure 31 – 70-Foot Major Collector

4.1.4 Minor Arterial

Minor Arterial streets balance regional travel and local access by connecting local and collector streets to regional transportation options such as freeways and highways.

- The 80-foot minor arterial cross-section has 11-foot travel lanes in each direction with a 15-foot turn lane in the middle and can accommodate either a 9-foot shoulder or a 9-foot buffered bike lane within a 80-foot right-of-way. This cross-section features high-back curb and gutter, park strips, and sidewalks on either side.
- Pleasant View Drive is a minor arterial with a unique cross-section, it has a 70 to 80-foot right of way with barrier curbs, two 11-foot travel lanes, a 14-foot center turn lane, 5-foot park strips, and a 10-foot pathway on one side with a 5-foot sidewalk on the other.

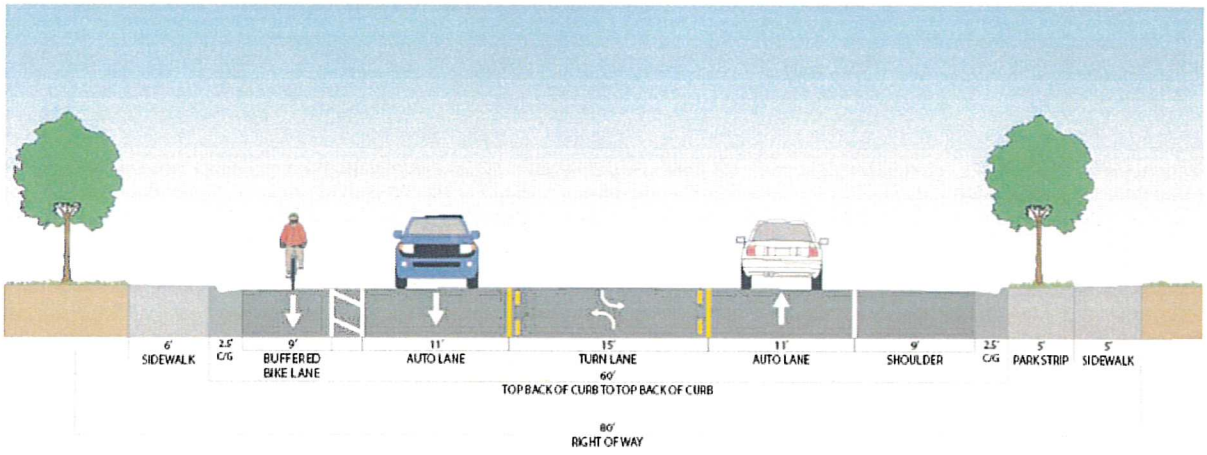


Figure 32 – 80-Foot Minor Arterial

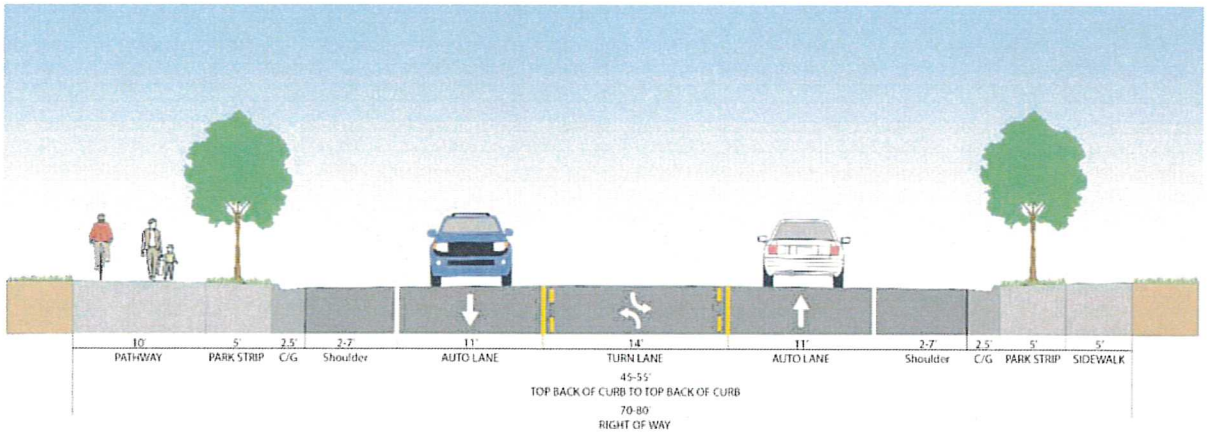


Figure 33 – Pleasant View Drive

4.1.5 Major Arterial

Major Arterial streets also balance regional travel and local access by connecting local and collector streets to regional transportation options such as freeways and highways while providing additional capacity to accommodate higher vehicle volumes. The 110-foot major arterial cross-section has two 12-foot travel lanes in each direction with a 14-foot turn lane in the middle. It can accommodate a 11.5-foot shoulder or a 9-foot buffered bike lane with a 2.5-foot shoulder within a 110-foot right-of-way. This cross-section features high-back curb and gutter, park strips, and sidewalks on either side. There are currently no plans for any new Major Arterial roads within the city.

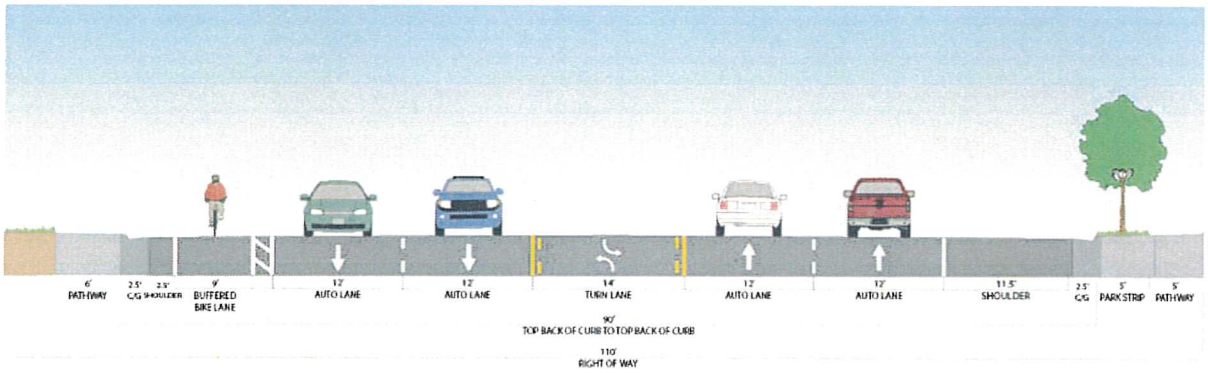


Figure 34 – 110-Foot Major Arterial

4.2 Transportation Guidelines

4.2.1 Traffic Control

The need for traffic control devices will increase as traffic volume and the road network throughout Pleasant View continues to grow. Per the Manual on Uniform Traffic Control Devices (MUTCD), "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." There are eight different traffic signal warrants the MUTCD states that need to 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. The evaluation of new traffic control devices should be made as need arises, verified by a warrant analysis and accompanied by traffic engineering study if deemed necessary by the city engineer. Potential future needed traffic signals based on anticipated conditions are shown in Figure 35.

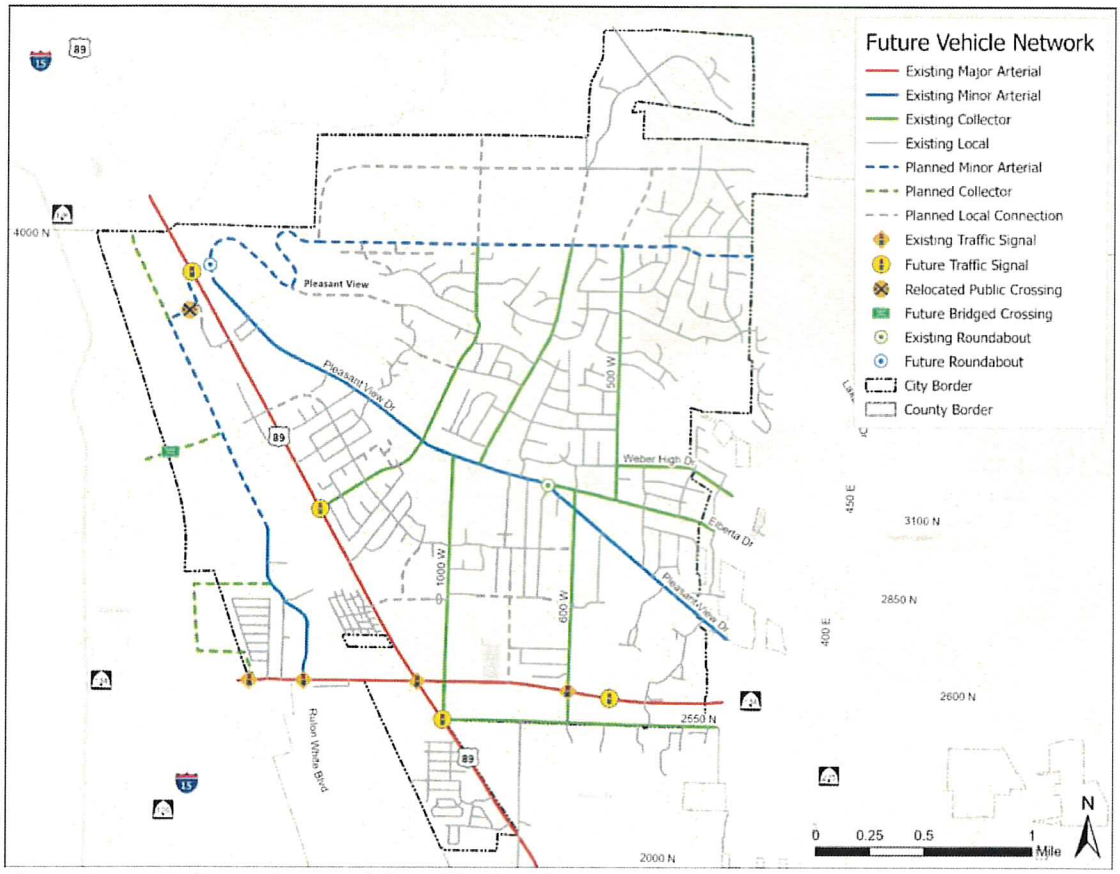


Figure 35 – Existing and Potential Traffic Signals

4.2.2 Access Spacing

Access spacing standards allow drivers to process one decision at a time. Through proper spacing, drivers may monitor upcoming conflict points and react accordingly to each conflict. 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. For state highways, UDOT Administrative Rule R930-6 defines the driveway, public street and signal spacing.

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 provided that a traffic impact study is prepared by the developer documenting the preservation of safety, capacity, and speed with reduced access spacing. Table 6 lists the Pleasant View City access spacing standards.

Table 6 – **Spacing Categories**

	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
Major Local Streets	1,320	300	150
Local Streets	N.A.	150	No Minimum

4.2.3 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 may also allow cars to make high speed turns and create increased crossing distances for pedestrians. A network of intersections with short curb radii would be of greatest benefit to pedestrians, but would hinder movement of fire trucks; thus, creating a hazardous environment. Therefore, curb radii standards are needed in order to accommodate all types of users. Recommended back of curb corner radii for each street classification is shown in Table 7.

Table 7 – **Back of Curb Radii by Street Intersection**

Right-of-Way					
		Local	**Major Local**	**Collector**	**Arterial**
Right-of-Way	Arterial	30'	30'	40'	40'
	Collector	30'	30'	40'	40'
	Major Local	20'	30'	30'	30'
	Local	20'	20'	30'	30'

The above radii may be adjusted based on traffic volumes, intensity of large vehicle uses and the needs of specific lane uses/truck routing. Changes to curb radii are subject to the discretion of the city engineer.

5. RAILROAD CROSSING ANALYSIS

The city is exploring railroad crossing options along the Union Pacific corridor located along the western portion of the city. The city currently plays host to six at-grade railroad crossing of the Union Pacific corridor listed in Table 8. These include three private and three public crossings. The city is interested in additional access to the area west of the rail corridor and for this to occur in alignment with the new Skyline Drive and Pleasant View Drive realignment.

Table 8 – Railroad Crossings in/near Pleasant View City

US DOT Crossing Inventory Number	Location	Public or Private	Active or Passive	Traffic Control Devices	Crossing Purpose
805946F	SR-134 (2700 North)	Public	Active	Bells, lights, gates	Roadway
970195F	Pleasant View Station	Public	Passive	Signs	Station, Ped
805947M	Approximately 1500 West	Private	Passive	Signs	Roadway
805948U	Approximately 1700 West	Private	Passive	Signs	Roadway
805949B	Approximately 4100 North	Private	Passive	Signs	Roadway
805950V	4000 North	Public	Active	Bells and lights	Roadway

5.1 Alignment Analysis

There are two key constraints that limit options for a new railroad crossing. First, there is a power transmission corridor that has two transmission towers that touch down between the railroad and U.S. 89. These towers cannot be relocated without considerable cost and need to be avoided. The second obstacle is a track siding for rail car storage. It is important that any new at-grade crossing avoid this because during storage the crossing may become blocked and rendered inoperable for long periods of time. Figure 36 below shows the location of these two obstacles and a crossing zone showing where a crossing could occur.

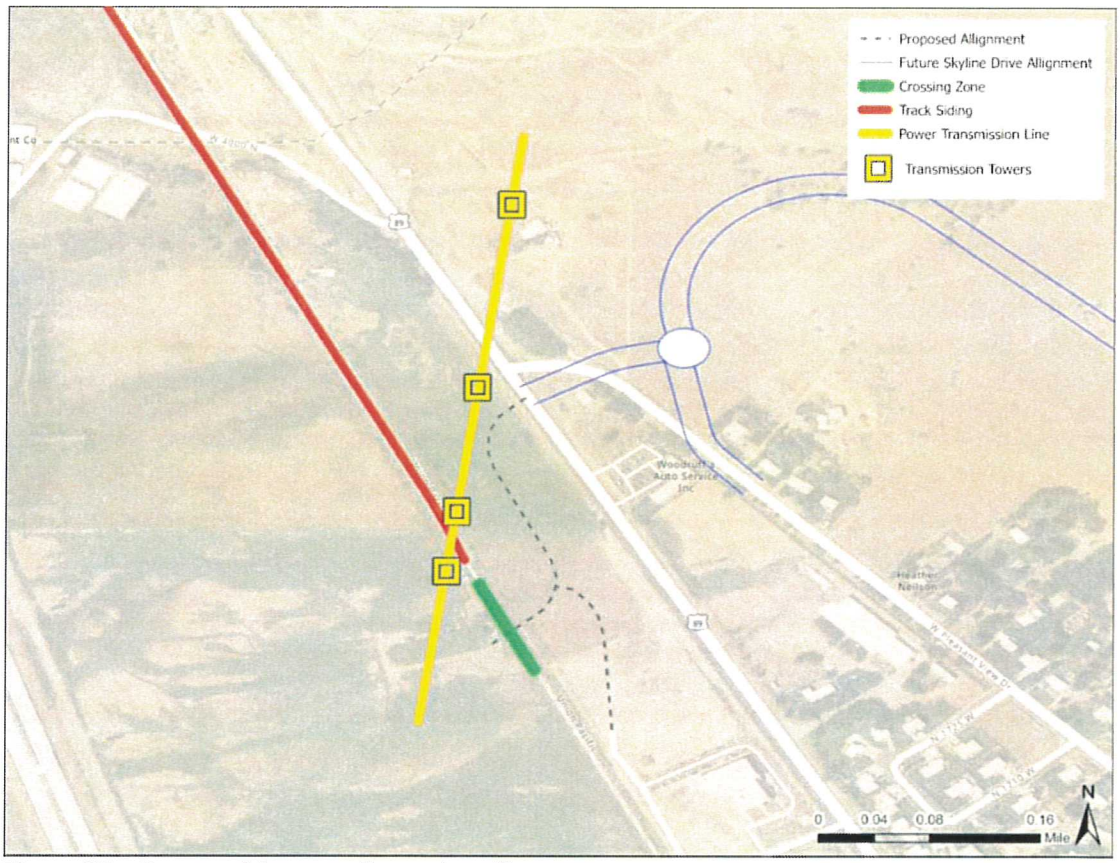


Figure 36 – Proposed future rail crossing alignment

5.2 Stacking distance

To ensure that the proposed crossing does not cause traffic operations problems during train stoppages, a stacking distance analysis was performed. During train stoppages, vehicles will stack and accumulate waiting for the train to clear. If this occurs to the extent that vehicle back up into upstream intersections, it can cause notable impacts to traffic operations and cause safety problems. Based on projected future 2050 vehicle volume, a peak of 55 stacked vehicles would occur during a typical 6-minute stoppage in the peak hour. Based on assumptions regarding vehicle mix, length, and spacing (see Table 9), these 55 vehicles would require roughly 2,000 feet of stacking distance. The proposed alignment is approximately 1,000 feet in length between U.S. 89 and the proposed crossing location. To accommodate peak stacking in 2050, 2-lanes in the westbound direction east of the tracks would be required. Stacking distance on the west side of the crossing is less of a concern, due to fewer constraints. However, the same 2,000 feet of stacking distance would also be needed before any major intersection.

Table 9 – Vehicle Assumptions

Vehicle Type	Vehicle Mix	Vehicle Length with Spacing (ft)
Large Trucks (72')	12%	87
Medium Trucks (35')	18%	45
Car (15')	70%	25
Average Vehicle Length		36

5.3 Next Steps

Union Pacific's current regulations stipulate that any new at-grade crossing would need to correspond with the closure of at least three existing ones. In order to accomplish this and meet the preferences of Union Pacific, we propose to relocate the existing public crossing 805950V to the desired location and work to close the three existing private crossings, 805947M, 805948U, and 805949B. The following are a proposed series of steps the city should follow to move towards creating the new crossing:

1. Pull back the existing application with Union Pacific.
2. Coordinate with property owners to secure concurrence on plans to close all private crossings.
3. Re-apply for the crossing with Union Pacific and UDOT.
4. Work to secure funding.