

ORDINANCE NO. 2012-20

AN ORDINANCE ADOPTING AN AMENDED AND UPDATED TRANSPORTATION IMPACT FEE FACILITIES PLAN AND IMPACT FEE ANALYSIS; ADOPTING AN AMENDED AND UPDATED IMPACT FEE FOR TRANSPORTATION; ESTABLISHING CERTAIN POLICIES RELATED TO IMPACT FEES FOR ROAD INFRASTRUCTURE; ESTABLISHING CERTAIN POLICIES RELATED TO IMPACT FEES FOR TRANSPORTATION INFRASTRUCTURE; ESTABLISHING SERVICE AREAS; AND/OR OTHER RELATED MATTERS

WHEREAS, the City of South Jordan (the “City”) is a political subdivision of the State of Utah, authorized and organized under the provisions of Utah law; and

WHEREAS, the City has legal authority, pursuant to Title 11, Chapter 36a Utah Code Annotated, as amended (“Impact Fees Act” or “Act”), to impose Impact Fees as a condition of development approval, which impact fees are used to defray capital infrastructure costs attributable to growth activity; and

WHEREAS, the City has historically assessed Impact Fees as a condition precedent to development approval in order to assign capital infrastructure costs to development in an equitable and proportionate manner; and

WHEREAS, the City has traditionally provided a high level of service in its transportation infrastructure, which has been a factor in the City’s growth, and high property values due to the unique aesthetics which City residents enjoy; and

WHEREAS, in the exercise of its legislative discretion the City Council desires to take a conservative approach in preparing the Impact Fee Facilities Plan (“IFFP”) and Impact Fee Analysis (“IFA”) and in the assessment of an impact fee which may be less than might otherwise be justified by the IFA and IFFP in order to promote economic development, expand the tax base, allow for more job creation, and respond to current economic realities; and

WHEREAS, the City properly noticed its intent to prepare the IFFP and IFA on March 20 and March 22, 2012; and

WHEREAS, the City has completed a Transportation IFFP and IFA which meets the requirements of State Law and City Ordinance; and

WHEREAS, the City Council has directed Lewis Young Robertson & Burningham, Inc. to prepare a Written Impact Fee Analysis consistent and in compliance with the Act (specifically 11-36a-201); and

WHEREAS, the City and consultants retained by the City have reviewed and evaluated the land within the City boundaries and have determined there shall be two service areas. The South Jordan Proper Service Area includes all land outside the Kennecott Master Subdivision but within South Jordan City’s boundaries. The Daybreak Service Area includes all the area within the Kennecott Master Subdivision; and

WHEREAS, the South Jordan City Council has reviewed the Transportation IFFP and IFA, including the creation of two service areas, and find it in the best interest of the welfare of the Citizens of the City to adopt the Transportation IFFP and IFA and enact a new Transportation Impact Fee based on the IFFP and IFA.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL (the “Council”) OF SOUTH JORDAN CITY, UTAH AS FOLLOWS:

SECTION 1 PURPOSE

This Impact Fee Ordinance establishes the City’s Transportation Impact Fee policies and procedures and repeals certain provisions of prior ordinances related to Transportation Impact Fees and conforms to the requirements of the Utah Impact Fees Act (§11-36a, the Act). This Ordinance repeals any prior ordinances related to Transportation facilities within the Service Areas, provides a schedule of Impact Fees for differing types of land-use development, and sets forth direction for challenging, modifying and appealing Impact Fees.

SECTION 2 DEFINITIONS

Words and phrases that are defined in the Act shall have the same definition in this Impact Fee Ordinance. The following words and phrases shall have the following meanings:

1. “City” means a political subdivision of the State of Utah and is referred to herein as City of South Jordan.
2. “Development Activity” means any construction or expansion of building, structure or use, any change in use of building or structure, or any change in the use of land located within the Service Area that creates additional demand and need for Roadway Facilities.
3. “Development Approval” means any written authorization from the City that authorizes the commencement of Development Activity and vests the property owner with the right to commence Development Activity, whether or not a specific building permit has been issued.
4. “Impact Fee” means a payment of money imposed upon Development Activity as a condition of development approval. “Impact Fee” includes development Impact

Fees, but is not a tax, a special assessment, a hookup fee, a building permit fee, a fee for project improvements, or other reasonable permit or application fees.

5. “Impact Fee Analysis” or (“IFA”) means the written analysis required by Section 11-36a-201 of the Act and is included in this ordinance by this reference and attached in Exhibit B.
6. “Impact Fee Facilities Plan” or (“IFFP”) means the plan required by Section 11-36a-301 of the Act. In Section 11-36a-301 (3) (a) there is an exception for cities of 5,000 or less in population, based on the latest census. South Jordan City does meet the population requirement as of the last Census and Impact Fee Facilities Plan has been prepared in accordance with the Impact Fees Act, and is to be adopted by passage of this Ordinance. The Impact Fee Facilities Plan is included by this reference and attached hereto in Exhibit A.
7. “Project Improvements” includes but is not limited to site improvements and facilities that are planned and designed to provide service for development resulting from a Development Activity and are necessary solely for the use and convenience of the occupants or users of said Development Activity. “Project Improvements” do not include “System Improvements” as defined below.
8. “Proportionate Share” of the cost of Roadway Facility improvements means an amount that is roughly proportionate and reasonably related to the service demands and needs of a Development Activity.
9. “Roadway Facilities” means a street or road that has been designated on an officially adopted subdivision plat, roadway plan, or general plan of a political subdivision, together with all necessary appurtenances.
10. “Service Area” refers to a geographic area designated by the City based on sound planning and engineering principles in which a defined set of the City’s Roadway Facilities provides service. For purposes of this Ordinance, there will be two service areas. The South Jordan Proper Service Area includes all land outside the Kennecott Master Subdivision but within South Jordan City’s boundaries. The Daybreak Service Area includes all the area within the Kennecott Master Subdivision as described in this Ordinance and in the attached IFFP and IFA. A map of each Service Area is included in Exhibit C attached hereto.
11. “System Improvements” refer both to existing Roadway Facilities designed to provide services within the Service Areas and to future Roadway Facilities identified in the Transportation IFFP adopted by the City that are intended to provide service to the Service Area. “System Improvements” do not include “Project Improvements” as defined above.

SECTION 3 **WRITTEN IMPACT FEE ANALYSIS**

1. Executive Summary. A summary of the findings of the written impact fee analysis that is designed to be understood by a lay person is included in the attached Transportation IFFP and IFA and demonstrates the need for Impact Fees to be assessed on Development Activity. The Executive Summary has been available for public inspection at least ten (10) days prior to the adoption of this Ordinance.

2. Impact Fee Analysis. The City has commissioned the IFFP and IFA for the Transportation Impact Fees which identifies the impacts upon Roadway Facilities required by the Development Activity and demonstrates how those impacts upon the City and the facilities required by Development Activity, demonstrates how those impacts on System Improvements are reasonably related to Development Activity, estimates the proportionate share of the costs of impacts on System Improvements that are reasonably related to the Development Activity and identifies how the Impact Fees are calculated. A copy of the Transportation IFFP and IFA has been available for public inspection at least ten (10) days prior to the adoption of this Ordinance.

3. Proportionate Share Analysis. In connection with the IFFP and IFA, the City has prepared a Proportionate Share analysis which analyzes whether or not the proportionate share of the costs of future Roadway Facilities is reasonably related to new Development Activity. The Proportionate Share analysis identifies the costs of existing Roadway Facilities, the manner of financing existing Roadway Facilities, the relative extent to which new development will contribute to the cost of existing facilities and the extent to which new development is entitled to a credit for payment towards the costs of new facilities from general taxation or other means apart from user charges in other parts of the City. A copy of the Proportionate Share analysis is included in the written Transportation Impact Fee Analysis and has been available for public inspection at least ten (10) days prior to the adoption of this Ordinance.

SECTION 4 **IMPACT FEE CALCULATIONS**

1. Ordinance Enacting Impact Fees. The City Council does, by this Ordinance, approve Impact Fees in accordance with the Transportation IFFP and IFA.
 - a. Elements. In calculating the Impact Fee, the City has included the construction costs, land acquisition costs, costs of improvements, fees for planning, surveying, and engineering services provided for and directly related to the construction of System Improvements, and outstanding or future debt service charges if the City might use Impact Fees as a revenue

stream to pay principal and interest on bonds or other obligations to finance the cost of System Improvements.

- b. Notice and Hearing. In conjunction with the approval of this, the City held a public hearing on December 4, 2012, and made a copy of the Ordinance available to the public in the South Jordan City Library, at least ten (10) days before the date of the hearing, all in conformity with the requirements of Utah Code Annotated 11-36a-502 (1). After the public hearing, the Council adopted this Impact Fee Ordinance as presented herein.
 - c. Contents of the Ordinance. The Ordinance adopting or modifying an Impact Fee contains such detail and elements as deemed appropriate by the Council, including a designation of the Service Areas within which the Impact Fees are to be calculated and imposed. The South Jordan Proper and Daybreak Service Areas are the only two service areas, with a map defining their boundaries included in the Transportation IFFP and IFA. The Ordinance herein includes (i) a schedule of Impact Fees to be imposed for Transportation and (ii) the formula to be used by the City in calculating the Impact Fee.
 - d. Adjustments. The standard Impact Fee may be adjusted at the time the fee is assessed due to inflation and/or in response to unusual circumstances or to fairly allocate costs associated with impacts created by a Development Activity or project. The standard Impact Fee may also be adjusted to ensure that Impact Fees are imposed fairly for affordable housing projects, in accordance with the local government's affordable housing policy, and other development activities with broad public purposes. The Impact Fee assessed to a particular development may also be adjusted should the developer supply sufficient written information and/or data to the City showing a discrepancy between the fee being assessed and the actual impact on the system.
 - e. Previously Incurred Costs. To the extent that new growth and Development Activity will be served by previously constructed improvements, the City's Impact Fees may include Roadway Facility costs and outstanding bond costs related to the Transportation improvements previously incurred by the City. These costs may include all projects included in the Impact Fee Facilities Plan which are under construction or completed but have not been utilized to their capacity, as evidenced by outstanding debt obligations. Any future debt obligations determined to be necessitated by growth activity may also be included to offset the costs of future capital projects.
2. Developer Credits. Development Activity may be allowed a credit against Impact Fees for any dedication or improvement to land or new construction of System

Improvements provided by the Development Activity provided that the Development Activity is (i) identified in the City’s Impact Fee Facilities Plans and (ii) required by the City as a condition of Development Approval. Otherwise, no credit may be given.

3. Impact Fees Accounting. The City will establish a separate interest-bearing ledger account for the Impact Fees collected pursuant to this Ordinance and will conform to the accounting requirements provided in the Impact Fees Act. All interest earned on the collection of Transportation Impact Fees shall accrue to the benefit of the segregated account. Impact Fees collected prior to the effective date of this Ordinance need not meet the requirements of this section.
 - a. Reporting. At the end of each fiscal year, the City shall prepare a report pursuant to Utah Code Ann, 11-36a-601.
 - b. Impact Fee Expenditures. The City may expend Impact Fees pursuant to Utah Code Ann. 11-36-602 the Impact Fees Policy only for System Improvements that are (i) Roadway Facilities identified in the City’s Impact Fee Facilities Plans and (ii) of the specific Roadway Facility type for which the fee was collected. Impact Fees will be expended on a First-In First-Out (“FIFO”) basis.
 - c. Time of Expenditure. Impact fees collected pursuant to the requirements of this Impact Fees Ordinance are to be expended, dedicated or encumbered for a permissible use within six years of the receipt of those funds by the City, unless the City meets other conditions outlined in the Act. For purposes of this calculation, the first funds received shall be deemed to be the first funds expended.
 - d. Refunds. The City shall refund any Impact Fees paid by a developer plus interest actually earned when (i) the developer does not proceed with the Development Activity and files a written request for a refund; (ii) the fees have not been spent or encumbered; and (iii) no impact has resulted. An impact that would preclude a developer from a refund from the City may include any impact reasonably identified by the City, including, but not limited to, the City having sized facilities and/or paid for, installed and/or caused the installation of facilities based in whole or in part upon the developer’s planned Development Activity even though that capacity may, at some future time, be utilized by another development.
4. Other Impact Fees. To the extent allowed by law, the City Council may negotiate or otherwise impose Impact Fees and other fees different from those currently charged. Those charges may, at the discretion of the City Council, include but not be limited to reductions or increases in Impact Fees, all or part of which may be

reimbursed to the developer who installed improvements that service the land to be connected with the City's system.

5. Additional Fees and Costs. The Impact Fees authorized hereby are separate from and in addition to user fees and other charges lawfully imposed by the City and other fees and costs that may not be included as itemized component parts of the Impact Fee Schedule. In charging any such fees as a condition of development approval, the City recognizes that the fees must be a reasonable charge for the service provided.
6. Fees Effective at Time of Payment. Unless the City is otherwise bound by a contractual requirement, the Impact Fee shall be determined from the fee schedule in effect at the time of Development Approval and paid in accordance with the provisions of Section 6 below.
7. Imposition of Additional Fee or Refund After Development. Should any developer undertake Development Activities such that the ultimate density or other impact of the Development Activity is not revealed to the City, either through inadvertence, neglect, a change in plans, or any other cause whatsoever, and/or the Impact Fee is not initially charged against all units or the total density within the development, the City shall be entitled to recover the total Impact Fee pursuant the IFFP and IFA from the developer or other appropriate person covering the density for which an Impact Fee was not previously paid.

SECTION 5 IMPACT FEE FACILITIES PLAN

1. Impact Fee Facilities Plan. The City has developed a Transportation IFFP for the City's transportation system. The Transportation IFFP has been prepared based on reasonable growth assumptions for the Service Areas, and analyzes the general demand characteristics of current and future users of the system. Furthermore, the IFFP identifies the impact on System Improvements created by Development Activity and estimates the Proportionate Share of the costs of impacts on System Improvements that are reasonably related to new Development Activity.

SECTION 6 IMPACT FEE SCHEDULES AND FORMULAS.

1. Fee Adoption. The City hereby adopts as the Impact fee for Transportation at the recommended level per trip found in the South Jordan Transportation IFFP & IFA and detailed below. The South Jordan Proper Impact Fee contains a portion that should be remitted to the Daybreak Service Area. Instead, an accounting credit is applied to reduce the Daybreak Impact Fee, which results in the Daybreak Adjusted Fee. The Adjusted Fee is the amount which should be charged to Development Activity within the Daybreak Service Area.

RECOMMENDED TRANSPORTATION IMPACT FEE SCHEDULE

Land Use Category	Trip Ends	South Jordan Proper IF	Daybreak Impact Fee	Daybreak Adjusted Fee
Cost per Trip		\$163.34	\$40.29	\$18.79
Residential (per unit)				
Single Family Residential (Unit)	4.79	\$781.58	\$192.79	\$89.90
Apartment (Unit)	3.33	\$543.11	\$133.97	\$62.47
Condo/Townhouse (Unit)	2.91	\$474.50	\$117.04	\$54.58
Senior Adult Housing-Detached (Unit)	1.86	\$303.00	\$74.74	\$34.85
Senior Adult Housing-Attached (Occ. Unit)	1.74	\$284.21	\$70.11	\$32.69
Assisted Living (Beds)	1.33	\$217.24	\$53.59	\$24.99
Hotel (Rooms)	3.45	\$563.52	\$139.00	\$64.82
Non-Residential (per 1,000 sq feet)				
Light Industrial	3.49	\$569.24	\$140.41	\$65.47
Industrial Park	3.48	\$568.42	\$140.21	\$65.38
Mini Warehouse	1.25	\$204.18	\$50.36	\$23.48
Elementary School	7.72	\$1,260.17	\$310.84	\$144.94
Middle/Jr. High School	6.89	\$1,125.42	\$277.60	\$129.44
Daycare Center	39.63	\$6,473.18	\$1,596.72	\$744.53
Nursing Home	3.79	\$619.06	\$152.70	\$71.20
Clinic	15.73	\$2,568.53	\$633.57	\$295.43
Church	4.56	\$744.02	\$183.52	\$85.57
General Office	5.51	\$899.19	\$221.80	\$103.42
Medical Dental Office	18.07	\$2,950.74	\$727.85	\$339.39
Free-Standing Discount Store	26.57	\$4,339.14	\$1,070.32	\$499.08
Hardware/Paint Store	25.65	\$4,188.86	\$1,033.26	\$481.79
Shopping Center/General Commercial	14.17	\$2,314.57	\$570.93	\$266.22
New Car Sales	16.67	\$2,722.88	\$671.65	\$313.18
Tire Store	8.95	\$1,462.42	\$360.73	\$168.20
Supermarket	32.72	\$5,343.97	\$1,318.18	\$614.65
Convenience Market w/ Gas Pumps	143.75	\$23,480.51	\$5,791.87	\$2,700.67
Discount Club	20.90	\$3,413.81	\$842.08	\$392.65
Home Improvement Superstore	7.75	\$1,265.56	\$312.17	\$145.56
Department Store	11.44	\$1,868.61	\$460.93	\$214.92
Pharmacy/Drugstore w/ Drive Thru	22.48	\$3,672.02	\$905.77	\$422.35
Drive-In Bank	39.26	\$6,412.70	\$1,581.80	\$737.57
Quality Restaurant	25.19	\$4,113.89	\$1,014.76	\$473.17
High Turnover/Sit Down Restaurant	36.24	\$5,919.09	\$1,460.04	\$680.80
Fast Food with Drive Thru	124.03	\$20,259.11	\$4,997.26	\$2,330.15
Automobile Care Center	7.93	\$1,295.29	\$319.51	\$148.98

1. Maximum Supportable Impact Fees. The fee schedule included in the Transportation IFFP and IFA indicates the maximum Impact Fees which the City may impose on development within the defined Service Area and are based upon general demand characteristics and potential demand that can be created by each class of user. The City reserves the right under the Impact Fees Act (Utah Code 11-36a-402(1)(c,)) to assess an adjusted fee to respond to unusual circumstances to ensure that fees are equitably assessed. The City may also decrease the Impact Fee if the developer can provide documentation that the proposed impact will be

less than what could be expected given the type of user (Utah Code 11-36a-402(1)(d)).

SECTION 7 FEE EXCEPTIONS AND ADJUSTMENTS

1. Waiver for “Public Purpose”. The City Council may, on a project by project basis, authorize exceptions or adjustments to the Impact Fees due from development for those projects the Council determines to be of such benefit to the community as a whole to justify the exception or adjustment. Such projects may include facilities being funded by tax-supported agencies, affordable housing projects, or facilities of a temporary nature. The City Council may elect to waive or adjust Impact Fees in consideration of economic benefits to be received from the Development Activity.
 - a. Procedures. Applications for exceptions are to be filed with the City at the time the applicant first requests the extension of service to the applicant’s development or property.

SECTION 8 APPEAL PROCEDURE

1. Any person or entity that has paid an Impact Fee pursuant to this Ordinance may challenge the Impact Fee by filing:
 - a. An appeal to the City pursuant to South Jordan Municipal Code §16.32.090. If no decision is issued pursuant to South Jordan Municipal Code §16.32.090 within 30 days of a timely filed appeal the appeal will be deemed denied.
 - b. A request for arbitration as provided in Utah Code Ann. § 11-36a-705 as amended; or
 - c. An action in district court.

SECTION 9 MISCELLANEOUS

1. Severability. If any section, subsection, paragraph, clause or phrase of this Impact Fee Policy shall be declared invalid for any reason, such decision shall not affect the remaining portions of this Impact Fee Policy, which shall remain in full force and effect, and for this purpose, the provisions of this Impact Fee Ordinance are declared to be severable.
2. Interpretation. This Impact Fee Ordinance has been divided into sections, subsections, paragraphs and clauses for convenience only and the interpretation of this Impact Fee Ordinance shall not be affected by such division or by any heading contained herein.

3. Effective Date. Except as otherwise specifically provided herein, this Impact Fee Ordinance shall not repeal, modify or affect any Impact Fee of the City in existence as of the effective date of this Ordinance, other than those expressly referenced in Section 1 above. All Impact Fees established, including amendments and modifications to previously existing Impact Fees, after the effective date of this Ordinance shall comply with the requirements of this Impact Fee Ordinance.

a. Passed and Approved this ____ day of _____
City of South Jordan Council

By: _____
_____, Mayor

[Seal]

Voting:

Yea ___ Nay ___
Yea ___ Nay ___
Yea ___ Nay ___
Yea ___ Nay ___
Yea ___ Nay ___

Attest:

By _____
_____, City Recorder

Deposited in the office of the City Recorder this _____ day of _____

Recorded this _____ day of _____.

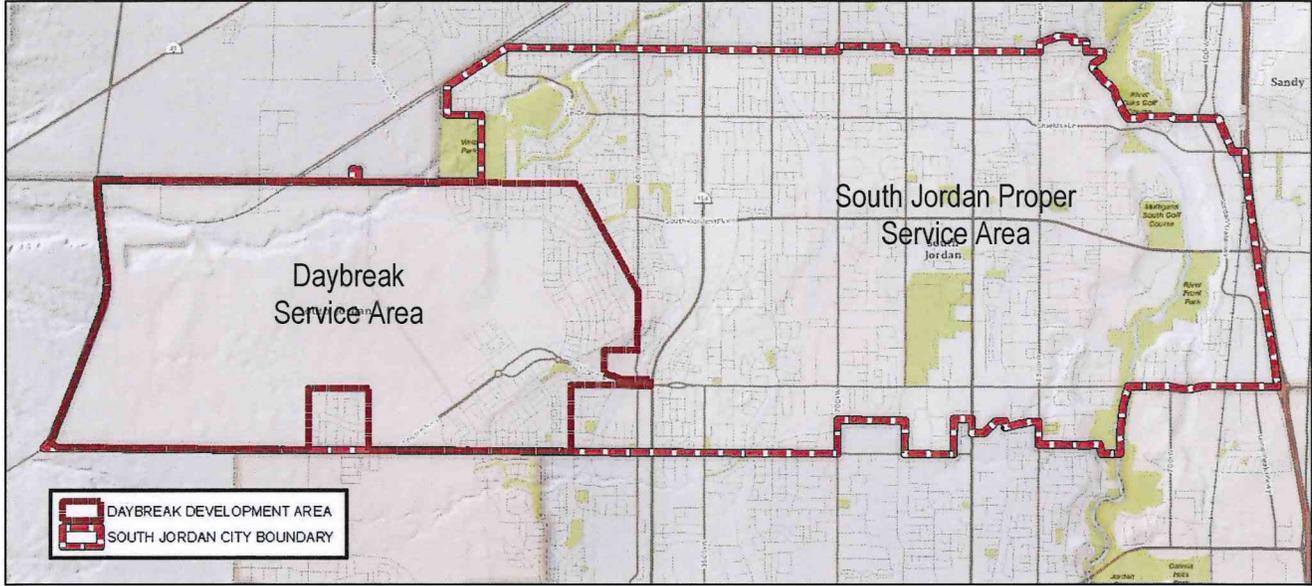
EXHIBIT A
IMPACT FEE FACILITIES PLAN

EXHIBIT B

WRITTEN IMPACT FEE ANALYSIS

EXHIBIT C

IMPACT FEE SERVICE AREAS MAP



South Jordan

Transportation Impact Fee Facilities Plan

DRAFT



South Jordan, Utah

October 1, 2012

UT12-329

IMPACT FEE FACILITIES PLAN CERTIFICATION

Hales Engineering certifies that the attached impact fee facilities plan:

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;
 - 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; and
3. complies in each and every relevant respect with the Impact Fees Act.

Hales Engineering makes the above certification with the following caveats:

1. Within the South Jordan City Proper service area, there are no new proposed improvements and therefore all costs are "buy-in" costs for existing roads.
2. Within the Daybreak service area, Costs for projects are not included in this study because they will be built by the developer and deeded to city per their agreements.
3. Hales Engineering did not make any cost estimates. Buy-in costs were prepared by LYRB.
4. All information provided to Hales Engineering is assumed to be correct, complete, and accurate. This includes information provided by South Jordan City as well as outside sources.

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Appendix A: Road Segment Database

DRAFT

I. INTRODUCTION

The South Jordan Transportation Impact Fee Facilities Plan (IFFP) must identify the following (as per UC 11-36a-302):

- Demands placed upon the existing public facilities by new development activity; and
- The proposed means by which the local political subdivision will meet these demands.

This IFFP document prepared by Hales Engineering discusses all aspects of the IFFP with the exception of the discussion of financial costs associated with the buy-in, new road costs, and calculations for cost per unit of development.

The calculations for this IFFP consider two service areas: Daybreak (Both east and west of the future MVC), and all other remaining portions of South Jordan (South Jordan City Proper). Only city-owned roads (or roads jointly owned with adjacent municipalities) are considered in this IFFP. UDOT-owned roads are not considered.

Within this IFFP, all references to the current Master Transportation Plan refer to *South Jordan City Master Transportation Plan* (Hales Engineering, February 2011).

Only system improvements are considered in this IFFP which are defined as “collector” and “arterial” streets. “Local” streets are considered project improvements and are therefore not considered.

No new road projects are needed within the South Jordan City Proper service area. Costs for the Daybreak service area projects are not included in this study because they will be built by the developer and deeded to the City per their agreements.

II. EXISTING FACILITIES

Hales Engineering compiled a database of all collector and arterial roads within South Jordan City. Each road was segmented to lengths with similar attributes (number of lanes) and traffic volumes. Generally, the segment breaks occurred at intersections with other collectors or arterials. The following data was compiled for each segment:

- Road name;
- Starting Point (cross street);
- Ending Point (cross street);
- Road classification (“minor collector,” “major collector,” “arterial,” or “connector” [Daybreak only]);
- Service area (Daybreak or South Jordan City Proper);
- Joint ownership (indicate another municipality if applicable such as Salt Lake County, Bluffdale, Riverton, etc.); and
- Existing (2012) capacity (based on the Master Transportation Plan roadway capacities [pg. 19]).

Roadway capacities were estimated as follows:

- 2-Lane Collectors/Connectors: 12,500 vehicles per day (vpd)
- 3-Lane Collectors/Connectors: 16,400 vpd
- 5-Lane Arterials: 34,500 vpd
- 7-Lane Arterials: 51,800 vpd

Existing facilities data for each road segment are shown in Appendix A.

III. EXISTING DEMAND AND LEVEL OF SERVICE

Hales Engineering estimated the existing (2012) average weekday daily traffic (AWDT) for each road segment in the database. These AWDTs were obtained from 24-hour pneumatic tube counts between 2009 and 2012. The older counts were adjusted to 2012 levels based on control counts conducted in both 2009 and 2012.

Existing (2012) demand AWDTs for each road segment are shown in Appendix A. Appendix A also shows the existing available capacity for each road segment (Existing Capacity – Existing AWDT). As shown in Appendix A, with the exception of a few road segments with demand approaching capacity, most roads segments have excess capacity. No road segments currently have demand that exceeds capacity. The available capacity is used in the Impact Fee Analysis (IFA) to calculate the buy-in cost for new development trips using existing capacity.

For purposes of this IFFP, level of service (LOS) is defined using the ratio of demand to capacity based on thresholds established in the Master Transportation Plan. An LOS D or better is considered to be an acceptable LOS. LOS E indicates the demand is very close to capacity and is considered failing. LOS F indicates the demand exceeds capacity, and is also considered failing. Appendix A shows the LOS for each roadway segment. No road segments have demands that exceed capacity (LOS F). One road segment, Daybreak Parkway between 5600 West and the Mountain View Corridor, has LOS E conditions. The existing AWDT is estimated to be approximately 12,000 vpd while the existing capacity is estimated to be approximately 12,500 vpd.

IV. FUTURE (2020) CAPACITY

The future 2020 capacity was calculated for each road segment based on the anticipated cross section in year 2020. Most road segments are not anticipated to be larger by year 2020. All increased capacity is due to new or widened roads within Daybreak.

For purposes of this IFFP, Hales Engineering assumed that all roads within Daybreak east of the Mountain View Corridor would be constructed to their full widths by year 2020. West of Mountain View Corridor, only South Jordan Parkway from 7200 West to the Mountain View Corridor was assumed to be constructed. Road segments within Daybreak assumed to be constructed or widened are as follows:

- New Roads:
 - Bingham Creek Road (MVC to Kestrel Rise Rd) – Two Lanes
 - 10200 South (Kestrel Rise Rd to 4800 West) – Two Lanes
 - South Jordan Parkway (7200 West to Lake Run Rd) – Five Lanes
 - Silver Mine Road (MVC to South Jordan Pkwy) – Two Lanes
 - Grandville Avenue (North end of existing park-and-ride lot to 10200 South) – Three Lanes
 - Lake Run Road (South Jordan Pkwy to Daybreak Pkwy) – Two Lanes
 - Kestrel Rise Road (Silver Mine Rd to Bingham Creek Rd) – Two Lanes
- Widened Roads:
 - South Jordan Parkway (Lake Run Rd to 4800 West) – Three Lanes to Five Lanes
 - Daybreak Parkway (5600 West to MVC) – Two Lanes to Five Lanes

All of these road segments are included in the 2040 WFRM travel demand model for year 2020 with the exception of Bingham Creek Road and 10200 South as listed above. However, these roads were included in the Master Transportation Plan for 2015.

Future 2020 capacities are also based on the Master Transportation Plan capacities as discussed previously.

No new road projects are needed within the South Jordan City Proper service area. Road projects in the Daybreak service area will be built by the developer and deeded to the City per their agreements.

V. FUTURE (2020) DEMAND AND LEVEL OF SERVICE

Hales Engineering estimated the future (2020) AWDT for each road segment in the database using the Wasatch Front Region Council (WFRC) travel demand model. The Master Transportation Plan was based on Version 6 of the travel demand model. Version 7 is now available and currently used by transportation planners along the Wasatch Front, therefore Hales Engineering compared the version 7 outputs with the Version 6 outputs to make sure no significant discrepancies exist.

Future traffic was forecasted using the travel demand model managed by the two Metropolitan Planning Organizations (MPO) along the Wasatch Front including the Wasatch Front Region Council (WFRC) and the Mountainland Associations of Governments (MAG). The WFRC is responsible for the model in Salt Lake County.

The travel demand model is an integrated land-use and transportation model composed of several models including:

- Household classification model
- Auto ownership model
- Trip generation model
- Trip distribution model
- Time of day model
- Highway / transit skim builder
- Mode choice model
- Vehicle assignment model
- Transit assignment model
- Model output

The model is implemented within the CUBE/Voyager modeling software package, with the application written in TP+ scripting. The model includes 2,230 internal Transportation Analysis Zones (TAZs) and 20 external zones.

The model has been calibrated and validated to the base year 2007. The model generates outputs such as volumes, trip lengths, and mode shares, which are all calibrated according to FHWA standards.

Future analysis year models are created by including estimates of future socioeconomic data and transportation infrastructure improvements based upon the MPO's long-range plan. Socioeconomic forecasting involves both analytical models and local negotiation and review. Additional details regarding the travel demand model can be obtained from WFRC (*WFRC & MAG Transportation Model Documentation: 2007 Base Year Model, Version 7.0, May 2011*).

The model used for the South Jordan Master Transportation Plan was Version 6. In 2008/2009, as part of the master transportation planning process, the socio-economic data for traffic analysis zones within South Jordan were refined by the master transportation plan team based on future land use plans for the City at the time. Future volumes were adjusted by observing the difference between the base model (2007) and existing traffic volumes and applying that difference to the travel demand model's future volumes. This methodology refines the model outputs by accounting for base-year error. Because the model is a large, regional model (five counties), larger roads such as freeways and expressways tend to be the most accurately projected roadways.

Version 7 of the model is now in use by transportation planners and practitioners along the Wasatch Front. Each new version of the model includes refinements to future land use data, roadway networks, and updated algorithms to better forecast future travel demand. Because a newer model is currently in use, Hales Engineering compared model outputs of Version 6 with Version 7 to investigate whether significant changes in forecasted demand exist.

The Master Transportation Plan includes forecasted AWDTs for 2015 and 2025. Version 7 of the model includes 2020 AWDTs. Hales Engineering averaged the 2015 and 2025 AWDTs to estimate a 2020 AWDT and then compared it to the raw 2020 AWDTs from Version 7. The 2020 AWDT values for each segment shown in Appendix A are based primarily on the average of the 2015 and 2025 AWDT volumes from the Master Transportation Plan.

The following are exceptions where a different method was required to estimate future 2020 demand:

- Some existing 2012 AWDTs are higher than both the 2015 and 2025 projected AWDTs. In these cases, if there is not a logical reason for a decrease in traffic (such as a new parallel facility), the Version 7 data was consulted. Often, the Version 7 data for these types of situations showed no increase between 2010 and 2020. Therefore, the existing 2012 AWDT was assumed to remain unchanged to year 2020. This occurred on a portion of Shields Lane and Kestrel Rise Road.
- In similar cases with existing 2012 AWDTs higher than 2015 and 2025 AWDTs, the 2020 AWDT was estimated to be higher if the Version 7 AWDT was also higher. This also occurred on a segment of Shields Lane and portions of 4000 West.
- Some road segments were modeled in the 2025 Master Transportation Plan model but not in the 2015 model. In these cases, the Version 7 AWDTs were used. This was the case for some road segments within Daybreak such as South Jordan Parkway between 7200 West and the Mountain View Corridor and Grandville Avenue (5600 West) between Bingham Creek and 10200 South.
- Some segments showed decreases between the existing 2012 AWDTs and the future AWDTs in both the Master Transportation Plan models and the Version 7 model. However, when no logical reason exists for a decrease in traffic (or a larger decrease was estimated than actually occurred for the opening of a parallel facility such as 114th South), Hales Engineering assumed that the 2020 AWDT would remain constant from

the 2012 AWDT. This was the case for a segment of 2700 West, portions of 1300 West, and a segment of Jordan Gateway.

Appendix A shows the 2020 LOS for each roadway segment. All road segments had the same LOS or a poorer LOS in 2020 with the exception of Daybreak Parkway between 5600 West and the Mountain View Corridor. This road segment improved from LOS E to LOS B. Road segments with LOS E or F in 2020 include the following:

- Shields Lane between 1000 West and Jordan Gateway. This segment has a demand approaching the capacity of the current three-lane cross section (LOS E).
- Daybreak Parkway between Oquirrh Lake Road and Bangerter Highway. This segment has a demand close to the capacity of the existing five-lane cross section. Widening this segment is shown on the Master Transportation Plan as a future (2025) improvement, but was not assumed to be widened yet by year 2020.
- U-111 (7200 West). The demand in 2020 is anticipated to exceed the capacity of the two-lane cross section. However, the widening of this road is planned by the WFRC as a Phase II project (2020 to 2030), therefore it was not included as a five-lane road in this IFFP.
- 4000 West between 11800 South and 11400 South. This segment has an estimated 2020 demand slightly higher than the existing two-lane capacity. Widening this road to a three-lane cross section is not included in the current Master Transportation Plan but could be considered in future updates.
- 4000 West between 10400 South and 9800 South. This segment has demand approaching the current three-lane cross section (LOS E).
- River Front Parkway between 11400 South and 11150 South. This segment has an estimated 2020 demand slightly higher than the existing two-lane capacity. Widening this road to a three-lane cross section is not included in the current Master Transportation Plan but could be considered in future updates.

Appendix A shows the increase in AWDT for each road segment between 2012 and 2020 (2020 AWDT – Existing AWDT). Not all of the new trips can be attributed to new growth within South Jordan. Some of the increase in trips are regional “cut-through” trips. These are trips with no origin or destination within the City limits. Roadway costs (Buy-in or new roads) cannot be charged to new development to provide capacity for cut-through trips. Furthermore, because this IFFP accounts for two service areas (Daybreak and other South Jordan City Proper), it is necessary to differentiate between trips with an origin or destination within Daybreak, trips with origins and destinations within the other areas of South Jordan, and trips with an origin and destination in Daybreak and an origin or destination within the other portions of South Jordan. To accomplish these tasks, a script was run in Version 7 of the 2020 travel demand model which calculates the percent of trips on each road segment which are “cut-through” trips, “Daybreak only” trips, “South Jordan Proper” trips, and “Both Daybreak and South Jordan Proper” trips. Trips in both Daybreak and South Jordan Proper were divided equally into the Daybreak and South Jordan Proper service areas.

Appendix A shows the number of new trips by year 2020 broken down as “Ineligible (cut-through)” trips, “Daybreak” trips, and “South Jordan City Proper” trips.

By dividing these new trips in the two service areas by the existing and future capacities of the road segments, a proportion of the buy-in or new construction cost can be calculated for each road segment.

The new trips for each service area are impact fee eligible.

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VI. COSTS/REVENUE SOURCES

The City's objective is to fairly and equitably recover the costs of new growth-related infrastructure from new development. This implies that new growth will be expected to pay its fair share of the costs that will be incurred for improvements that serve new growth. In accordance with this philosophy, the following explains the pros and cons of the funding mechanisms that are available to the City to pay for new infrastructure.

Property Tax Revenues or General Fund Revenues

Ad valorem taxes such as property taxes are a stable source of revenue. However, ad valorem taxes allocate new system costs to new development based upon property valuation rather than true impact. In addition, the costs of new infrastructure would be borne by existing users who have already contributed to the existing infrastructure through their property taxes and other fees. This would place an unfair burden upon existing users who have already paid for existing infrastructure and will continue to subsidize growth.

Other general fund revenue sources include Class "C" road funds which are distributed based on both population and road miles. These funds, however, are generally used for operations and maintenance, rather than for capital construction costs.

Sales tax revenues can be used for road costs and are distributed to cities based on both population and point of sale. They are often used to backstop a variety of bonds, and cities need to carefully evaluate how they commit these funds.

User Fees

Like property tax and General Fund revenues, user fees require existing users to subsidize new growth since existing users have already contributed to infrastructure.

Special Assessment Bonds

Special Assessment Area (SAA) bonds are an acceptable mechanism to recover the costs of growth-related infrastructure from new users by means of placing an assessment upon a property user's land. SAA bonds are a stable funding mechanism but have some limitations. One limitation is that assessments are typically based upon lot size rather than by a measure of the true impact that a user will have. Special Assessment Areas generally work best in specific geographic areas, and would be difficult to establish and administer when parcels are spread throughout a City.

Impact Fees

Impact fees have become an ideal mechanism for funding growth-related infrastructure. Analysis is required to accurately assess the true impact of a particular user upon the City infrastructure and to prevent existing users from subsidizing new growth.

It is the opinion of this analysis that given the historic methods of funding existing infrastructure and the intent of the City to equitably allocate the costs of growth-related infrastructure in accordance with the true impact that a user will place upon the transportation system, impact fees can be used to fund applicable growth-related infrastructure planned by the City.

No new road projects are needed within the South Jordan City Proper service area. Costs for the Daybreak service area projects are not included in this study because they will be built by the developer and deeded to the City per their agreements.

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APPENDIX A

Road Segment Database

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Road Name	From	To	SJ Classification	Service Area	Joint Ownership	Existing (2012) Capacity	Future (2020) Capacity	2012 AWDT	2020 AWDT	2012 LOS	2020 LOS	2012 Available Capacity
9800 South / Shields Lane	4000 W	3800 W	Minor Collector	SJ		12500	12500	6000	7000	B	C	6500
9800 South / Shields Lane	3800 W	Bangerter	Minor Collector	SJ		16400	16400	11000	13000	C	D	5400
9800 South / Shields Lane	Bangerter	3200 W	Minor Collector	SJ		16400	16400	6000	7500	B	B	10400
9800 South / Shields Lane	3200 W	2700 W	Minor Collector	SJ		16400	16400	8000	8000	B	B	8400
9800 South / Shields Lane	2700 W	2200 W	Minor Collector	SJ		16400	16400	9000	9000	C	C	7400
9800 South / Shields Lane	2200 W	1700 W	Minor Collector	SJ		16400	16400	8000	8000	B	B	8400
9800 South / Shields Lane	1700 W	1300 W	Minor Collector	SJ		16400	16400	8000	10000	B	C	8400
9800 South / Shields Lane	1300 W	1000 W	Minor Collector	SJ		16400	16400	8000	12000	B	C	8400
9800 South / Shields Lane	1000 W	Jordan Gateway	Minor Collector	SJ		16400	16400	9000	14000	C	E	7400
9800 South / Shields Lane	Jordan Gateway	City Limit	Minor Collector	SJ		34500	34500	19000	20000	C	C	15500
10200 South	7200 West	MVC	Arterial	DB	West Jordan	12500	12500	2000	7000	A	C	10500
Bingham Creek Rd (10200S)	MVC	5600 W	Connector	DB		0	12500	0	6000	B	B	0
Bingham Creek Rd (10200S)	5600 W	Kestrel Rise Rd	Connector	DB		0	12500	0	6000	B	B	0
10200 South	Kestrel Rise Rd	4800 W	Connector	DB		0	12500	0	8500	C	C	0
10200 South	4800 W	4000 W	Minor Collector	DB/SJ		16400	16400	3000	9000	A	C	13400
SJ Pkwy	7200 West	6600 W	Arterial	DB		0	34500	0	10000	A	A	0
SJ Pkwy	6600 W	MVC	Arterial	DB		0	34500	0	12000	B	B	0
SJ Pkwy	MVC	5600 W	Arterial	DB		0	34500	0	20500	C	C	0
SJ Pkwy	5600 W	Lake Run Rd	Arterial	DB		0	34500	0	13000	B	B	0
SJ Pkwy	Lake Run Rd	Kestrel Rise Rd	Arterial	DB		16400	34500	1000	9500	A	A	15400
SJ Pkwy	Kestrel Rise Rd	4800 W / Silver Mine Rd	Arterial	DB		16400	34500	1000	9500	A	A	15400
SJ Pkwy / 10400 South	4800 W / Silver Mine Rd	Oquirrh Lake	Arterial	DB		34500	34500	1000	10000	A	A	33500
SJ Pkwy / 10400 South	Oquirrh Lake	Walnut Canyon	Arterial	DB		34500	34500	4000	15000	A	B	30500
SJ Pkwy / 10400 South	Walnut Canyon	4000 W	Arterial	SJ		34500	34500	7000	15000	A	B	27500
SJ Pkwy / 10400 South	4000 W	Bangerter	Arterial	SJ		34500	34500	14000	23500	B	C	20500
Silver Mine Rd	MVC	Grandville Ave	Connector	DB		0	12500	0	4000	B	B	0
Silver Mine Rd	Grandville Ave	Lake Run Rd	Connector	DB		0	12500	0	2000	A	A	0
Silver Mine Rd	Lake Run Rd	Kestrel Rise Rd	Connector	DB		0	12500	0	1500	A	A	0
Silver Mine Rd	Kestrel Rise Rd	SJ Pkwy	Connector	DB		0	12500	0	2000	A	A	0
Silver Mine Rd (4800 W)	SJ Pkwy	10200 S	Connector	DB		12500	12500	0	5500	A	B	12500
11800 South	7200 West	6600 W	Arterial	DB	SL County	12500	12500	2000	8500	A	C	10500
11800 South	6600 W	6000 W	Arterial	DB	Bluffdale	12500	12500	6000	8500	B	C	6500
11800 South	6000 W	5600 W	Arterial	SJ	Bluffdale	34500	34500	8000	8000	A	A	26500
11800 South	Vadania	Grandville Ave	Connector	DB	Bluffdale	16400	16400	6000	8000	B	B	10400
11800 South	Grandville Ave	Kestrel Rise Rd	Connector	DB	Bluffdale	16400	16400	11000	12000	C	C	5400
11800 South	Kestrel Rise Rd	4000 W	Minor Collector	SJ	Riverton	16400	16400	12000	12000	C	C	4400
11800 South	4000 W	Bangerter	Minor Collector	SJ	Riverton	16400	16400	9000	9000	C	C	7400
11800 South	Bangerter	3600 W	Minor Collector	SJ	Riverton	34500	34500	9000	9000	A	A	25500
11800 South	3600 W	3200 W	Minor Collector	SJ	Riverton	12500	12500	8000	8500	C	C	4500
11800 South	3200 W	2700 W	Minor Collector	SJ	Riverton	12500	12500	7000	7500	C	C	5500
11800 South	2700 W	1700 W	Minor Collector	SJ	Riverton	16400	16400	7000	7000	B	B	9400
Daybreak Pkwy	5600 W	MVC	Arterial	DB		12500	34500	12000	14500	E	B	500
Daybreak Pkwy	MVC	Grandville Ave	Arterial	DB		34500	34500	12000	15500	B	B	22500
Daybreak Pkwy	Grandville Ave	Lake Run Rd	Arterial	DB		34500	34500	12000	15000	B	B	22500
Daybreak Pkwy	Lake Run Rd	Kestrel Rise Rd	Arterial	DB		34500	34500	12000	15000	B	B	22500
Daybreak Pkwy	Kestrel Rise Rd	Oquirrh Lake	Arterial	DB		34500	34500	12000	22000	B	C	22500
Daybreak Pkwy	Oquirrh Lake	4000 W	Arterial	DB		34500	34500	18000	34000	C	E	16500
11400 South	4000 W	Bangerter	Arterial	SJ		34500	34500	19000	39500	C	F	15500
7200 West	11800 S	11400 S	Arterial	DB	SL County	12500	12500	8000	30500	C	F	4500
7200 West	11400 S	SJ Pkwy	Arterial	DB	SL County	12500	12500	8000	28000	C	F	4500
7200 West	SJ Pkwy	10200 S	Arterial	DB	SL County	12500	12500	8000	28000	C	F	4500
Grandville Ave	11800 S	DB Pkwy	Connector	DB		16400	16400	2000	4000	A	A	14400
Grandville Ave	DB Pkwy	N End of PNR	Connector	DB		16400	16400	2000	2500	A	A	14400
Grandville Ave	N End of PNR	11400 S/Silver Mine Rd	Connector	DB		0	16400	0	2500	A	A	0
Grandville Ave	11400 S/Silver Mine Rd	SJ Pkwy	Connector	DB		0	16400	0	1500	A	A	0
Grandville Ave (5600 W)	SJ Pkwy	Bingham Creek (10200 S)	Connector	DB		0	16400	0	6500	B	B	0
Grandville Ave (5600 W)	Bingham Creek (10200 S)	10200 S	Connector	DB		0	16400	0	6000	B	B	0
Lake Run Rd	SJ Pkwy	Silver Mine Rd	Connector	DB		0	12500	0	6000	B	B	0
Lake Run Rd	Silver Mine Rd	DB Pkwy	Connector	DB		0	12500	0	4000	B	B	0
Kestrel Rise Rd	11800 S	DB Pkwy	Connector	DB		12500	12500	2000	2000	A	A	10500
Kestrel Rise Rd	DB Pkwy	Silver Mine Rd	Connector	DB		12500	12500	1000	7500	A	C	11500
Kestrel Rise Rd	Silver Mine Rd	SJ Pkwy	Connector	DB		0	12500	0	4500	B	B	0
Kestrel Rise Rd	SJ Pkwy	Bingham Creek (10200 S)	Connector	DB		0	12500	0	2500	A	A	0
Oquirrh Lake Rd	DB Pkwy	SJ Pkwy	Connector	DB		12500	12500	4000	8500	B	C	8500
4000 West	11800 S	11400 S	Major Collector	SJ		12500	12500	10000	13000	D	F	2500
4000 West	11400 S	10400 S	Major Collector	SJ		16400	16400	7000	8000	B	B	9400
4000 West	10400 S	10200 S	Major Collector	SJ		16400	16400	12000	14000	C	E	4400
4000 West	10200 S	9800 S	Major Collector	SJ		16400	16400	11000	15000	C	E	5400
4000 West	9800 S	City Limit	Major Collector	SJ		16400	16400	12000	13000	C	D	4400
River Heights Drive	11400 S	10400 S	Major Collector	SJ		16400	16400	3000	6000	A	B	13400
3600 West	11800 S	11400 S	Minor Collector	SJ		16400	16400	4000	4500	A	A	12400
3200 West	11800 S	11400 S	Minor Collector	SJ		16400	16400	1000	1000	A	A	15400
3200 West	11400 S	10800 S	Minor Collector	SJ		16400	16400	3000	3500	A	A	13400
3200 West	10800 S	10400 S	Minor Collector	SJ		12500	12500	3000	3500	A	A	9500
3200 West	10400 S	9800 S	Minor Collector	SJ		12500	12500	3000	3500	A	A	9500
3200 West	9800 S	City Limit	Minor Collector	SJ		16400	16400	5000	6500	B	B	11400
2700 West	City Limit	11400 S	Minor Collector	SJ		12500	12500	10000	10500	D	D	2500
2700 West	11400 S	10400 S	Minor Collector	SJ		12500	12500	10000	10000	D	D	2500
2700 West	10400 S	9800 S	Minor Collector	SJ		16400	16400	8000	9500	B	C	8400
2700 West	9800 S	City Limit	Minor Collector	SJ		16400	16400	9000	10500	C	C	7400
2200 West	11400 S	10400 S	Minor Collector	SJ		12500	12500	4000	6000	B	B	8500
2200 West	10400 S	9800 S	Minor Collector	SJ		12500	12500	6000	7500	B	C	6500
2200 West	9800 S	City Limit	Minor Collector	SJ		12500	12500	4000	6500	B	C	8500
1300 West	11800 S	11400 S	Major Collector	SJ		16400	16400	12000	12000	C	C	4400
1300 West	11400 S	10400 S	Major Collector	SJ		16400	16400	8000	8000	B	B	8400
1300 West	10400 S	9800 S	Major Collector	SJ		16400	16400	10000	10000	C	C	6400
1300 West	9800 S	City Limit	Major Collector	SJ		16400	16400	10000	10000	C	C	6400
1000 West	10400 S	9800 S	Minor Collector	SJ		12500	12500	2000	2500	A	A	10500
River Front Pkwy	11400 S	Midas Pond Rd	Major Collector	SJ		12500	12500	7000	13500	C	F	5500
River Front Pkwy	Midas Pond Rd	10600 S	Major Collector	SJ		34500	34500	12000	17000	B	B	22500
Jordan Gateway	11400 S	10600 S	Arterial	SJ		34500	34500	17000	17000	B	B	17500
Jordan Gateway	10600 S	10000 S	Arterial	SJ		34500	34500	18000	22000	C	C	16500
Jordan Gateway	10000 S	City Limit	Arterial	SJ		34500	34500	12000	16000	B	B	22500

2012 to 2020 ADT Increase	Impact Fee Ineligible (cut-through trips)	Increased SJ Trips	Increased DB Trips
1000	120	653	227
2000	140	1583	277
1500	173	1165	162
0	0	0	0
0	0	0	0
0	0	0	0
2000	560	1347	93
4000	1360	2484	156
5000	1500	3352	148
1000	490	490	20
5000	1975	172	2853
6000	600	540	4860
6000	600	540	4860
8500	850	765	6885
6000	690	1134	4176
10000	3900	1126	4974
12000	4200	1262	6538
20500	820	1754	17926
13000	520	2269	10211
8500	425	1880	6195
8500	340	1936	6224
9000	360	2160	6480
11000	440	2618	7942
8000	240	1987	5773
9500	285	3973	5242
4000	80	98	3822
2000	20	183	1797
1500	30	162	1308
2000	110	216	1674
5500	495	484	4521
6500	3803	627	2070
2500	1275	271	954
0	0	0	0
2000	700	343	957
1000	395	194	411
0	0	0	0
0	0	0	0
0	0	0	0
500	203	164	134
500	240	170	90
0	0	0	0
2500	1025	219	1256
3500	753	623	2125
3000	690	618	1692
3000	480	551	1969
10000	1000	1825	7175
16000	2400	3467	10133
20500	4510	4949	11041
22500	16763	331	5406
20000	13500	295	6205
20000	14400	200	5400
2000	0	165	1835
500	0	41	459
2500	0	185	2315
1500	0	98	1402
6500	0	591	5909
6000	2820	720	2460
6000	0	850	5150
4000	0	296	3704
0	0	0	0
6500	130	590	5780
4500	0	333	4167
2500	0	206	2294
4500	270	645	3585
3000	2130	690	180
1000	60	771	169
2000	200	1386	414
4000	360	2504	1136
1000	150	678	172
3000	0	2500	500
500	243	209	48
0	0	0	0
500	125	347	28
500	83	418	0
500	60	433	7
1500	450	845	205
500	285	174	41
0	0	0	0
1500	540	882	78
1500	480	976	44
2000	0	2000	0
1500	0	1345	155
2500	975	1450	75
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
500	0	500	0
6500	1885	4543	72
5000	1675	3262	63
0	0	0	0
4000	680	3182	138
4000	2640	1280	80

SOUTH JORDAN, UTAH
TRANSPORTATION IMPACT FEE ANALYSIS (IFA)

SEPTEMBER 2012

PREPARED BY:
LEWIS YOUNG ROBERTSON & BURNINGHAM

IMPACT FEE ANALYSIS CERTIFICATION

IFA Certification

LYRB certifies that the attached impact fee analysis prepared for road and transportation facilities:

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;
 - 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.

LYRB makes this certification with the following caveats:

1. All of the recommendations for implementations of the Impact Fee Facilities Plan (IFFP) made in the IFFP documents or in the Impact Fee Analysis documents are followed by Agency Staff and elected officials.
2. If all or a portion of the IFFP or IFA are modified or amended, this certification is no longer valid.
3. All information provided to LYRB is assumed to be correct, complete, and accurate. This includes information provided by the City as well as outside sources.

LEWIS YOUNG ROBERTSON & BURNINGHAM, INC.

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SECTION I: EXECUTIVE SUMMARY

The purpose of the Transportation Impact Fee Analysis ("IFA") is to fulfill the requirements established in Utah Code Title 11 Chapter 36a, the "Impact Fees Act", and assist South Jordan City (the "City") to plan, finance and construct necessary capital improvements related to its municipal transportation system in order to meet the service demands created by development activity.

- ☞ **Service Area:** For purposes of the City's transportation system, the service area will include the Daybreak (DB) Area and the South Jordan Proper (SJP) Area, which includes all land outside of Daybreak but within South Jordan City municipal boundaries.
- ☞ **Demand Analysis:** The demand units utilized in this analysis are based on undeveloped residential and commercial land and the new trips generated from these land-use types as development takes place. The transportation capital improvements identified in this study are based on maintaining the existing and established level of service as defined by the City and this document.
- ☞ **Level of Service (LOS):** LOS C or D is generally considered acceptable for rural or urbanized areas, whereas LOS E and F are considered above capacity or failure without modification or adjustment. For this analysis a LOS D is the maximum acceptable delay/congestion for both roadways and intersections.
- ☞ **Existing Facilities and Excess Capacity:** Excess roadway capacity or a buy-in component has been considered for system improvements within each Service Area. It is anticipated that new residents in the SJP Service Area will utilize approximately 4.6 percent of the capacity within South Jordan Proper and 2.1 percent of the capacity in Daybreak within the next eight years. Residents in the Daybreak area will utilize approximately 1.3 percent of existing capacity of South Jordan Proper roads in the same timeframe.
- ☞ **Capital Facility Analysis:** This document identifies public facilities that will allow the City to maintain the current level of service enjoyed by existing residents and development into the future. No new roads are planned for the South Jordan Proper area. Although new roads are planned for the Daybreak area, they will be built by the developer and deeded to the City.
- ☞ **Impact Fee Methodology:** Impact fees can be calculated using planned capital costs specified for future development, defined as a Plan Based Analysis. The improvements are identified in the Impact fee Facilities Plan ("IFFP"), Capital Facilities Plan ("CFP") or Capital Improvement Plan ("CIP") as growth related projects. The total project costs are divided by the total demand units that the capital facilities are designed to serve. Under this methodology, it is important to identify the existing level of service and determine any excess capacity in existing facilities that could serve new growth.

TRANSPORTATION IMPACT FEES

The applicable buy-in component and new facility costs are identified in Table 1.1. The total cost of existing and future facilities utilized by new development is applied to the total future trips served. This results in a cost per trip of \$163.34 in the SJP Service Area and \$39.36 (\$18.79 net cost) in the DB Service Area.

TABLE 1.1: ILLUSTRATION OF IMPACT FEE PER TRIP

	TOTAL QUALIFIED COST	% TO NEW GROWTH	COST TO NEW GROWTH	TRIPS	COST PER TRIP
SJP Service Area					
Existing Facilities					
South Jordan Traffic on SJCP Roads	\$55,573,942	4.3%	\$2,403,951	19,876	\$120.95
South Jordan Traffic on DB Roads	\$20,189,018	1.3%	\$259,993	19,876	\$13.08
Outstanding Debt (Interest on Bonds)	\$3,414,346	4.3%	\$147,694	19,876	\$7.43
Future Facilities (IFFP Planning Horizon)					
South Jordan Traffic on DB Roads	\$16,962,464	2.5%	\$421,750	19,876	\$21.22
Professional Expense	\$34,020	100.0%	\$34,020	51,579	\$0.66
South Jordan Service Area Impact Fee			\$3,267,408		\$163.34
Daybreak Service Area					
Existing Facilities					
Daybreak Traffic on SJCP Roads	\$55,573,942	2.1%	\$1,183,720	31,703	\$37.34
Outstanding Debt (Interest on Bonds)	\$3,414,346	2.1%	\$72,725	31,703	\$2.29
Future Facilities (IFFP Planning Horizon)	\$0	100.0%	\$0		\$0.00
Professional Expense	\$34,020	100.0%	\$34,020	51,579	\$0.66
Daybreak Service Area Impact Fee			\$1,290,465		\$39.36
Accounting Credit for SJ Traffic on DB Roads	(\$681,743)	100.0%	(\$681,743)	31,703	(\$21.50)
Daybreak Net Cost Per Trip					\$18.79

The cost per trip is then applied to the trip statistics for each type of land use, as shown below in order to derive the impact fee for various types of land uses.

TABLE 1.2: RECOMMENDED IMPACT FEES

LAND USE CATEGORY	TRIP ENDS	SJP IMPACT FEE	DAYBREAK IMPACT FEE	DAYBREAK ADJUSTED FEE
Cost per Trip		\$163.34	\$40.29	\$18.79
Residential (per unit)				
Single Family Residential (Unit)	4.79	\$781.58	\$192.79	\$89.90
Apartment (Unit)	3.33	\$543.11	\$133.97	\$62.47
Condo/Townhouse (Unit)	2.91	\$474.50	\$117.04	\$54.58
Senior Adult Housing-Detached (Unit)	1.86	\$303.00	\$74.74	\$34.85
Senior Adult Housing-Attached (Occ. Unit)	1.74	\$284.21	\$70.11	\$32.69
Assisted Living (Beds)	1.33	\$217.24	\$53.59	\$24.99
Hotel (Rooms)	3.45	\$563.52	\$139.00	\$64.82
Non-Residential (per 1,000 sq feet)				
Light Industrial	3.49	\$569.24	\$140.41	\$65.47
Industrial Park	3.48	\$568.42	\$140.21	\$65.38
Mini Warehouse	1.25	\$204.18	\$50.36	\$23.48
Elementary School	7.72	\$1,260.17	\$310.84	\$144.94
Middle/Jr. High School	6.89	\$1,125.42	\$277.60	\$129.44
Daycare Center	39.63	\$6,473.18	\$1,596.72	\$744.53
Nursing Home	3.79	\$619.06	\$152.70	\$71.20
Clinic	15.73	\$2,568.53	\$633.57	\$295.43
Church	4.56	\$744.02	\$183.52	\$85.57

LAND USE CATEGORY	TRIP ENDS	SJP IMPACT FEE	DAYBREAK IMPACT FEE	DAYBREAK ADJUSTED FEE
General Office	5.51	\$899.19	\$221.80	\$103.42
Medical Dental Office	18.07	\$2,950.74	\$727.85	\$339.39
Free-Standing Discount Store	26.57	\$4,339.14	\$1,070.32	\$499.08
Hardware/Paint Store	25.65	\$4,188.86	\$1,033.26	\$481.79
Shopping Center/General Commercial	14.17	\$2,314.57	\$570.93	\$266.22
New Car Sales	16.67	\$2,722.88	\$671.65	\$313.18
Tire Store	8.95	\$1,462.42	\$360.73	\$168.20
Supermarket	32.72	\$5,343.97	\$1,318.18	\$614.65
Convenience Market w/ Gas Pumps	143.75	\$23,480.51	\$5,791.87	\$2,700.67
Discount Club	20.90	\$3,413.81	\$842.08	\$392.65
Home Improvement Superstore	7.75	\$1,265.56	\$312.17	\$145.56
Department Store	11.44	\$1,868.61	\$460.93	\$214.92
Pharmacy/Drugstore w/ Drive Thru	22.48	\$3,672.02	\$905.77	\$422.35
Drive-In Bank	39.26	\$6,412.70	\$1,581.80	\$737.57
Quality Restaurant	25.19	\$4,113.89	\$1,014.76	\$473.17
High Turnover/Sit Down Restaurant	36.24	\$5,919.09	\$1,460.04	\$680.80
Fast Food with Drive Thru	124.03	\$20,259.11	\$4,997.26	\$2,330.15
Automobile Care Center	7.93	\$1,295.29	\$319.51	\$148.98

TABLE 1.3: PREVIOUS (2005) IMPACT FEES

LAND USE CATEGORY	TRIP ENDS	SJP IMPACT FEE	DAYBREAK IMPACT FEE
Cost per Trip		\$375.99	\$63.39
Residential (per unit)			
Single Family Residential (Unit)	5.00	\$1,879.95	\$316.95
Multi Family Residential (Unit)	3.50	\$1,315.97	\$221.87
Hotel/Motel (Rooms)	4.12	\$1,547.22	\$260.85
Non-Residential (per 1,000 sq feet)			
School (1,000 sf)	6.21	\$233.05	\$393.34
Church (1,000 sf)	4.94	\$1,856.47	\$312.99
Office (1,000 sf)	7.83	\$2,943.28	\$496.22
Light Industrial (1,000 sf)	3.49	\$1,310.34	\$220.92
Commercial (1,000 sf)	18.00	\$4,737.53*	\$1,141.03

*Fee changed by R. Horst 12/21/06. Original was \$6,767.90

NON-STANDARD IMPACT FEES

The proposed fees are based upon projected trip ends generated by land uses within the City. The City reserves the right under the Impact Fees Act to assess an adjusted fee that more closely matches the true impact that the land use will have upon public facilities.¹ This adjustment could result in a lower impact fee if the City determines that a particular user may create a different impact than what is standard for its land use. To determine the impact fee for a non-standard use, the City should use the following formula:

$$\text{Total Trips (per Specified Land Use)} * \text{Applicable Adjustment Factors} * \text{Cost per Trip } (\$163.34 \text{ or } \$18.79)$$

EXPENDITURE OF IMPACT FEES

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 five to six years should be spent only on those projects as set forth in this analysis.

¹ 11-36a-402(1)(c)

The legislative definition of "encumber" means a pledge to retire a debt or an allocation to a current purchase order or contract.²

DRAFT

² 11-36a-102(6)

SECTION II: GENERAL IMPACT FEE METHODOLOGY

FIGURE 2.1: IMPACT FEE
METHODOLOGY

DEMAND ANALYSIS

The purpose of this study is to fulfill the requirements of the Impact Fees Act regarding the establishment of an Impact Fee Analysis (IFA). The IFA is designed to proportionately allocate the cost of the new facilities and any excess capacity in roadway facilities to new development, while ensuring that all methods of financing are considered. Each component must consider the historic level of service provided to existing development and ensure that impact fees are not used to raise that level of service.

DEMAND ANALYSIS

The demand analysis serves as the foundation for the IFA. This element focuses on a specific demand unit related to each public service – the existing demand on public facilities and the future demand as a result of new development that will impact public facilities. For purposes of this Transportation-related IFA, trips generated by new development activity are used as the demand unit to measure impact.

LOS ANALYSIS

LEVEL OF SERVICE ANALYSIS

The demand placed upon existing public facilities by existing development is known as the existing “Level of Service” (LOS). Through the inventory of existing facilities, combined with the growth assumptions, this analysis identifies the level of service which is provided to a community’s existing residents and ensures that future facilities maintain these standards. Any excess capacity identified within existing facilities can be apportioned to new development. Any demand generated from new development that overburdens the existing system beyond the existing capacity justifies the construction of new facilities.

EXISTING FACILITIES ANALYSIS

EXISTING FACILITY INVENTORY

In order to quantify the demands placed upon existing public facilities by new development activity, the IFFP provides an inventory of the City’s existing system facilities. To the extent possible, the inventory valuation should consist of the following information:

FUTURE FACILITIES ANALYSIS

- ☒ Original construction cost of each facility;
- ☒ Estimated date of completion of each future facility;
- ☒ Estimated useful life of each facility; and,
- ☒ Remaining useful life of each existing facility.

FINANCING STRATEGY

The inventory of existing facilities is important to properly determine the excess capacity of existing facilities and the utilization of excess capacity by new development.

PROPORTIONATE SHARE ANALYSIS

FUTURE CAPITAL FACILITIES ANALYSIS

The demand analysis, existing facility inventory and LOS analysis allow for the development of a list of capital projects necessary to serve new growth and to maintain the existing or current level of service. This list includes any excess capacity of existing facilities as well as future system improvements necessary to maintain the level of service. Any demand generated from new development that overburdens the existing system beyond the existing capacity justifies the construction of new facilities.

FINANCING STRATEGY – CONSIDERATION OF ALL REVENUE SOURCES

This analysis must also include a consideration of all revenue sources, including

impact fees, future debt costs, alternative funding sources and the dedication of system improvements, which may be used to finance system improvements.³ In conjunction with this revenue analysis, there must be a determination that impact fees are necessary to achieve an equitable allocation of the costs of the new facilities between the new and existing users.⁴ This is further discussed in Section VI: Financing Strategy.

PROPORTIONATE SHARE ANALYSIS

The written impact fee analysis is required under the Impact Fees Act and must identify the impacts placed on the facilities by development activity and how these impacts are reasonably related to the new development. The written impact fee analysis must include a proportionate share analysis, clearly detailing each cost component and the methodology used to calculate each impact fee. A local political subdivision or private entity may only impose impact fees on development activities when its plan for financing system improvements establishes that impact fees are necessary to achieve an equitable allocation to the costs borne in the past and to be borne in the future (UCA 11-36a-302(3)). Section IV: Existing Facilities Inventory explores the proportionate share of new growth.

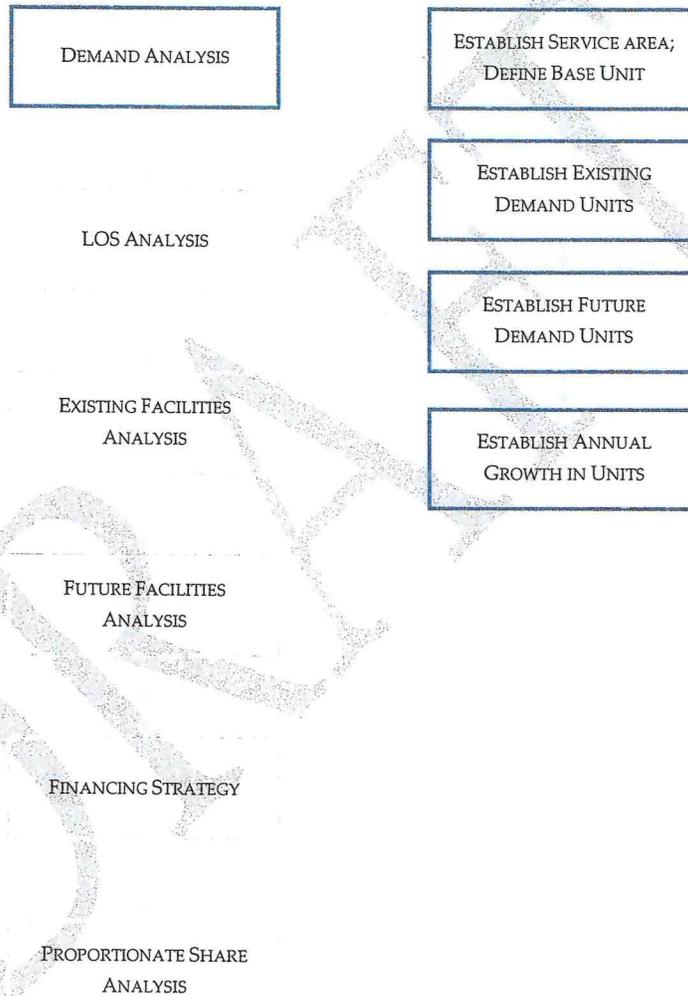
³ 11-36a-302(2)

⁴ 11-36a-302(3)

SECTION III: OVERVIEW OF SERVICE AREA AND DEMAND ANALYSIS

The demand analysis serves as the foundation for the IFA. This element focuses on a specific demand unit related to each public service – the existing demand on public facilities and the future demand as a result of new development that will impact public facilities.

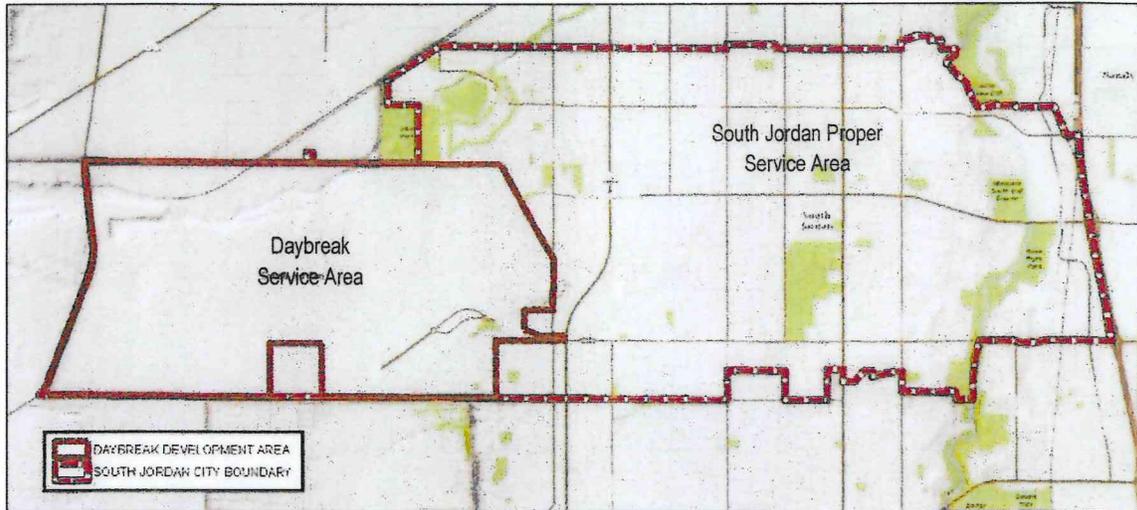
FIGURE 3.1: DEMAND ANALYSIS METHODOLOGY



SERVICE AREA

Utah Code requires the impact fee enactment to establish one or more service areas within which impact fees will be imposed.⁵ A service area is a geographic area designed by the City on the basis of sound planning and engineering principles in which a defined set of public facilities are provided. The service area for purposes of the City's transportation impact fees will include the Daybreak Area and the South Jordan Proper Area, which includes all land outside of Daybreak but within South Jordan City municipal boundaries. Image 3.1 provides a visual representation of the service areas.

IMAGE 3.1: MAP OF IFA SERVICE AREAS



Map courtesy of South Jordan GIS Department.

DEMAND UNITS

For purposes of the City's transportation impact fees, demand is measured in terms of trip generation related to undeveloped residential and commercial land use types. Based on projected growth in demand within the service area, public facilities are needed to meet the additional demands created on the City's existing roadway system and maintain the level of service. The impact fees calculated in this document are based upon the projected growth in trip generation which is used as a means to quantify the impact that future users will have upon the City's system. The trip generation or demand unit used in the calculation of the transportation impact fee is based upon each land use category's impact and road usage characteristics expressed in the number of trips generated. The existing and future trip statistics used in this analysis were prepared by the Hales Engineering in the Impact Fee Facilities Plan (IFFP). This data was also used to establish proportionality between the Daybreak and SJP Service Areas. To determine the proportionate impact from each land use type, the existing trips are allocated to the different land use types based on trip statistics as presented in the Institute of Traffic Engineers (ITE) Trip Generation Manual, 8th Edition. Appropriate adjustment factors are applied to remove pass-by traffic.

⁵ 11-36a-402(a)

TABLE 3.1: EXISTING TRIP ENDS BY TYPE

LAND USE	UNIT	FAR	ACRES	DEVELOPED UNITS	PEAK HOUR TRIPS	ENTERING/EXITING	PASS-BY ADJUST.	CURRENT PEAK HOUR TRIPS
South Jordan Proper								
Residential	Unit		4,398.42	14,640	7.34	0.50	0%	53,754
Commercial	Sq Ft	0.18	611.07	4,658,222	102.22	0.50	44%	133,662
Industrial	Sq Ft	0.30	0.00	0	6.97	0.50	0%	0
TOTALS			5,009.49					187,416
Daybreak								
Residential	Unit		343.42	1,143	7.34	0.50	0%	4,197
Commercial	Sq Ft	0.18	85.37	650,795	102.22	0.50	44%	18,674
Industrial	Sq Ft	0.30	302.45	3,952,428	6.97	0.50	0%	13,774
TOTALS			731.24					36,645
Combined Total								
Residential	Unit		4,741.83	15,783	7.34	0.50	0%	57,951
Commercial	Sq Ft	0.18	696.45	5,309,017	102.22	0.50	44%	152,335
Industrial	Sq Ft	0.30	302.45	3,952,429	6.97	0.50	0%	13,774
TOTALS			5,740.73					224,060

TABLE 3.2: FUTURE TRIP ENDS BY TYPE (PROJECTED THROUGH BUILD-OUT)

LAND USE	UNDEVELOPED ACRES	UNDEVELOPED UNITS	FUTURE PEAK HOUR TRIPS	TOTAL TRIPS @ BUILD-OUT
South Jordan Proper				
Residential	1,306.51	2,545	9,346	63,100
Commercial	316.05	2,409,246	69,130	202,792
Industrial	17.69	231,158	806	806
TOTAL	1,640.25		79,282	266,698
Daybreak				
Residential	2,089.15	16,922	62,131	66,328
Commercial	1,006.21	7,670,320	220,090	238,764
Industrial	128.64	1,681,118	5,859	19,633
TOTAL	3,224.01		288,079	324,724
Combined Total				
Residential	3,395.66	19,467	71,477	129,428
Commercial	1,322.26	10,079,566	289,220	441,556
Industrial	146.33	1,912,276	6,664	20,438
TOTAL	4,864.25		367,361	591,422

TABLE 3.3: SUMMARY OF ANNUAL GROWTH IN TRIP ENDS

YEAR	TRIPS	ANNUAL GROWTH	SJCP TRIPS	DAYBREAK TRIPS
2012	224,060		187,416	36,645
2013	229,406	5,346	189,792	39,614
2014	235,023	5,617	192,198	42,824
2015	240,930	5,907	194,635	46,295
2016	247,149	6,219	197,103	50,046
2017	253,704	6,555	199,602	54,102
2018	260,619	6,915	202,133	58,486
2019	267,921	7,302	204,696	63,225
2020	275,640	7,719	207,291	68,348
2021	283,806	8,167	209,919	73,887
2022	292,455	8,649	212,581	79,874
2023	301,623	9,168	215,276	86,347
2024	311,350	9,727	218,006	93,344
2025	321,678	10,328	220,770	100,908
2026	332,654	10,976	223,569	109,085
2027	344,328	11,674	226,404	117,924
2028	356,755	12,427	229,275	127,480
2029	369,992	13,237	232,182	137,810
2030	384,103	14,111	235,126	148,978
2031	399,157	15,053	238,107	161,050
2032	415,226	16,070	241,126	174,101
2033	432,392	17,165	244,183	188,209
2034	450,739	18,347	247,279	203,460
2035	470,362	19,622	250,414	219,947
2036	491,360	20,998	253,590	237,770
2037	513,843	22,483	256,805	257,038
2038	537,928	24,085	260,061	277,867
2039	563,742	25,814	263,358	300,383
2040	591,422	27,680	266,698	324,724
New Trips in 8 Year Horizon			19,876	31,703
New Trips Through Buildout			79,282	288,079

The DB Service Area is projected to have an 8.10% annual growth rate in trips, while the SJP Service Area is projected to have a 1.27% annual growth rate in trips to reach the projected buildout.

Source: Calculated using trip data from ITE Trip Manual (8th Edition), ITE Handbook 2nd Edition and South Jordan City Land Use Data.

Table 3.3 identifies the new trips generated through the eight-year planning horizons, as well as through buildout. It is important to forecast the growth in each service area to properly allocate the study costs to the demand that will be served.

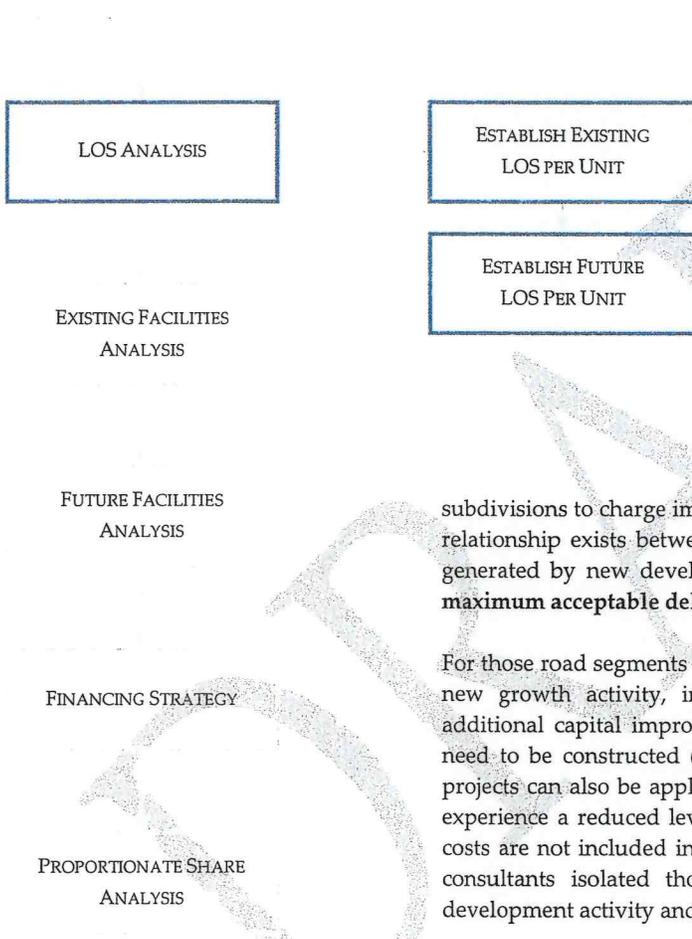


LEVEL OF SERVICE STANDARDS

The demand placed upon existing public facilities by existing development is known as the existing "Level of Service" ("LOS"). Through the inventory of existing facilities, combined with the growth assumptions, the IFFP identifies the level of service which is provided to a community's existing residents and ensures that future facilities maintain these standards. In addition, the IFFP illustrates excess capacity within existing facilities and the utilization of excess capacity by new development. Any demand generated from new development that overburdens the existing system beyond the existing capacity justifies the construction of new facilities.

FIGURE 3.2

DEMAND ANALYSIS



Roadway operations are typically rated based on level of service standard, described as the traffic operations of an intersection and/or roadway based on congestion and delay. The LOS is generally defined in ranges from LOS A (almost no congestion or delay) to LOS F (traffic demand is above capacity and the intersections experience long queues and delays). LOS C or D is generally considered acceptable for rural or urbanized areas, whereas LOS E and F are considered above capacity or failure without modification or adjustment.

The Impact Fees Act allows local political subdivisions to charge impact fees for roadway facilities as long as a reasonable relationship exists between the fees imposed on development and the needs generated by new development activity. **For this analysis a LOS D is the maximum acceptable delay/congestion for both roadways and intersections.**

For those road segments that experience a reduced level of service as a result of new growth activity, impact fees are an applicable method of financing additional capital improvements. In addition, in areas where new roadways need to be constructed (due to new development), the capital costs of these projects can also be applied to impact fees. For the road segments that do not experience a reduced level of service as a result of future growth, the capital costs are not included in the impact fee analysis. Under this methodology the consultants isolated those projects that are directly necessitated by new development activity and thus, are appropriately funded through impact fees.

It is important to note that capital improvement costs are not included in the computation of impact fees for roadways that maintain the level of service despite growth and road segments that will be funded by developers or other agencies are not included in the computation of impact fees.

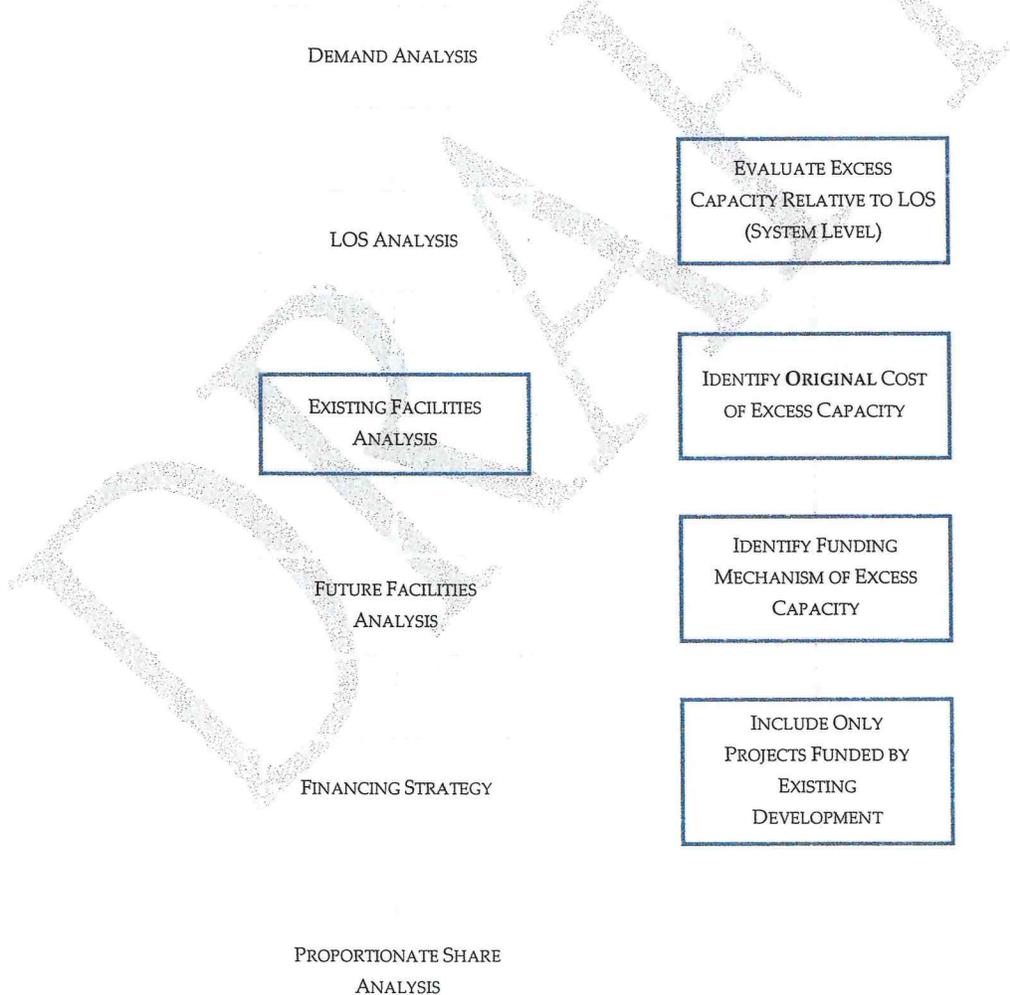
SECTION IV: EXISTING FACILITIES INVENTORY

In order to quantify the demands placed upon existing public facilities by new development activity, the Impact Fee Facilities Plan provides an inventory of the City's existing facilities. To the extent possible, the inventory valuation should consist of the following information:

- ☞ Original construction cost of each existing system improvement;
- ☞ Estimated date of completion of each future system improvement;
- ☞ Estimated useful life of each system improvement; and,
- ☞ Remaining useful life of each existing system improvement.

The inventory of existing facilities is important to properly determine the excess capacity of existing facilities and the utilization of excess capacity by new development. Figure 4.1 illustrates the process for evaluating existing facilities.

FIGURE 4.1



GENERAL SYSTEM EXCESS CAPACITY

Transportation impact fees are justified when average daily trips (ADTs) are added to system-wide roadways that exceed the existing capacity or when new system-wide roadways are needed to meet the demands of new development activity. A buy-in component is contemplated for the roadways that have sufficient capacity to handle new growth activity while maintaining safe and acceptable levels of service. Table 4.1 below shows the existing roadways, many of which have sufficient capacity to handle new growth. This inventory represents only system improvements which are relevant to the purposes of impact fees. Additionally, only capacity at a level of service D or better was included in the calculations to attribute buy-in for new growth.

TABLE 4.1: CITY EXISTING ROADWAY FACILITIES INVENTORY

Road Segment	Service Area	2012 AWDT	2012 LOS	2020 AWDT	2020 LOS	2020 Capacity	% of Total Capacity	% Attributed to New Growth			
								SJ trips on SJ Roads	DB trips on SJ Roads	SJ trips on DB Roads	
9800 South / Shields Lane	SJ	6000	B	7000	C	12500	1.0%	6.2%	2.1%	0.0%	0.0%
9800 South / Shields Lane	SJ	11000	C	13000	D	16400	1.3%	11.5%	1.9%	0.0%	0.0%
9800 South / Shields Lane	SJ	6000	B	7500	B	16400	1.3%	8.6%	0.9%	0.0%	0.0%
9800 South / Shields Lane	SJ	8000	B	8000	B	16400	1.3%	0.0%	0.0%	0.0%	0.0%
9800 South / Shields Lane	SJ	9000	C	9000	C	16400	1.3%	0.0%	0.0%	0.0%	0.0%
9800 South / Shields Lane	SJ	8000	B	8000	B	16400	1.3%	0.0%	0.0%	0.0%	0.0%
9800 South / Shields Lane	SJ	8000	B	10000	C	16400	1.3%	9.8%	0.5%	0.0%	0.0%
9800 South / Shields Lane	SJ	8000	B	12000	C	16400	1.3%	18.1%	0.9%	0.0%	0.0%
9800 South / Shields Lane	SJ	9000	C	14000	E	16400	1.3%	24.1%	0.7%	0.0%	0.0%
9800 South / Shields Lane	SJ	19000	C	20000	C	34500	2.7%	1.7%	0.1%	0.0%	0.0%
10200 South	DB	2000	A	7000	C	12500	0.5%	0.0%	0.0%	1.6%	26.9%
10200 South	DB/SJ	3000	A	9000	C	16400	1.3%	3.3%	15.8%	3.3%	15.8%
SJ Pkwy / 10400 South	DB	1000	A	10000	A	34500	2.7%	0.0%	0.0%	5.5%	23.9%
SJ Pkwy / 10400 South	DB	4000	A	15000	B	34500	2.7%	0.0%	0.0%	6.7%	29.3%
SJ Pkwy / 10400 South	SJ	7000	A	15000	B	34500	2.7%	4.9%	21.6%	0.0%	0.0%
SJ Pkwy / 10400 South	SJ	14000	B	23500	C	34500	2.7%	13.3%	18.1%	0.0%	0.0%
Silver Mine Rd (4800 W)	DB	0	A	5500	B	12500	1.0%	0.0%	0.0%	4.1%	43.0%
11800 South	DB	2000	A	8500	C	12500	0.5%	0.0%	0.0%	5.6%	19.8%
11800 South	DB	6000	B	8500	C	12500	0.5%	0.0%	0.0%	2.3%	9.2%
11800 South	SJ	8000	A	8000	A	34500	1.3%	0.0%	0.0%	0.0%	0.0%
11800 South	DB	6000	B	8000	B	16400	0.6%	0.0%	0.0%	2.3%	7.1%
11800 South	DB	11000	C	12000	C	16400	0.6%	0.0%	0.0%	1.3%	3.0%
11800 South	SJ	12000	C	12000	C	16400	0.6%	0.0%	0.0%	0.0%	0.0%
11800 South	SJ	9000	C	9000	C	16400	0.6%	0.0%	0.0%	0.0%	0.0%
11800 South	SJ	9000	A	9000	A	34500	1.3%	0.0%	0.0%	0.0%	0.0%
11800 South	SJ	8000	C	8500	C	12500	0.5%	1.5%	1.3%	0.0%	0.0%
11800 South	SJ	7000	C	7500	C	12500	0.5%	1.6%	0.8%	0.0%	0.0%

Road Segment	Service Area	2012 AWDT	2012 LOS	2020 AWDT	2020 LOS	2020 Capacity	% of Total Capacity	% Attributed to New Growth				
								SJ trips on SJ Roads	DB trips on SJ Roads	SJ trips on DB Roads		
11800 South	SJ	7000	B	7000	B	16400	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Daybreak Pkwy	DB	12000	B	15500	B	34500	2.7%	0.0%	0.0%	0.0%	1.9%	7.5%
Daybreak Pkwy	DB	12000	B	15000	B	34500	2.7%	0.0%	0.0%	0.0%	1.9%	6.0%
Daybreak Pkwy	DB	12000	B	15000	B	34500	2.7%	0.0%	0.0%	0.0%	1.5%	7.1%
Daybreak Pkwy	DB	12000	B	22000	C	34500	2.7%	0.0%	0.0%	0.0%	4.6%	26.1%
Daybreak Pkwy	DB	18000	C	34000	E	34500	2.7%	0.0%	0.0%	0.0%	6.9%	26.0%
11400 South	SJ	19000	C	39500	F	34500	2.7%	7.6%	19.8%	0.0%	0.0%	0.0%
7200 West	DB	8000	C	30500	F	12500	0.5%	0.0%	0.0%	0.0%	0.4%	5.9%
7200 West	DB	8000	C	28000	F	12500	0.5%	0.0%	0.0%	0.0%	0.4%	7.7%
7200 West	DB	8000	C	28000	F	12500	0.5%	0.0%	0.0%	0.0%	0.2%	6.7%
Grandville Ave	DB	2000	A	4000	A	16400	1.3%	0.0%	0.0%	0.0%	0.6%	13.8%
Grandville Ave	DB	2000	A	2500	A	16400	1.3%	0.0%	0.0%	0.0%	0.1%	3.4%
Kestrel Rise Rd	DB	2000	A	2000	A	12500	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Kestrel Rise Rd	DB	1000	A	7500	C	12500	1.0%	0.0%	0.0%	0.0%	3.1%	56.9%
Kestrel Rise Rd	DB	4000	B	8500	C	12500	1.0%	0.0%	0.0%	0.0%	4.9%	34.9%
Oquirrh Lake Rd	DB	10000	D	13000	F	12500	1.0%	1.4%	0.4%	0.0%	0.0%	0.0%
4000 West	SJ	7000	B	8000	B	16400	1.3%	5.8%	0.9%	0.0%	0.0%	0.0%
4000 West	SJ	12000	C	14000	E	16400	1.3%	10.2%	2.3%	0.0%	0.0%	0.0%
4000 West	SJ	11000	C	15000	E	16400	1.3%	13.7%	5.5%	0.0%	0.0%	0.0%
4000 West	SJ	12000	C	13000	D	16400	1.3%	5.1%	1.0%	0.0%	0.0%	0.0%
River Heights Drive	SJ	3000	A	6000	B	16400	1.3%	19.4%	2.2%	0.0%	0.0%	0.0%
3600 West	SJ	4000	A	4500	A	16400	1.3%	1.5%	0.3%	0.0%	0.0%	0.0%
3200 West	SJ	1000	A	1000	A	16400	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%
3200 West	SJ	3000	A	3500	A	16400	1.3%	2.7%	0.0%	0.0%	0.0%	0.0%
3200 West	SJ	3000	A	3500	A	12500	1.0%	3.9%	0.0%	0.0%	0.0%	0.0%
3200 West	SJ	3000	A	3500	A	12500	1.0%	4.1%	0.1%	0.0%	0.0%	0.0%
3200 West	SJ	5000	B	6500	B	16400	1.3%	6.3%	1.2%	0.0%	0.0%	0.0%
2700 West	SJ	10000	D	10500	D	12500	0.7%	1.7%	0.4%	0.0%	0.0%	0.0%
2700 West	SJ	10000	D	10000	D	12500	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2700 West	SJ	8000	B	9500	C	16400	1.3%	6.5%	0.4%	0.0%	0.0%	0.0%
2700 West	SJ	9000	C	10500	C	16400	1.3%	7.1%	0.2%	0.0%	0.0%	0.0%
2200 West	SJ	4000	B	6000	B	12500	1.0%	18.8%	0.0%	0.0%	0.0%	0.0%
2200 West	SJ	6000	B	7500	C	12500	1.0%	13.3%	0.8%	0.0%	0.0%	0.0%
2200 West	SJ	4000	B	6500	C	12500	1.0%	13.6%	0.7%	0.0%	0.0%	0.0%
1300 West	SJ	12000	C	12000	C	16400	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%
1300 West	SJ	8000	B	8000	B	16400	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%

Road Segment	Service Area	2012 AWDT	2012 LOS	2020 AWDT	2020 LOS	2020 Capacity	% of Total Capacity	% Attributed to New Growth			
								SJ trips on SJ Roads	DB trips on Roads	SJ trips on DB Roads	DB trips on DB Roads
1300 West	SJ	10000	C	10000	C	16400	1.3%	0.0%	0.0%	0.0%	0.0%
1300 West	SJ	10000	C	10000	C	16400	1.2%	0.0%	0.0%	0.0%	0.0%
1000 West	SJ	2000	A	2500	A	12500	1.0%	4.7%	0.0%	0.0%	0.0%
River Front Pkwy	SJ	7000	C	13500	F	12500	1.0%	23.8%	0.4%	0.0%	0.0%
River Front Pkwy	SJ	12000	B	17000	B	34500	2.7%	11.1%	0.2%	0.0%	0.0%
Jordan Gateway	SJ	17000	B	17000	B	34500	2.7%	0.0%	0.0%	0.0%	0.0%
Jordan Gateway	SJ	18000	C	22000	C	34500	2.7%	11.0%	0.3%	0.0%	0.0%
Jordan Gateway	SJ	12000	B	16000	B	34500	2.7%	4.4%	0.3%	0.0%	0.0%
SJ Pkwy	DB	1000	A	9500	A	16400	1.3%	0.0%	0.0%	10.3%	47.7%
SJ Pkwy	DB	1000	A	9500	A	16400	1.3%	0.0%	0.0%	10.4%	48.2%
Total		500555		842500		1280323	100.0%	4.1%	1.4%	1.1%	6.5%
Weighted Average Capacity								4.3%	2.1%	1.3%	6.8%

The Weighted Average Capacity is calculated by weighting the attribution of each road segment by that segment's total capacity compared to the capacity of all the segments in the system. This helps adjust the average to weigh small segments less heavily and larger segments more heavily, producing a more accurate overall representation of the trips in the system.

VALUATION OF EXCESS CAPACITY

Initially, the City's asset lists and depreciation schedules were used to determine the value of existing infrastructure. An initial attempt to use these records produced an estimated system road value of over \$103 million. However, due to the broad asset categories within the City's records, it was difficult to distinguish between system improvements (and thus impact fee eligible) and project improvements.

Thus, a more conservative approach was taken. Each road segment in the IFA was valued individually using a similar methodology as the City employs in assigning value for their asset lists. In this way, each asset (i.e. roads, land, curb, gutter, sidewalks, and traffic lights) was valued using a historic average cost from the City's asset valuation data. At the City's request, the value for street lights (not traffic) was left out, making the valuation even more conservative. Using this method also provided a clearer delineation between assets for the two service areas.

	South Jordan Proper	Daybreak
System Value using Asset Lists	\$103,265,693 (COMBINED VALUE)	
Revised System Value using Calculated Values	\$57,727,542	\$20,189,018
Less Grant and Other Funds	-\$2,153,599	\$0
Total	\$55,573,942	\$20,189,018

FUNDING MECHANISM OF EXISTING FACILITIES

The inventory of existing assets includes only those roadways classified as City owned roadways. While complete records are not available regarding the original source of funding for each project, it is assumed these projects were funded by existing residential and commercial land-uses through general fund moneys and impact fee revenues. The City did identify \$2,153,599 of federal grant funding used on a portion of 1300 West from 11000 South to 11600 South. That amount was subtracted from the value of the system assets so it wouldn't be included in the existing "level of service." Therefore, the City's existing "level of service" standards have been funded by the City's existing residents and the City revenues created by existing residential and commercial development. Funding the future improvements through impact fees places a similar burden upon future users as that which has been placed upon existing users through impact fees, property taxes, user fees, and other revenue sources.

OUTSTANDING DEBT

According to the previous impact fee studies completed in 2005, bonds were issued in both 2000 and 2001 to fund growth related roadway improvements. The 2000 bonds have been paid in full, while the remaining debt for the 2002 bonds were refinanced in 2006. Additional growth-related bonds were also issued in 2008. According to the City, 45.1 percent of the 2006 debt was utilized for growth related improvements and 21.8 percent of the 2008 debt was utilized for growth related improvements. The value of the road assets has already been included in the study, thus only the interest amount will be included here. **The outstanding debt interest will be allocated to the new trips generated through 2020 in proportion to the system as a whole.**

TABLE 4.3: EXISTING OUTSTANDING DEBT RELATED TO TRANSPORTATION IMPROVEMENTS

BOND	INTEREST	% IFA QUALIFIED	\$ IFA QUALIFIED
2006 Sales Tax Refunding	\$5,850,090	45.1%	\$2,636,070
2008 Sales Tax	\$3,576,363	21.8%	\$778,276
Total	\$9,426,453		\$3,414,346

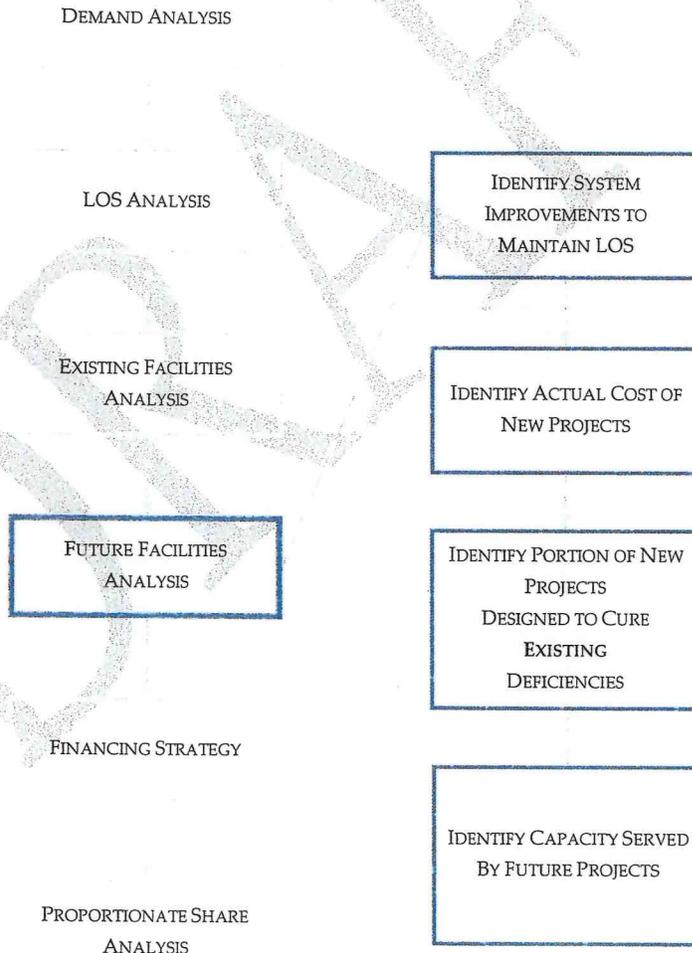
SECTION V: CAPITAL FACILITY ANALYSIS

The demand analysis, LOS analysis and existing facility inventory allow for the development of a list of capital projects necessary to serve new growth and to maintain the existing system. **Any demand generated from new development that overburdens the existing system beyond the existing capacity justifies the construction of new facilities.**

Impact fees cannot be used to finance an increase in the level of service to current or future users of capital improvements. Therefore, it is important to: i) measure and identify the City's level of service for roadways, and ii) identify the appropriate capital facilities necessary to maintain the existing and measured level of service related to roadway facilities within the designated service area. Future capital projects have been designed to maintain a consistent and proportional level of service (as defined in Section III) for future development. Repair and replacement projects have been excluded from the calculation of impact fees.

This section identifies system improvements that are necessary to maintain the existing LOS.

FIGURE 5.1



Based upon the projected increase in trip ends through 2020, the IFFP indicates that no new road facilities are needed in the South Jordan Proper area during the plan horizon. New roads are needed in the Daybreak area. These roads will be built by the developer and deeded to the City. Because the City will not be constructing the new roads, detailed cost estimates were not included in the IFFP and thus are not available for use in the impact fee analysis. Instead, the best available data was used, which included the cost estimates used by the City in calculating road value for their Asset Depreciation Schedules.

CAPACITY OF FUTURE FACILITIES

In order to determine the portion of future facilities related to new development within the IFFP planning horizon, each future project was analyzed based on the capacity provided. According to the IFFP, these projects will be completed in the plan horizon and are necessary to maintain the existing LOS in response to new growth.

TABLE 5.1: FUTURE ROADS IN THE DAYBREAK SERVICE AREA

ROAD SEGMENT	FROM	TO	SERVICE AREA	2012 CAPACITY	2012 LOS	2020 CAPACITY	2020 LOS
Bingham Creek Rd (10200S)	MVC	5600 W	DB	0		12500	B
Bingham Creek Rd (10200S)	5600 W	Kestrel Rise Rd	DB	0		12500	B
10200 South	Kestrel Rise Rd	4800 W	DB	0		12500	C
SJ Pkwy	7200 West	6600 W	DB	0		34500	A
SJ Pkwy	6600 W	MVC	DB	0		34500	B
SJ Pkwy	MVC	5600 W	DB	0		34500	C
SJ Pkwy	5600 W	Lake Run Rd	DB	0		34500	B
SJ Pkwy	Lake Run Rd	Kestrel Rise Rd	DB	16400	A	34500	A
SJ Pkwy	Kestrel Rise Rd	4800 W / Silver Mine Rd	DB	16400	A	34500	A
Silver Mine Rd	MVC	Grandville Ave	DB	0		12500	B
Silver Mine Rd	Grandville Ave	Lake Run Rd	DB	0		12500	A
Silver Mine Rd	Lake Run Rd	Kestrel Rise Rd	DB	0		12500	A
Silver Mine Rd	Kestrel Rise Rd	SJ Pkwy	DB	0		12500	A
Daybreak Pkwy	5600 W	MVC	DB	12500	E	34500	B
Grandville Ave	N End of PNR	11400 S/Silver Mine Rd	DB	0		16400	A
Grandville Ave	11400 S/Silver Mine Rd	SJ Pkwy	DB	0		16400	A
Grandville Ave (5600 W)	SJ Pkwy	Bingham Creek (10200 S)	DB	0		16400	B
Grandville Ave (5600 W)	Bingham Creek (10200 S)	10200 S	DB	0		16400	B
Lake Run Rd	SJ Pkwy	Silver Mine Rd	DB	0		12500	B
Lake Run Rd	Silver Mine Rd	DB Pkwy	DB	0		12500	B
Kestrel Rise Rd	Silver Mine Rd	SJ Pkwy	DB	0		12500	B
Kestrel Rise Rd	SJ Pkwy	Bingham Creek (10200 S)	DB	0		12500	A

Although the IFFP indicates South Jordan Parkway between Lake Run Rd and Kestrel Rise Rd will be widened from three to five lanes during the planning horizon, the demand analysis shows there is enough capacity in the three lane road to handle predicted road trips through 2020. Thus, the cost of this widening has not been included in the impact fee analysis, but a buy-in component for the existing capacity was included. Furthermore, the segment of Daybreak Parkway between 5600 West and Mountain View Corridor is currently at a Level of Service E, which is below the

City's acceptable level of service for IFA, so it was not included in the impact fee analysis.

TABLE 5.1: FUTURE ROADS IN THE DAYBREAK SERVICE AREA

Road Segment	From	To	Estimated Road Value	% Attributed to SJP trips on DB Roads	Impact Fee Eligible Value
Bingham Creek Rd (10200S)	MVC	5600 W	\$1,317,802.61	2.8%	\$37,208.54
Bingham Creek Rd (10200S)	5600 W	Kestrel Rise Rd	\$397,870.59	2.8%	\$11,233.99
10200 South	Kestrel Rise Rd	4800 W	\$949,829.80	4.0%	\$37,993.19
SJ Pkwy	7200 West	6600 W	\$2,164,878.11	3.4%	\$73,823.64
SJ Pkwy	6600 W	MVC	\$2,851,905.63	3.9%	\$110,866.92
SJ Pkwy	MVC	5600 W	\$454,723.26	4.8%	\$22,022.19
SJ Pkwy	5600 W	Lake Run Rd	\$405,296.81	5.4%	\$22,019.28
Silver Mine Rd	MVC	Grandville Ave	\$3,493,441.81	0.6%	\$19,727.67
Silver Mine Rd	Grandville Ave	Lake Run Rd	\$195,485.55	1.0%	\$1,858.64
Silver Mine Rd	Lake Run Rd	Kestrel Rise Rd	\$538,160.23	1.0%	\$5,264.57
Silver Mine Rd	Kestrel Rise Rd	SJ Pkwy	\$818,739.49	1.1%	\$9,396.08
Grandville Ave	N End of PNR	11400 S/Silver Mine Rd	\$268,650.36	0.9%	\$2,361.75
Grandville Ave	11400 S/Silver Mine Rd	SJ Pkwy	\$292,530.40	0.3%	\$953.86
Grandville Ave (5600 W)	SJ Pkwy	Bingham Creek (10200 S)	\$274,620.37	2.3%	\$6,402.56
Grandville Ave (5600 W)	Bingham Creek (10200 S)	10200 S	\$158,205.21	5.2%	\$8,171.29
Lake Run Rd	SJ Pkwy	Silver Mine Rd	\$639,352.75	4.3%	\$27,490.83
Lake Run Rd	Silver Mine Rd	DB Pkwy	\$604,855.30	1.2%	\$6,970.72
Kestrel Rise Rd	Silver Mine Rd	SJ Pkwy	\$657,751.39	1.9%	\$12,411.85
Kestrel Rise Rd	SJ Pkwy	Bingham Creek (10200 S)	\$478,364.65	1.2%	\$5,572.10
			\$16,962,464.31	2.5%	\$421,749.68

Each new road segment planned for construction in the DB Service Area was valued individually using a similar methodology as the City employs in assigning value for their asset lists. In this way, each asset (i.e. roads, land, curb, gutter, sidewalks, and traffic lights) was valued using the most recent (i.e. 2011) cost from the City's asset valuation data. At the City's request, the value for street lights (not traffic) was left out. Trip statistics from the IFFP were used to determine the proportional share of usage attributed to growth-related traffic from the SJP Service Area on the Daybreak roads.

SYSTEM VS. PROJECT IMPROVEMENTS

System improvements are defined as existing public facilities designed to provide services to service areas within the community at large and future public facilities that are intended to provide services to service areas within the community at large.⁶ Project improvements are improvements and facilities that are planned and designed to provide service for a specific development (resulting from a development activity) and considered necessary for the use and convenience of the occupants or users of that development.⁷ The Impact Fee Analysis may only include the costs of impacts on system improvements related to new growth within the proportionate share analysis. In the case of South Jordan City, roadway system improvements are considered to be collector, connector, or arterial roadways.

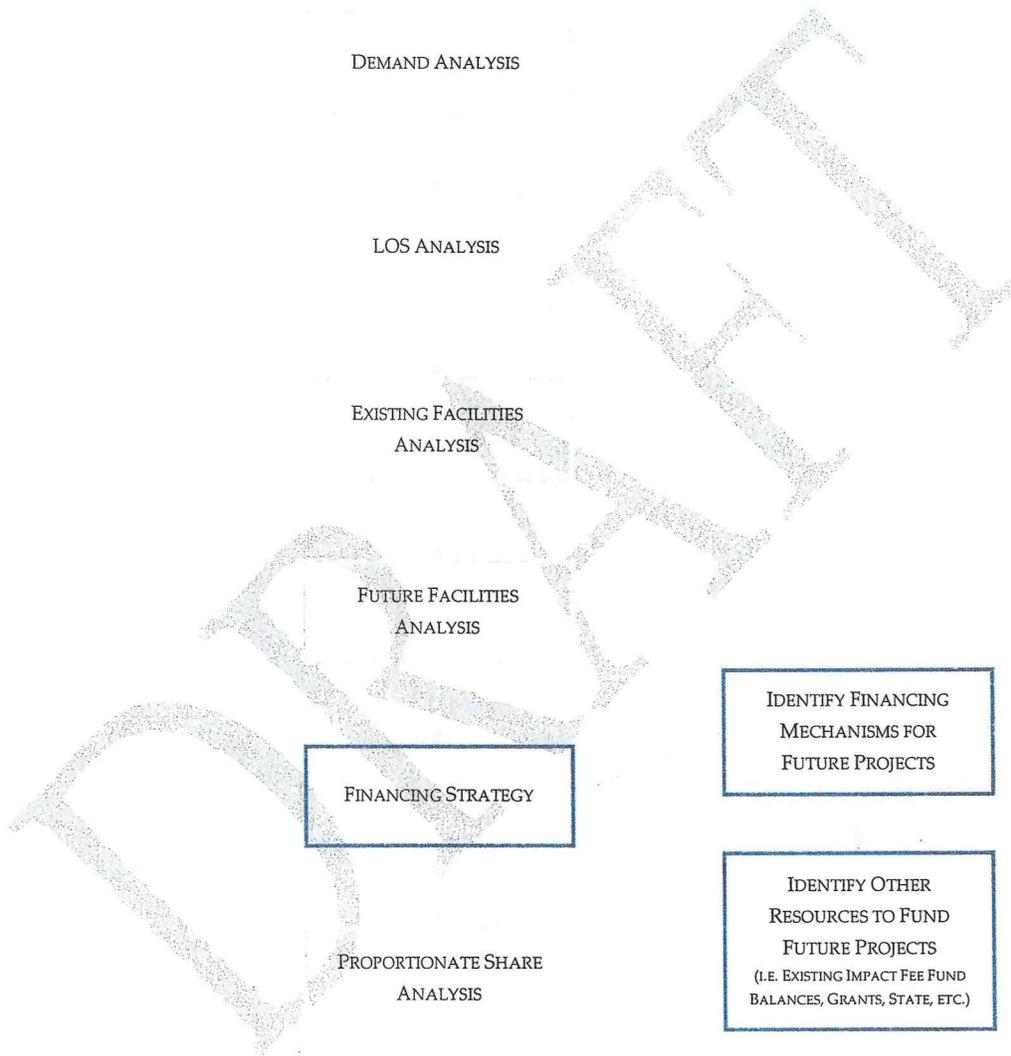
⁶ 11-36a-102(20)

⁷ 11-36a102(13)

SECTION VI: FINANCING STRATEGY

This analysis must also include a consideration of all revenue sources, including impact fees and the dedication of system improvements, which may be used to finance system improvements.⁸ In conjunction with this revenue analysis, there must be a determination that impact fees are necessary to achieve an equitable allocation of the costs of the new facilities between the new and existing users.⁹

FIGURE 6.1



⁸ 11-36a-302(2)

⁹ 11-36a-302(3)

FUNDING OF FUTURE FACILITIES

No new projects are planned for the SJP Service Area during the plan horizon. Impact fees will be used to buy into existing capacity. Projects planned for the Daybreak area will be funded and built by the developer and then deeded to the City. As such, the IFA does not include the impact of residents within the DB Service Area driving on roads in that area.

IMPACT FEE FUND BALANCES

Impact fee fund balances can be used to offset the cost of new infrastructure when the city determines that those fund balances will be used to help fund the projects identified in the IFFP. South Jordan does not plan to construct new facilities within the IFFP plan horizon, thus any impact fee fund balance is not used to offset future costs. Instead those funds can be used to fund projects identified in previous planning documents or to reimburse the City for impact fee qualified expenses that were funded with general tax dollars.

EQUITY OF IMPACT FEES

The transportation impact fees identified in this document are intended to recover the costs of capital infrastructure that relate to future development activity. The impact fee calculations are structured for impact fees to fund the growth-related facilities identified in the proportionate share analysis as presented in this document. Even so, there may be years that impact fee revenues cannot cover the annual growth-related expenses. In those years, other revenues such as general fund revenues will be used to make up any annual deficits. Any borrowed funds are to be repaid in their entirety through impact fees. This analysis recommends that the City consider documenting any inter-fund loan or transfer as a liability or debt obligation for which future collection of impact fees will repay and reimburse. This will allow the City to accurately allocate the true cost of new development activity.

PASS THROUGH TRAFFIC

Traffic that passes through a service area, but does not start or end at a destination within the area, is often referred to as pass through traffic. While these trips are not impact fee eligible, they utilize capacity within the transportation system. Regional traffic is often funded through state or federal sources. In the DB Service Area, some of the roads being constructed are servicing regional pass through traffic. State or federal funding sources may be considered to help offset these costs.

NECESSITY OF IMPACT FEES

This analysis and documentation has determined that for purposes of the transportation impact fees, the City is justified to collect impact fees as a way to finance system improvements. This is predicated upon the review of existing inventory, level of service standards, and historic funding of similar system improvements. In other words, in order to establish and achieve parity and equity across current and future users of the transportation and roadway system, the City must impose and collect the impact fees calculated in this document.

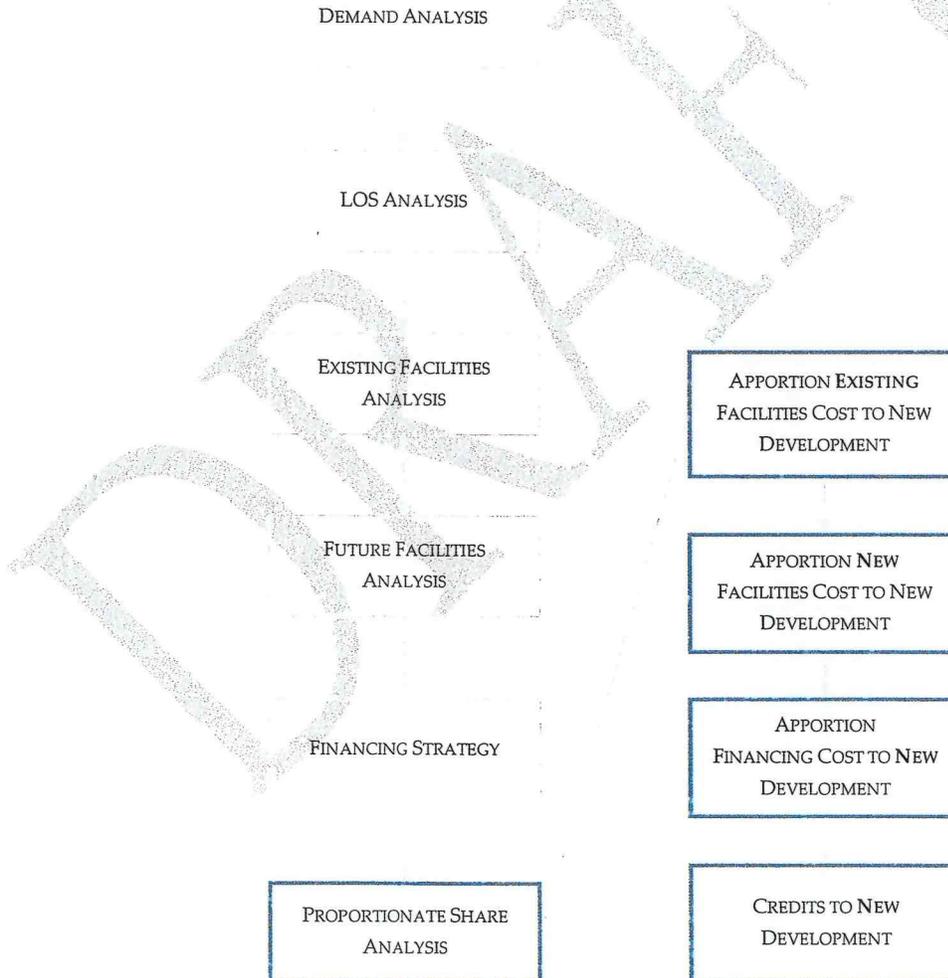
SECTION VII: PROPORTIONATE SHARE ANALYSIS

The calculation of impact fees relies upon the demand analysis, LOS analysis, inventory of existing facilities and excess capacity, and the needed future capital improvement as identified in Sections II through VI. Impact fees are calculated based on many variables centered on proportionality and level of service. The following paragraphs briefly discuss the methodology for calculating impact fees.

PLAN BASED (FEE BASED ON DEFINED CIP)

Impact fees can be calculated using a specific set of costs specified for future development. The improvements are identified in the IFFP, CFP or CIP as growth related projects. The total project costs are divided by the total demand units the projects are designed to serve. Under this methodology, it is important to identify the existing level of service and determine any excess capacity in existing facilities that could serve new growth.

FIGURE 7.1



IMPACT FEE CALCULATION

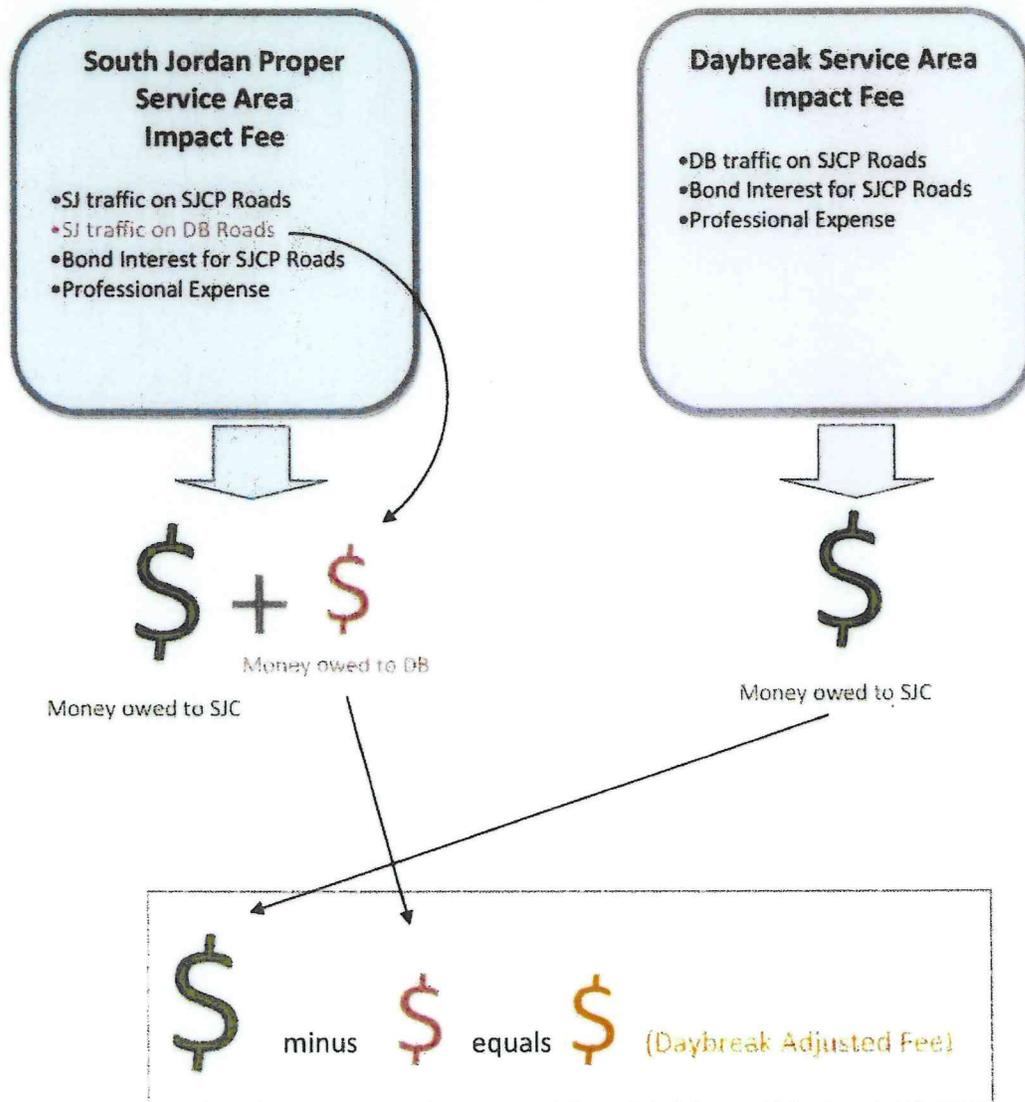
The applicable buy-in component and impact fee eligible costs are identified in Table 7.1. The total cost of existing and future facilities utilized by new development is applied to the total future trips served (See Section III). This results in a cost per trip of \$163.34 for the SJP Service Area and \$39.36 for the DB Service Area. \$681,743 is owed to Daybreak for the traffic generated by South Jordan Proper on Daybreak roads. When this is divided over the 31,703 projected trips in the Daybreak area, it creates a \$21.50 per trip accounting credit. Thus, in order to simplify fee collection, DB Service Area residents should only be charged \$18.79 per trip. Illustration 7.1 provides a visual representation of this concept.

TABLE 7.1: ILLUSTRATION OF IMPACT FEE PER TRIP

	TOTAL QUALIFIED COST	% TO NEW GROWTH	COST TO NEW GROWTH	TRIPS	COST PER TRIP
SJP Service Area					
Existing Facilities					
South Jordan Traffic on SJCP Roads	\$55,573,942	4.3%	\$2,403,951	19,876	\$120.95
South Jordan Traffic on DB Roads	\$20,189,018	1.3%	\$259,993	19,876	\$13.08
Outstanding Debt (Interest on Bonds)	\$3,414,346	4.3%	\$147,694	19,876	\$7.43
Future Facilities (IFFP Planning Horizon)					
South Jordan Traffic on DB Roads	\$16,962,464	2.5%	\$421,750	19,876	\$21.22
Professional Expense	\$34,020	100.0%	\$34,020	51,579	\$0.66
South Jordan Service Area Impact Fee			\$3,267,408		\$163.34
Daybreak Service Area					
Existing Facilities					
Daybreak Traffic on SJCP Roads	\$55,573,942	2.1%	\$1,183,720	31,703	\$37.34
Outstanding Debt (Interest on Bonds)	\$3,414,346	2.1%	\$72,725	31,703	\$2.29
Future Facilities (IFFP Planning Horizon)	\$0	100.0%	\$0		\$0.00
Professional Expense	\$34,020	100.0%	\$34,020	51,579	\$0.66
Daybreak Service Area Impact Fee			\$1,290,465		\$39.36
Accounting Credit for SJ Traffic on DB Roads	(\$681,743)	100.0%	(\$681,743)	31,703	(\$21.50)
Daybreak Net Cost Per Trip					\$18.79

ILLUSTRATION 7.1: ACCOUNTING CREDIT FOR DAYBREAK SERVICE AREA

All of the impact fees collected from the DB Service Area is owed to South Jordan City. Most of the impact fee collected from the SJP Service Area is owed to South Jordan City, but the portion collected for South Jordan Traffic on Daybreak roads is owed to Daybreak Development because that portion is buying into the capacity of roads paid for by that developer. Rather than exchanging funds, the accounting credit reduces the amount owed by the DB Service Area to South Jordan City.



The cost per trip is then applied to the trip statistics for each type of land use, as shown below.

TABLE 7.2: TRIPS BY LAND USE TYPE

LAND USE	ITE CODES	PER	WEEKDAY	PASS-BY ADJUSTMENT	ENTERING/ EXITING	ADJUSTED TRIPS
Single Family Residential	210	Unit	9.57	0%	0.50	4.79
Apartment	220	Unit	6.65	0%	0.50	3.33
Condo/Townhouse	230	Unit	5.81	0%	0.50	2.91
Senior Adult Housing-Detached	251	Unit	3.71	0%	0.50	1.86
Senior Adult Housing-Attached	252	Occ. Unit	3.48	0%	0.50	1.74
Assisted Living	254	Beds	2.66	0%	0.50	1.33
Hotel	310, 320	Rooms	6.90	0%	0.50	3.45
Light Industrial	110	KSF	6.97	0%	0.50	3.49
Industrial Park	130	KSF	6.96	0%	0.50	3.48
Mini Warehouse	151	KSF	2.50	0%	0.50	1.25
Elementary School	520	KSF	15.43	0%	0.50	7.72
Middle/Jr. High School	522	KSF	13.78	0%	0.50	6.89
Daycare Center	565	KSF	79.26	0%	0.50	39.63
Nursing Home	620	KSF	7.58	0%	0.50	3.79
Clinic	630	KSF	31.45	0%	0.50	15.73
Church	560	KSF	9.11	0%	0.50	4.56
General Office	710	KSF	11.01	0%	0.50	5.51
Medical Dental Office	720	KSF	36.13	0%	0.50	18.07
Free-Standing Discount Store	813	KSF	53.13	0%	0.50	26.57
Hardware/Paint Store	816	KSF	51.29	0%	0.50	25.65
Shopping Center/General Commercial	820	KSF	42.94	34%	0.50	14.17
New Car Sales	841	KSF	33.34	0%	0.50	16.67
Tire Store	848	KSF	24.87	28%	0.50	8.95
Supermarket	850	KSF	102.24	36%	0.50	32.72
Convenience Market w/ Gas Pumps	853	KSF	845.6	66%	0.50	143.75
Discount Club	857	KSF	41.80	0%	0.50	20.90
Home Improvement Superstore	862	KSF	29.80	48%	0.50	7.75
Department Store	875	KSF	22.88	0%	0.50	11.44
Pharmacy/Drugstore w/ Drive Thru	881	KSF	88.16	49%	0.50	22.48
Drive-In Bank	912	KSF	148.15	47%	0.50	39.26
Quality Restaurant	931	KSF	89.95	44%	0.50	25.19
High Turnover/Sit Down Restaurant	932	KSF	127.15	43%	0.50	36.24
Fast Food with Drive Thru	934	KSF	496.12	50%	0.50	124.03
Automobile Care Center	942	KSF	15.86	0%	0.50	7.93

Source: ITE Trip Manual (8th Edition), ITE Handbook 2nd Edition

TABLE 7.3: RECOMMENDED IMPACT FEES

LAND USE CATEGORY	TRIP ENDS	SJP IMPACT FEE	DAYBREAK IMPACT FEE	DAYBREAK ADJUSTED FEE
Cost per Trip		\$163.34	\$40.29	\$18.79
Residential (per unit)				
Single Family Residential (Unit)	4.79	\$781.58	\$192.79	\$89.90
Apartment (Unit)	3.33	\$543.11	\$133.97	\$62.47
Condo/Townhouse (Unit)	2.91	\$474.50	\$117.04	\$54.58
Senior Adult Housing-Detached (Unit)	1.86	\$303.00	\$74.74	\$34.85
Senior Adult Housing-Attached (Occ. Unit)	1.74	\$284.21	\$70.11	\$32.69
Assisted Living (Beds)	1.33	\$217.24	\$53.59	\$24.99
Hotel (Rooms)	3.45	\$563.52	\$139.00	\$64.82
Non-Residential (per 1,000 sq feet)				
Light Industrial	3.49	\$569.24	\$140.41	\$65.47
Industrial Park	3.48	\$568.42	\$140.21	\$65.38
Mini Warehouse	1.25	\$204.18	\$50.36	\$23.48
Elementary School	7.72	\$1,260.17	\$310.84	\$144.94
Middle/Jr. High School	6.89	\$1,125.42	\$277.60	\$129.44
Daycare Center	39.63	\$6,473.18	\$1,596.72	\$744.53
Nursing Home	3.79	\$619.06	\$152.70	\$71.20
Clinic	15.73	\$2,568.53	\$633.57	\$295.43
Church	4.56	\$744.02	\$183.52	\$85.57
General Office	5.51	\$899.19	\$221.80	\$103.42
Medical Dental Office	18.07	\$2,950.74	\$727.85	\$339.39
Free-Standing Discount Store	26.57	\$4,339.14	\$1,070.32	\$499.08
Hardware/Paint Store	25.65	\$4,188.86	\$1,033.26	\$481.79
Shopping Center/General Commercial	14.17	\$2,314.57	\$570.93	\$266.22
New Car Sales	16.67	\$2,722.88	\$671.65	\$313.18
Tire Store	8.95	\$1,462.42	\$360.73	\$168.20
Supermarket	32.72	\$5,343.97	\$1,318.18	\$614.65
Convenience Market w/ Gas Pumps	143.75	\$23,480.51	\$5,791.87	\$2,700.67
Discount Club	20.90	\$3,413.81	\$842.08	\$392.65
Home Improvement Superstore	7.75	\$1,265.56	\$312.17	\$145.56
Department Store	11.44	\$1,868.61	\$460.93	\$214.92
Pharmacy/Drugstore w/ Drive Thru	22.48	\$3,672.02	\$905.77	\$422.35
Drive-In Bank	39.26	\$6,412.70	\$1,581.80	\$737.57
Quality Restaurant	25.19	\$4,113.89	\$1,014.76	\$473.17
High Turnover/Sit Down Restaurant	36.24	\$5,919.09	\$1,460.04	\$680.80
Fast Food with Drive Thru	124.03	\$20,259.11	\$4,997.26	\$2,330.15
Automobile Care Center	7.93	\$1,295.29	\$319.51	\$148.98

TABLE 7.4: PREVIOUS (2005) IMPACT FEES

LAND USE CATEGORY	TRIP ENDS	SJP IMPACT FEE	DAYBREAK IMPACT FEE
Cost per Trip		\$375.99	\$63.39
Residential (per unit)			
Single Family Residential (Unit)	5.00	\$1,879.95	\$316.95
Multi Family Residential (Unit)	3.50	\$1,315.97	\$221.87
Hotel/Motel (Rooms)	4.12	\$1,547.22	\$260.85
Non-Residential (per 1,000 sq feet)			
School (1,000 sf)	6.21	\$233.05	\$393.34
Church (1,000 sf)	4.94	\$1,856.47	\$312.99
Office (1,000 sf)	7.83	\$2,943.28	\$496.22
Light Industrial (1,000 sf)	3.49	\$1,310.34	\$220.92
Commercial (1,000 sf)	18.00	\$4,737.53*	\$1,141.03

*Fee changed by R. Horst 12/21/06. Original was \$6,767.90

NON-STANDARD IMPACT FEES

The proposed fees are based upon projected trip ends generated by land uses within the City. The City reserves the right under the Impact Fees Act to assess an adjusted fee that more closely matches the true impact that the land use will have upon public facilities.¹⁰ This adjustment could result in a lower impact fee if the City determines that a particular user may create a different impact than what is standard for its land use. To determine the impact fee for a non-standard use, the City should use the following formula:

$$\text{Total Trips (per Specified Land Use)} * \text{Applicable Adjustment Factors} * \text{Cost per Trip } (\$163.34 \text{ or } \$18.79)$$

EXPENDITURE OF IMPACT FEES

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 five to six years should be spent only on those projects as set forth in this analysis. The legislative definition of "encumber" means a pledge to retire a debt or an allocation to a current purchase order or contract.¹¹

PROPOSED CREDITS OWED TO DEVELOPMENT

The Impact Fees Act requires that credits be paid back to development for future fees that will pay for growth-driven projects and qualifying system improvements included in the Impact Fee Facilities Plan that would otherwise be paid for through user fees. Credits may also be paid to developers who have constructed and donated facilities to that City that are included in the IFFP in-lieu of impact fees. This situation does not apply to developer exactions or improvements required to offset density or as a condition of development or project improvements. Any project that a developer funds must be included in the IFFP if a credit is to be issued.

In the situation that a developer chooses to construct facilities found in the IFFP in-lieu of impact fees, the decision must be made through negotiation with the developer and the City on a case-by-case basis.

SUMMARY OF TIME PRICE DIFFERENTIAL

The Impact Fees Act allows for the inclusion of a time price differential to ensure that the future value of costs incurred at a later date are accurately calculated to include the costs of construction inflation. While an inflation component may be included in the impact fee analysis to reflect the future cost of facilities, it is not considered in the cost estimates in this study.

¹⁰ 11-36a-402(1)(c)

¹¹ 11-36a-102(6)