



Nibley City Transportation Impact Fee Report for Nov 14, 2019

Description	A Summary of Ordinance 19-17: An Update to Nibley City's Transportation Impact Fee
Department	Planning
Presenter	Stephen Nelson, City Planner
Reviewed By	City Planner, City Public Works Department, City Manager, and City Attorney

Background

Nibley City, in January of 2019, adopted a new Transportation Master Plan. The master plan reviewed Nibley City's current road and street network, and based on that review, recommended future improvements to Nibley City's transportation system in Chapter 6 Capital Facilities Plan. These recommendations included a list of needed projects to be built in the next five years, next 5-15 years, and in the next 15-25 years. The plan also provides cost estimates for the needed improvements.

Based on the findings within Nibley City's Transportation Master Plan, Nibley City contracted with Lewis Young Robertson & Burningham, Inc to create an Impact Fee Facilities Plan (IFFP) and Impact Fee Analysis (IFA) for transportation (see attached). The firm reviewed the findings within the Transportation Master Plan, and in compliance with Utah's Impact Fee Act, created recommended Transportation Impact Fees for different land uses.

What are Impact Fees?

The Utah Property Rights Ombudsman's website defines an impact fee as follows:

*An **impact fee** is a one-time charge imposed by local governments to mitigate the impact on local infrastructure caused by new development. Growth in the form of new homes and businesses requires expansion or enlargement of public facilities to maintain the same level and quality of public services for all residents of a community. Impact fees help fund expansion of public facilities necessary to accommodate new growth.*

[\(https://propertyrights.utah.gov/impact-fees/\)](https://propertyrights.utah.gov/impact-fees/)

Impact fees are not charged to existing buildings or uses. These fees are only assessed with new development within the City to compensate for the increased impact of the development on City infrastructure.

What is Nibley City's Current Transportation Impact Fee?

Nibley City currently has impact fees for Transportation and Roads as follows:

Land Use		Fee
Single-family detached house:	Per Unit	\$467.00
Apartment:	Per Unit	\$324.00
Condominium/Townhouse:	Per Unit	\$286.00
Retail store:	Per 1,000 Square Feet	\$2,803.00
Office:	Per 1,000 Square Feet	\$1,107.00
Light Industrial:	Per 1,000 Square Feet	\$341.00
Warehousing:	Per 1,000 Square Feet	\$242.00
Education:	Per 1,000 Square Feet	\$618.00
Hotel:	Per Room	\$436.00
Food Services (fast food)	Per 1,000 Square Feet	\$4,393.00
Gas station with Convenience store:	Per Fueling Station	\$7,950.00
Church:	Per 1,000 Square Feet	\$445

These impact fees are applied to all new building permits for the proposed uses. An applicant is not able to obtain a building permit until these impact fees are paid.

What are the new Transportation Impact Fees that are being proposed?

Based on the IFFP and IFA, Nibley City has proposed an adjustment to these impact fees as follows:

Land Use		Fee
RESIDENTIAL SINGLE-FAMILY	PER UNIT	\$887
RESIDENTIAL MULTI-FAMILY	PER UNIT	\$688
MOBILE HOME	PER UNIT	\$470
SHOPPING CENTER	PER 1,000 SF	\$2,342
OFFICE	PER 1,000 SF	\$1,522
LIGHT INDUSTRIAL	PER 1,000 SF	\$466
WAREHOUSE	PER 1,000 SF	\$164
INSTITUTIONAL	PER 1,000 SF	\$1,426
HOTEL	PER 1,000 SF	\$786
FOOD/FAST FOOD	PER 1,000 SF	\$11,257
GAS STATION/CONV	PER 1,000 SF	\$46,015

These fees will be used to pay for the following projects:

PROJECT	PROJECT SEGMENTS	TOTAL COST ESTIMATE
1200 W	2450 S to 2200 S	\$676,000
1200 W Corridor Roundabout	3200 S and 1200 W	\$2,284,000
2600 S	US89/91 to 1900 W	\$86,486
900 W/1000W	Nibley Park Ave to 2200 S	\$306,400

Nibley City will be holding a public hearing on November 14, at 6:30 p.m. at Nibley City Hall to discuss the proposed fees. The proposed fees are being introduced as Ordinance 19-17: An Update to Nibley City's Transportation Impact Fee.

ORDINANCE 19-17

AN UPDATE TO NIBLEY CITY'S TRANSPORTATION IMPACT FEE

WHEREAS, Nibley City is a municipal corporation duly organized and existing under the laws of the State of Utah; and

WHEREAS, Nibley City finds that in conformance with the provision of UCA 11-36a et seq., the City has in the past enacted and promulgated certain impact fees within the City; and

WHEREAS, Nibley City finds that it is in the public welfare and for the benefit of the City and its residents to adopt an impact fee to provide for the future transportation and circulation needs of the City;

WHEREAS, Nibley City finds that in conformance with the provisions of UCA 11-36a-303, the City has prepared a written Impact Fee Analysis and a summary of the impact fee analysis designed to be understood by a lay person for transportation; and

WHEREAS, Nibley City Council has reviewed the transportation Impact Fee Analysis and the summary of that analysis, and finds and concludes that the analysis provides a reasonable plan on which to impose and base an increase of impact fees for transportation; and

WHEREAS, Nibley City finds that the new transportation impact fee schedule should be adopted and incorporated into City code alongside the existing Culinary Water, Park, and Sanitary Sewer Impact Fees; and

WHEREAS, Nibley City Council finds that the Impact Fee ordinance, including the new transportation impact fee, should be re-codified for organizational purposes as shown, moving it from Nibley City Code 15.12 to 17.06, provided that such re-codification makes no substantive changes to the impact fee ordinance or previously adopted impact fees except as necessary to carry out the adoption of the transportation impact fee.

NOW, THEREFORE, BE IT ORDAINED BY THE NIBLEY CITY COUNCIL OF NIBLEY, UTAH THAT:

1. The attached Nibley City Code 17.06 be adopted.
2. All ordinances, resolutions, and policies of the City, or parts thereof, inconsistent herewith, are hereby repealed, but only to the extent of such inconsistency. This repealer shall not be construed as reviving any law, order, resolution, or ordinance, or part thereof.
3. Nibley City Code 17.04.010, 17.04.020, 17.04.030 be repealed and 15.12 be re-codified as Nibley City Code 17.06, as shown in the attachment.
4. Nibley City accepts the impact fee analysis

5. This ordinance, with its the recodification and the adoption of the new impact fee, shall take effect within 90 days after the adoption of this ordinance by the City Council
6. Should any provision, clause, or paragraph of this ordinance or the application thereof to any person or circumstance be declared by a court of competent jurisdiction to be invalid, in whole or in part, such invalidity shall not affect the other provisions or applications of this ordinance or the Nibley City Municipal Code to which these amendments apply. The valid part of any provision, clause, or paragraph of this ordinance shall be given independence from the invalid provisions or applications, and to this end the parts, sections, and subsections of this ordinance, together with the regulations contained therein, are hereby declared to be severable.

PASSED BY THE NIBLEY CITY COUNCIL THIS _____ DAY OF _____, 2019.

Shaun Dustin, Mayor

ATTEST: _____
David Zook, City Recorder

17.06 Impact Fee for transportation, Parks, Sanitary Sewer, and Culinary Water

17.06.010 Findings

17.06.020 Definitions

17.06.030 Adoption

17.06.040 Impact Fee Calculations

17.06.050 Impact Fee Imposed

17.06.060 Fee Exceptions And Adjustments

17.06.070 Appeal Procedures

17.06.080 Effective Date; Savings Clause

17.06.090 Severability

17.06.010 Findings

- A. All required notices have been given and made and public hearings conducted as requested by the Impact Fee Act with respect to the Impact Fee Analysis, and this impact fee enactment (this "Ordinance").
- B. Growth and development activities in Nibley City will create additional demands on its park, transportation, culinary water and sanitary sewer systems. The capital facility improvement requirements which are analyzed in the Impact Fee Analysis are the direct result of additional facility needs caused by future development activities. The persons responsible for growth and development activities should pay a proportionate share of the costs of the park, transportation, culinary water and sanitary sewer systems needed to serve the growth and development activity.
- C. Impact fees are necessary to achieve an equitable allocation to the costs borne in the past and to be borne in the future, in comparison with the benefits already received and yet to be received.
- D. In enacting and approving the Impact Fee Analysis and this Ordinance, the Council has taken into consideration, and in certain situations will consider on a case-by-case basis in the future, the future capital facilities and park, transportation, culinary water and sanitary sewer needs of Nibley City, the capital financial needs of Nibley City which are the result of the City's future facilities needs, the distribution of the burden of costs to different properties within the City based on the use of park, transportation, culinary water and sanitary sewer facilities of the City by such properties, the financial contribution of those properties and other properties similarly situated in Nibley City at the time of computation of the required fee and prior to the enactment of this Ordinance, all revenue sources available to Nibley City, and the impact on future park, transportation, culinary water and sanitary sewer facilities that will be required by growth and new development activities in Nibley City.
- E. The provisions of this Ordinance shall be liberally construed in order to carry out the purpose and intent of the Council in establishing the impact fee program.
- F. The existing impact fee ordinance of the city is superseded and amended to read as set forth in this chapter; provided, however, that this chapter shall be deemed a continuation of the previous ordinance, and not a new enactment, insofar as the substance of revisions of the previous ordinance is included, whether in the same or in different language; and this chapter shall be so interpreted upon all questions of construction.

17.06.020 Definitions

- A. Except as provided below, words and phrases that are defined in the Impact Fee Act shall have the same meaning in this Ordinance.
- B. "Service Area 1" shall mean that geographic area designated. It is determined to be the entire City
- C. "Project Improvements" does not mean system improvements and includes, but is not limited to those projects listed in the Analysis.

17.06.030 Adoption

- A. The Council hereby approves and adopts the Impact Fee Analysis, dated February 7, 2013, (Analysis) attached as Exhibit A and the analysis reflected therein. The Impact Fee Analysis is incorporated herein by reference as though fully set forth herein. Based on its approval and adoption of the Impact Fee Analysis, the Council hereby imposes the impact fees specified herein and enacts this Ordinance to require payment of the impact fees specified herein as a condition of building a house or residential living units, institutional or commercial building in Nibley City.
- B. The City Council hereby approve and adopts the Impact Fee Analysis, dated July 2019, attached as Exhibit B and the analysis reflected therein, and includes the same within the meaning of the terms "Impact Fee Analysis" or "Analysis" as used in this Ordinance. The Impact Fee Analysis is incorporated herein by reference as though fully set forth herein. Based on its approval and adoption of the Impact Fee Analysis, the Council hereby imposes the impact fees specified herein and enacts this Ordinance to require payment of the impact fees specified herein as a condition of building a house or residential living units, institutional or commercial building in Nibley City.

17.06.040 Impact Fee Calculations

- A. **Developer Credits/Developer Reimbursements.** A developer may be allowed a credit against or proportionate reimbursement of Impact fees if the developer dedicates land for a system improvement, builds and dedicates some or all of a system improvement, or dedicates a public facility that the City and the developer agree will reduce the need for a system improvement. A credit against impact fees shall be granted for any dedication of land for, improvement to, or new construction of, any system improvements provided by the developer if the facilities are system improvements, or are dedicated to the public and offset the need for an identified system improvement.
- B. **Impact Fees Accounting.** Nibley City shall establish a separate interest-bearing ledger account for the cash impact fees collected pursuant to this Ordinance. Interest earned on such account shall be allocated to that account. Impact fees collected prior to the effective date of this Ordinance need not meet the requirements of this section.
 - 1. **Reporting.** At the end of each fiscal year, Nibley City shall prepare a report on such account generally showing the source and amount of all monies collected, earned and received by the fund or account and each expenditure from the fund or account. The report shall also identify impact fee funds by the year in which they were received, the project from which the funds were collected, the capital projects for which the funds were budgeted, and the projected schedule for expenditure and be provided in a format approved by the State Auditor and certified by the Nibley City Chief Financial Officer.
 - 2. **Impact Fee Expenditures.** Nibley City may expend cash impact fees covered by this Ordinance only for systems improvements that are (i) public facilities identified in the Impact Fee Analysis; and (ii) of the specific public facilities type for which the fee was collected.
 - 3. **Time of Expenditure.** Cash impact fees collected pursuant to this Ordinance are to be expended, dedicated or encumbered for a permissible use within six (6) years of receipt by Nibley City, unless the Council directs otherwise. For purposes of this calculation, the first funds received shall be deemed to be the first funds expended.
 - 4. **Extension of Time.** Nibley City may hold previously dedicated or unencumbered fees for longer than six (6) years if it identifies in writing, before the expiration of the six year period, (i) an extraordinary and compelling reason why the fees should be held longer than six (6) years; and (ii) an absolute date by which the fees will be expended.

- C. **Refunds.** Nibley City shall refund any impact fees paid by a builder or developer, plus interest actually earned when (i) the builder or developer does not proceed with the building activity and files a written request for a refund; (ii) the fees have not been spent or encumbered; (iii) the builder or developer has contributed in excess of its proportional costs; and (iv) no impact has resulted.
- D. **Additional Fees and Costs.** The impact fees authorized hereby are separate from and in addition to user fees and other charges lawfully imposed by Nibley City, such as engineering and inspection fees, building permit fees, review fees, and other fees and costs that may not be included as itemized component parts of the impact fee.
- E. **Fees Effective at Time of Payment.** Unless Nibley City is otherwise bound by a contractual requirement, the impact fee shall be determined from the impact fee schedule in effect at the time of payment in accordance with the provisions of NCC 17.06.050.
- F. **Imposition of Additional Fee.** 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 charge an additional impact fee to the developer or other appropriate person covering the density for which an impact fee was not previously paid.

17.06.50 Impact Fee Imposed

- A. Impact fees are hereby imposed as a condition of and unless otherwise provided and approved by the City Council, shall be paid prior to the issuance of a building permit by Nibley City for any development activity which creates additional demand and need for public facilities or makes demands on the roadways, streets, park, culinary water and sanitary sewers in Nibley City's system. The fees imposed are as follows:

1. Facilities Impact Fee

Parks Impact Fee	\$4,500 per single-family unit \$4,500 per multi-family unit
Sanitary Sewer Impact Fee	\$1,725 (1-inch meter) \$3,450 (1 1/2-inch meter) \$5,520 (2-inch meter) \$10,349 (3-inch meter) \$20,698 (4-inch meter) (Based on the size of the culinary water meter).
Culinary Water Impact Fee	\$1,950 (1-inch meter) \$3,900 (1 1/2-inch meter) \$6,241 (2-inch meter) \$11,701 (3-inch meter) \$23,403 (4-inch meter) (Based on the size of the culinary water meter).

2. Transportation Impact Fee

	ASSESSMENT	ITE CODE	TRIPS GENERATED	ADJUSTMENT FACTOR	ADJUSTED TRIPS	FEE
Residential Single-Family	Per Unit	210	9.44	-	9.44	\$887
Residential Multi-Family	Per Unit	220	7.32	-	7.32	\$688
Mobile Home	Per Unit	240	5.00	-	5.00	\$470
Shopping Center	Per 1,000 sf	820	37.75	34%	24.92	\$2,342
Office	Per 1,000 sf	712	16.19	-	16.19	\$1,522
Light Industrial	Per 1,000 sf	110	4.96	-	4.96	\$466
Warehouse	Per 1,000 sf	150	1.74	-	1.74	\$164
Institutional	Per 1,000 sf	Average*	15.18	-	15.18	\$1,426
Hotel	Per 1,000 sf	310	8.36	-	8.36	\$786
Food/Fast Food**	Per 1,000 sf	Average**	299.43	60%	119.77	\$11,257
Gas Station/Conv	Per 1,000 sf	945	1,440.02	66%	489.61	\$46,015

*Institutional trip statistics based on an average of ITE Categories 520, 522, and 530.

**Food/Fast Food based on an average of ITE Categories 930, 932, and 934.

- B. **Impact Fees for Other Forms of Development.** Other forms of development not readily related to those of the above chart shall be subject to an impact fee calculated by the City Manager using the formulas in the Analysis and the trip generation data from the same source as used in the Analysis.

17.06.060 Fee Exceptions And Adjustments

- A. **Waiver for "Public Purpose."** The Council may, on a project by project basis, authorize Waiver for "Public Purpose." The Council may, on a project by project basis, authorize exceptions or adjustments to the then impact fee rate structure 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 low income housing, and except for an exemption for low income housing, the City Council shall establish one or more sources of funds other than impact fees to pay for the exempted development activity.
- B. **Adjustments.** The Council may adjust impact fees imposed pursuant to this Ordinance as necessary in order to respond to unusual circumstances in specific areas, ensure that impact fees are imposed fairly, permit the adjustments of the amount of the impact fees based upon studies and data submitted by an applicant in order to ensure that the impact fee represents the proportionate share of the cost of providing such public facilities which are reasonably related to and necessary in order to provide the services in question to anticipate future growth and development activities. This adjustment may result in a higher fee if the city determines that a user would create a greater than normal impact on the system. The city may also decrease the fee if the city is satisfied that the developer-provided documentation demonstrates that the proposed impact will be less than what could be expected given the type of user.

The City may adjust the standard impact fee at the time the fee is charged to respond to a request

for a prompt and individualized impact fee review for the development activity of the state, a school district, or a charter school and an offset or credit for a public facility for which an impact fee has been or will be collected.

17.06.070 Appeal Procedures

- A. **Application.** The appeal procedure applies both to challenges to the legality of impact fees, to similar and related fees of Nibley City and to the interpretation and/or application of those fees. It shall not apply to any decision of the City Council concerning a waiver for public purposes.
- B. **Declaratory Judgment Action.** Any person or entity residing in or owning property within Nibley City, and any organization, association or corporation representing the interests of persons or entities owning property within Nibley City may file a declaratory judgment action challenging the validity of an impact fee only after having first exhausted their administrative remedies of this section.
- C. **Request for Information Concerning the Fee.** Any person or entity required to pay an impact fee under this Ordinance may file a written request for information concerning the fee with Nibley City. Nibley City will provide the person or entity with Nibley City's written impact fee analysis and other relevant information relating to the impact fee within fourteen (14) days after receipt of the request for information.
- D. **Appeal to Nibley City Before Payment of the Impact Fee.** Any affected or potentially affected person or entity who wishes to challenge an impact fee under this Ordinance prior to payment thereof may file a written request for information concerning the fee and proceed under Nibley City's appeal procedure.
- E. **Appeals to Nibley City.** Any developer, landowner or affected party desiring to challenge the legality of any impact fee or related fee, paid pursuant to this Ordinance, subject to Utah Code § 11-36a-703(4), shall appeal directly to Nibley City by filing a written challenge with Nibley City, provided that the affected party does so in writing within the time limitations stated in Utah Code § 11-36a-702(1). If no written challenge is filed with Nibley City within the said time limitations of Utah Code § 11-36a-702(1), the affected party may neither file nor pursue an administrative appeal with Nibley City nor seek judicial relief.
 - 1. **Hearing.** An informal hearing will be held not sooner than five (5) days nor more than twenty-five (25) days after the written appeal/challenge to the validity of Nibley City's impact fees is filed. The Hearing of the appeal shall be conducted by the City's Land Use Appeal Officer.
 - 2. **Decision.** After the conclusion of the informal hearing, the Land Use Appeal Officer shall affirm, reverse, or take action with respect to the challenge or appeal as he/she may deem appropriate. The decision of the Land Use Appeal Officer will be issued within thirty (30) days after the date the written appeal/challenge was filed. In light of the statutorily mandated time restriction, Nibley City shall not be required to provide more than three (3) working days prior notice of the time, date and location of the informal hearing and the inconvenience of the hearing to the challenging party shall not serve as a basis of appeal of Nibley City's final determination.
- F. **Denial Due to Passage of Time.** Should Nibley City, for any reason, fail to issue a final decision on a written appeal/challenge to an impact fee, its calculation or application, within thirty (30) days after the filing of that appeal/challenge with Nibley City, the challenge shall be deemed to have been denied and any affected party to the proceedings may seek appropriate judicial relief from such denial.
- G. **Judicial Review.** Any party to the administrative action provided for herein, who is adversely affected by Nibley City's final decision may petition the district court for a review of the decision and shall file such petition within thirty (30) days after the day on which a final decision is rendered in the City's administrative appeals procedure. (Utah Code § 11-36a-702(2)). After

having been served with a copy of the pleadings initiating the court review, Nibley City shall submit to the court the record of the proceedings before Nibley City, including minutes, and if available, a true and correct transcript of any proceedings.

17.06.080 Effective Date; Savings Clause

- A. Except as otherwise specifically provided herein, this impact fee ordinance shall not repeal, modify or affect any other impact fee of the city in existence as of the effective date hereof. All impact fees established, including amendments and modifications to previously existing impact fees, after the effective date hereof shall comply with the requirements of this impact fee ordinance. This impact fee ordinance shall take effect ninety (90) days after the day on which this impact fee ordinance is approved and adopted by the City Council and this impact fee ordinance shall be posted, as provided by law, immediately after approval and adoption.

17.06.090 Severability

- A. If any section, subsection, paragraph, clause or phrase of this ordinance shall be declared invalid for any reason, such decision shall not affect the remaining provisions of this ordinance, which shall remain in full force and effect, and for this purpose, the provisions of this Ordinance are declared to be severable.

IMPACT FEE FACILITIES PLAN (IFFP) AND IMPACT FEE ANALYSIS (IFA)

TRANSPORTATION

NIBLEY, UT

JULY 2019



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IMPACT FEE CERTIFICATION

IFFP CERTIFICATION

Lewis Young Robertson & Burningham, Inc. and Nibley City jointly certify that the Impact Fee Facilities Plan ("IFFP") prepared for transportation:

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.

LEWIS YOUNG ROBERTSON & BURNINGHAM, INC.
NIBLEY CITY

IFA CERTIFICATION

Lewis Young Robertson & Burningham, Inc. certifies that the Impact Fee Analysis ("IFA") prepared for transportation:

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;
 - d. offsets costs with grants or other alternate sources of payment; and
3. complies in each and every relevant respect with the Impact Fees Act.

Lewis Young Robertson & Burningham, Inc. makes this certification with the following caveats:

1. All of the recommendations for implementation of the IFFP made in the IFFP documents or in the IFA documents are followed by City 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.

SECTION I: EXECUTIVE SUMMARY

The purpose of this Impact Fee Facilities Plan (IFFP), with supporting Impact Fee Analysis (IFA), is to fulfill the requirements established in Utah Code Title 11 Chapter 36a, the "Impact Fees Act," and help Nibley City (the "City") fund necessary capital improvements for future growth. This document will address the transportation infrastructure needed to serve the City through the next six years, as well as the appropriate impact fees the City may charge to new growth to maintain the level of service (LOS). The information related to the roadway system was obtained from data prepared by AECOM and assistance from City Staff.

- ☞ **Impact Fee Service Area:** The Service Area for the transportation impact fees includes all areas within the City. FIGURE 3.1 illustrates the proposed Service Area. This document identifies the necessary future system improvements for the Service Area that will maintain the existing LOS into the future.
- ☞ **Demand Analysis:** The demand unit utilized in this analysis is trips on existing and proposed roadways. As new development occurs within the City, it generates increased demand on City infrastructure. The system improvements identified in this study are designed to maintain the existing LOS for any new development within the City.
- ☞ **Level of Service (LOS):** The LOS analysis assesses the level of congestion on a roadway segment or intersection. LOS is measured using a letter grade A through F, where A represents free flowing traffic with absolutely no congestion and F represents grid lock. Nibley City has adopted an acceptable standard of LOS C for its streets and intersections.
- ☞ **Excess Capacity:** The demand analysis, existing facility inventory and LOS analysis allow for the development of a list of capital facilities necessary to serve new growth and to maintain the existing system. This list includes any excess capacity of existing facilities, as well as future system improvements necessary to maintain the LOS. The inclusion of excess capacity is known as a "buy-in." Any demand generated from new development that overburdens the existing system beyond the existing capacity justifies the construction of new facilities. This analysis includes a buy-in component. The City is currently in the process of building new system improvements to serve new development. For the purposes of this analysis, these facilities are considered future improvements.
- ☞ **Outstanding Debt:** The City has historically funded roadway projects with grant and general fund monies. There is no outstanding debt to consider in this analysis, and the City has no plans to issue debt to fund the projects considered in this analysis.
- ☞ **Capital Facilities Analysis:** This IFFP includes the growth-related projects needed within the next six years, as identified in the Nibley Transportation Master Plan. The total construction year cost related to growth is \$835,013, based on construction timing and inflation of three percent annually.
- ☞ **Funding of Future Facilities:** This analysis assumes future growth-related facilities will be funded through a combination of General Fund Revenues, Class C Road Funds and impact fee revenues. Where applicable, interest costs are included in the total cost to fund proposed system improvements.

PROPORTIONATE SHARE ANALYSIS

The proportionate share analysis determines the proportionate costs assignable to new development based on the proposed capital projects and the new growth served by the proposed projects. The impact fee per trip is calculated below.

TABLE 1.1: PROPORTIONATE SHARE ANALYSIS

TRANSPORTATION CAPITAL PROJECTS	GROWTH RELATED COSTS	FUTURE TRIPS	COST PER TRIP
Future Roadway Projects	\$835,013	19,026	\$43.89
Excess Capacity of Existing Roads	1,046,887	19,026	55.03
Professional Expenses	7,250	19,026	0.38
Impact Fee Fund Balance	(101,037)	19,026	(5.31)
Net Impact Fee Cost per Trip	\$1,788,113		\$93.98

IMPACT FEE SUMMARY BY LAND USE TYPE

The impact fee by land use type is illustrated in Table 1.2.

TABLE 1.2: IMPACT FEE SUMMARY BY LAND USE TYPE

	ASSESSMENT	ITE CODE	TRIPS GENERATED	ADJUSTMENT FACTOR	ADJUSTED TRIPS	ESTIMATED FEE
Residential Single-Family	Per Unit	210	9.44	-	9.44	\$887
Residential Multi-Family	Per Unit	220	7.32	-	7.32	688
Mobile Home	Per Unit	240	5.00	-	5.00	470
Shopping Center	Per 1,000 sf	820	37.75	34%	24.92	2,342
Office	Per 1,000 sf	712	16.19	-	16.19	1,522
Light Industrial	Per 1,000 sf	110	4.96	-	4.96	466
Warehouse	Per 1,000 sf	150	1.74	-	1.74	164
Institutional	Per 1,000 sf	Average*	15.18	-	15.18	1,426
Hotel	Per 1,000 sf	310	8.36	-	8.36	786
Food/Fast Food**	Per 1,000 sf	Average**	299.43	60%	119.77	11,257
Gas Station/Conv	Per 1,000 sf	945	1,440.02	66%	489.61	46,015

*Institutional trip statistics based on an average of ITE Categories 520, 522, and 530.

**Food/Fast Food based on an average of ITE Categories 930, 932, and 934.

NON-STANDARD IMPACT FEES

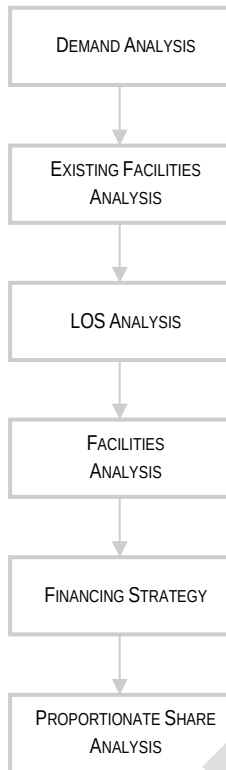
The City reserves the right under the Impact Fee Act¹ to assess an adjusted fee that more closely matches the true impact that a specific land use will have upon the City's transportation system. This adjustment could result in a different impact fee by land use if evidence suggests a particular user will create a different impact than what is standard for its category. The formula for calculating a non-standard impact fee is as follows:

$$\text{Estimated Number of Trips per Unit} \times \text{Adjustment Factor} \times \$93.98 \text{ Cost per Trip} = \text{Impact Fee}$$

¹ 11-36a-402(1)(c)

SECTION II: GENERAL IMPACT FEE METHODOLOGY

FIGURE 2.1: IMPACT FEE METHODOLOGY



The purpose of this study is to fulfill the requirements of the Impact Fees Act regarding the establishment of an IFFP and IFA. The IFFP identifies the demands placed upon the City's existing facilities by future development and evaluates how these demands will be met by the City. The IFFP also outlines the improvements which are intended to be funded by impact fees. The data used for this IFFP has been provided by City Staff and AECOM as part of the Nibley Transportation Master Plan, dated July 2018 and adopted January 2019. The purpose of the IFA is to allocate the cost of the new facilities and any excess capacity in existing facilities to new development, while ensuring that all methods of financing are considered. The Impact Fees Act requires that the IFFP and IFA consider the historic LOS provided to existing development and ensure that the proposed impact fees maintain the existing LOS. The following elements are important considerations in the IFFP and IFA.

DEMAND ANALYSIS

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

EXISTING FACILITY INVENTORY

In order to quantify the demands placed upon existing public facilities by new development activity, to the extent possible the IFFP provides an inventory of the City's existing system facilities. The inventory valuation should include the original construction cost and estimated useful life of each facility. The inventory of existing facilities is important to determine the excess capacity of existing facilities and the utilization of excess capacity by new development.

LEVEL OF SERVICE ANALYSIS

"Level of service" means the defined performance standard or unit of demand for each capital component of a public facility within a service area. Through the inventory of existing facilities, combined with growth assumptions, this analysis identifies the existing LOS that is provided to a community's existing residents and ensures that future facilities maintain this LOS.

EXCESS CAPACITY AND 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 system. This list includes any excess capacity of existing facilities as well as future system improvements necessary to maintain the LOS. 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.

FINANCING STRATEGY

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.² 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.³

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 of the costs borne in the past and to be borne in the future.⁴

² 11-36a-302(2)

³ 11-36a-302(3)

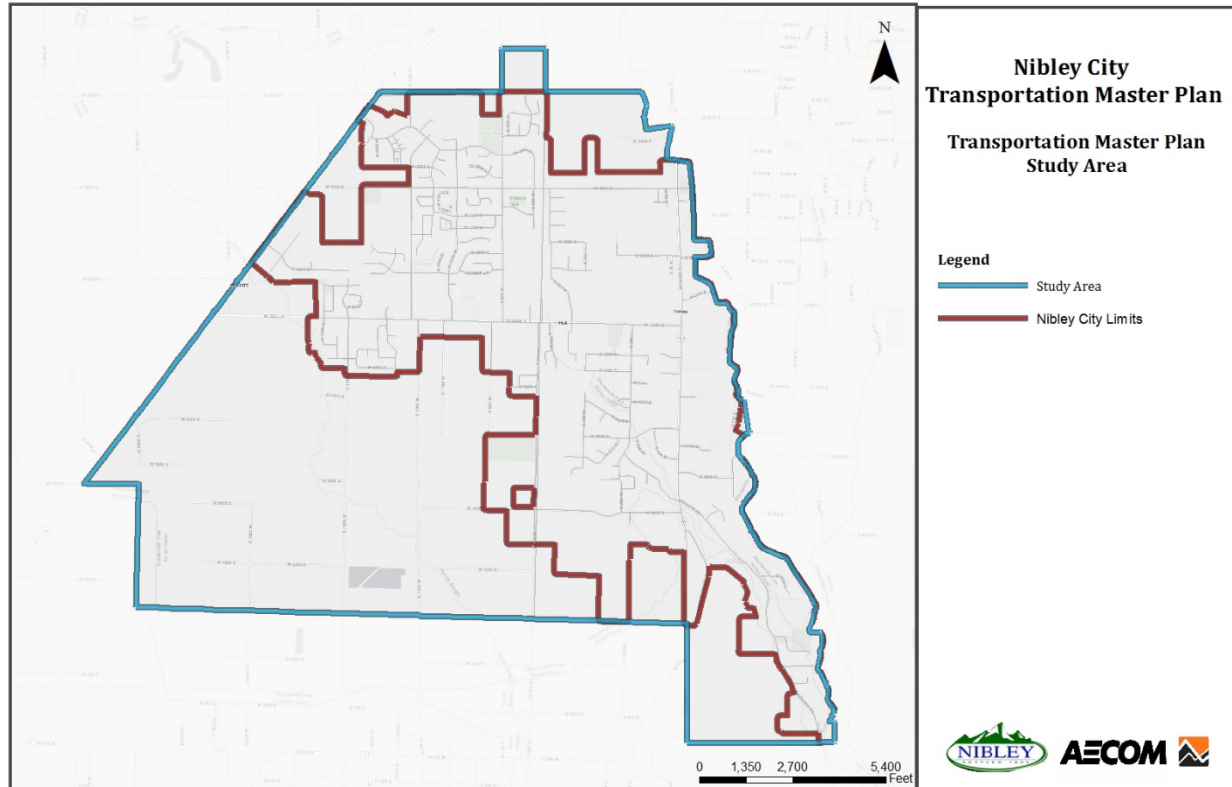
⁴ 11-36a-302

SECTION III: OVERVIEW OF SERVICE AREA AND GENERAL DEMAND FIGURES

SERVICE AREAS

Utah Code requires the impact fee enactment to establish one or more service areas within which impact fees will be imposed.⁵ The Service Area for the transportation impact fees includes all areas within the current municipal boundaries of the City, as shown in FIGURE 3.1. This document identifies the necessary future system improvements for the Service Area that will maintain the existing LOS into the future.

FIGURE 3.1: SERVICE AREA



DEMAND UNITS

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 residential and commercial growth occurs within the City, additional trips will be generated on the City's roadways. The transportation capital improvements identified in this study are based on maintaining the current level of service as defined by the City and engineers. The proposed impact fees are based upon the projected growth in demand units which are used as a means to quantify the impact that future users will have upon the City's system. The 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 City and engineers.

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, 10th Edition. The most common method of determining growth is measuring the number of trips within a community based on existing and future land uses. Appropriate adjustment factors are applied to remove pass-by traffic. Based on the growth in trips, the City will need to expand its current facilities to accommodate new growth. Growth of new development will create an additional 19,026 trips through 2024, as show in TABLE 3.1.

⁵ UC 11-36a-402(1)(a)

TABLE 3.1: TRIP PROJECTIONS

	FUTURE UNITS	ADJUSTED TRIPS/UNIT	NEW TRIPS
Residential	899	9.44	8,487
Commercial	423,000	24.92	10,539
Total			19,026

Sources: AECOM; ITE Trip Generational Manual, 10th Edition

TABLE 3.2: TRIP STATISTICS BY LAND USE TYPE

	ITE CLASSIFICATION	UNITS	WEEKDAY	PASS-BY ADJUSTMENT	DAILY TRIPS
Residential					
Single Family Homes	210	Dwelling Unit	9.44	0%	9.44
Non-Residential					
Shopping Center	820	1,000 Square Feet	37.75	34%	24.92

LEVEL OF SERVICE

Level of Service (LOS) assesses the level of congestion on a roadway segment or intersection. LOS is measured using a letter grade A through F, where A represents free flowing traffic with absolutely no congestion and F represents grid lock. Nibley City has adopted an acceptable standard of LOS C for its street network and intersections.⁶

⁶ See Nibley Transportation Master Plan 2018, page 20

SECTION IV: EXISTING FACILITIES INVENTORY

The Transportation Master Plan describes in detail the City's existing street network. It considers the level of service established by the City and includes a plan for maintaining the level of service in the future. The existing streets under Nibley City's jurisdiction have been considered in this analysis as they will also serve future development within the City.

EXCESS CAPACITY & BUY-IN

A buy-in component is justified in the calculation of an impact fee when there is excess capacity in existing system improvements that can help meet the demands placed on the system by new growth and development. A buy-in component is contemplated in this analysis for the system improvement roadways that have sufficient capacity to handle new growth while maintaining safe and acceptable levels of service.

EXISTING TRANSPORTATION SYSTEM BUY-IN

The determination of a buy-in impact fee related to existing roadways is based on proportionate trips generated within the IFFP planning horizon and the value of the existing roadway system. According to City records, the transportation system is valued at \$9.5 million. However, approximately \$3.5 million is related to project improvements and is therefore removed from the analysis. The remaining value of \$6 million is used to determine the appropriate buy-in fee. It is anticipated that all existing and future development benefit from the existing roadways that have been constructed within the service area. Approximately 17.6 percent of the total demand on the system will occur within the IFFP planning horizon. As a result, the proportionate share of \$1,046,887 of total original system cost is considered in this analysis, based on the original cost of system improvements as identified in the City's financial records.

TABLE: 4.1: ALLOCATION OF BUY-IN COMPONENT

	PROPORTIONAL TRIPS	PERCENT OF TOTAL	ALLOCATION OF ORIGINAL VALUE
Existing Trips	45,581	42.0%	\$2,508,076
IFFP Demand	19,026	17.6%	1,046,887
Buildout Trips	108,064	100.0%	5,946,226
Source: Nibley City Financial Statements			

SECTION V: CAPITAL FACILITY ANALYSIS

The City retained AECOM to complete the Nibley Transportation Master Plan, which includes a Capital Facilities Plan (CFP) and lays out all of the projects the City will need to construct to handle future development through buildout. AECOM has divided these future improvements into three phases, and this IFFP and IFA will deal solely with the Phase 1 projects and associated costs as provided by AECOM. Summary tables are included in this chapter and additional detailed data can be found in the Appendices at the end of this document.

FUTURE CAPITAL PROJECTS

Table 5.1 illustrates the estimated cost of future capital improvements within the Service Area and the portion of those capital improvements costs that can be legally recovered through impact fees for the purposes of this IFFP. These projects are identified in the CFP and a detailed breakdown of the costs specifically intended to serve new development over the planning horizon of this study, through 2024, can be found in Appendix C. The total cost of these improvements that is related to growth is \$835,013 based on construction timings and inflation of three percent annually. This number excludes any capacity not used during the course of this study, and also removes the percentage of each project that will serve pass through (cut through) traffic, as determined by AECOM (shown in Appendix C).

TABLE 5.1: SUMMARY OF IMPACT FEE ELIGIBLE FUTURE SYSTEM IMPROVEMENTS

PROJECT	PROJECT SEGMENTS	TOTAL COST ESTIMATE (PHASE 1) ⁷	% CAPACITY USED ⁸	% TO PASS THRU TRAFFIC ⁹	COST TO GROWTH
1200 West	2450 S to 2200 S	\$676,000	100.0%	60.0%	\$270,400
1200 W Corridor Roundabout	3200 S	2,284,000	8.7%	56.0%	87,825
2600 South ¹⁰	US89/91 to 1900 W; 1900 W to 1200 W	1,466,000	29.5%	80.0%	86,486
900 W/1000 W	Nibley Park Ave to 2200 S (1200 W Connection)	766,000	100.0%	60.0%	306,400
	Total	\$5,192,000			\$751,111

TABLE 5.2: SUMMARY OF CONSTRUCTION YEAR COSTS FOR THE IFFP PLANNING HORIZON

YEAR	PROJECT	LOCATION	COST TO GROWTH	CONSTRUCTION YEAR COST TO GROWTH
2020	1200 West	2450 S to 2200 S	\$270,400	\$286,867
2020	1200 West Roundabout	3200 S	87,825	98,438
2021	2600 South	US89/91 to 1900 W; 1900 W to 1200 W	86,486	94,506
2023	900 W/1000 W	Nibley Park Ave to 2200 S (1200 W Connection)	306,400	355,202
	Total		\$751,111	\$835,013

SYSTEM VS. PROJECT IMPROVEMENTS

System improvements are defined as existing and future public facilities designed to provide services to users within the community at large.¹¹ 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.¹² To the extent possible, this analysis only includes the costs of system improvements related to new growth within the service area.

FUNDING OF FUTURE FACILITIES

The IFFP also includes a consideration of all revenue sources, including impact fees and the dedication of system improvements, which may be used to finance system improvements.¹³ In conjunction with this revenue analysis, there must be a determination

⁷ See Appendix C for details of project costs; provided by AECOM

⁸ Based on data provided by AECOM (see Appendix C)

⁹ Percent deducted from cost to account for pass thru traffic; provided by AECOM (see Appendix C)

¹⁰ See Appendix A for full calculation of cost to growth for the project segments

¹¹ 11-36a-102(21)

¹² 11-36a-102(14)

¹³ 11-36a-302(2)

that impact fees are necessary to achieve an equitable allocation of the costs of the new facilities between the new and existing users.¹⁴

In considering the funding of future facilities, the IFFP has identified the portion of each project that is intended to be funded by the City, as well as funding sources from other government agencies. The cost applied to the City includes growth and non-growth-related projects. The capital projects that will be constructed to cure the existing system deficiencies will be funded through general fund revenues and Class B & C road funds. All other capital projects within the next six years which are intended to serve new growth will be funded through impact fees or on a pay-as-you-go approach. Where these revenues are not sufficient, the City may issue bonds or issue inter-fund loans to construct the proposed projects.

Other revenues such as grants can be used to fund these types of expenditures. The impact fees should be adjusted if grant monies are received. New development may be entitled to a reimbursement for any grants or donations received by the City for growth related projects or for developer funded IFFP projects. It is anticipated that future project improvements will be funded by the developer. These costs have been excluded from the calculation of the impact fee.

PROPOSED CREDITS OWED TO DEVELOPMENT

The Impact Fees Act requires a local political subdivision or private entity to ensure that the impact fee enactment allows a developer, including a school district or a charter school, to receive a credit against or proportionate reimbursement of an impact fee if the developer: (a) dedicates land for a system improvement; (b) builds and dedicates some or all of a system improvement; or (c) dedicates a public facility that the local political subdivision or private entity and the developer agree will reduce the need for a system improvement.¹⁵ The facilities must be considered system improvements or be dedicated to the public, and offset the need for an improvement identified in the IFFP.

EQUITY OF IMPACT FEES

Impact fees are intended to recover the costs of capital infrastructure that relate to future growth. The impact fee calculations are structured for impact fees to fund 100 percent of the growth-related facilities identified in the proportionate share analysis as presented in the impact fee analysis. 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.

NECESSITY OF IMPACT FEES

An entity may only impose impact fees on development activity if the entity's plan for financing system improvements establishes that impact fees are necessary to achieve parity between existing and new development. This analysis has identified the improvements to public facilities needed for new development. Impact fees are identified as a necessary funding mechanism to help offset the costs of new capital improvements related to new growth.

¹⁴ 11-36a-302(3)

¹⁵ 11-36a-402(2)

SECTION VI: TRANSPORTATION IMPACT FEE CALCULATION

The transportation impact fees proposed in this analysis will be assessed to the Service Area as defined in Section III. Transportation impact fees are justified when trips are added to system-wide roadways. The fees can be assessed on future projects when new system-wide roadways are needed to meet the demands of growth and existing roadways that have excess capacity and can serve growth without compromising level of service standards set forth. The impact fees in this analysis include both components, and the detailed fee calculation per trip can be found below in Table 6.1.

PROPOSED TRANSPORTATION IMPACT FEE

The proportionate share analysis determines the proportionate cost assignable to new development based on the proposed capital projects and the new growth served by the proposed projects. The impact fee per trip is calculated below.

TABLE 6.1: PROPORTIONATE SHARE ANALYSIS

TRANSPORTATION CAPITAL PROJECTS	GROWTH RELATED COSTS	FUTURE TRIPS	COST PER TRIP
Future Roadway Projects	\$835,013	19,026	\$43.89
Excess Capacity of Existing Roads	5,946,226	108,064	55.03
Professional Expenses	7,250	19,026	0.38
Impact Fee Fund Balance	(101,037)	19,026	(5.31)
Net Impact Fee Cost per Trip	\$6,687,452		\$93.98

IMPACT FEE SUMMARY BY LAND USE TYPE

The impact fee by land use type is, is illustrated in Table 6.2.

TABLE 6.2: IMPACT FEE SUMMARY BY LAND USE TYPE

	ASSESSMENT	ITE CODE	TRIPS GENERATED	ADJUSTMENT FACTOR	ADJUSTED TRIPS	ESTIMATED FEE
Residential Single-Family	Per Unit	210	9.44	-	9.44	\$887
Residential Multi-Family	Per Unit	220	7.32	-	7.32	688
Mobile Home	Per Unit	240	5.00	-	5.00	470
Shopping Center	Per 1,000 sf	820	37.75	34%	24.92	2,342
Office	Per 1,000 sf	712	16.19	-	16.19	1,522
Light Industrial	Per 1,000 sf	110	4.96	-	4.96	466
Warehouse	Per 1,000 sf	150	1.74	-	1.74	164
Institutional	Per 1,000 sf	Average*	15.18	-	15.18	1,426
Hotel	Per 1,000 sf	310	8.36	-	8.36	786
Food/Fast Food**	Per 1,000 sf	Average**	299.43	60%	119.77	11,257
Gas Station/Conv	Per 1,000 sf	945	1,440.02	66%	489.61	46,015

*Institutional trip statistics based on an average of ITE Categories 520, 522, and 530.

**Food/Fast Food based on an average of ITE Categories 930, 932, and 934.

NON-STANDARD IMPACT FEES

The City reserves the right under the Impact Fees Act¹⁶ to assess an adjusted fee that more closely matches the true impact that a specific land use will have upon the City's transportation system. This adjustment could result in a different impact fee if evidence suggests a particular user will create a different impact than what is standard for its category. The formula for calculating a non-standard impact fee is as follows:

$$\text{Estimated Number of Trips per Unit} \times \text{Adjustment Factor} \times \$93.98 \text{ Cost per Trip} = \text{Impact Fee}$$

¹⁶ 11-36a-402(1)(c)

CONSIDERATION OF ALL REVENUE SOURCES

The Impact Fees Act requires the proportionate share analysis to demonstrate that impact fees paid by new development are the most equitable method of funding growth-related infrastructure. See Section V for further discussion regarding the consideration of revenue sources.

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 IFFP planning horizon should be spent only on those projects outlined in the IFFP as growth related costs to maintain the LOS.

GROWTH-DRIVEN EXTRAORDINARY COSTS

The City does not anticipate any extraordinary costs necessary to provide services to future development.

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. A three percent annual construction inflation adjustment is applied to the proposed capital improvements identified in this analysis. The impact fee analysis should be updated regularly to account for changes in cost estimates over time.

APPENDIX A: 2600 S PROJECT COST DETAIL BY SEGMENT

PHASE 1 PROJECT SEGMENTS	LENGTH	% OF PHASE 1 SEGMENT	PROJECT COST BY SEGMENT	CURRENT CAPACITY	CAPACITY USED BY 2024	TOTAL CAPACITY AT BUILD- OUT	% CAPACITY USED THRU IFFP TIMELINE	PORTION OF PROJECT COST TO GROWTH
2600 S US89/91 to 1900 W	1,297	49.732%	\$729,065	0	3,000	10,000	30%	\$218,720
2600 S US89/91 to 1900 W	1,311	50.268%	736,935	0	2,900	10,000	29%	213,711
	2,608		\$1,466,000					\$432,431

Data pulled from Appendix C, provided by AECOM

APPENDIX B: ADDITION OF 1200 WEST CORRIDOR ROUNDABOUT DOCUMENTATION

DRAFT



AECOM
756 East Winchester Street
Suite 400
Salt Lake City, UT 84107
aecom.com

Project name: Nibley Transportation Master Plan

Project ref: 60561713

From: Kordel Braley, PE, PTOE

Date:
June 25, 2019

To: Stephen Nelson, Nibley City

Memo

Nibley City proposes to reconstruct the offset intersections of 3200 South and 1200 West as one intersection with a roundabout. This project was not specifically considered in the Transportation Master Plan (January 2019). The cost of constructing a roundabout was also not included in the cost estimates prepared by AECOM for the impact fee facilities plan (IFFP) and impact fee analysis (IFA). However, a roundabout is planned to be constructed by 2020.

The IFFP includes projects on 3200 South and 1200 West as follows:

- 3200 South is proposed to be improved to a three-lane cross section with trail facility.
- 1200 West is proposed to be improved to a two-lane cross section with trail facility.

The transportation master plan, which is the basis for the IFFP, considers the capacity and level of service of streets as segments and does not specifically consider the capacity or operations at an intersection level. Instead, the capacities are assumed to account for reasonable intersection configurations such as traffic signals and roundabouts at larger intersections, and two-way stop control or all-way stop control at smaller intersections.

Therefore, the proposed roundabout at 3200 South and 1200 West would not significantly affect the overall capacity or level of service of the either street's project. Therefore, it is recommended that the cost of the roundabout be added to the IFFP and IFA. The traffic demand for this roundabout can be assumed to be the average of the demand for 1200 West and 3200 South. The capacity can be assumed to be the same capacity as 3200 South because a roundabout provides similar capacity as an intersection with left-turn lanes.

PIN: PROJECT # PROJECT NAME: 1200 West Corridor Nibley, UT
Cost Estimate - Concept Level Phase 1

Prepared By: Marcus Simons

Date 8/25/2017

Proposed Project Scope: Phase 1

Approximate Route Reference Mile Post (BEGIN) =	(END) =
Project Length = 0.200	miles 1,056 ft
Current FY Year (July-June) = 2017	
Assumed Construction FY Year = 2020	
Construction Items Inflation Factor = 1.14	3 yrs for inflation
Assumed Yearly Inflation for Engineering Services (PE and CE) (%/yr) = 3.0%	
Assumed Yearly Inflation for Right of Way (%/yr) = 3.0%	
Items not Estimated (% of Construction) = 20.0%	
Preliminary Engineering (% of Construction + Incentives) = 12.0%	
Construction Engineering (% of Construction + Incentives) = 10.0%	

Construction Items	Cost	Remarks
Public Information Services	\$0	
Roadway and Drainage	\$1,111,057	
Traffic and Safety	\$13,040	
Structures	\$0	
Environmental Mitigation	\$65,776	
ITS	\$0	
Subtotal	\$1,189,873	
Items not Estimated (20%)	\$237,975	
Construction Subtotal	\$1,427,848	
P.E. Cost	P.E. Subtotal \$171,342	12%
C.E. Cost	C.E. Subtotal \$142,785	10%
Right of Way	Right of Way Subtotal \$474,800	
Utilities	Utilities Subtotal \$66,500	
Incentives	Incentives Subtotal \$0	
Miscellaneous	Miscellaneous Subtotal \$0	

Cost Estimate (ePM screen 505)	2017	2020
P.E.	\$171,000	\$187,000
Right of Way	\$475,000	\$519,000
Utilities	\$67,000	\$76,000
Construction	\$1,428,000	\$1,622,000
C.E.	\$143,000	\$156,000
Incentives	\$0	\$0
Aesthetics	\$0	\$0
Change Order Contingency	\$0	\$0
UDOT Oversight	\$0	\$0
Miscellaneous	\$0	\$0
TOTAL	\$2,284,000	\$2,560,000

PROPOSED COMMISSION REQUEST	TOTAL	\$2,284,000	TOTAL	\$2,560,000
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Project Assumptions/Risks

1	8
2	9
3	10
4	11
5	12
6	13
7	14

Roadway and Drainage

PIN: PROJECT # PROJECT NAME: 1200 West Corridor Nibley, UT

Item #	Item	Quantity	Units	Price	Cost	Remarks
Roadway						
015017010	Mobilization	1	lump	\$140,000.00	\$140,000.00	Usually 7-10% of construction
015547005	Traffic Control	1	lump	\$50,000.00	\$50,000.00	Usually 3-5% of construction
	Survey	1	0.2	\$28,500.00	\$28,500.00	
020567015	Granular Borrow (Plan Quantity)	1,726	cubic yard	\$28.00	\$48,328.00	
022317010	Clearing and Grubbing		lump			
023167020	Roadway Excavation (Plan Quantity)	3,872	cubic yard	\$10.00	\$38,720.00	
027217020	Untreated Base Course (Plan Quantity)	598	cubic yard	\$35.00	\$20,930.00	
02737001*	Asphalt Pavement Soft Spot Repair - Type A	28	cy	\$110.00	\$3,080.00	
027417050	HMA - 1/2 Inch	1,027	ton	\$85.00	\$87,295.00	
027767025	Concrete Curb and Gutter Type B1	1,700	foot	\$17.00	\$28,900.00	
027767010	Concrete Sidewalk	8,500	square foot	\$7.00	\$59,500.00	
	HA5 Surface Treatment	4,628	square yard	\$5.50	\$25,454.00	
027857075	Emulsified Asphalt HFMS-2P	0	square yard	\$1.50	\$0.00	
	Roundabout	1	lump	\$475,000.00	\$475,000.00	
Roadway Subtotal					\$1,005,707	
Drainage						
	Bedding Material	900	ft	\$8.00	\$7,200.00	
026107386	Drainage Pipe - 18 inch, Smooth, Leak-Resistant	500	foot	\$34.00	\$17,000.00	
026107388	Drainage Pipe - 24 inch, Smooth, Leak-Resistant	0	foot	\$39.00	\$0.00	
026107391	Drainage Pipe - 36 inch, Smooth, Leak-Resistant	400	foot	\$44.00	\$17,600.00	
	Catch Basin	4	each	\$2,000.00	\$8,000.00	
	Detention Basin	5,555	cubic yard	\$10.00	\$55,550.00	
Drainage Subtotal					\$105,350	
PI						
015407010	Public Information Services	1	lump		\$0	Usually 0.25% of construction

Traffic, Safety & ITS

PIN: PROJECT # PROJECT NAME: 1200 West Corridor Nibley, UT

Item #	Item	Quantity	Units	Price	Cost	Remarks
Traffic						
027657050	Pavement Marking Paint	190	gallon	\$60.00	\$11,400.00	
027687110	Pavement Message (Preformed Thermoplastic Stop Line, Crosswalks - 12 inch)	0	0.2	\$15.00	\$0.00	
028917028	Sign Type A-1, 12 Inch X 36 Inch	4	each	\$150.00	\$600.00	
028917285	Relocate Sign Less Than 20 Square Feet	0	each			
	Slipbase Sign Base	4	each	\$260.00	\$1,040.00	
	Stop Sign	0	each	\$200.00	\$0.00	
Traffic and Safety Subtotal					\$13,040	
ITS						
135537035	1D Conduit		foot			
135567010	Closed Circuit Television (CCTV) Assembly System	1	Lump			
ITS Subtotal					\$0	

Environmental and Landscaping

PIN: PROJECT # PROJECT NAME: 1200 West Corridor Nibley, UT

Item #	Item	Quantity	Units	Price	Cost	Remarks
Environmental						
	Wetland Mitigation	1	Lump			
	Stream Alteration Permitting	1	0.2	\$2,500.00	\$2,500.00	
	Wetland Delineation	1	Lump	\$8,500.00	\$8,500.00	
Temporary Erosion Control						
015717030	Silt Fence		foot			
015717025	Check Dam - Fiber Roll		Each			
	BMP's	1	Lump	\$8,500.00	\$8,500.00	
Landscaping						
029127010	Contractor Furnished Topsoil	1,322	square yard	\$8.00	\$10,576.00	
	Trees	34	each	\$300.00	\$10,200.00	
	Sprinkler	1,700	foot	\$15.00	\$25,500.00	
Environmental Mitigation Subtotal					\$65,776	

Utilities, Right of Way, and Incentives

PIN: PROJECT # PROJECT NAME: 1200 West Corridor Nibley, UT

Item #	Item	Quantity	Units	Price	Cost	Remarks
Utilities						
	Relocate Water/Irrigation/Sewer Lines	1	Lump	\$16,500.00	\$16,500.00	
	Relocate Gas Line	1	Lump			
	Relocate Power Line	1	0.2	\$50,000.00	\$50,000.00	
	Relocate Fiber Optic	1	Lump			
	Relocate Phone	1	Lump			
Utilities Subtotal						
					\$66,500	
Right-of-way						
	Non-Urban/Suburban Farm	0	sq ft	\$6.00	\$0.00	
	Full Take Residential	1	Lump	\$440,000.00	\$440,000.00	2 Properties
	Partial Take Residential	5,800	sq ft	\$6.00	\$34,800.00	
Right-of-Way Subtotal						
					\$474,800	
Incentives						
00007601*	Pavement Smoothness Incentive	0	lump			
00007602*	Hot Mix Asphalt (HMA) Incentive	0	lump	\$3,774.00	\$0.00	
00007603*	Stone Matrix Asphalt (SMA) Incentive	0	lump			
00007604*	Open Graded Surface Course Incentive	0	lump			
00007605*	Bonded Wearing Course Incentive	0	lump	\$311.73	\$0.00	
00007606*	Early Completion - Time	0	calendar day			
00007607*	Lane Rental Incentive	0	Hours			
00000608*	Miscellaneous Incentive	0	Lump			
Incentives Subtotal						
					\$0	

APPENDIX C: COST ESTIMATES PREPARED FOR THE IFFP AND IFA (BY AECOM)

Street	Road Segment		Volumes			Cut-through h	Cost (2018 Dollars)	Phase	PHASE 1 COST (Disaggregated Cost & No Trail)
	From	To	2017	2024	2050				
1200 West Corridor Roundabout	3200 South	3200 South	3700	4600	10400	56%	\$ 2,284,000	Phase I	\$ 2,284,000
4400 South	Southwest boundary	2500 West	0	200	800	75%	\$ 12,993,000	Phase II	
4400 South	2500 West	1900 West	0	300	900	75%			
4400 South	1900 West	1500 West	200	400	1200	75%			
4400 South	1500 West	1200 West	200	400	1200	75%			
4400 South	1200 West	700 West	100	100	200	75%			
4400 South	700 West	250 West	100	200	600	75%			
4400 South	250 West	SR-165	100	300	600	75%		Phase III	
4000 South	US-89/US-91	2500 West	0	400	0	20%	\$ 8,829,000	Phase II	
4000 South	2500 West	1900 West	0	400	0	20%			
4000 South	1900 West	1500 West	0	400	1400	20%			
4000 South	1500 West	1200 West	0	400	800	20%			
4000 South	1200 West	900 West	300	700	1200	20%			
4000 South	900 West	640 West	300	1500	2900	20%			
4000 South	640 West	280 West	500	1400	1800	20%			
4000 South	280 West	SR-165	500	300	900	20%		Phase III	
3650/3700 South	2500 West	1900 West	0	600	4700	0%	\$ 7,077,000	Phase II	
3650/3700 South	1900 West	1500 West	0	800	1500	0%			
3650/3700 South	1500 West	1200 West	0	900	1600	0%			
3650/3700 South	1200 West	900 West	0	800	1400	0%			
3650/3700 South	900 West	640 West	0	1000	2100	0%			
3650/3700 South	640 West	250 West	0	1200	2500	0%			
3650/3700 South	250 West	SR-165	0	2200	2600	0%			

3200 South	US-89/US-91	1900 West	6300	3000	7300	60%	\$ 5,188,000	Phase II	
3200 South	1900 West	1500 West	6300	3300	9500	60%			
3200 South	1500 West	1200 West	4600	4800	10900	50%			
3200 South	1200 West	1000 West	4800	5000	10700	50%		Phase III	
3200 South	1000 West	800 West	3200	4900	12800	50%			
3200 South	800 West	640 West	3900	4700	12400	50%			
3200 South	640 West	500 West	3400	4700	11800	50%			
3200 South	500 West	250 West	3200	4500	10900	50%			
3200 South	250 West	SR-165	3300	5100	10000	50%		Phase III	
Mill Road	SR-165	East Border	3200	3500	7700	70%			
Nibley Parkway	US-89/US-91	1900 West	2800	5800	6900	25%	\$ -	No	
Nibley Parkway	1900 West	1600 West	0	500	1600	0%			
2600 South	US-89/US-91	1900 West	0	3000	1600	80%	\$ 2,415,000	Phase I	\$ 1,466,000
2600 South	1900 West	1200 West	0	2900	6700	80%			
2600 South	1200 West	1000 West	1100	2200	2900	80%		Phase II	
2600 South	1000 West	800 West	1300	4500	1200	80%			
2600 South	800 West	250 West	2700	4900	7000	80%			
2600 South	250 West	SR-165	2700	2300	3900	80%			
2200 South	US-89/US-91	1200 West	1300	1900	3700	10%	\$ 1,779,000	Phase III	
2200 South	1200 West	800 West	1700	700	1700	10%			
2200 South	800 West	Union Pacific Railroad	900	800	900	10%			
2500 West	4400 South	4000 South	0	500	1900	70%	\$ 2,634,000	Phase III	
2500 West	4000 South	3650 South	0	500	1800	70%			
2500 West	3650 South	US-89/US-91	0	1100	6300	70%			
1900 West	4400 South	4000 South	1100	3000	4300	75%	\$ 5,394,000	Phase III	
1900 West	4000 South	3650 South	1200	3100	5500	75%			
1900 West	3650 South	3200 South	1000	4100	7100	75%			
Heritage	3200 South	Nibley Parkway	0	4700	6200	10%	\$ 3,624,000	Phase II	
Heritage	Nibley Parkway	2600 South	0	6600	4100	10%			
Heritage	2600 South	US-89/US-91	2000	5700	3300	10%		Phase III	
1700 West	3200 South	2960 South	0	1300	3300	0%	\$ 953,000	Phase II	

1500 West	4400 South	4000 South	0	0	100	5%	\$ 2,923,000		
1500 West	4000 South	3650 South	0	0	500	5%		Phase II	
1500 West	3650 South	3390 South	0	500	1100	5%		Phase III	
1500 West	3390 South	3200 South	500	500	1200	5%			
1200 West	4400 South	4000 South	4200	4400	8600	75%	\$ 5,720,000		
1200 West	4000 South	3650 South	4200	4200	8400	70%			
1200 West	3650 South	3390 South	4200	4000	8100	65%			
1200 West	3390 South	3200 South	4300	4100	8300	65%			
1200 West	3200 South	2600 South	1100	4500	11700	60%		Phase II	
1200 West	2600 South	2450 South	800	3700	7900	60%			
1200 West	2450 South	2200 South	0	12000	16500	60%		Phase I	\$ 676,000
900/1000 West	4400 South	4000 South	0	1000	2000	60%	\$ 5,062,000		
900/1000 West	4000 South	3650 South	0	1500	4000	55%			
900/1000 West	3650 South	3200 South	100	1600	4900	50%			
900/1000 West	3200 South	2600 South	900	4300	2700	50%		Phase II	
900/1000 West	2600 South	Nibley Park Ave	100	8400	9100	55%			
900/1000 West	Nibley Park Ave	2200 South (1200 West Connection)	0	12000	16500	60%		Phase I	\$ 766,000
800 West/3400 South	900 West	3200 South	0	400	1500	0%	\$ 2,175,000	Phase II	
800 West/3400 South	3200 South	2600 South	3600	2800	7900	50%			
800 West/3400 South	2600 South	2200 South	3700	4200	8500	55%		Phase III	
800 West/3400 South	2200 South	North boundary	10200	4100	8400	60%			
640 West/700 West	4400 South	4000 South	600	1900	2700	60%	\$ 2,771,000		
640 West/700 West	4000 South	3650 South	800	600	1200	50%		Phase III	
640 West/700 West	3650 South	3200 South	800	700	1600	40%			
250 West	4400 South	4000 South	0	200	500	5%	\$ 2,204,000		
250 West	4000 South	3650 South	1000	1100	1000	0%			
250 West	3650 South	3200 South	1000	1000	1400	0%			
250 West	3200 South	2600 South	0	1000	400	0%		Phase II	
250 West	2600 South	North boundary	0	100	400	5%			
Hollow Road	Southeast boundary	New North South Connection	1100	1200	2200	70%	\$ 3,109,000		
Hollow Road	New North South Connection	SR-165	1100	900	2600	70%		Phase III	
250 East	Hollow Road/3700 S/3650 S	3200 S/200 South (Millville Connection)	0	600	800	35%	\$ 5,626,000	Phase II	
GRAND TOTALS							\$ 82,760,000		\$ 5,192,000

Cost estimates prepared by AECOM with direction from City staff; Phase I projects are highlighted in orange