

Ordinance 2022-10

SHORT TITLE:

AN ORDINANCE AMENDING PROVO CITY CODE TO ADOPT AN
UPDATED WASTEWATER IMPACT FEE ANALYSIS AND SEWER IMPACT
FEE FACILITIES PLAN TO MODIFY IMPACT FEES FOR WASTEWATER.
(22-020)

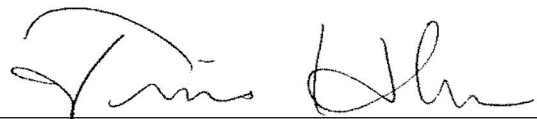
I

PASSAGE BY MUNICIPAL COUNCIL

ROLL CALL

DISTRICT	NAME	FOR	AGAINST	OTHER
CW 1	KATRICE MACKAY	✓		
CW 2	DAVID SHIPLEY	✓		
CD 1	BILL FILLMORE			Excused
CD 2	GEORGE HANDLEY	✓		
CD 3	SHANNON ELLSWORTH			Excused
CD 4	TRAVIS HOBAN	✓		
CD 5	RACHEL WHIPPLE	✓		
TOTALS		5	0	2

This ordinance was passed by the Municipal Council of Provo City, on the 15th day of March 2022, on a roll call vote as described above. Signed this 22nd day of March 2022.

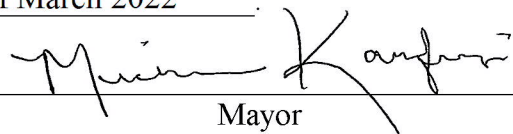


Chair

II

APPROVAL BY MAYOR

This ordinance is approved by me this 22nd day of March 2022.



Mayor

Ordinance 2022-10

III

CITY RECORDER'S CERTIFICATE AND ATTEST

This ordinance was signed and recorded in the office of the Provo City Recorder on the 23rd day of March 2022 and was published on the Utah Public Notice Website on the 16th day of March 2022. I hereby certify and attest that the foregoing constitutes a true and accurate record of proceedings with respect to Ordinance Number 2022-10.



A handwritten signature in black ink, appearing to be "D. J. [unclear]", is written over a horizontal line.

City Recorder

ORDINANCE 2022-10

AN ORDINANCE AMENDING PROVO CITY CODE TO ADOPT AN
UPDATED WASTEWATER IMPACT FEE ANALYSIS AND SEWER
IMPACT FEE FACILITIES PLAN TO MODIFY IMPACT FEES FOR
WASTEWATER. (22-020)

WHEREAS, Provo City (the "City") is authorized to enact impact fees for certain public facilities in accordance with the Utah Impact Fees Act (the "Act") as set forth in Utah Code Section 11-36a-101 et seq.; and

WHEREAS, Provo City last adopted an Impact Fee Analysis and Impact Fee Facilities Plan, which included impact fees for various public facilities including wastewater, on December 10, 2019; and

WHEREAS, Zions Public Finance, Inc. has prepared an updated Wastewater Impact Fee Analysis and Bowen Collins & Associates prepared an updated Sewer Impact Fee Facilities Plan (the "IFFP") for wastewater (sewer) public facilities (collectively, the "Wastewater Public Facilities") that analyzes proposed public facilities and associated impact fees as provided in the Act; and

WHEREAS, the IFFP (i) considers all revenue sources for financing wastewater public facility system improvements necessary to accommodate future growth, (ii) analyzes statutory criteria for determining whether a proportionate share of the cost of new Wastewater Public Facilities is reasonably related to new development activity as set forth in the Act, and (iii) sets forth the methodology used to calculate the impact fees proposed for the Wastewater Public Facilities; and

WHEREAS, on March 15, 2022, the Municipal Council met to ascertain the facts regarding this matter and receive public comment, which facts and comments are found in the public record of the Council's consideration; and

WHEREAS, as provided in the Act, it is proposed that current impact fees for wastewater be modified as set forth below; and

WHEREAS, after considering the facts and comments presented to the Municipal Council, the Council finds (i) growth and development within the City is creating continuing demand for Wastewater Public Facilities to serve such development, (ii) impact fees are necessary to fairly distribute the costs of Wastewater Public Facilities to serve new development, (iii) impact fees established by this ordinance constitute a proper proportionate share of the cost of Wastewater Public Facilities which are reasonably related to new development activity as set forth in the Act and the IFFP; (iv) the wastewater impact fees established by this ordinance were developed by conservative analysis and justified by the IFFP; and (v) adoption of this ordinance reasonably furthers the health, safety, and general welfare of current and future residents of Provo City.

NOW, THEREFORE, be it ordained by the Municipal Council of Provo City, Utah, as

follows:

PART I:

The Wastewater Impact Fee Analysis and Sewer Impact Fee Facilities Plan (IFFP) shown in Exhibit A and B are hereby adopted.

PART II:

Provo City Code Section 15.08.060 is hereby amended as follows:

15.08.060. Impact Fee Calculations.

(1) The impact fees established by this Chapter may not exceed the highest fee justified by the written analysis set forth in the Impact Fee Analysis and Impact Fee Facilities Plan (IFFP) adopted by the Municipal Council on December 1, 2019 for public facilities other than wastewater. For wastewater public facilities, the impact fees established by this Chapter may not exceed the highest fee justified by the written analysis set forth in the Wastewater Impact Fee Analysis and Sewer Impact Fee Facilities Plan (IFFP) adopted by the Municipal Council on March 15, 2022.

...

PART III:

The Consolidated Fee Schedule of the Provo City Code is hereby amended as follows:

...

Sewer Impact Fees

Residential Sewer Impact Fee	ERUDemand	Fee
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...

As of July 1, 2022, the following fees will be as follows:

Sewer Impact Fees

Residential Sewer Impact Fee	ERUDemand	Fee
Sewer Impact Fee per ERU	1.00	\$4,450.26
Fixture Type	Drainage Fixture Unit Value as Load Factors	Impact Fee per Fixture Type
Automatic clothes washers, commercial	3	\$513.49

Automatic clothes washers, residential	2	\$342.33
Bathtub	2	\$342.33
Bidet	1	\$171.16
Combination sink and tray	2	\$342.33
Dental lavatory	1	\$171.16
Dental unit or cuspidor	1	\$171.16
Dishwashing machine, domestic	2	\$342.33
Drinking Fountain	0.5	\$85.58
Floor Drains	2	\$342.33
Kitchen Sink, Domestic	2	\$342.33
Laundry Tray	2	\$342.33
Lavatory	1	\$171.16
Shower	2	\$342.33
Sink	2	\$342.33
Urinal	4	684.66
Urinal , 1 gal. or less per flush	2	684.66
Wash sink, circular or multiple, each set faucets	2	\$342.33
Water closet, flushometer tank, public or private	4	\$684.66
Water closet, private (1.6 gpf)	3	\$513.49
Water closet, private (flushing greater than 1.6 gpf)	4	\$684.66
Water closet, public (1 .6 gpf)	4	\$684.66
Water closet, public (flushing greater than 1.6 gpt)	6	\$1,026.98

Swimming Pool	10	\$1,711.64
Hot Tub	2	\$342.33
Car Wash (per bay)	2	\$342.33
Sewer Non-Standard Impact Fee Formula		
Multiply Number of Fixture Units by Impact Fee per Fixture Unit		\$171.16
Commercial	Computed on the basis of residential equivalent fixture units 26 fixture units shall be considered a residential equivalent	

PART IV:

A. If a provision of this ordinance conflicts with a provision of a previously adopted ordinance, this ordinance shall prevail.

B. This ordinance and its various sections, clauses and paragraphs are hereby declared to be severable. If any part, sentence, clause or phrase is adjudged to be unconstitutional or invalid, the remainder of the ordinance shall not be affected thereby.

C. The Municipal Council hereby directs that the official copy of the Provo City Code be updated to reflect the provisions enacted by this ordinance.

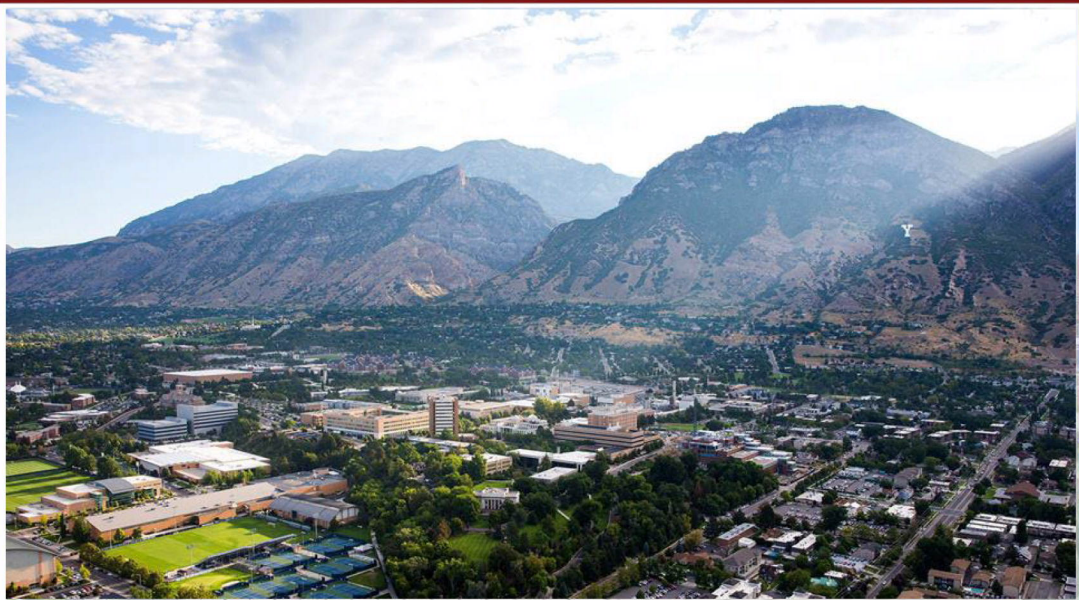
D. This ordinance shall take effect on July 1, 2022.

END OF ORDINANCE.

ZIONS PUBLIC FINANCE



City of Provo Wastewater Impact Fee Analysis



Prepared by
Zions Public Finance, Inc.
February 2022

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EXECUTIVE SUMMARY

The City of Provo (the City) commissioned Zions Public Finance, Inc. (ZPFI) to calculate the City's wastewater impact fees in accordance with Utah State Code 11-36a. An impact fee is a payment of money imposed upon new development activity as a condition of development approval to mitigate the impact of the new development on public infrastructure. In conjunction with this project, Bowen Collins & Associates (BC&A) prepared the Sewer Impact Fee Facilities Plan (IFFP).

Projections for equivalent residential unit (ERU) growth in the City are shown in Table 1:

TABLE 1: PROJECTED ERU GROWTH, 2021-2031

Year	ERUs
2021	45,033
2022	45,523
2023	46,011
2024	46,496
2025	46,978
2026	47,457
2027	47,933
2028	48,407
2029	48,877
2030	49,345
2031	49,866
Growth in ERUs, 2021-2031	4,833

Source: Bowen Collins & Associates, Sewer Impact Fee Facilities Plan 2021

This IFA is organized based on the legal requirements of Utah Code 11-36a-304.

Wastewater Service Area

There is one service area that covers the entire City for the purpose of calculating wastewater impact fees.

Level of Service

Level of service (LOS) defines the wastewater demands that a typical residential user, defined as an Equivalent Residential Unit (ERU), will require and should pay for with the impact fee. LOS is based upon historic observed demands per ERU. Impact fee law prohibits the use of impact fees to increase the LOS above the current demands without an appropriate credit.

According to the IFFP prepared by BC&A, the primary demand per ERU is 228.3 gpd/ERU which reflects the average day indoor water use for a typical residential user. A residential unit is equated to one ERU and includes up to 26 fixture units. Non-residential properties are assessed an impact fee according to fixture units as shown the Appendix.

Wastewater Capital Facilities

The IFFP identifies excess capacity in the existing system by defining the portion of existing collection improvements that are impact fee eligible and determining that there is no excess capacity in the existing treatment facility. The IFFP states that, "while the City's existing treatment plant has a rated capacity of 21 mgd, much of the existing facility is in the process of being upgraded to accommodate new permit

requirements by the State of Utah DEQ. Thus, all future growth will be charged an assessment for the cost of constructing new treatment capacity and will not be charged to buy excess capacity at the existing facility even if the excess capacity is used in the short-term until the improvements are completed.”¹ Based on expected growth in the next 10 years, \$1,613,586 of the excess collection system capacity will be consumed by new development. Table 2 shows the excess capacity in the existing wastewater system.

TABLE 2: EXCESS CAPACITY IN EXISTING SYSTEM

	Maintenance	Treatment	Collection	Equipment	Total Cost
Qualifying Total	\$ -	\$ -	\$ 38,418,715	\$ -	\$38,418,715
Non-Qualifying	30,636	38,574,798	18,249,164	816,937	57,671,535
TOTAL	\$30,636	\$38,574,798	\$56,667,879	\$816,937	\$96,090,250

The total cost of new treatment system improvements attributable to new development within the next 10 years is \$26,048,182 as shown in Table 3.

TABLE 3: NEW SYSTEM IMPROVEMENTS- TREATMENT

Treatment Capital Projects	Year to be Constructed	2021 Cost	Construction Cost with Inflation	10 Year Impact Fee Qualifying Cost	Impact Fee Qualifying Beyond 10 Years	Non-Impact Fee Qualifying
New Reclamation Facility Liquid Stream- Strength Capacity	2022	\$67,500,000	\$71,610,750	\$6,094,075	\$8,765,156	\$56,751,519
New Reclamation Facility Liquid Stream- Hydraulic Capacity	2022	50,000,000	53,045,000	5,155,974	7,082,303	59,372,473
New Reclamation Facility- Solids Handling	2025	100,000,000	115,927,407	14,798,134	21,284,272	137,808,706
TOTAL		\$285,000,000	\$317,112,611	\$26,048,182	\$37,131,731	\$253,932,698

Source: Bowen Collins & Associates, Sanitary Sewer Collection IFFP 2021

¹ Source: Sewer Impact Fee Facilities Plan prepared by Bowen Collins & Associates Page ES-5

The total cost of new collection system improvements attributable to new development within the next 10 years is \$14,126,913 as shown in Table 4.

TABLE 4: NEW SYSTEM IMPROVEMENTS- COLLECTION

Collection Capital Projects	Year to be Constructed	2021 Cost	Construction Cost with Inflation	10 Year Impact Fee Qualifying Cost	Impact Fee Qualifying Beyond 10 Years	Non-Impact Fee Qualifying
Exchange Park (Phase 1)	2021	\$3,321,000	\$3,420,630	\$345,484	\$528,487	\$2,546,659
Lakeview Pkwy- Construct 3,225 ft of 27" pipe from Center Street to 620 N	2021	\$4,725,600	\$4,867,368	\$378,643	\$1,363,837	\$3,124,850
Billings LS Interceptor	2021	\$2,200,000	\$2,266,000	\$31,710	\$224,334	\$2,009,942
Lakeview Pkwy- Construct 1,740 ft of 21" pipe from 620 N to Bulldog Lane	2021	\$1,364,400	\$1,405,332	\$260,660	\$831,816	\$312,846
Southwest Lift Station & 1st Force Main	2021	\$13,493,000	\$13,897,790	\$2,579,706	\$3,499,145	\$7,818,939
Airport LS Interceptor	2022	\$1,864,000	\$1,977,518	\$331,767	\$524,438	\$1,121,252
East Bay Blvd. Trunkline & Plant Lift Station (Noorda)	2022	\$3,694,000	\$3,918,965	\$3,057,184	\$861,780	\$ -
Lakeview Pkwy- Construct 4,400 ft of 21" pipe from Bulldog Lane to NW Lift Station	2023	\$3,451,000	\$3,771,001	\$899,745	\$2,871,256	\$ -
Skipper Bay LS Interceptor	2023	\$2,500,000	\$2,731,818	\$120,997	\$365,244	\$2,245,554
Redundant 36-inch Trunkline	2024	\$9,466,000	\$10,654,066	\$3,275,634	\$7,377,941	\$ -
Harbor Park LS Interceptor	2026	\$3,700,000	\$4,417,993	\$1,598,996	\$1,652,771	\$1,166,350
2nd Force Main from SW Lift Station	2026	\$2,493,000	\$2,976,772	\$663,519	\$2,313,253	\$ -
500 N Diversion	2029	\$24,000	\$31,315	\$10,438	\$10,438	\$10,438
Exchange Park (Phase 2)	2030	\$1,325,000	\$1,780,689	\$572,430	\$1,208,198	\$ -
TOTAL		\$53,621,000	\$58,117,257	\$14,126,913	\$23,632,938	\$20,356,831

Source: Bowen Collins & Associates, Sewer Impact Fee Facilities Plan 2021

Wastewater System Impact Fee Calculation

The impact fee calculation is summarized in Table 5. One ERU is equivalent to a residential unit with up to 26 fixture units. Non-residential units will be assessed an impact fee according to fixture units as shown in the Appendix.

TABLE 5: PROPORTIONATE SHARE ANALYSIS – MAXIMUM IMPACT FEE

Summary	Amount
Treatment Costs	\$5,486.57
Collection Costs	\$3,272.40
Consultant Costs	\$18.95
Impact Fee Deficiency Credit	(\$4,327.67)
Total Maximum Impact Fee per ERU	\$4,450.26

CHAPTER 1: OVERVIEW OF THE WASTEWATER IMPACT FEES

Summary

An impact fee is intended to recover the City's costs of building wastewater system capacity to serve new residential and non-residential development rather than passing all of these growth-related costs on to existing users through rates. The Utah Impact Fees Act allows only certain costs to be included in an impact fee so that only the fair cost of expansionary projects or existing unused capacity paid for by the City is assessed through an impact fee.

Costs to be Included in the Impact Fee

The impact fees proposed in this analysis are calculated based upon:

- Excess capacity in the City's wastewater system;
- New capital infrastructure for treatment and collection systems that will serve new development; and
- Professional and planning expenses related to the construction of system improvements that will serve new development.

The costs that cannot be included in the impact fee are as follows:

- Costs that cure system deficiencies;
- Costs for projects that increase the Level of Service (LOS) above that which is currently provided without an appropriate credit;
- Operations and maintenance costs;
- Costs of facilities funded by grants or other funds that the City does not have to repay; and
- Costs of reconstruction of facilities that do not have capacity to serve new growth.

Utah Code Legal Requirements

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

Notice of Intent to Prepare Impact Fee Analysis

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

Preparation of Impact Fee Analysis

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

This IFA conforms with Section 11-36a-304 of the Utah Code outlines the requirements of an impact fee analysis which is required to:

- (1) An impact fee analysis shall:
 - (a) identify the anticipated impact on or consumption of any existing capacity of a public facility by the anticipated development activity;
 - (b) identify the anticipated impact on system improvements required by the anticipated development activity to maintain the established level of service for each public facility;
 - (c) demonstrate how the anticipated impacts described in Subsections (1)(a) and (b) are reasonably related to the anticipated development activity;
 - (d) estimate the proportionate share of:
 - (i) the costs for existing capacity that will be recouped; and
 - (ii) the costs of impacts on system improvements that are reasonably related to the new development activity; and
 - (e) identify how the impact fee was calculated.
- (2) In analyzing whether or not the proportionate share of the costs of public facilities are reasonably related to the new development activity, the local political subdivision or private entity, as the case may be, shall identify, if applicable:
 - (a) the cost of each existing public facility that has excess capacity to serve the anticipated development resulting from the new development activity;
 - (b) the cost of system improvements for each public facility;
 - (c) other than impact fees, the manner of financing for each public facility, such as user charges, special assessments, bonded indebtedness, general taxes, or federal grants;
 - (d) the relative extent to which development activity will contribute to financing the excess capacity of and system improvements for each existing public facility, by such means as user charges, special assessments, or payment from the proceeds of general taxes;
 - (e) the relative extent to which development activity will contribute to the cost of existing public facilities and system improvements in the future;
 - (f) the extent to which the development activity is entitled to a credit against impact fees because the development activity will dedicate system improvements or public facilities that will offset the demand for system improvements, inside or outside the proposed development;
 - (g) extraordinary costs, if any, in servicing the newly-developed properties; and
 - (h) the time-price differential inherent in fair comparisons of amounts paid at different times.

Calculating Impact Fees

Utah Code states that for purposes of calculating an impact fee, a local political subdivision or private entity may include:

- (a) the construction contract price;
- (b) the cost of acquiring land, improvements, materials, and fixtures;
- (c) the cost for planning, surveying, and engineering fees for services provided for and directly related to the construction of the system improvements; and
- (d) for political subdivision, debt service charges, if the political subdivision might use impact fees as a revenue stream to pay the principal and interest on bonds, notes or other obligations issued to finance the costs of the system improvements.

Additionally, the Code states that each political subdivision or private entity shall base impact fee amounts on realistic estimates and the assumptions underlying those estimates shall be disclosed in the impact fee analysis.

Certification of Impact Fee Analysis

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

Impact Fee Enactment

Utah Code states that a local political subdivision or private entity wishing to impose impact fees shall pass an impact fee enactment in accordance with Section 11-36a-402. Additionally, an impact fee imposed by an impact fee enactment may not exceed the highest fee justified by the impact fee analysts. An impact fee enactment may not take effect until 90 days after the day on which the impact fee enactment is approved.

CHAPTER 2: IMPACT FROM GROWTH UPON THE CITY'S FACILITIES AND LEVEL OF SERVICE

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

Wastewater Service Area

City of Provo has one service area for the purpose of calculating wastewater impact fees.

Proposed Wastewater Demands

Table 6 shows wastewater growth projections. The City's wastewater system currently serves 45,033 ERUs which will grow to an estimated 49,866 ERUs by 2031. The growth between 2021 and 2031, as used in the IFFP, is expected to be 4,833 ERUs.

TABLE 6: PROJECTED ERU GROWTH, 2021-2031

Year	ERUs
2021	45,033
2022	45,523
2023	46,011
2024	46,496
2025	46,978
2026	47,457
2027	47,933
2028	48,407
2029	48,877
2030	49,345
2031	49,866
Growth in ERUs, 2021-2031	4,833

Source: Bowen Collins & Associates, Sewer Impact Fee Facilities Plan 2021

Existing and Proposed LOS Analysis

The IFFP defines the level of service according to the existing level of service and the performance standard and defines them as follows; "The performance standard will be considered the desired minimum level of performance for each component, while the existing level of service will be the actual current performance of the component and the proposed level of service will be the proposed actual performance of the component in the future."² Table 7 summarizes the existing and future level of service.

² Bowen Collins & Associates Provo City Impact Fee Facilities Plan, page ES-3

TABLE 7: EXISTING AND FUTURE LEVEL OF SERVICE

	Existing Level of Service (1)	Performance Standard and Future Level of Service
Pipeline Capacity		
Maximum Ratio of Flow (2) to Pipeline Capacity/Percent of Collection System that Meets the Standard	0.75/94.4%	0.75/100%
Treatment Capacity		
Available Plant Capacity- Average Day, Maximum Month Flow (gpd/ERU) (3)	355.3	238.4

(1) Because there are thousands of pipeline components, a percentage is provided to identify the percentage of system that currently meets the City performance standard.

(2) Peak hour, dry weather flow

(3) The City has prepared several water reclamation studies that have determine there is no remaining excess capacity at the existing treatment facility. This is in part due to new treatment standards from the Department of Environmental Quality. As a result, future growth will only be assessed for the cost to expand the treatment facility.

Source: Sewer IFFP Table ES-3 Prepared by Bowen Collins & Associates

CHAPTER 3: IMPACT ON CAPACITY FROM DEVELOPMENT ACTIVITY

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

Excess Capacity and Deficiency

According to the IFFP, there is excess capacity in the current collection system. New development can be charged a buy-in fee, as part of the overall impact fee, for the capacity it consumes. The actual value of the system projects with excess capacity is estimated at \$38,418,715 shown as the collection qualifying total in Table 8.

TABLE 8: EXCESS CAPACITY IN EXISTING SYSTEM

System	Maintenance	Treatment	Collection	Equipment	Total Cost
Repair & Replacement	\$30,636	\$38,574,798	\$1,581,802	\$ -	\$40,187,236
Impact Fee Eligible Improvements	\$ -	\$ -	\$30,419,989	\$ -	\$30,419,989
Sewer Lines	\$ -	\$ -	\$24,661,073	\$ -	\$24,661,073
Equipment	\$ -	\$ -	\$ -	\$816,937	\$816,937
Assets Under \$5,000	\$ -	\$ -	\$5,016	\$ -	\$5,016
Credits	\$ -	\$ -	\$ -	\$ -	\$ -
Contributed	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL	\$30,636	\$38,574,798	\$56,667,880	\$816,937	\$96,090,250

	Maintenance	Treatment	Collection	Equipment	Total Cost
Qualifying Total	\$ -	\$ -	\$ 38,418,715	\$ -	\$38,418,715
Non-Qualifying	\$30,636	\$38,574,798	\$18,249,164	\$816,937	\$57,671,535
TOTAL	\$30,636	\$38,574,798	\$56,667,879	\$816,937	\$96,090,250

New development will consume \$1,613,586 of excess capacity in the existing system within the next 10 years based on the percentage (4.20%) of existing collection system excess capacity calculated by BC&A and shown in Table 9.

TABLE 9: COLLECTION SYSTEM EXCESS CAPACITY

Collection System	Capacity Allocation
Existing Use	74.58%
10-Year Use	4.20%
Use by Growth Beyond 10 Years	21.24%
TOTAL	100.00%

CHAPTER 4: SYSTEM IMPROVEMENTS REQUIRED FROM DEVELOPMENT ACTIVITY

Utah Code 11-36a-304(1)(b)(c), (2)(b)

Additional wastewater improvements will be required in order to maintain the established level of service. The means by which the City will meet growth demands include constructing the following projects as set forth in the Impact Fee Facilities Plan. This will occur through requiring new development to pay for its fair share of existing excess capacity consumed over the next 10 years as well as paying for its fair share of the new construction projects.

The following tables (Tables 10 & 11) show the 10-year treatment and collection improvements anticipated within the 10-year planning horizon and identifies the capacity that will be consumed by 10-year growth. The total cost of new treatment system improvements attributable to new development within the next 10 years is \$26,048,182 and the total cost of new collection system improvements attributable to new development within the next 10 years is \$14,126,913.

TABLE 10: NEW SYSTEM IMPROVEMENTS- TREATMENT

Treatment Capital Projects	Year to be Constructed	2021 Cost	Construction Cost with Inflation	10 Year Impact Fee Qualifying Cost	Impact Fee Qualifying Beyond 10 Years	Non-Impact Fee Qualifying
New Reclamation Facility Liquid Stream- Strength Capacity	2022	\$67,500,000	\$71,610,750	\$6,094,075	\$8,765,156	\$56,751,519
New Reclamation Facility Liquid Stream- Hydraulic Capacity	2022	50,000,000	53,045,000	5,155,974	7,082,303	59,372,473
New Reclamation Facility- Solids Handling	2025	100,000,000	115,927,407	14,798,134	21,284,272	137,808,706
TOTAL		\$285,000,000	\$317,112,611	\$26,048,182	\$37,131,731	\$253,932,698

Source: Bowen Collins & Associates, Sanitary Sewer Collection IFFP 2021

TABLE 11: NEW SYSTEM IMPROVEMENTS- COLLECTION

Collection Capital Projects	Year to be Constructed	2021 Cost	Construction Cost with Inflation	10 Year Impact Fee Qualifying Cost	Impact Fee Qualifying Beyond 10 Years	Non-Impact Fee Qualifying
Exchange Park (Phase 1)	2021	\$3,321,000	\$3,420,630	\$345,484	\$528,487	\$2,546,659
Lakeview Pkwy- Construct 3,225 ft of 27" pipe from Center Street to 620 N	2021	\$4,725,600	\$4,867,368	\$378,643	\$1,363,837	\$3,124,850
Billings LS Interceptor	2021	\$2,200,000	\$2,266,000	\$31,710	\$224,334	\$2,009,942
Lakeview Pkwy- Construct 1,740 ft of 21" pipe from 620 N to Bulldog Lane	2021	\$1,364,400	\$1,405,332	\$260,660	\$831,816	\$312,846
Southwest Lift Station & 1st Force Main	2021	\$13,493,000	\$13,897,790	\$2,579,706	\$3,499,145	\$7,818,939
Airport LS Interceptor	2022	\$1,864,000	\$1,977,518	\$331,767	\$524,438	\$1,121,252
East Bay Blvd. Trunkline & Plant Lift Station (Noorda)	2022	\$3,694,000	\$3,918,965	\$3,057,184	\$861,780	\$ -
Lakeview Pkwy- Construct 4,400 ft of 21" pipe from Bulldog Lane to NW Lift Station	2023	\$3,451,000	\$3,771,001	\$899,745	\$2,871,256	\$ -
Skipper Bay LS Interceptor	2023	\$2,500,000	\$2,731,818	\$120,997	\$365,244	\$2,245,554
Redundant 36-inch Trunkline	2024	\$9,466,000	\$10,654,066	\$3,275,634	\$7,377,941	\$ -
Harbor Park LS Interceptor	2026	\$3,700,000	\$4,417,993	\$1,598,996	\$1,652,771	\$1,166,350
2nd Force Main from SW Lift Station	2026	\$2,493,000	\$2,976,772	\$663,519	\$2,313,253	\$ -
500 N Diversion	2029	\$24,000	\$31,315	\$10,438	\$10,438	\$10,438
Exchange Park (Phase 2)	2030	\$1,325,000	\$1,780,689	\$572,430	\$1,208,198	\$ -
TOTAL		\$53,621,000	\$58,117,257	\$14,126,913	\$23,632,938	\$20,356,831

Source: Bowen Collins & Associates, Sewer Impact Fee Facilities Plan 2021

CHAPTER 5: PROPORTIONATE SHARE ANALYSIS

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

Maximum Legal Wastewater Impact Fee per ERU

The Impact Fees Act requires the Impact Fee Analysis to estimate the proportionate share of the future costs for system improvements and historic cost of existing system improvements that benefit new growth that can be recouped through impact fees. The impact fee for existing assets must be based on the historic costs while the fees for construction of new facilities must be based on reasonable future costs of the system.

The maximum impact fee permitted by law for the wastewater system includes buy-in costs for existing excess capacity as well as the cost of construction of new facilities.

Buy-In to Existing Excess Capacity

There is existing excess capacity in the City's wastewater collection system. New development should be required to pay a buy-in fee for its fair share of the excess capacity consumed over the next 10 years. Based on the ERUs served over the next 10 years, the total buy-in cost per ERU is calculated at \$349.39 as shown in Table 12.

TABLE 12: PROPORTIONATE SHARE ANALYSIS, EXISTING EXCESS CAPACITY

Collection	Total Cost of Existing Excess Capacity	% to Ten-Year	\$ to Ten-Year	Ten-Year ERUs	Cost per ERU
Existing Collection Projects	\$38,418,715	4.20%	\$1,613,586	4,833	\$333.87
Existing Collection Related Debt - OUTSTANDING INTEREST ONLY	\$1,785,790	4.20%	\$75,003	4,833	\$15.52
Existing Excess Capacity Subtotal	\$40,204,505		\$1,688,589		\$349.39

New System Improvements Necessitated by New Development

The City intends to maintain its LOS through constructing new system improvements described in the IFFP and previously in this IFA. Total new improvement costs attributable to new development over the next 10 years will reach \$40,643,529. Divided by growth of 4,833 ERUs over the next 10 years results in a cost of \$8,409.58 per ERU. Table 13 summarizes the new construction costs attributable to 10-year growth.

TABLE 13: PROPORTIONATE SHARE ANALYSIS, NEW CONSTRUCTION NECESSITATED BY NEW DEVELOPMENT

Wastewater	Total Cost to Component	% That will Serve Ten Year Demand	Dollar Amount that will Serve Ten Year Demand	Ten Year Demand (ERU)	Cost per ERU
Treatment					
Future 10 Year Capital Projects	\$317,112,611	8.21%	\$26,048,182	4,833	\$5,389.65
Treatment Related Debt- Issued on Future Capital Projects- INTEREST ONLY	\$5,702,753	8.21%	\$468,434	4,833	\$96.92
Treatment Subtotal	\$322,815,364		\$26,516,616		\$5,486.57
Collection					
Future 10 Year Capital Projects	\$58,117,257	24.31%	\$14,126,913	4,833	\$2,923.01
Future Collection Related Debt to be Issued - INTEREST ONLY	\$ -	0.00%	\$ -	4,833	\$ -
Collection Subtotal	\$58,117,257		\$14,126,913		\$2,923.01
Total Future Capital Project Costs	\$380,932,621		\$40,643,529		\$8,409.58

Consultant Costs

The Impact Fees Act allows for fees charged to include the reimbursement of consultant costs incurred in the preparation of the IFFP and IFA.

Consultant costs are estimated at \$165,380 to prepare the Master Plan/IFFP and IFA that were necessary in order to calculate defensible impact fees. The engineering Master Plan/IFFP is considered to serve growth through 2040 and the impact fee analysis is considered to serve development over the next 10-years. Based on the ERU projections, the total consultant cost per ERU is \$18.95 as shown in Table 14.

TABLE 14: PROPORTIONATE SHARE ANALYSIS, CONSULTANT COSTS

	Amount
BC&A Master Plan and IFFP	\$157,880
Growth in ERUs, 2021-2040	9,072
ZPFI Impact Fee Analysis	\$7,500
Growth in ERUs, 2021-2031	4,833
Cost per ERU	\$18.95

Impact Fee Fund Balance Credit

The City does not have a balance in its wastewater impact fee fund. Therefore, no impact fee fund balance was calculated at this time.

Deficiency Credit

The future projects the City has planned within the next 10-years include a deficiency cost of \$274,289,529 which will benefit existing users. This cost is primarily attributed to the new treatment plant which is being constructed. The City also making payments on two outstanding wastewater bonds with portions of the bonds benefitting existing users. In order to fund the future improvements, the City has adjusted monthly wastewater rates in order to cash fund the majority of the future projects. As a result, an impact fee deficiency credit has been included in the impact fee calculation to account for the deficiency portion of the outstanding bonds and future capital projects shown in Tables 15-18.

TABLE 15: SERIES 2015A BOND CREDIT

Year	ERUs	Series 2015A Debt (Treatment)	Payment Per ERU	Series 2015A Credit per ERU (NPV)
2021	45,033	\$375,288	\$8.33	\$95.67
2022	45,523	\$373,293	\$8.20	\$89.82
2023	46,011	\$373,721	\$8.12	\$83.96
2024	46,496	\$373,578	\$8.03	\$78.02
2025	46,978	\$373,222	\$7.94	\$72.01
2026	47,457	\$375,573	\$7.91	\$65.94
2027	47,933	\$373,578	\$7.79	\$59.74
2028	48,407	\$374,490	\$7.74	\$53.50
2029	48,877	\$374,946	\$7.67	\$47.15
2030	49,345	\$374,946	\$7.60	\$40.71
2031	49,866	\$374,490	\$7.51	\$34.17
2032	50,337	\$373,578	\$7.42	\$27.55
2033	50,808	\$375,060	\$7.38	\$20.84
2034	51,279	\$375,972	\$7.33	\$14.00
2035	51,750	\$373,464	\$7.22	\$7.03

TABLE 16: SERIES 2020 BOND CREDIT

Year	ERUs	Series 2020 Bond Interest to Existing	Payment Per ERU	Series 2020 Credit per ERU (NPV)
2021	45,033	266,397	\$5.92	\$1,179.51
2022	45,523	303,490	\$6.67	\$1,179.49
2023	46,011	303,490	\$6.60	\$1,178.72
2024	46,496	343,528	\$7.39	\$1,178.02
2025	46,978	343,328	\$7.31	\$1,176.52
2026	47,457	343,128	\$7.23	\$1,175.10
2027	47,933	3,505,950	\$73.14	\$1,173.74
2028	48,407	3,489,934	\$72.10	\$1,106.47
2029	48,877	3,734,168	\$76.40	\$1,039.91
2030	49,345	3,736,870	\$75.73	\$968.71
2031	49,866	3,763,496	\$75.47	\$897.82
2032	50,337	3,761,874	\$74.73	\$826.84
2033	50,808	3,764,176	\$74.09	\$756.24
2034	51,279	3,762,375	\$73.37	\$685.93
2035	51,750	3,764,497	\$72.74	\$615.99
2036	52,221	3,758,511	\$71.97	\$546.33
2037	52,692	3,756,469	\$71.29	\$477.09
2038	53,163	3,758,351	\$70.69	\$408.18
2039	53,634	3,760,132	\$70.11	\$339.53
2040	54,105	3,761,814	\$69.53	\$271.12
2041	54,576	3,759,392	\$68.88	\$202.94
2042	55,047	3,760,893	\$68.32	\$135.08
2043	55,518	3,762,295	\$67.77	\$67.43

TABLE 17: DEFICIENCY CREDIT CALCULATION

Capital Projects Deficiency Credit	Amount
Capital Projects Benefitting Existing Users	\$274,289,529
Minus: Cash on Hand	-\$3,094,734
Minus: 2020 Bond Principal (Existing Users Portion)	-\$60,697,991
Net Amount to be Credited	210,496,803.88
Annual Deficiency Credit (20 Year Horizon)	\$10,524,840.19

Year	ERUs	Capital Projects Benefitting Existing Users	Annual Credit Per ERU	Capital Project Deficiency Credit (NPV)
2021	45,033	\$10,524,840.19	\$233.71	\$3,196.95
2022	45,523	\$10,524,840.19	\$231.20	\$3,059.15
2023	46,011	\$10,524,840.19	\$228.75	\$2,919.73
2024	46,496	\$10,524,840.19	\$226.36	\$2,778.57
2025	46,978	\$10,524,840.19	\$224.04	\$2,635.57
2026	47,457	\$10,524,840.19	\$221.78	\$2,490.60
2027	47,933	\$10,524,840.19	\$219.57	\$2,343.54
2028	48,407	\$10,524,840.19	\$217.42	\$2,194.27
2029	48,877	\$10,524,840.19	\$215.33	\$2,042.68
2030	49,345	\$10,524,840.19	\$213.29	\$1,888.62
2031	49,866	\$10,524,840.19	\$211.06	\$1,731.99
2032	50,337	\$10,524,840.19	\$209.09	\$1,572.89
2033	50,808	\$10,524,840.19	\$207.15	\$1,410.99
2034	51,279	\$10,524,840.19	\$205.25	\$1,246.17
2035	51,750	\$10,524,840.19	\$203.38	\$1,078.31
2036	52,221	\$10,524,840.19	\$201.54	\$907.28
2037	52,692	\$10,524,840.19	\$199.74	\$732.95
2038	53,163	\$10,524,840.19	\$197.97	\$555.20
2039	53,634	\$10,524,840.19	\$196.23	\$373.88
2040	54,105	\$10,524,840.19	\$194.53	\$188.86
Total		\$210,496,803.88		

TABLE 18: CREDIT CALCULATION SUMMARY

Credit	2021 Amount	2022 Amount	2023 Amount	3-Year Avg Credit
Series 2015A Bond Credit	\$95.67	89.82	83.96	\$89.82
Series 2020 Bond Credit	\$1,179.51	\$1,179.49	\$1,178.72	\$1,179.24
Deficiency Credit	\$3,196.95	\$3,059.15	\$2,919.73	\$3,058.61
3-Year Avg Credit (2021-2023)				\$4,327.67

Summary of Gross Impact Fee

Table 19 shows that the maximum impact fee per ERU is \$4,450.26, calculated by adding together the costs for buy-in to excess capacity, new improvements, consultant costs and subtracting the deficiency credit. A residential unit is equated to one ERU and includes up to 26 fixture units. Non-residential properties are assessed an impact fee according to fixture units as shown in the Appendix.

TABLE 19: PROPORTIONATE SHARE ANALYSIS – MAXIMUM FEE

Sanitary Sewer	Total Cost to Component	% That will Serve Ten Year Demand	Dollar Amount that will Serve Ten Year Demand	Ten Year Demand (ERU)	Impact Fee per ERU
Treatment					
Future 10 Year Capital Projects	\$317,112,611	8.21%	\$26,048,182	4,833	\$5,389.65
Future Treatment Related Debt - INTEREST ONLY	\$5,702,753	8.21%	\$ 468,434	4,833	\$ 96.92
Existing Treatment Projects	\$ -	0.00%	\$ -	4,833	\$ -
Existing Treatment Related Debt - Issued on Future Projects (INTEREST ONLY)	\$ -	8.21%	\$ -	4,833	\$ -
Treatment Subtotal	\$322,815,364		\$26,516,616		\$5,486.57
Collection					
Future 10 Year Capital Projects	\$58,117,257	24.31%	\$14,126,913	4,833	\$2,923.01
Future Collection Related Debt to be Issued - INTEREST ONLY	\$ -	0.00%	\$ -	4,833	\$ -
Existing Collection Projects	\$38,418,715	4.20%	\$1,613,586	4,833	\$333.87
Existing Collection Related Debt - OUTSTANDING INTEREST	\$1,785,790	4.20%	\$75,003	4,833	\$15.52
Collection Subtotal	\$98,321,762		\$15,815,502		\$3,272.40
Professional Services/Credits					
Impact Fee Fund Balance Credit	\$ -	9.69%	\$ -	4,833	\$ -
Credit	\$ -	0.00%	\$ -	-	(\$4,327.67)
Professional Services	\$165,380	55.39%	\$91,609	4,833	\$18.95
Professional Services/Credits Subtotal	\$165,380		\$91,609		(\$4,308.71)
Total Impact Fee per ERU	\$421,302,506		\$42,423,727		\$4,450.26

CHAPTER 6: MANNER OF FINANCING, CREDITS, ETC.

Utah Code 11-36a-304(2)(c)(d)(e)(f)(g) and (h)

An impact fee is a one-time fee that is implemented by a local government on new development to fund and pay for the proportionate costs of public facilities (system improvements) that are needed to serve new development. As a matter of policy and legislative discretion, a City may choose to have new development pay the full cost of its proportionate share of new public facilities and existing facilities that have excess capacity to service new development through impact fees. Alternatively, local governments may elect to subsidize new development by using other sources of revenue (user charges, special assessments, bonds, taxes, grants) to pay for the new facilities required to service new development and use impact fees to recover the cost difference between the total cost of the new facilities and the other sources of revenue.

Additional system improvements beyond those funded through impact fees that are desired to raise the level of service will be paid for by the community through other revenue sources such as user charges, special assessments, General Obligation bonds, general taxes, etc.

Impact Fee Credits

The Impact Fees Act requires that the IFA consider the relative extent to which new development activity will contribute to financing the excess capacity of and system improvements for public facilities that benefit existing development, by such means as user charges, special assessments, or payment from the proceeds of general taxes so that new development is not charged twice. This IFA clearly identifies the amount of excess capacity to be paid for by new development and the impact fee calculation includes a deficiency credit to account for the City's existing debt and portion of the future capital projects that will benefit existing users.

In terms of new facilities, all impact fee amounts collected must be spent for the specific project improvements listed in the IFFP and incorporated into this IFA.

Credits may also be paid back to developers who have constructed or directly funded system improvements that are included in the IFFP or donated to the City in lieu of impact fees, including the dedication of land for system improvements. This situation does not apply to developer exactions for project improvements. Any item for which a developer receives credit should be included in the IFFP and must be agreed upon with the City before construction begins.

The standard impact fee can also be decreased to respond to unusual circumstances in specific cases in order to ensure that impact fees are imposed fairly. In certain cases, a developer may submit studies and data that clearly show a need for adjustment.

Extraordinary Costs and Time Price Differential

It is not anticipated that there will be any extraordinary costs in servicing newly developed properties. To account for the time-price differential inherent in fair comparisons of amounts paid at different times, actual costs have been used to compute buy-in costs to public facilities with excess capacity and current costs have been used to compute impacts on system improvements required by anticipated development activity to maintain the established level of service for each public facility.

CERTIFICATION

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

1. includes only the costs of public facilities that are:
 - a. allowed under the Impact Fees Act; and
 - b. actually incurred; or
 - c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;
2. does not include:
 - a. costs of operation and maintenance of public facilities;
 - b. costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents;
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.

APPENDIX

	ERU Demand	Proposed Impact Fee
Impact Fee per Residential Dwelling Unit	1.00	\$4,450.26

Conversion from Impact Fee per ERU to Fixture Unit	
Impact Fee per ERU	\$4,450.26
Fixture Units per ERU	26
Impact Fee per Fixture Unit	\$171.16

NON-RESIDENTIAL IMPACT FEE BY FIXTURE TYPE

Fixture Type	Drainage Fixture Unit Value as Load Factors	Impact Fee per Fixture Type
Automatic clothes washers, commercial	3	\$513.49
Automatic clothes washers, residential	2	\$342.33
Bathtub	2	\$342.33
Bidet	1	\$171.16
Combination sink and tray	2	\$342.33
Dental lavatory	1	\$171.16
Dental unit or cuspidor	1	\$171.16
Dishwashing machine, domestic	2	\$342.33
Drinking fountain	0.5	\$85.58
Emergency floor drain	0	\$0.00
Floor Drains	2	\$342.33
Kitchen sink, domestic	2	\$342.33
Laundry tray	2	\$342.33
Lavatory	1	\$171.16
Shower	2	\$342.33
Sink	2	\$342.33
Urinal	4	\$684.66
Urinal, 1 gal. or less per flush	2	\$342.33
Wash sink, circular or multiple, each set of faucets	2	\$342.33
Water closet, flushometer tank, public or private	4	\$684.66
Water closet, private (1.6 gpf)	3	\$513.49
Water closet, private (flushing greater than 1.6 gpf)	4	\$684.66
Water closet, public (1.6 gpf)	4	\$684.66
Water closet, public (flushing greater than 1.6 gpf)	6	\$1,026.98
Swimming pool	10	\$1,711.64
Hot Tub	2	\$342.33
Car wash (per bay)	2	\$342.33

gpf= gallon per flushing cycle

EXECUTIVE SUMMARY

SEWER IMPACT FEE FACILITIES PLAN

The purpose of an impact fee facilities plan (IFFP) is to identify demands placed upon City facilities by future development and evaluate how these demands will be met by the City. The IFFP is also intended to outline the improvements which may be funded through impact fees.

WHY IS AN IFFP NEEDED

The IFFP provides a technical basis for assessing updated impact fees throughout the City. This document addresses the future infrastructure needed to serve the City. The existing and future capital projects documented in this IFFP will ensure that level of service standards are maintained for all existing and future residents who reside within the service area. Local governments must pay strict attention to the required elements of the Impact Fee Facilities Plan which are enumerated in the Impact Fees Act.

PROJECTED FUTURE GROWTH

To evaluate the use of existing capacity and the need for future capacity, it is first necessary to calculate the demand associated with existing development and projected growth. Growth within the City was developed in coordination with the City's planning department. City personnel provided updated projections of Provo City's residential population. The ratio of nonresidential to residential development was assumed to remain approximately the same to project nonresidential growth. Growth in terms of both equivalent residential units and corresponding sewer flows is summarized in Table ES-1.

**Table ES-1
City Service Area Projections**

Year	Population	Equivalent Residential Units	Max Month, Domestic Wastewater Production (mgd)	Max Month Infiltration¹ (mgd)	Max Month, Average Daily Flow (mgd)
2021	129,927	45,033	9.25	4.02	13.27
2022	131,318	45,523	9.35	4.03	13.38
2023	132,710	46,011	9.45	4.05	13.50
2024	134,102	46,496	9.55	4.06	13.61
2025	135,494	46,978	9.65	4.08	13.73
2026	136,885	47,457	9.75	4.10	13.84
2027	138,277	47,933	9.85	4.11	13.96
2028	139,669	48,407	9.94	4.13	14.07
2029	141,060	48,877	10.04	4.14	14.18
2030	142,452	49,345	10.14	4.16	14.29
2031	144,078	49,866	10.24	4.18	14.42
2040	157,382	54,105	11.11	4.32	15.43
2050	169,273	57,856	11.88	4.44	16.32
2060	178,304	60,682	12.46	4.53	17.00
2070	184,918	62,740	12.89	4.60	17.49
Buildout	200,000	66,353	13.63	4.72	18.35

¹Growth in infiltration is estimated to be approximately 33 gallons per ERC for future domestic production.

Demands are projected in terms of Equivalent Residential Units (ERUs). An ERU represents the demand that a typical single-family residence places on the system. The basis of an ERU for historical flow rates is summarized in Table ES-2.

Table ES-2
Service Area Historic Flows

Item	Value for Existing Conditions
Equivalent Residential Units (ERUs)	45,033
Domestic Wastewater Production (mgd)	9.25
Infiltration, Maximum Month (mgd) ¹	4.02
Average Day, Maximum Month Flow (mgd)	13.27
Peak Hour Flow (mgd)	19.46
Flows per ERU	
Domestic Wastewater Production (gpd/ERU)	205.4
Average Day, Maximum Month Flow (gpd/ERU)	294.6
Peak Hour Flow (gpd/ERU)	432.2
Average Indoor Water Use (gpd/ERU) ²	228.3

¹ Infiltration rate is based on May 2018 infiltration. Observed infiltration was significantly higher in 2011. While the 2011 data is conservatively used for pipe sizing, the more typical infiltration is used in defining an ERU here.

²City data shows that the average residential winter water use for a meter of 1" or smaller is 6,943 gallons/month.

LEVEL OF SERVICE

Level of service is defined in the Impact Fees Act as “the defined performance standard or unit of demand for each capital component of a public facility within a service area”. Performance standards are those standards that are used to design and evaluate the performance of facilities. While the Impact Fees Act includes “defined performance standard” as part of the level of service definition, this report will make a subtle distinction between performance standard and level of service. The performance standard will be considered the desired minimum level of performance for each component, while the existing level of service will be the actual current performance of the component and the proposed level of service will be the proposed actual performance of the component in the future. Summary values for each of these categories are shown in Table ES-3.

Table ES-3
Existing Level of Service and Performance Standards
for Various System Requirements

	Existing Level of Service¹	Performance Standard and Future Level of Service
Pipeline Capacity		
Maximum Ratio of Flow ² to Pipeline Capacity/Percent of Collection System that Meets the Standard	0.75/94.4%	0.75/100%
Treatment Capacity		
Available Plant Capacity – Average Day, Maximum Month Flow (gpd/ERU) ³	355.3	238.4

¹ Because there are thousands of pipeline components, a percentage is provided to identify the percentage of the system that currently meets the City performance standard.

² Peak hour, dry weather flow

³ The City has prepared several water reclamation studies that have determined there is no remaining excess capacity at the existing treatment facility. This is in part due to new treatment standards from the Department of Environmental Quality. As a result, future growth will only be assessed for the cost to expand the treatment facility.

EXISTING CAPACITY AVAILABLE TO SERVE FUTURE GROWTH

Projected future growth will be met through a combination of available excess capacity in existing facilities and construction of additional capacity in new facilities. Defining existing system capacity in terms of a single number is difficult. To improve the accuracy of the analysis, the system was divided into two different components (collection and treatment). Excess capacity in each component of the system is as follows:

Collection

Use of collection capacity was evaluated using the updated computer model of the City's collection system. The calculated percentage of existing collection capacity in use by existing and future development is summarized in Table ES-4

Table ES-4
Collection System Excess Capacity

Use Category	Total Flow (mgd)
Existing Use	74.58%
10-Year Use	4.20%
Use by Growth Beyond 10 years	21.24%
Total	100.00%

Treatment

While the City's existing treatment plant has a rated capacity of 21 mgd, much of the existing facility is in the process of being upgraded to accommodate new permit requirements by the State of Utah DEQ. Thus, all future growth will be charged an assessment for the cost of constructing new treatment capacity and will not be charged to buy excess capacity at the existing facility even if the excess capacity is used in the short-term until the improvements are completed.

REQUIRED SYSTEM IMPROVEMENTS

Beyond available existing capacity, additional improvements required to serve new growth are summarized in Tables ES-5. To satisfy the requirements of state law, Table ES-5 provides a breakdown of the percentage of the project costs attributed to existing and future users. For future use, capacity has been divided between capacity to be used by growth within the 10-year planning window of this IFFP and capacity that will be available for growth beyond the 10-year window.

Table ES-5
Provo City Area Project Costs Allocated to Projected Development, 10-Year Planning Window

Year	Project Description ^a	Estimated 2020 Total Cost	Percent to Existing	Percent to 10-Year Growth	Percent to Growth through Buildout	Cost to Existing	Cost to 10-Year Growth	Cost to Growth Beyond 10- Years
2021	Exchange Park (phase 1)	\$3,321,000	74.45%	10.10%	15.45%	\$2,472,485	\$335,421	\$513,095
2021	Lakeview Pkwy. - Construct 3,225 ft of ~27" pipe from Center Street to 620 North	\$4,725,600	64.20%	7.78%	28.02%	\$3,033,835	\$367,615	\$1,324,113
2021	Billings LS Interceptor	\$2,200,000	88.70%	1.40%	9.90%	\$1,951,400	\$30,786	\$217,800
2021-2022	Lakeview Pkwy. - Construct 1,740 ft of 21" pipe from 620 North to Bulldog Lane	\$1,364,400	22.26%	18.55%	59.19%	\$303,734	\$253,068	\$807,588
2021-2023	Southwest Lift Station & 1st Force Main	\$13,493,000	56.26%	18.56%	25.18%	\$7,591,203	\$2,504,569	\$3,397,228
2022	Airport LS Interceptor	\$1,864,000	56.70%	16.78%	26.52%	\$1,056,888	\$312,722	\$494,333
2022-2023	East Bay Blvd. Trunkline & Plant Lift Station (Noorda)	\$3,694,000	0.00%	78.01%	21.99%	\$0	\$2,881,689	\$812,311
2023	Lakeview Pkwy. - Construct 4,400 ft of 21" pipe from Bulldog Lane to Northwest Lift Station	\$3,451,000	0.00%	23.86%	76.14%	\$0	\$823,394	\$2,627,606
2023	Skipper Bay LS Interceptor	\$2,500,000	82.20%	4.43%	13.37%	\$2,055,000	\$110,729	\$334,250
2024-2026	Redundant 36-inch Trunkline	\$9,466,000	0.00%	30.75%	69.25%	\$0	\$2,910,358	\$6,555,205
2026	Harbor Park LS Interceptor	\$3,700,000	26.40%	36.19%	37.41%	\$976,800	\$1,339,134	\$1,384,170
2026	2nd Force Main from Southwest Lift Station	\$2,493,000	0.00%	22.29%	77.71%	\$0	\$555,687	\$1,937,313
2029	500 N. Diversion	\$24,000	33.33%	33.33%	33.33%	\$8,000	\$8,000	\$8,000
2030	Exchange Park (phase 2)	\$1,325,000	0.00%	32.15%	67.85%	\$0	\$425,942	\$899,013
	Collection System Total	\$53,621,000				\$19,449,345	\$12,859,116	\$21,312,023
2022	New Reclamation Facility Liquid Stream - Strength	\$67,500,000	79.25%	8.51%	12.24%	\$53,493,750	\$5,744,250	\$8,262,000
2022	New Reclamation Facility Liquid Stream - Hydraulic	\$67,500,000	82.91%	7.20%	9.89%	\$55,964,250	\$4,860,000	\$6,675,750
2025	New Reclamation Facility Solids Handling	\$150,000,000	79.25%	8.51%	12.24%	\$118,875,000	\$12,765,000	\$18,360,000
	Reclamation Facility Total	\$285,000,000				\$228,333,000	\$23,369,250	\$33,297,750
	TOTAL	\$338,621,000				\$240,191,142	\$44,249,079	\$54,179,656

^aProvo City may phase the timing of facility construction for financing reasons. Financing options will be discussed in more detail in the impact fee analysis

IMPACT FEE FACILITIES PLAN

INTRODUCTION

Provo City has retained Bowen Collins & Associates (BC&A) to prepare an Impact Fee Facilities Plan (IFFP) for sewer collection services provided by the City. The purpose of an IFFP is to identify demands placed upon City facilities by future development and evaluate how these demands will be met by the City. The IFFP is also intended to outline the improvements which may be funded through impact fees.

Much of the analysis forming the basis of this IFFP has been taken from the City's Sewer Master Plan, also prepared by BC&A. The reader should refer to the sewer master plan document for additional discussion of planning and evaluation methodology beyond what is contained in this report.

HISTORY OF THE 2021 IFFP

The City has updated its IFFP several times in recent years. An original Sewer IFFP document was completed in November of 2018. Shortly after the completion of that document, the City received multiple requests for additional development projects to be added to the plan. Thus, an amendment to the original document was issued in November of 2019. Since that time, the City has proceeded to move forward with regular planning activities and completed an updated Master Plan Study with revised growth projections, updated project costs, and additional system modeling. Thus, a revision to this IFFP document is needed once again. This update follows the same general methodology and approach as developed in previous versions of the study but updates the analysis to reflect the new master plan.

IMPACT FEE FACILITY PLAN COMPONENTS

Requirements for the preparation of an IFFP are outlined in Title 11, Chapter 36a of the Utah code (the Impact Fees Act). Under these requirements, an IFFP shall accomplish the following for each facility:

1. Identify the existing level of service
2. Establish a proposed level of service
3. Identify excess capacity to accommodate future growth at the proposed level of service
4. Identify demands placed upon existing public facilities by new development
5. Identify the means by which demands from new development will be met
6. Consider the following additional issues
 - a. revenue sources to finance required system improvements
 - b. necessity of improvements to maintain the proposed level of service
 - c. need for facilities relative to planned locations of schools

The following sections of this report have been organized to address each of these requirements.

EXISTING LEVEL OF SERVICE -11-36a-302(1)(a)(i)

Level of service is defined in the Impact Fees Act as “the defined performance standard or unit of demand for each capital component of a public facility within a service area”. This section discusses the level of service being currently provided to existing users.

Unit of Demand

The projected flow used to design and evaluate system components will vary depending on the nature of each component. For example, most treatment plant processes are designed based on average day, maximum month flow. Conversely, conveyance pipelines must be designed based on peak hour flow (function of daily flow and diurnal flow variation).

For the purposes of this analysis, it is useful to define these various demands in terms of Equivalent Residential Units (ERUs). An ERU represents the demand that a typical single-family residence places on the system. To estimate the number of ERUs for Provo City, winter water use data provided by the City was used to evaluate water use for each ERU. The basis of an ERU for historical flow rates is summarized in Table 1.

Table 1
Service Area Historic Flows

Item	Value for Existing Conditions
Equivalent Residential Units (ERUs)	45,033
Domestic Wastewater Production (mgd)	9.25
Infiltration, Maximum Month (mgd) ¹	4.02
Average Day, Maximum Month Flow (mgd)	13.27
Peak Hour Flow (mgd)	19.46
Flows per ERU	
Domestic Wastewater Production (gpd/ERU)	205.4
Average Day, Maximum Month Flow (gpd/ERU)	294.6
Peak Hour Flow (gpd/ERU)	432.2
Average Indoor Water Use (gpd/ERU) ²	228.3

¹ Infiltration rate is based on May 2018 infiltration. Observed infiltration was significantly higher in 2011. While the 2011 data is conservatively used for pipe sizing, the more typical infiltration is used in defining an ERU here.

²City data shows that the average residential winter water use for a meter of 1” or smaller is 6,943 gallons/month.

The City’s current estimate of ERUs in the City includes 45,033 ERUs based on indoor water meter data provided by Provo City personnel.

Performance Standard

Performance standards are those standards that are used to design and evaluate the performance of facilities. While the Impact Fees Act includes “defined performance standard” as part of the level of service definition, this report will make a subtle distinction between performance standard and level of service. The performance standard will be considered the desired minimum level of performance for each component, while the existing level of service will be the actual current performance of the component. Thus, if the existing level of service is less than the performance standard, it is a deficiency. If it is greater than the performance standard, it may indicate excess capacity. This section discusses the existing performance standards for the City. A subsequent section will consider existing level of service relative to these standards.

To improve the accuracy of the analysis, this impact fee facilities plan has divided the system into two different components (pipeline capacity and treatment capacity). Each of these components has its own set of performance standards:

Pipeline Capacity

City engineering standards require that all sewer mains be designed such that the peak flow depth in the pipe is less than or equal to the depth equal to 75 percent of the pipe’s hydraulic capacity using a Manning’s roughness factor¹ of 0.013. This is approximately equal to a depth over diameter ratio of 0.65. This allows for a small amount of extra capacity to be reserved in the pipeline to account for potential inflow into the system and other unknowns. All sewer connections serving more than a single customer must also be a minimum 8-inches in diameter. This design standard was used as the level of service for system evaluation.

Treatment Plant Capacity

A treatment plant consists of a large number of different components. Each component may have different criteria for design depending on the nature of the component. For the majority of treatment related components, however, design is based on treating the average daily flow during the maximum month. This is the same standard used by the State of Utah Department of Environmental Quality (UDEQ) when rating the capacity of a treatment plant. Thus, the performance standard for the IFFP will be to provide treatment capacity sufficient to treat the planning maximum month, average day flow of 294.6 gpd/ERU² for existing flows as identified in Table 1.

Existing Level of Service

Existing level of service has been divided into the same three components as identified for the system performance standard (pipeline capacity, treatment capacity, and general assets). Existing

¹ Manning’s roughness is an empirical measure of roughness or friction used to calculate hydraulic capacity.

² It will be noted that this is a significantly lower number than reported in previous versions of the IFFP. This is not because there has been a significant reduction in the actual flow to the plant. Instead, the majority of this reduction is the result of a change in the way plant capacity is being defined. Instead of defining plant capacity based on the absolute maximum infiltration event, plant capacity is now being defined based on typical summertime infiltration with a separate hydraulic allowance for extreme, outlier events. The level of service has correspondingly been adjusted to match this revised definition.

level of service values are summarized in Table 2 below. For comparison purposes, Table 2 also includes a summary of the existing performance standards.

Table 2
Existing Performance Standards and Level of Service
for Various System Requirements

	Existing Performance Standard	Existing Level of Service ¹
Pipeline Capacity		
Maximum Ratio of Flow ² to Pipeline Capacity/Percent of Collection System that Meets the Standard	0.75	0.75/94.4%
Treatment Capacity		
Available Plant Capacity – Average Day, Maximum Month Flow (gpd/ERU) ³	294.6	355.3

¹Because there are thousands of pipeline components, a percentage is provided to identify the percentage of the system that currently meets the City performance standard.

² Peak hour, dry weather flow

³ The City has prepared several water reclamation studies that have determined there is no remaining excess capacity at the existing treatment facility. This is in part due to new treatment standards from the Department of Environmental Quality. As a result, future growth will only be assessed for the cost to expand the treatment facility.

As shown in the table, there are a few areas of the system that do not currently meet the existing performance standard. However, these deficiencies are associated with a very small number of pipelines in the existing system and excess capacity still exists in other parts of the system. Excess capacity and curing of deficiencies will be discussed in subsequent sections of this report. Costs for projects to correct deficiencies that do not meet the required level of service will not be included as part of the impact fee, consistent with the Impact Fees Act.

PROPOSED LEVEL OF SERVICE -11-36a-302(1)(a)(ii)

The proposed level of service is the performance standard used to evaluate system needs in the future. The Impact Fee Act indicates that the proposed level of service may:

1. diminish or equal the existing level of service; or
2. exceed the existing level of service if, independent of the use of impact fees, the City implements and maintains the means to increase the level of service for existing demand within six years of the date on which new growth is charged for the proposed level of service.

By definition, proposed future level of service will be equal to the performance standard in most cases. However, there are a couple of changes that will be implemented at the City's wastewater treatment plant that constitute new level of service improvements:

- **Nutrient Removal** – Due to new nutrient regulations introduced by the Utah Division of Water Quality (DWQ), the City is currently in the process of improving its wastewater treatment plant to accommodate the needs of existing and future growth.

- **Reduced Inflow and Infiltration** – The City currently has a significant amount of flow in its system associated with inflow and infiltration (I&I). With improvements in construction techniques and materials, I&I is expected to be significantly less for future development. Thus, projected flows for all future growth is expected to be 238.4 gpcd based on domestic flow rates plus 33 gallons per day for each added ERC to account for additional I&I.

Increases in the level of service for the City will be funded in accordance with the requirements of the Impact Fees Act. Table 3 summarizes the proposed performance standards and level of service. The proposed level of service is the same for both service areas.

Table 3
Proposed Performance Standards and Level of Service for Various System Requirements

	Proposed Performance Standard	Proposed Level of Service
Pipeline Capacity		
Maximum Ratio of Flow ¹ to Pipeline Capacity/Percent of Collection System that Meets the Standard	0.75	0.75/100%
Treatment Capacity		
Available Plant Capacity – Average Day, Maximum Month Flow (gpd/ERU)	238.4	238.4

¹ Peak hour, dry weather flow

EXCESS CAPACITY TO ACCOMMODATE FUTURE GROWTH -11-36a-302(1)(a)(iii)

Because most of the sewer collection facilities within the City have adequate capacity through the long-term planning window of the City, capacity for most future growth will be met through available excess capacity in existing facilities. There are two components of assets to discuss within the City: collections system facilities and treatment facilities. Excess capacity in the collection and treatment are described as follows:

Collection

To calculate the percentage of existing capacity to be used by future growth in existing facilities, existing and future flows were examined in system model for each collection pipeline. The method used to calculate excess capacity available for use by future flows is as follows:

1. **Calculate Flows** – The peak flow in each facility was calculated in the model for both existing and future flows. The available capacity at a 0.65 depth to diameter ratio of each pipeline was also calculated.
2. **Identify Available Capacity** – Where a facility has capacity in excess of projected flows at buildout, the available capacity in the facility was defined as the difference between existing flows and buildout flows. Where the facility has capacity less than projected flows at buildout, the available capacity in the facility was defined as the difference between existing flows and the facility's maximum capacity.

3. **Eliminate Facilities without Excess Capacity** – For the planning window period (in this case, 10 years), the projected growth in flow during the planning window was compared against the facility's available capacity. Where the future flow exceeded the capacity of the facility, the available excess capacity was assumed to be zero. By definition, this corresponds to those facilities with deficiencies that are identified in the facilities plan. By assigning a capacity of zero, this eliminated double counting those facilities against new users.
4. **Calculate Percent of Excess Capacity Used in Remaining Facilities** – Where the future flow was less than the capacity of the facility, the percent of excess capacity being used in each facility was calculated by dividing the growth in flow in the facility (future flow less existing flow) by the total capacity (existing flow plus available capacity).
5. **Calculate Excess Capacity for the System as a Whole** – Each pipeline in the system has a different quantity of excess capacity to be used by future growth. To develop an estimate of excess capacity on a system wide basis, the capacities of each of these pipelines and their contribution to the system as a whole must be considered. To do this, each pipeline must first be weighted based on its relative capacity in the system. For this purpose, each pipeline has been weighted based on the product of its diameter and length. For example, a pipe that is 36 inches in diameter and is 4,000 ft. long will cost proportionally more than a pipe that is 10 inches in diameter and 300 ft. long. The excess capacity in the system as a whole can then be calculated as the sum of the weighted capacity used by future growth divided by the sum of total weighted capacity in the system.

Based on the method described above, the amount of excess capacity in existing facilities available to accommodate future growth and the demands placed on the existing facilities by new development activity has been calculated for each element in the system by BC&A. This is summarized in Table 4.

Table 4
Collection System Excess Capacity

Use Category	Percent Use
Existing Use	74.58%
10-Year Use	4.20%
Use By Growth Beyond 10 years	21.24%
Total	100.00%

Treatment

While the City's existing treatment plant has a rated capacity of 21 mgd, much of the existing facility is in the process of being upgraded to accommodate new permit requirements by the State of Utah DEQ. Thus, all future growth will be charged an assessment for the cost of constructing new treatment capacity and will not be charged to buy excess capacity in the existing facility even if the excess capacity is used in the short-term until the facility improvements are completed.

DEMANDS PLACED ON FACILITIES BY NEW DEVELOPMENT - 11-36a-302(a)(iv)

Growth within the City was developed in coordination with the City's planning department. City personnel provided updated projections of Provo City's residential population. The ratio of nonresidential to residential development was assumed to remain approximately the same to project nonresidential growth. Growth in terms of both equivalent residential units and corresponding sewer flows is summarized in Table 5.

Table 5
City Service Area Projections

Year	Population	Equivalent Residential Units	Max Month, Domestic Wastewater Production (mgd)	Max Month Infiltration¹ (mgd)	Max Month, Average Daily Flow (mgd)
2021	129,927	45,033	9.25	4.02	13.27
2022	131,318	45,523	9.35	4.03	13.38
2023	132,710	46,011	9.45	4.05	13.50
2024	134,102	46,496	9.55	4.06	13.61
2025	135,494	46,978	9.65	4.08	13.73
2026	136,885	47,457	9.75	4.10	13.84
2027	138,277	47,933	9.85	4.11	13.96
2028	139,669	48,407	9.94	4.13	14.07
2029	141,060	48,877	10.04	4.14	14.18
2030	142,452	49,345	10.14	4.16	14.29
2031	144,078	49,866	10.24	4.18	14.42
2040	157,382	54,105	11.11	4.32	15.43
2050	169,273	57,856	11.88	4.44	16.32
2060	178,304	60,682	12.46	4.53	17.00
2070	184,918	62,740	12.89	4.60	17.49
Buildout	200,000	66,353	13.63	4.72	18.35

¹ Growth in infiltration is at a ratio of approximately 33 gallons per ERC for future domestic production.

INFRASTRUCTURE REQUIRED TO MEET DEMANDS OF NEW DEVELOPMENT**11-36a-302(1)(a)(v)**

To satisfy the requirements of state law, demand placed upon existing system facilities by future development was projected using the process outlined below. Each of the steps were completed as part of this plan's development. More description of the methodology used in the process outlined below can be found in the City's Sewer Master Plan.

1. **Existing Demand** – The demand existing development places on the City's system was estimated based on historic water use, flow records, and the 2018 flow monitoring study performed by the City.
2. **Existing Capacity** – The capacities of existing system collection facilities were estimated using size data provided by the City and a hydraulic computer model.
3. **Existing Deficiencies** – Existing deficiencies in the system were looked for by comparing defined levels of service against calculated capacities. A few deficiencies were identified in the sewer master plan.
4. **Future Demand** - The demand future development will place on the system was estimated based on development projections (discussed in Chapter 4 of the Sewer Master Plan).
5. **Future Deficiencies** - Future deficiencies in the collection system were identified using the defined level of service and results from a hydraulic computer model (discussed in Chapter 6 of the Sewer Master Plan).
6. **Recommended Improvements** – Needed system improvements were identified to meet demands associated with future development.

The steps listed above “identify demands placed upon existing public facilities by new development activity at the proposed level of service; and... the means by which the political subdivision or private entity will meet those growth demands” (Section 11-36a-302(1)(a) of the Utah Code).

10-Year Improvement Plan

In the City's Sewer Master Plan, capital facility projects needed to provide service to various parts of the City at projected buildout were identified. Most of the projects will not be needed within the next 10 years. Only infrastructure to be constructed within a 10-year horizon will be considered in the calculation of impact fees to avoid uncertainty surrounding improvements further into the future. Table 6 summarizes the components of projects identified in the sewer master plan that will need to be constructed within the next ten years.

Table 6
Provo City Area Project Costs Allocated to Projected Development, 10-Year Planning Window

Year	Project Description ^a	Estimated 2020 Total Cost	Percent to Existing	Percent to 10-Year Growth	Percent to Growth through Buildout	Cost to Existing	Cost to 10-Year Growth	Cost to Growth Beyond 10-Years
2021	Exchange Park (phase 1)	\$3,321,000	74.45%	10.10%	15.45%	\$2,472,485	\$335,421	\$513,095
2021	Lakeview Pkwy. - Construct 3,225 ft of ~27" pipe from Center Street to 620 North	\$4,725,600	64.20%	7.78%	28.02%	\$3,033,835	\$367,615	\$1,324,113
2021	Billings LS Interceptor	\$2,200,000	88.70%	1.40%	9.90%	\$1,951,400	\$30,786	\$217,800
2021-2022	Lakeview Pkwy. - Construct 1,740 ft of 21" pipe from 620 North to Bulldog Lane	\$1,364,400	22.26%	18.55%	59.19%	\$303,734	\$253,068	\$807,588
2021-2023	Southwest Lift Station & 1st Force Main	\$13,493,000	56.26%	18.56%	25.18%	\$7,591,203	\$2,504,569	\$3,397,228
2022	Airport LS Interceptor	\$1,864,000	56.70%	16.78%	26.52%	\$1,056,888	\$312,722	\$494,333
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	TOTAL	\$338,621,000				\$240,191,142	\$44,249,079	\$54,179,656

^aProvo City may phase the timing of facility construction for financing reasons. Financing options will be discussed in more detail in the impact fee analysis

Project Cost Attributable to Future Growth

To satisfy the requirements of state law, Table 6 provides a breakdown of the capital facility projects and the percentage of the project costs attributed to existing and future users. As defined in Section 11-36a-102(15), the impact fee facilities plan should only include the proportionate share of “the cost of public facilities that are roughly proportionate and reasonably related to the service demands and needs of any development activity.” Many projects identified in the tables are required solely to meet future growth, but some projects also provide a benefit to existing users. Projects that benefit existing users include those projects addressing existing capacity needs and maintenance related projects.

For many projects, the division of costs between existing and future users is easy because 100 percent of the project costs can be attributed to one category or the other (e.g. infrastructure needed solely to serve new development can be 100 percent attributed to new growth, while projects related to existing condition or capacity deficiencies can be 100 percent attributed to existing user needs). For projects needed to address both existing deficiencies and new growth or where a higher level of service is being proposed, costs have been divided proportionally between existing and future users based on their needs in the facility. A few additional notes regarding specific projects are as follows:

- Westside Improvements – Many of the projects shown in Table 6 are related to the expected growth west of the freeway. Some of these projects will only serve future growth, but most will also be used to help eliminate several existing lift stations to reduce maintenance costs. As a result, many of the projects will serve existing users as well as future users. The percentage assigned to existing and future growth is based on proportional use of capacity as calculated in hydraulic modeling performed in the master plan.
- Water Reclamation Facility – The majority of costs for the water reclamation facility are based on treating wastewater strength, but components must also be sized to accommodate peak flow rates associated with planning conditions (high infiltration and inflow). For the purpose of this study, costs associated with hydraulic capacity have been divided by projected flows while strength capacity has been allocated by projected growth in ERC’s.

It should be noted that Table 6 does not include bond costs related to paying for impact fee eligible improvements. These costs, if any, should be considered as part of the impact fee analysis.

Project Cost Attributable to 10-Year Growth

Included in Table 6 is a breakdown of capacity associated with growth both through buildout and through the next 10 years. This is necessary because the projects identified in the table will be built with capacity to accommodate flows beyond the 10-year growth window. This has been done following the same general process as described above.

Basis of Construction Cost Estimates

The costs of pipe and treatment plant projects have been based on engineering cost estimates prepared in the master plan and by Waterworks Engineers for conveyance and reclamation projects respectively.

ADDITIONAL CONSIDERATIONS

MANNER OF FINANCING 11-36a-302(2)

The City may fund the infrastructure identified in this IFFP through a combination of different revenue sources.

Federal and State Grants and Donations

Impact fees cannot reimburse costs funded or expected to be funded through federal grants and other funds that the City has received for capital improvements without an obligation to repay. Grants and donations are not currently contemplated in this analysis. If grants become available for constructing facilities, impact fees will need to be recalculated and an appropriate credit given. Any existing infrastructure funded through past grants will be removed from the system value during the impact fee analysis.

Bonds

None of the costs contained in this IFFP include the cost of bonding. The cost of bonding required to finance impact fee eligible improvements identified in the IFFP may be added to the calculation of the impact fee. This will be considered in the impact fee analysis.

User Rate Revenue

Because infrastructure must generally be built ahead of growth, there often arises situations in which projects must be funded ahead of expected impact fee revenues. In some cases, the solution to this issue will be bonding. In others, funds from existing user rate revenue will be used to complete initial construction of impact fee eligible projects and will be reimbursed later as impact fees are received. Consideration of potential use of user rate revenue to pay for impact fee eligible expenditures will be included in the impact fee analysis and should also be considered in subsequent accounting of impact fee expenditures.

Impact Fees

It is recommended that impact fees be used to fund growth-related capital projects as they help to maintain the proposed level of service and prevent existing users from subsidizing the capital needs for new growth. Based on this IFFP, an impact fee analysis will be able to calculate a fair and legal fee that new growth should pay to fund the portion of the existing and new facilities that will benefit new development.

Developer Dedications and Exactions

Developer exactions are not the same as grants. Developer exactions may be considered in the inventory of current and future infrastructure. If a developer constructs facility or dedicates land within the development, the value of the dedication is credited against that particular developer's impact fee liability.

If the value of the dedication/exaction is less than the development's impact fee liability, the developer will owe the balance of the liability to the City. If the value of the improvements

dedicated is worth more than the development's impact fee liability, the City must reimburse the difference to the developer from impact fee revenues collected from other developments.

It should be emphasized that the concept of impact fee credits pertains to system level improvements only. For project level improvement (i.e. projects not identified in the impact fee facility plan), developers will be responsible for the construction of the improvements without credit against the impact fee.

NECESSITY OF IMPROVEMENTS TO MAINTAIN LEVEL OF SERVICE - 11-36a-302(3)

According to State statute, impact fees cannot be used to correct deficiencies in the City's system and must be necessary to maintain the proposed level of service established for all users. Only those facilities or portions of facilities that are required to maintain the proposed level of service for future growth have been included in this IFFP. This will result in an equitable fee as future users will not be expected to fund any portion of the facilities that will benefit existing residents.

SCHOOL RELATED INFRASTRUCTURE -11-36a-302(2)

As part of the noticing and data collection process for this plan, information was gathered regarding future school district and charter school development. Where the City is aware of the planned location of a school, required public facilities to serve the school have been included in the impact fee analysis.

NOTICING AND ADOPTION REQUIREMENTS -11-36a-502

The Impact Fees Act requires that entities must publish a notice of intent to prepare or modify any IFFP. If an entity prepares an independent IFFP rather than include a capital facilities element in the general plan, the actual IFFP must be adopted by enactment. Before the IFFP can be adopted, a reasonable notice of the public hearing must be published in a local newspaper at least 10 days before the actual hearing. A copy of the proposed IFFP must be made available in each public library within the City during the 10-day noticing period for public review and inspection. Utah Code requires that the City must post a copy of the ordinance in at least three places. These places may include the City offices and the public libraries within the City's jurisdiction. Following the 10-day noticing period, a public hearing will be held, after which the City may adopt, amend and adopt, or reject the proposed IFFP.

IMPACT FEE CERTIFICATION - 11-36a-306(1)

This IFFP has been prepared in accordance with Utah Code Title 11, Chapter 36a (the "Impact Fees Act"), which prescribes the laws pertaining to the imposition of impact fees in Utah. The accuracy of this IFFP relies in part upon planning, engineering, and other source data, provided by the City and its designees.

In accordance with Utah Code Annotated, 11-36a-306(1), Bowen Collins & Associates makes the following certification:

I certify 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. cost for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents; or
 - c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement; and
3. Complies in each and every relevant respect with the Impact Fees Act.



Keith Larson, P.E.