

MEMORANDUM

To:

Mayor and Council

From:

Greg Meszaros, Director, Austin Water Utility

Date:

August 28, 2013

Subject: Austin Water Utility Impact Fee Update Report

Background: Under cover of this memo, the Austin Water Utility (AWU) is providing a copy of the water and wastewater impact fee revision report. By way of background, State law requires that impact fees be updated every 5 years. The revision process requires the Utility to update Land Use Assumptions (LUA) and the Capital Improvement Plan (CIP) that will serve new development over the next 10 years and determine the maximum allowable water and wastewater impact fees that can be collected. The actual fees collected, up to the maximum allowable fee, are determined by the City Council. The current impact fee structure for collected fee amounts varies according to location in 7 areas. This was intended to incentivize development in the urban core and Desired Development Zone (DDZ) areas.

A central policy question with regards to impact fee revisions is the appropriate amount, if any, to continue to incentivize investment through discounted fees. For perspective, the Joint Committee on Austin Water Utility's Financial Plan recommended the following:

"Adopt an impact fee policy that calculates the maximum impact fee allowed by law. Consider the elimination of the current zone discount policy that has the effect of subsidizing infrastructure for new development."

Alternatively, other stakeholders have expressed a desire to preserve a pricing preference for investment in the DDZ, to add linkages to the Imagine Austin Comprehensive Plan by reducing fees in priority investment areas, and to remain competitive with the impact fees charged by other surrounding jurisdictions.



Impact Fee Report Structure: The report consists of the following documents: Assessed and Collected Fees (ACF), Land Use Assumptions (LUA), Capital Improvement Plan (CIP) and supporting Appendices. For easy reference, the ACF document within the report provides a concise summary of the impact fee revision process and fee discount options under consideration and is divided into the following sections:

- Section I provides introductory and background material on impact fee revision process and associated maximum allowable fee calculations as prescribed by State law.
- Sections II & III provide information on assessed and collected fees. As
 noted in the report, the Utility has historically collected significantly less
 than the maximum allowable fees. Reducing fees below the maximum
 allowable was intended to shift development away from the Drinking
 Water Protection Zone (DWPZ) and incentivize development in the central
 city and Desired Development Zone (DDZ).
- Sections IV & V provide a summary of the stakeholder input process and the progression of fee structure options that were developed for consideration. The options are summarized as follows:
 - Options 1 & 2 These two options retain the current 7 development zone discounts now in place and provide the lowest fee increases of all options under consideration. The only difference between these two options is the use of a different formula for determining the amount of rate revenue credits associated with the maximum allowable fee calculation. Throughout this report, the Utility is recommending the use of an Austin specific rate revenue credit calculation as opposed to the generalized 50% method. Both methods are allowable by State law.
 - Options 3A, 3B, 3C & 3Ci This family of options eliminates the current 7 discount zones and creates a uniform impact fee across the entire service area. The letter designations indicate a varying discount rate from the Maximum Allowable Fee (MAF) calculation. For example, 3A captures 75% of the MAF, 3B captures 80% of the MAF and 3C captures 85% of the MAF. The "i" in 3Ci represents the addition of a special 50% MAF capture rate for Imagine Austin targeted growth corridors and centers.
 - Options 4 & 4i These options eliminate the current 7 discount zones in favor of using two standard zones: one for the DWPZ and one for the DDZ. Option 4 is designed to capture 85% of the MAF in the DWPZ area and 60% of the MAF in the DDZ. The "i" in 4i represents



the addition of a special 50% MAF capture rate for Imagine Austin targeted growth corridors and centers.

- o Option 5 This option eliminates the current 7 discount zones and creates a uniform impact fee, set at the maximum allowable, across the entire service area. By its nature, this option maximizes impact fee revenue collection associated with new growth.
- o In addition to the fee configuration options, Section V contains several important tables and graphs. Of particular note, Table 2 summarizes the amount of impact fee revenues projected to be collected under the various options. Figure 1 provides a comparison of potential impact fee options to other local jurisdictions.

Recommendation: AWU recommends Option 4i as a starting point for policy discussions. This option achieves several key outcomes and incorporates comments from stakeholders. Relative to the current impact fees, it increases revenues associated with new growth while preserving a long standing Council policy direction of maintaining a pricing signal differentiation between the DWPZ and the DDZ. This option creates a link to the Imagine Austin plan by including an additional 10% fee discount for priority areas identified within the plan. In addition, as referenced in Figure 1, when compared with impact fees from other local jurisdictions, Option 4i provides a competitive pricing structure for development in the DDZ.

Next Steps: We are scheduled to discuss impact fee revisions at the Council's work session on Tuesday, September 24, 2013. The public hearing and possible Council action on impact fees is scheduled for Thursday, October 17, 2013. If you have any questions or need additional information please contact me.

cc: Marc Ott, City Manager Robert Goode P.E., Assistant City Manager





WATER & WASTEWATER IMPACT FEE REPORTS:

ASSESSED AND COLLECTED FEES

AND

LAND USE ASSUMPTIONS

AND

CAPITAL IMPROVEMENTS PLAN

City of Austin, Texas Austin Water Utility

August 28, 2013



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ASSESSED AND COLLECTED FEES

City of Austin, Texas Austin Water Utility

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ASSESSED AND COLLECTED FEES

I. INTRODUCTION

The Austin Water Utility (AWU) worked in concert with the Impact Fee Advisory Committee (IFAC), the Water and Wastewater Commission, external stakeholders, and several City of Austin (City) departments to develop the periodic impact fee update as required by state law. The 5-year update takes a fresh look at the Land Use Assumptions (LUA) and the impact fee Capital Improvements Plan (CIP) that will serve new development in the next 10 years. The basic requirements for determining the costs "necessitated by and attributable to" new development are prescribed in the Impact Fee Act, Section 395.016 of the Texas Local Government Code. Facility capacity that will be used by new growth and its cost are determined by first projecting the demand on the system, the LUA, and then deriving the facility plan for serving that demand, the CIP. The end-products are the maximum allowable impact fees for water and wastewater, which reflect the calculated cost of serving new growth that is not recouped in new customer rate payments. The law also sets the terms of fee assessment for a given tract of land.

The actual fees collected, up to the maximum allowable fee, are the purview of the Austin City Council. Compared to previous periodic updates, a larger effort has been made to gather public input on setting collected fees. The main factors motivating the larger effort are the maximum allowable fees being higher than before and increased interest in the question of "how much should growth pay for itself". Based on the input received, AWU is proposing new collected fees for consideration via the public hearing mandated by the impact fee law. These proposed fees are presented in Section V. Subsequent to the hearing, Austin City Council will enact an ordinance adopting new fees and that ordinance will be appended to this document.

As detailed in the LUA document, Austin continues to be one of the fastest growing cities in the country. With continuation of this trend, the projected magnitude of 10-year growth has not changed significantly from the previous update in 2007. Also, the impact fee service area has not changed significantly. A comparison of population and service unit growth for the water system is shown below:

Previous 2007 Update for Water				
Population Service Units				
2005	2015	10-year Growth	10-year Growth	
799,965	971,363	171,398	78,208	

Proposed Update for Water				
Population Service Uni				
2010	2020	10-year Growth	10-year Growth	
875,936	1,050,991	175,055	70,292	

Similarly, for wastewater the 2010 service unit 10-year growth increment is 70,288, compared to the previous 2007 update of 74,273.

What is changing is the way people use water. The City of Austin's water conservation programs have lowered and are projected to continue lowering the amount of water used per person and per meter service unit in AWU's system. To account for this in the periodic update, the City of Austin's goal of reaching 140 gallons per capita formed the basis of the 2020 flow projection. With less flow per service unit, the capacity of individual facilities expressed in service units is increased, so the cost per service unit is lowered, which subsequently reduces the calculated impact fees.

Most facilities that will serve new growth are part of the CIP plans developed over the past 30 years. Major changes since 2007 regarding the water facility plan are the addition of the South IH35 projects and the increase in WTP 4 related growth costs. The top three facility changes for wastewater are the new South IH35 projects, the proposed Parmer Interceptor serving northwest Austin and the updated cost of the Downtown Tunnel. Both water and wastewater plans include CIP projects serving SH130 corridor growth, including city-funded facility components serving the areas of three recently formed utility districts. Total project costs and the 10-year growth impact costs are shown below:

Previous 2007 Update				
Total	10-yr Growth			
Wit	Project Cost			
Water	\$1,599,866,000	\$517,342,000		
Wastewater	\$950,630,000	\$275,145,000		

Proposed Update				
Total P	10-yr Growth			
With	With Interest			
Water	\$2,057,353,000	\$591,088,000		
Wastewater	\$1,050,393,000	\$248,365,000		

An additional change factor in calculating the new maximum allowable fees is the rate revenue credit. To avoid double charging new customers, the law requires that monies paid by new users toward the growth projects in the form of rates be subtracted from the 10-year growth project costs. In this periodic update the rate revenue credit amount is calculated for Austin-specific conditions for the first time. Previously, the default option provided in the law (a credit equal to 50% of growth impact costs) was used. Since the Austin-specific rate revenue credits for water and wastewater equate to about 35% of the growth impact costs, the new method acts to increase the maximum allowable fee. A comparison of maximum allowable fees is shown below.

Previous 2007 Update			
Maximum Allowable Fee Using 50% Rate Revenue Credit			
Water	\$3,307		
Wastewater	\$1,852		

Proposed Update			
Maximum Allowable Fee Using 35% Rate Revenue Credit			
Water \$5,415			
Wastewater	\$2,284		

II. ASSESSED FEES

The Impact Fee Act provides what is called fee assessment in order to set the timing for establishing fees for a given tract of land. It states that impact fees must be assessed on all property no later than the time of subdivision (with certain exceptions where development occurs without the need for subdivision). Accordingly, the assessed fees for a particular lot are those in effect at the time of subdivision recordation. After 1990 the impact fee update reports and ordinances included the assessed fee separate from the maximum allowable and collected fees. The assessed fee remained constant at \$1,700 for water per service unit and \$1,300 for wastewater per service unit until the previous 2007 update. Since then the assessed fee is deemed to be the maximum allowable amount, thereby keeping open the option of setting collected fees up to the maximum allowable fee in effect at the time a subdivision plat is recorded.

III. COLLECTED FEE BACKGROUND

After the required public hearing and Austin City Council adoption of the LUA and CIP periodic update, Council considers adoption of the ordinance that sets the impact fees actually assessed and collected at the time of tap sale for water meter purchase and/or wastewater service. The collected fees are generally referred to as Austin's impact fees. The current fees are shown on the left hand side of the alternative options tables following this narrative. Historically, the collected amounts have been set by ordinance at amounts lower than the maximum allowable fees.

The alternative options tables show the current impact fee structure, originally adopted by Austin City Council in 1999, for collected fee amounts that varied according to location in seven areas. This was intended to incentivize development in central city and Desired Development Zone (DDZ) areas. In subsequent years the adopted annual budget included this fee structure. The zone percentages and current fee amounts established in the previous 2007 update and city-wide rate ordinances with this structure remain in effect today for lots platted on or after October 1, 2007.

With existing computer databases, City of Austin staff can readily determine the date when a subdivision plat is recorded and its location relative to fee incentive areas. The scanned image of the recorded plat is available to municipal personnel in the subdivision review and tap sales offices allowing them to inform customers in a timely fashion what the collected fee is for a specific lot. Based on past fee updates and ordinance actions there are only two fee schedules currently in effect, one for before October 1, 2007, and one from that date forward. Adoption of the fees proposed in this periodic impact fee update would institute a new third schedule. On average, a period of about eight years elapses before most of the plats recorded in a given year are built out, which has the effect of phasing in new fees that are adopted.

IV. STAKEHOLDER AND PUBLIC INPUT

The Impact Fee Act provides for public hearings on the LUA, CIP, and the imposition of the impact fee. Because the maximum allowable fee amounts calculated in this update are larger than before, and because the issue of growth paying for itself has received more attention during this periodic update, the Austin Water Utility made a larger effort

to gather stakeholder and public input in concert with the Impact Fee Advisory Committee before making a recommendation to Austin City Council on new collected fee amounts. The following narrative describes the stakeholder effort chronologically.

In August of 2012 AWU developed three options to aid in talking with interested parties about possible changes in collected fees. The alternative options tables following this narrative summarize these options, and provide dollar value increases and percentage fee increases associated with each option. The original options provided in August of 2012 are listed below, from smallest fee increase to largest:

- Option 1 Keep the current seven development zones structure and use the default 50% rate revenue credit:
- Option 2 Keep the current seven development zones structure and use the Austin-specific rate revenue credit:
- Option 3 Use the Austin-specific rate revenue credit and eliminate the seven development zones structure in favor of a uniform percentage of the maximum allowable fee:
 - Option 3A shows the resulting fees and increase amounts for a uniform percentage of 75%. This reflects the current maximum percentage in the Drinking Water Protection Zone.
 - Option 3B shows the resulting fees and increase amounts for a uniform percentage of 80%.
 - Option 3C shows the results for a uniform percentage of 85%. This was the highest percentage looked at based on the idea that it is desirable to have collected fees below the maximum allowable since there are inherently some uncertainties and estimates used in the analysis to determine the maximum allowable.

Option 3C was the example used in the stakeholder input process. This option reflects the recommendation of the Joint Committee on Austin Water Utility's Financial Plan. The committee, made up of members from the Resource Management Commission, the Water and Wastewater Commission, and the Impact Fee Advisory Committee, was tasked with crafting a financial stability framework for AWU. The Joint Committee's recommendation (Item 3.1) made in May 2012 states:

"Adopt an impact fee policy that calculates the maximum impact fee allowed by law. Consider the elimination of the current zone discount policy that has the effect of subsidizing infrastructure for new development."

AWU solicited public comment and hosted a public meeting specifically for this update of the impact fees last fall. To encourage stakeholder input and participation, AWU notified the community members with potential interest in the Utility's finances and impact fees. Additionally, AWU presented to, and received stakeholder input from, the following external entities that responded to the communications soliciting input:

- Home Builders Association of Greater Austin
- Real Estate Council of Austin
- Downtown Austin Alliance
- Chamber of Commerce

Discussion focused on the update process and the magnitude of collected fees compared to the current impact fees. Four main policy considerations became evident:

- How much should "growth pay for itself" regarding water and wastewater infrastructure related to fee increase options?
- Support for the concept of lower fees for incentive areas to direct growth.
- Affordability, especially housing, from the buyer's perspective.
- Regional competition and the cost of development, from the development community perspective.

The three options presented above provided a framework for the discussion. AWU developed a website to make information developed in this periodic update process available. The website includes a component for receiving input and answering questions.

Setting lower fees in incentive areas to direct growth was suggested to AWU by the City of Austin Planning and Development Review Department (PDRD) utilizing a new approach based on the Imagine Austin Comprehensive Plan concept of incentivizing growth in certain corridors and centers. Additionally, PDRD provided the following list of Imagine Austin Comprehensive Plan policies and actions incentivizing development within targeted areas:

- LUT P3. Promote development in compact centers, communities, or along corridors that are connected by roads and transit, are designed to encourage walking and bicycling, and reduce healthcare, housing and transportation costs. (See also HN P4, S P3, C P9)
- LUT P7. Encourage infill and redevelopment opportunities that place residential, work, and retail land uses in proximity to each other to maximize walking, bicycling, and transit opportunities. (See also HN P7, HN P11, S P11)
- LUT P9. Develop and maintain consistent fiscal policies to direct public investments associated with growth and development to implement Imagine Austin.
- LUT A1: Give priority to City of Austin investments to support mixed use, transit, and the creation of compact walkable and bikeable places.
- LUT A4: Use incentives and regulations to direct growth to areas consistent with the Growth Concept Map that have existing infrastructure capacity including roads, water, wastewater, drainage, and schools.
- CFS A34: Align policies, incentives, regulations, service area extensions, and infrastructure to coordinate with the Growth Concept Map, maintain Austin's livability and affordability, protect environmentally sensitive areas, and sustainably manage Austin's water resources. Include consideration of diverse water sources and conservation and efficiency measures when planning for future demand for potable water.
- CE A3: Preserve and protect environmentally sensitive areas using a variety of tools, including transferable development rights as well as policies and regulations that incentivize greyfield/redevelopment/infill.

The initial concept for creating an option to incorporate these policies and actions was to have a single lower fee that applies to all of the areas for which a small area plan for a center or corridor has been established by PDRD and Council ordinance. Presently there are several areas that qualify including the entire CURE area, and the areas highlighted in green on the maps following this narrative. The use of these Imagine Austin Incentives Areas is denoted with the letter "i" at the end of the option title.

Through the extended stakeholder and public input process, several new options were developed for consideration. These options are presented below chronologically as they were developed from the input process:

- Option 3Ci Similar to Option 3C detailed above, this option uses the Austin-specific rate revenue credit and eliminates the seven development zones in favor of a uniform percentage of 85% of the maximum allowable fee; however, the "i" portion of this option incorporates the proposed Imagine Austin Incentive Areas as discussed above. These incentive areas receive a 41.3% discount from other areas in the City (50% of the maximum allowable fee versus 85% as discussed above). While this option was the first to incorporate the additional Imagine Austin Comprehensive Plan fee setting components, there were some issues highlighted during the stakeholder input process:
 - These areas were already heavily incentivized through other means and already developing at a rapid pace.
 - There is a significant difference in proposed fees for adjacent lots, which could lead to many requests for parcels near an area and developing per Imagine Austin to be included in the incentive areas.
 - There was concern about the differential in fees for development occurring outside of the incentive areas that is consistent with Imagine Austin.
 - There was not an incentive to develop in the less environmentally sensitive areas, which is also an Imagine Austin priority.
 - As with several of the higher proposed fee options, there was feedback from several stakeholders about the fee amount being significantly higher than neighboring central Texas suburban communities.
- Option 4 Based on the input received from Options 1 through 3Ci, Options 4 and 4i were developed. Option 4 uses the Austin-specific rate revenue credit and eliminates the seven development zones in favor of using the City standard two development zones: the Drinking Water Protection Zone (DWPZ) and the Desired Development Zone (DDZ). A uniform percentage of 85% of the maximum allowable fee would be applied in the DWPZ, and a uniform percentage of 60% of the maximum allowable fee would be applied in the DDZ, which is a 30.4% discount from the DWPZ. This option provides an environmental differential and a more competitive (from the central Texas perspective) impact fee in the DDZ.

Option 4i - Similarly, Option 4i uses the Austin-specific rate revenue credit and eliminates the seven development zones in favor of using the City standard two development zones: the Drinking Water Protection Zone (DWPZ) and the Desired Development Zone (DDZ). A uniform percentage of 85% of the maximum allowable fee would be applied in the DWPZ, and a uniform percentage of 60% of the maximum allowable fee would be applied in the DDZ, which is a 30.4% discount from the DWPZ. Additionally, a uniform percentage of 50% of the maximum allowable fee would be applied in the Imagine Austin Incentive Areas, which is a 41.3% discount from the DWPZ and a 15.6% discount from the DDZ. This option combines the environmental differential and regional competitiveness benefits of Option 4 with the Imagine Austin development framework. Additionally, this option mitigates the issue of the significant difference in proposed fees for lots adjacent to the Imagine Austin Incentive Areas as discussed in Option 3Ci.

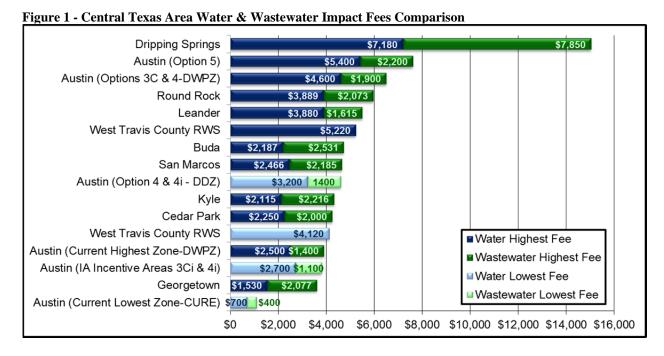
To gather additional stakeholder input, the impact fee update was an integral part of the AWU Fiscal Year 2013-2014 budget process, which included two public meetings and numerous Boards and Commissions meetings.

Option 5 - There was significant discussion about the impact fee update through the recent stakeholder input effort for the fiscal year 2013-2014 AWU budget. Option 5 was developed at the request of the Budget Committee of the Water and Wastewater Commission. This option uses the Austin-specific rate revenue credit and eliminates the seven development zones in favor of a uniform percentage of 100% of the maximum allowable fee (rounded down to the nearest \$100).

V. PROPOSED COLLECTED FEES FOR PUBLIC HEARING

As previously discussed, the actual fees collected, up to the maximum allowable fee, are the purview of the Austin City Council, and compared to previous updates, a much more significant effort has been made to gather stakeholder and public input on setting collected fees. The main factors motivating the larger effort are the maximum allowable fees being higher than before and increased interest in the question of "how much should growth pay for itself".

In summary, Options 1 and 2 keep the current zone incentive discounts, which provide minimal fee increases. Options 3A, 3B, 3C and 5 eliminate all zone incentives and apply a uniform fee based on various percentage reduction factors. These options dramatically increase fees from the current structure with Option 5 providing a nearly 100% maximum allowable fee. Options 3Ci, 4 and 4i take into account various stakeholder input including internal input from PDRD about using the Imagine Austin Comprehensive Plan as a tool for developing fee recommendations. Additionally, when comparing the various options with the impact fees from other central Texas water and wastewater utilities, the impact fees in the DDZ are competitive as noted in the following comparison chart (Figure 1):



After weighing the points made in the public input process, AWU recommends Option 4i for consideration in the public hearing and as a starting point for policy discussions. This option achieves several key outcomes and incorporates comments from stakeholders. Relative to the current impact fees, it significantly increases revenues associated with new growth while preserving a long standing Council policy direction of maintaining a pricing signal differentiation between the DWPZ and the DDZ. This option creates a link to the Imagine Austin plan by adding an additional 10% fee incentive for priority areas identified within the plan. In addition, as referenced above, when compared with impact fees from other local jurisdictions, Option 4i provides a competitive pricing structure for development in the DDZ. Comparisons with current fees are shown in Table 1:

Table 1 - Current and Recommended Collected Fees

urrent li er Service Unit	mpact	Fees	Water: Max Allow. (Austin-Specific Collected Fee	i: Imagine Calc. Method: Rate Rev. Credit s: DWPZ 85%,	Austin (IA	⇒ O	r	
er Service	mpact	Fees	Max Allow. (Austin-Specific Collected Fee	Rate Rev. Credit		⇒ O		
er Service	mpact	Fees	Austin-Specific Collected Fee	Rate Rev. Credit		⇒ O		
er Service	mpact	Fees		s: DWPZ 85%,				
			,	A Incentive Areas nax allow.	Most A		imagine / incentive Compared to Cu	
OTTE	% of Ma Allowab		\$ per Service Unit	% of Maximum Allowable Fee	\$ Increase / (\$ Decrease)	% Change	\$ Increase / (\$ Decrease)	% Change
\$3,307		100%	\$5,415	100%	\$2,108	64%	\$2,108	64%
	cted fee:			ted fee:				_
\$2,500		75%	DWPZ	DWPZ	\$2,100	84%	N/A	N/A
·-,						84%		N/A
\$2,200		65%	\$4,600	85%	\$2,400	109%	N/A	N/A
\$1,800		55%	DDZ	DDZ	\$1,400	78%	\$900	50%
\$1,000		30%	Areas:	Areas:	\$2,200	220%	\$1,700	170%
\$800		25%	\$3,200	60%	\$2,400	300%	\$1,900	238%
\$700		20%	IAAs: \$2,700	50%	N/A	N/A	\$2,000	286%
			Wastewater:					
						\Rightarrow O		
urrent l	mpact	Fees	DDZ 60%, and I/	A Incentive Areas			Incentive	Areas
			\$ per Service	% of Maximum	\$ Increase /	%	\$ Increase /	% Change
						-		
		100%			\$432	25%	\$4 32	23%
		750/			\$500	200/	N/A	N/A
	-							
								N/A
			. ,					N/A
								10%
					-			83%
								120%
\$400		20%	IAAs: \$1,100	50%	N/A	N/A	\$700	175%
						⇒ O	rs	
urrent h	mpact	Fees		,	Most A	reas	_	
	-		50% of m	nax allow.				
er Service Unit			\$ per Service Unit	% of Maximum Allowable Fee	\$ Increase /	%	\$ Increase / (\$ Decrease)	% Change
			<u> </u>		-		-	49%
		100/8			#Ly.FiU	43/6	#45×P10	4370
		75%	DWPZ	DWPZ	\$2,600	67%	N/A	N/A
5 3.900					72,000	0,,0		
\$3,900 \$3,900	_			Areas:	\$2,600	67%	N/A	N/A
\$3,900		75%	Areas:	Areas:	\$2,600 \$3,100	67% 91%	N/A N/A	N/A
\$3,900 \$3,400		75% 65%	Areas: \$6,500	85%	\$3,100	91%	N/A	N/A
\$3,900 \$3,400 \$2,800		75% 65% 55%	Areas: \$6,500 DDZ	85% DDZ	\$3,100 \$1,800	91% 64%	N/A \$1,000	N/A 36%
\$3,900 \$3,400		75% 65%	Areas: \$6,500	85% DDZ Areas:	\$3,100	91%	N/A	N/A
	\$2,500 \$2,200 \$1,800 \$1,000 \$800 \$700 urrent li er Service Unit \$1,852 Calle \$1,400 \$1,000 \$600 \$400	\$2,500 \$2,200 \$1,800 \$1,000 \$800 \$700 \$700 \$700 \$700 \$1,852 Collected fee: \$1,400 \$1,400 \$1,200 \$1,000 \$600 \$500 \$400 \$400	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500

Other factors for consideration of impact fee setting policy:

- Due to the many uncertainties and estimates used to calculate the system-wide impact costs per service unit, AWU has previously recommended at minimum a 25% reduction from the maximum allowable amount. The options provided above all have reductions equal to or greater than 15% except for Option 5.
- As previously discussed, adopting new impact fees will set a new schedule for plats recorded after the effective date, which will require administration of three different sets of collected impact fees based on plat date:
 - o Prior to October 1, 2007
 - October 1, 2007 through December 31, 2013*

Arlington \$480 \$380 \$0 \$1.0

\$1.000

- After January 1, 2014*
 - *Assuming the effective date of the new fees is January, 1, 2014
- Comparisons of impact fees in the top 15 most populated cities in Texas are considerably different from comparisons to the central Texas area provided above.



Figure 2 - Top 15 Large Texas Cities Water & Wastewater Impact Fees Comparison

• Based on the data collected last fall, utilities with fewer rate payers tend to maximize impact fees; whereas, 8 of the top 15 largest cities in Texas do not assess impact fees.

\$2,000 \$3,000

Garland, Irving, Laredo, Lubbock, Plano

\$5,000

\$4,000

\$6,000 \$7,000

\$8,000

• Increased revenue from substantially higher impact fees will not be recognized immediately due to the natural phasing effect of the plat date application of the fee. For example, a subdivision platted in 2006 may still have undeveloped lots that will be assessed the lower "Prior to October 1, 2007" fees if they purchase a meter in 2015. Based on analysis of previous impact fee updates, it takes approximately 8 years to fully recognize the effects of the new fees.

- The following financial information was produced at the request of the Water and Wastewater Commission Budget Committee, and was shared with the Impact Fee Advisory Committee.
 - o Table 2 shows the calculated 10-year projected revenue for each option based on historical phasing and waiver information, and Table 3 shows the phasing plan used in the calculations:

Table 2 - Projected 10-year Revenue from Impact Fees

	Projected 10-Year Revenue at Proposed Options (1)	Projected 10-Year Revenue at Current Rates (2)	Increase to Current Projected	
Option 1	\$114,097,113	\$106,754,160	\$7,342,953	
Option 2	\$134,328,003	\$106,754,160	\$27,573,843	
Option 3A	\$224,004,980	\$106,754,160	\$117,250,820	
Option 3B	\$233,186,165	\$106,754,160	\$126,432,005	
Option 3C	\$245,360,188	\$106,754,160	\$138,606,028	
Option 3Ci	\$179,240,493	\$106,754,160	\$72,486,333	
Option 4	\$198,805,488	\$106,754,160	\$92,051,328	
Option 4i (high) (3)	\$195,552,145	\$106,754,160	\$88,797,985	*
Option 4i (low) (4)	\$179,240,493	\$106,754,160	\$72,486,333	*
Option 5	\$282,022,572	\$106,754,160	\$175,268,412	

⁽¹⁾ Includes phasing and waivers. Does not include adjustments.

Collected fee amounts are rounded to the nearest \$100.

Current impact fee rates are for lots platted on or after October 1, 2007.

Table 3 – Impact Fee Collections Phasing based on Historical Trends

Estimated Phasing Percentage by Year				
Year	Platted under Current Fee Schedule	Platted under Proposed Fee Schedule		
2013	100.0%	0.0%		
2014	87.5%	12.5%		
2015	75.0%	25.0%		
2016	62.5%	37.5%		
2017	50.0%	50.0%		
2018	37.5%	62.5%		
2019	25.0%	75.0%		
2020	12.5%	87.5%		
2021	0.0%	100.0%		
2022	0.0%	100.0%		

o The following chart (Figure 3) summarizes this information over a 10-year period:

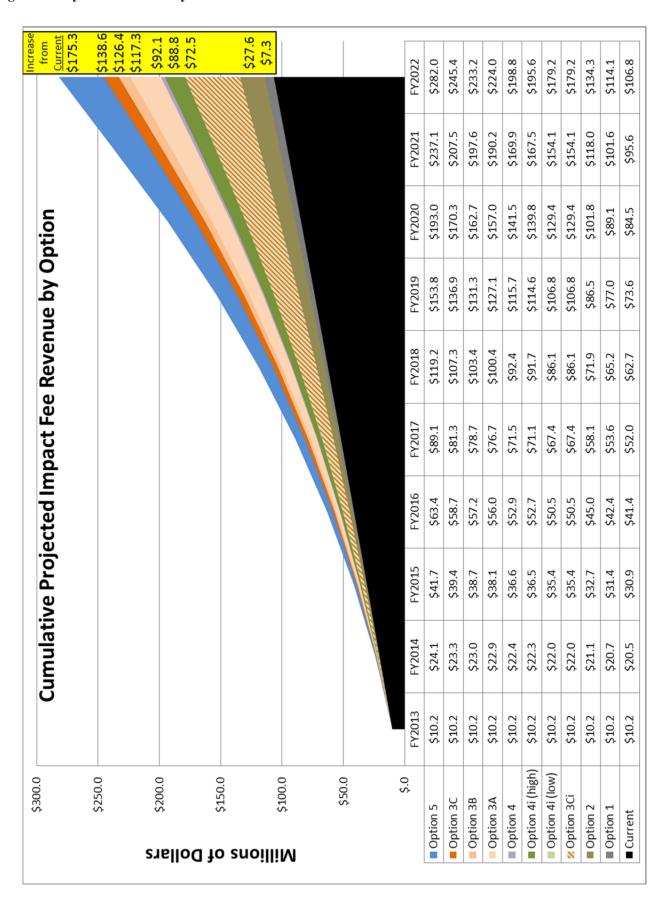
⁽²⁾ Includes waivers. Does not include adjustments or phasing.

^{(3) 85%} DWPZ and 60% DDZ with Imagine Austin (IA) Incentive.

^{(4) 85%} DWPZ and 50% DDZ with Imagine Austin (IA) Incentive.

^{*}Average of 4i high and low options is \$80,642,159

Figure 3 - 10-year Revenue Analysis Chart



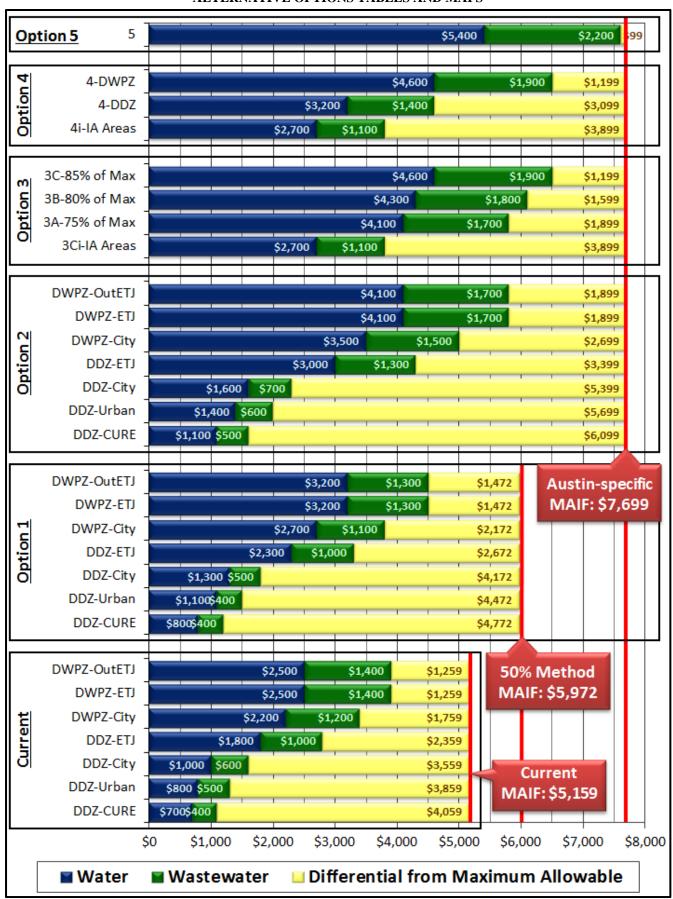
Current collected impact fees from the proposed FY 2013/2014 City-wide Rate Ordinance are available via the following link (Impact Fees detail begins half-way down the page and ends on the next page): https://assets.austintexas.gov/budget/13-14/downloads/fy14_proposed_volume_ii.pdf#page=662

A proposed budget amendment for collected impact fees for FY 2013/2014 will be required if the fees are modified as proposed.

VI. ADOPTED FEES

This section reserved for fees adopted by Austin City Council ordinance subsequent to the public hearing.

ALTERNATIVE OPTIONS TABLES AND MAPS



Preliminary and Subject to Change

			OPTION 1:				OPTION 2:	åi		
			Water:				Water:			
			Max Allow. Calc Rate Re	Max Allow, Calc, Method: 50% Rate Rev. Credit	39		Max Allow. (Austin-Specific	Max Allow. Calc. Method: Austin-Specific Rate Rev. Credit		
	Current	Current Impact Fees	Collected Fee	Collected Fee: current zone structure	Compared to Current Fees	ment Fees	Collected Fee	Collected Fee: current zone structure	Compared to Current Fees	ment Fees:
10/2122	\$ per Service	% of Maximum	\$ per Service	% of Maximum	\$ Increase /	%	\$ per Service	% of Maximum	\$ Increase/	%
Water	Unit	_	Unit	Allowable Fee	(\$ Decrease)	Change	Unit	Allowable Fee	(\$ Decrease)	Change
Maximum Allowable Fee	\$3,307	100%	\$4,205	100%	\$898	27%	\$5,415	100%	\$2,108	64%
	Colle	Collected fee:	Collected fee	ed fee:			Collec	Collected fee:		
DWPZ - Outside ETJ Fee	\$2,500	75%	\$3,200	%54	\$200	28%	\$4,100	75%	\$1,600	64%
DWPZ - ETJ Fee	\$2,500		\$3,200	75%	\$700	28%	\$4,100	75%	\$1,600	64%
DWPZ - Inside City Fee	\$2,200		\$2,700	9659	\$500	23%	\$3,500	%59	\$1,300	29%
DDZ - ETJ Fee	\$1,800	925%	\$2,300	9699	\$500	28%	\$3,000	929%	\$1,200	%19
DDZ - Inside City Fee	\$1,000	30%	\$1,300	30%	\$300	30%	\$1,600	30%	\$600	%09
DDZ - Urban Watersheds Fee	\$800	25%	\$1,100	75%	\$300	38%	\$1,400	25%	\$600	75%
DDZ - CURE	\$200		2800	50%	\$100	14%	\$1,100		\$400	21%
			Wastewater:				Wastewater:			
			Max Allow. Calc Rate Re	Max Allow. Calc. Method: 50% Rate Rev. Credit			Max Allow. (Austin-Specific	Max Allow, Calc, Method: Austin-Specific Rate Rev. Credit		
	Current	Current Impact Fees	Collected Fees struc	Collected Fees: current zone structure	Compared to Current Fees	ment Fees	Collected Fee stru	Collected Fees: current zone structure	Compared to Current Fees:	rent Fees:
Mostomator	\$ per Service	% of Maximum	\$ per Service	% of Maximum	\$ Increase /	%	\$ per Service	% of Maximum	\$ Increase /	%
Wastewaler	Unit	_	Unit	Allowable Fee	(\$ Decrease)	Change	Unit	Allowable Fee	(\$ Decrease)	Change
Maximum Allowable Fee	\$1,852	100%	\$1,767	100%	(\$82)	-5%	\$2,284	100%	\$432	23%
	Colle	Collected fee:	Collected fee	ed fee:			Collec	Collected fee:		
DWPZ - Outside ETJ Fee	\$1,400	75%	\$1,300	75%	(\$100)	-7%	\$1,700	75%	\$300	21%
DWPZ - ETJ Fee	\$1,400		\$1,300	75%	(\$100)	-7%	\$1,700		\$300	21%
DWPZ - Inside City Fee	\$1,200		\$1,100	%59	(\$100)	-8%	\$1,500		\$300	25%
DDZ - ETJ Fee	\$1,000	%99	\$1,000	%99	80	960	\$1,300	92%	\$300	30%
DDZ - Inside City Fee	\$600		\$500	30%	(\$100)	-17%	\$700		\$100	17%
DDZ - Urban Watersheds Fee	\$500	25%	\$400	25%	(\$100)	-20%	\$600	25%	\$100	50%
DDZ - CURE	\$400		\$400	20%	80	%0	\$500		\$100	25%

Note: In the tables above, collected fee amounts are rounded to the nearest \$100

DWPZ: Drinking Water Protection Zone DDZ: Desired Development Zone ETJ: Extraterritorial Jurisdiction SU: Service Unit

An Impact Fee Service Unit (SU) represents a standard 5/8-inch meter - for service unit equivalents of larger meters, see SU equivalency table

Ourrent impact fees are for lots that were platted on or after October 1, 2007. For lots platted prior to this date see previous fee schedules in effect at time of platting.

Draft 5-year Update - Impact Fee Comparison v15.xlsx: All W&WW IF Options

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Preliminary and Subject to Change

			OPTION 3	OPTION 3A: Uniform 75%	1 75%		OPTION 3	OPTION 3B: Uniform 80%	%08 u	
			Water:				Water:			
			Max Allow. C Austin-Specific F	Max Allow. Calc. Method: Austin-Specific Rate Rev. Credit			Max Allow, Calc, Method: Austin-Specific Rate Rev. Credit	alc. Method: Rate Rev. Credit		
	Current In	Current Impact Fees	Collected Fees; max allow., no	Collected Fees: uniform 75% of max allow, no zone reductions	Compared to Current Feed	mant Fees	Collected Fees: uniform 80% of max allow, no zone reductions	uniform 80% of cone reductions	Compared to Current Fees:	Trent Feek
Water	\$ per Service	% of Maximum Allowable Fee	\$ per Service Unit	% of Maximum Allowable Fee	\$ Increase /	% Change	\$ per Service Unit	% of Maximum Allowable Fee	\$ Increase /	% Change
Maximum Allowable Fee	\$3,307	100%	\$5,415	1	\$2,108	64%	\$5,415	100%	\$2,108	64%
	Collect	Collected fee:	Collect	Collected fee:			Collected fee:	ed fee:		
DWPZ - Outside ETJ Fee	\$2,500	75%			\$1,600	64%			\$1,800	72%
DWPZ - ETJ Fee	\$2,500	75%			\$1,600	64%			\$1,800	72%
DWPZ - Inside City Fee	\$2,200	%59	All Areas:	All Areas:	\$1,900	86%	All Areas:	All Areas:	\$2,100	85%
DDZ - ETJ Fee	\$1,800	929%	\$4,100	75%	\$2,300	128%	\$4,300	%08	\$2,500	139%
DDZ - Inside City Fee	\$1,000	30%			\$3,100	310%			\$3,300	330%
DDZ - Urban Watersheds Fee	\$800	25%			\$3,300	413%			\$3,500	438%
DDZ - CURE	\$200	20%			\$3,400	486%			\$3,600	514%
			Wastewater:				Wastewater:			
			Max Allow. C Austin-Specific F	Max Allow. Calc. Method: Austin-Specific Rate Rev. Credit			Max Allow, Calc, Method: Austin-Specific Rate Rev. Credit	alc, Method: Rate Rev. Credit		
	Current In	Current Impact Fees	Collected Fees: max allow., no	Collected Fees: uniform 75% of max allow., no zone reductions	Compared to Current Fees	ment Fees:	Collected Fees: uniform 80% of max allow., no zone reductions	uniform 80% of cone reductions	Compared to Current Fees.	ment Fees:
Wastewater	\$ per Service Unit	% of Maximum Allowable Fee	\$ per Service Unit	% of Maximum Allowable Fee	\$ Increase / (\$ Decrease)	% Change	\$ per Service Unit	% of Maximum Allowable Fee	\$ Increase / (\$ Decrease)	% Change
Maximum Allowable Fee	\$1,852	100%	\$2,284	100%	\$432	23%	\$2,284	100%	\$432	23%
	Collect	Collected fee:	Collect	Collected fee:			Collected fee:	ed fee:		
DWPZ - Outside ETJ Fee	\$1,400	45%			\$300	21%			\$400	29%
DWPZ - ETJ Fee	\$1,400	75%			\$300	21%			\$400	29%
DWPZ - Inside City Fee	\$1,200	%59	All Areas:	All Areas:	\$500	42%	All Areas:	All Areas:	\$600	20%
DDZ - ETJ Fee	\$1,000	25%	\$1,700	75%	\$700	70%	\$1,800	%08	\$800	80%
DDZ - Inside City Fee	\$600	30%			\$1,100	183%			\$1,200	200%
DDZ - Urban Watersheds Fee	\$500	25%			\$1,200	240%			\$1,300	260%
DDZ - CURE	\$400	20%			\$1,300	325%			\$1,400	350%

Note: In the tables above, collected fee amounts are rounded to the nearest \$100

DWPZ: Drinking Water Protection Zone DDZ: Desired Development Zone ETJ: Extraterritorial Jurisdiction SU: Service Unit

An Impact Fee Service Unit (SU) represents a standard 5/8-inch meter - for service unit equivalents of larger meters, see SU equivalency table

Current impact fees are for lots that were platted on or after October 1, 2007. For lots platted prior to this date see previous fee schedules in effect at time of platting.

Draft 5-year Update - Impact Fee Comparison v15.xlsx: All W&WW IF Options

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equivalency table

Nastewater

DWPZ - ETJ Fee

DDZ - ETJ Fee

DDZ - CURE

nearest \$100

DWPZ - ETJ Fee

Water

DDZ - ETJ Fee

in effect at time of platting.

equivalency table

Nastewater

Maximum Allowable Fee

Water

DWPZ - Outside ETJ Fee

DWPZ - Inside City Fee

DDZ - ETJ Fee

DWPZ - ETJ Fee

DDZ - Inside City Fee

Maximum Allowable Fee

DWPZ - Outside ETJ Fee

DWPZ - Inside City Fee

DDZ - ETJ Fee

DWPZ - ETJ Fee

DDZ - Urban Watersheds Fee

DDZ - CURE

nearest \$100

DDZ - Inside City Fee

DRAFT - Impact Fee Collected Fee Update Options

Preliminary and Subject to Change

			OPTION 5 Water:	OPTION 5: Max Allowable Water:	wable	
			Max Allow. C Austin-Specific F	Max Allow. Calc. Method: Austin-Specific Rate Rev. Credit		
	Current	Current Impact Fees	Collected Fees from max allow.	Collected Fees: Round down from max allow. to nearest \$100	Compared to Current Fees:	ment Fees.
Water	\$ per Service Unit	% of Maximum Allowable Fee	\$ per Service Unit	% of Maximum Allowable Fee	\$ Increase / (\$ Decrease)	% Change
Maximum Allowable Fee	\$3,307	100%	\$5,415		\$2,108	64%
	Collec	Collected fee:	Collect	Collected fee:		
DWPZ - Outside ETJ Fee	\$2,500	75%			\$2,900	116%
DWPZ - ETJ Fee	\$2,500				\$2,900	116%
DWPZ - Inside City Fee	\$2,200	%59	All Areas:	All Areas:	\$3,200	145%
DDZ - ETJ Fee	\$1,800	929%	\$5,400	100%	\$3,600	200%
DDZ - Inside City Fee	\$1,000	30%			\$4,400	440%
DDZ - Urban Watersheds Fee	\$800	25%			\$4,600	575%
DDZ - CURE	\$700				\$4,700	671%
			Wastewater:			
			Max Allow. C Austin-Specific F	Max Allow. Calc. Method: Austin-Specific Rate Rev. Credit		
	Current	Current Impact Fees	Collected Fees: Round down from max allow. to nearest \$100	Collected Fees: Round down from max allow. to nearest \$100	Compared to Current Fees:	ment Fees:
Wastewater	\$ per Service Unit	% of Maximum Allowable Fee	\$ per Service Unit	% of Maximum Allowable Fee	\$ Increase / (\$ Decrease)	% Change
Maximum Allowable Fee	\$1,852	100%	\$2,284	100%	\$432	23%
	Collec	Collected fee:	Collected fee:	ed fee:		
DWPZ - Outside ETJ Fee	\$1,400	%5 2			\$800	21%
DWPZ - ETJ Fee	\$1,400				\$800	21%
DWPZ - Inside City Fee	\$1,200	%59	All Areas:	All Areas:	\$1,000	83%
DDZ - ETJ Fee	\$1,000	929%	\$2,200	100%	\$1,200	120%
DDZ - Inside City Fee	\$600				\$1,600	267%
DDZ - Urban Watersheds Fee	\$500	25%			\$1,700	340%
DDZ - CURE	\$400				\$1,800	450%

Note: In the tables above, collected fee amounts are rounded to the nearest \$100

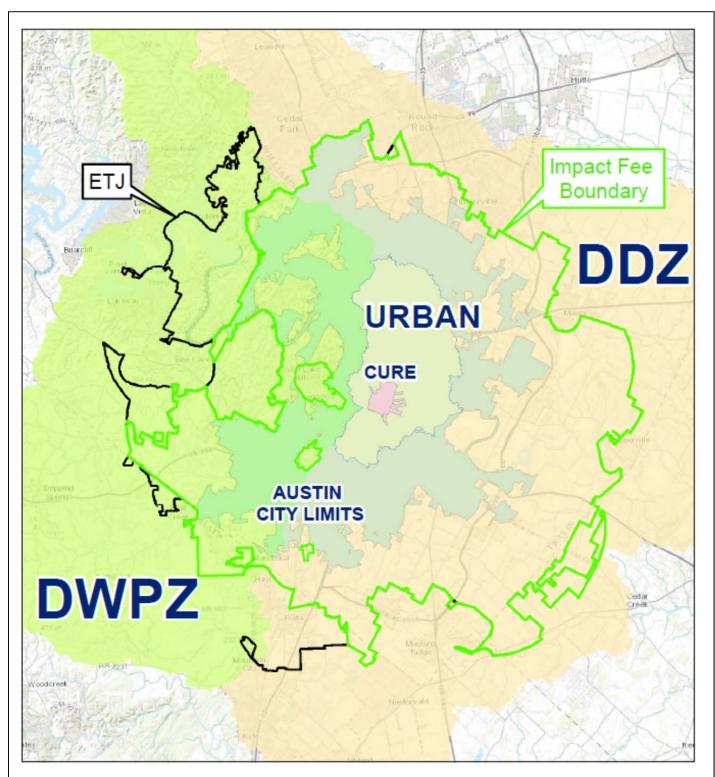
DWPZ: Drinking Water Protection Zone DDZ: Desired Development Zone ETJ: Extraterritorial Jurisdiction SU: Service Unit

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Draft 5-year Update - Impact Fee Comparison v15.xlsx: All W&WW IF Options

5/5



2013 Impact Fee Boundary (DRAFT)



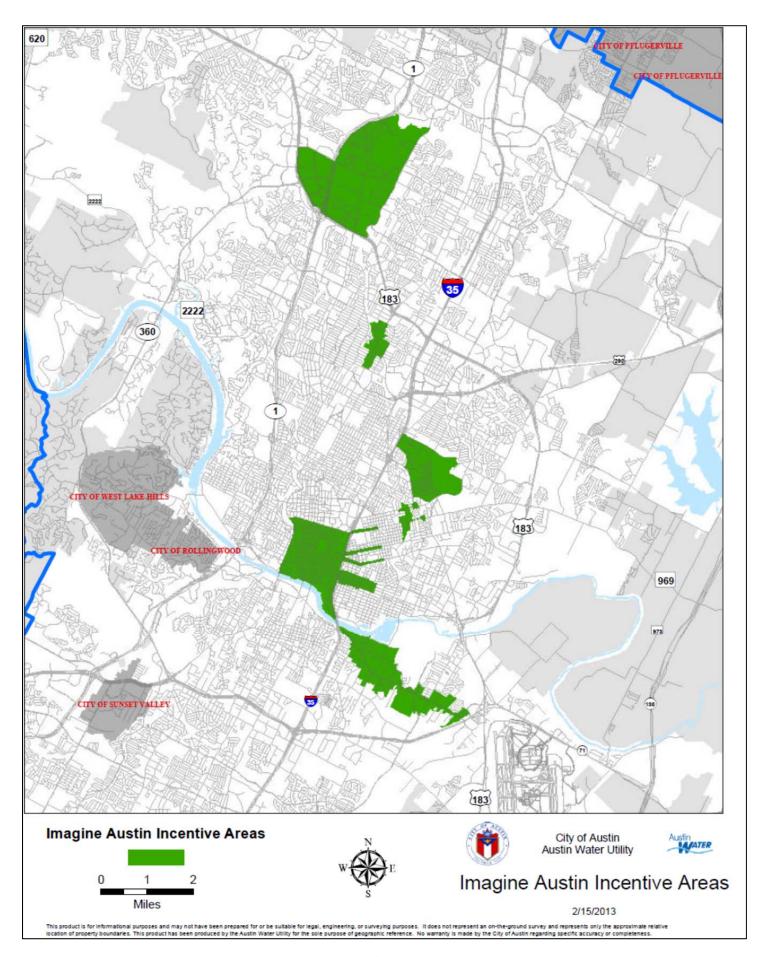


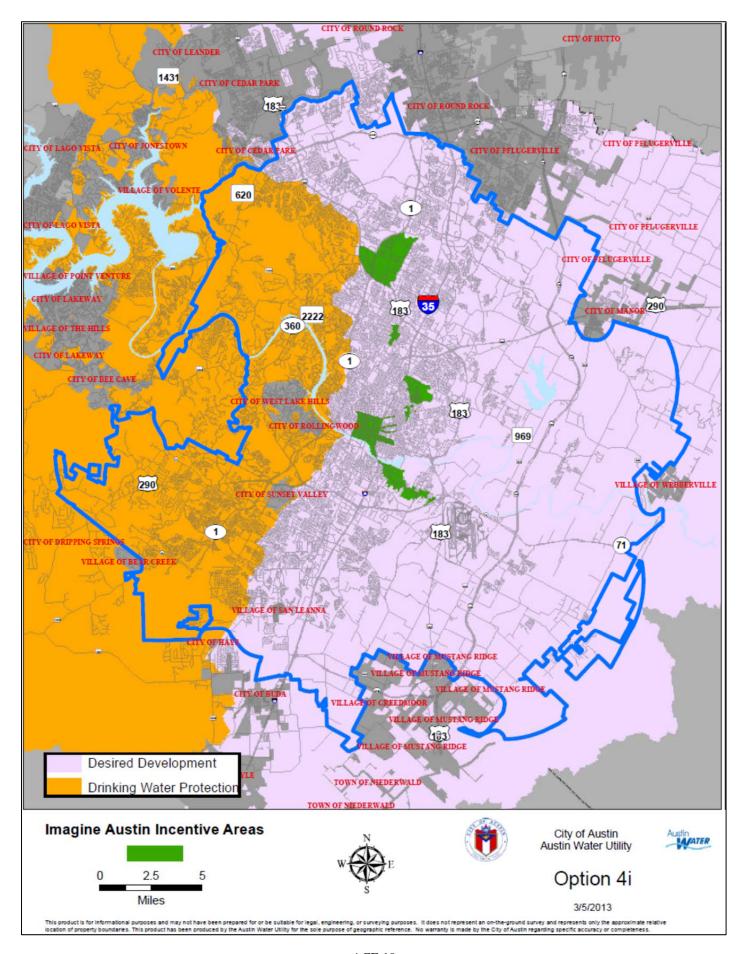
City of Austin Austin Water Utility 8/5/2013



Produced by the Infrastructure Management Division

This product is for informational purposes and may not have been prepared or be suitable for legal, engineering or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries. This product has been produced by the Austin Water Utility for the sole purpose of geographic reference. No warrenty is made by the City of Austin regarding specific accuracy or completeness.





IMPACT FEE LAND USE ASSUMPTIONS

City of Austin, Texas Austin Water Utility



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IMPACT FEE LAND USE ASSUMPTIONS

City of Austin, Texas Austin Water Utility

Working Document for Public Review July 2013

I. INTRODUCTION

Texas law, specifically Texas Local Government Code, Chapter 395, enacted by the State Legislature in 1987 (Senate Bill 336) and amended as recently as 2011, empowers cities to impose and collect "impact fees" and establishes the guidelines cities must follow to do so. The term "impact fee" includes the "capital recovery fees" that the City of Austin charges for facility expansion of its water and wastewater systems. The City of Austin water and wastewater impact fees are further governed by the Austin City Code, Title 25 Land Development, Chapter 25-9 Water and Wastewater, Article 3 Water and Wastewater Capital Recovery Fees, Sections 25-9-311 through 25-9-353, other sections of the Land Development Code referred to by these sections, and ordinances approved amending these sections.

Among the several requirements imposed on cities by Chapter 395 is the development and approval of a report called "land use assumptions." Section 395.001 (5) of the Local Government Code defines the term succinctly: "Land use assumptions' includes a description of the service area and projections of changes in land uses, densities, and population over at least a 10-year period." In a definitive article written by three people who helped develop Chapter 395, entitled "Impact Fees: The Intent Behind the New Law" (St. B. Tex. Envtl. L. J., vol. 19; 1989; pp. 68-73) by Ray Farabee, et.al., the term is so described:

"Land use assumptions" are the basic projections of population growth and future land uses on which plans for new or expanded facilities must be based. The land use assumptions may be general and do not require detailed projections for specific parcels of land. They should, however, be thorough enough to permit reasonably accurate long range planning. The time period on which these projections are based must be at least ten years.

This report has been prepared for the purpose of complying with the requirements of Chapter 395 of the Local Government Code with respect to "land use assumptions." It is an amendment to the City's impact fee land use assumptions approved by the City Council on February 13, 1997, and subsequently amended and updated, most recently in August 2007, and adopted by City Council September 17, 2007. State law requires that the land use assumptions be updated at least every five years.

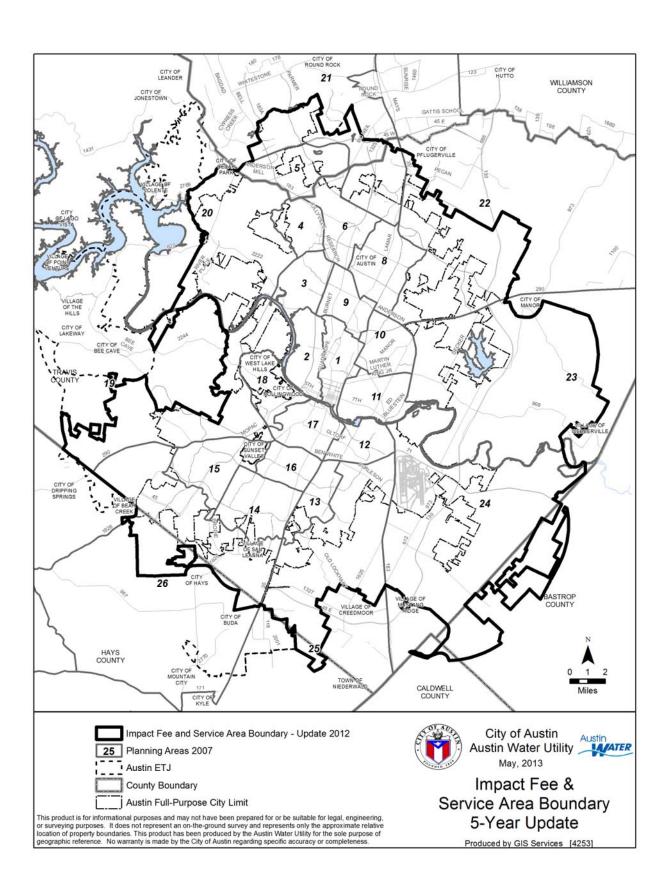
II. SERVICE AREA

The "service area", for the purposes of these land use assumptions, is the area within the corporate boundaries of the City of Austin and its existing extraterritorial jurisdiction (ETJ) to be served by the existing city water and wastewater systems and the facilities listed in the revised Impact Fee Capital Improvements Plan. The boundary encompassing this area is illustrated by Map 1. For general reference the areas are:

- 2007 outer boundary = 537 sq. mi. (343,861 acres)
- 2012 outer boundary = 544 sq. mi. (347,965 acres)

For reference, within the outer boundary, the 2010 served area covers approximately 192,000 acres, not including conservation land and other cities' jurisdictions, in general. Appendix A of this land use assumptions report provides the written description of the updated impact fee service area boundary for ordinance purposes. The written description, not the map, is the official service area description.

The Impact Fee "service area" defines the area to be used to calculate projected "service units" and the impact fee.



These land use assumptions anticipate that the impact fees to be calculated will be imposed uniformly over the entire service area and will be calculated in a manner consistent with that premise. This is explicitly provided for by 1989 amendments to Chapter 395 of the Local Government Code, which added Section 395.0455. This section reads in part:

System-Wide Land Use Assumptions.

(a) In lieu of adopting land use assumptions for each service area, a political subdivision may, except for storm water, drainage, flood control and roadway facilities, adopt system-wide land use assumptions, which cover all of the area subject to the jurisdiction of the political subdivision for the purpose of imposing impact fees under this chapter.

Another paragraph in this section further clarifies the requirements of state law:

(c) After adoption of system-wide land use assumptions, a political subdivision is not required to adopt additional land use assumptions for a service area for water supply, treatment, and distribution facilities or wastewater collection and treatment facilities as a prerequisite to the adoption of a capital improvements plan or impact fee, provided the capital improvements plan and impact fee are consistent with the system-wide land use assumptions.

III. GROWTH PROJECTIONS

For the 5-year update, 2010 U.S. Census population data was used to estimate the 2010 served population. This data was also used to adjust and improve the 2010 employment figures and the 2020 population and employment forecasts developed in years past by the Planning and Development Review Department. The 10-year period from 2010 to 2020 is used as the basis for determining the amount of growth in a 10-year planning horizon as required in the Impact Fee Act. The GIS-based review and adjustment procedure for updating the growth projection was done in coordination with the City Demographer from the Planning and Development Review Department. The resulting projection takes the form of population and employment distributed by traffic serial zones, which are then aggregated into the water pressure zones and wastewater drainage areas necessary for analysis of facility demand versus capacity relationships.

Results for the Planning Areas illustrated on Map 1 are:

Table 1 - Population Growth. Shows estimated 2010 and projected 2020 population aggregated to Planning Areas and to total service area. As noted above, these figures are consistent with U.S. census data for 2010 and projections for 2020. These 10-year growth population figures correspond to estimates and projections of residents actually receiving City of Austin water and/or wastewater service. This table includes the calculated average annual growth rate and the gross population density. The gross densities are calculated by dividing the estimated or projected population by the total acres in each Planning Area.

Table 2 - Employment Growth. Shows estimated 2010 and projected 2020 employment aggregated to Planning Area and to total service area. As noted above, these 10-year growth figures are consistent with Planning and Development Review Department data for 2010 and projections for 2020. This table includes the calculated average annual growth rate, and the gross employment density. The gross densities are calculated by dividing the estimated or projected employees by the total acres in each Planning Area. As with population, these figures correspond to work sites that will actually receive City of Austin water and/or wastewater service.

Table 1: Population Growth

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rialilig	2010	2020	ropulation	ACIES IOI	Cross Descitor	Czoc Posciti.	Cildinge III
Summary	Population	Population	Annual Growth Rate	ZUIU Served	Gross Density Pon/Ac	Gross Density Pon/Ac *	Residential Gross Density
7	000	00	7 226	2 2 2	- OP/ 1-	27/do -	44 OF0/
I	60,282	68,750	1.32%	5,139	11./3	13.38	14.05%
2	25,815	727,72	0.72%	5,315	4.86	5.22	7.41%
3	27,171	28,242	0.39%	5,328	5.10	5.30	3.94%
4	20,455	21,782	0.63%	4,244	4.82	5.13	6.49%
2	37,491	44,846	1.81%	5,353	7.00	8:38	19.62%
9	32,643	36,390	1.09%	6,410	5.09	5.68	11.48%
7	31,217	36,150	1.48%	5,178	6.03	86.9	15.80%
∞	74,144	77,052	0.39%	8,318	8.91	9.26	3.92%
6	31,967	35,210	0.97%	4,689	6.82	7.51	10.14%
10	41,351	50,543	2.03%	5,735	7.21	8.81	22.23%
11	35,787	42,209	1.66%	6,317	5.66	89.9	17.95%
12	43,359	45,269	0.43%	4,596	9.43	9.85	4.41%
13	35,255	38,000	0.75%	4,463	7.90	8.51	7.79%
14	47,441	51,549	0.83%	7,965	5.96	6.47	8.66%
15	39,986	45,632	1.33%	2,996	5.00	5.71	14.12%
16	31,163	34,604	1.05%	4,245	7.34	8.15	11.04%
17	43,605	48,858	1.14%	5,627	7.75	8.68	12.05%
18	12,629	13,032	0.31%	5,520	2.29	2.36	3.19%
19	29,897	33,678	1.20%	13,355	2.24	2.52	12.65%
20	30,345	39,781	2.74%	8,240	3.68	4.83	31.09%
21	16,616	35,702	7.95%	4,185	3.97	8.53	114.87%
22	39,468	62,383	4.68%	16,389	2.41	3.81	28.06%
23	20,433	31,871	4.55%	6,799	2.09	3.25	22.98%
24	16,527	27,781	5.33%	22,191	0.74	1.25	68.10%
25	20,225	35,416	2.76%	7,634	2.65	4.64	75.11%
26	30,663	38,534	2.31%	7,340	4.18	5.25	25.67%
Total within Boundary	875,936	1,050,991	1.84%	191,570	4.57	5.49	19.98%

* Based on 2010 served area acreage

Table 2: Employment Growth

Change in	Employment	Gross Density	%69.9	11.89%	11.80%	12.43%	24.04%	5.23%	51.30%	12.84%	8.69%	68.16%	20.40%	8.69%	23.87%	31.19%	24.06%	18.40%	22.19%	1.64%	22.82%	27.40%	%08.96	48.50%	34.32%	87.04%	71.91%	%09.62	24.63%
2020 Employment	Gross Density	Emp/Ac *	27.72	3.29	2.34	1.67	3.62	7.70	2.84	3.84	69.9	8.08	4.62	6.23	2.67	1.04	1.27	3.70	4.80	2.14	1.27	2.16	3.42	3.10	3.15	1.92	3.30	1.21	3.77
2010 Employment 2020 Employment	Gross Density	Emp/Ac	25.98	2.94	2.09	1.48	2.92	7.32	1.88	3.40	6.16	4.80	3.84	5.73	2.15	0.79	1.03	3.12	3.93	2.10	1.03	1.69	1.74	2.09	2.34	1.03	1.92	0.67	3.03
Acres for	2010 Served	Area	5,139	5,315	5,328	4,244	5,353	6,410	5,178	8,318	4,689	5,735	6,317	4,596	4,463	7,965	966'2	4,245	5,627	5,520	13,355	8,240	4,185	16,389	6,799	22,191	7,634	7,340	191,570
Employment	Annual	Growth Rate	0.65%	1.13%	1.12%	1.18%	2.18%	0.51%	4.23%	1.22%	0.84%	5.33%	1.87%	0.84%	2.16%	2.75%	2.18%	1.70%	2.02%	0.16%	2.08%	2.45%	7.00%	4.03%	2.99%	6.46%	5.57%	6.03%	2.23%
	2020 Fmnlovment	Lingioyineiic	142,441	17,462	12,479	7,072	19,372	49,371	14,694	31,905	31,381	46,321	29,214	28,627	11,910	8,245	10,175	15,706	27,013	11,806	16,954	17,786	14,309	50,830	30,829	42,682	25,216	8,865	722,665
	ZUIU Fmnlovment I		133,511	15,607	11,162	6,290	15,618	46,916	9,712	28,275	28,872	27,546	24,264	26,337	9,615	6,285	8,202	13,265	22,107	11,616	13,804	13,961	7,271	34,228	22,952	22,820	14,668	4,936	579,840
Planning	Area	Summary	Н	2	3	4	2	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	Total within Boundary

* Based on 2010 served area acreage

IV. SERVICE UNITS

Water and Wastewater Service Unit Assumptions

Calculation of the impact fee in accordance with Chapter 395 of the Local Government Code requires the use of a "service unit." Within the definitions section of Chapter 395.001(10), "'Service unit' means a standardized measure of consumption, use, generation, or discharge attributable to an individual unit of development calculated in accordance with generally accepted engineering or planning standards and based on historical data and trends applicable to the political subdivision in which the individual unit of development is located during the previous 10 years."

To use a simplified explanation, the number of projected new service units are divided into the costs of capital projects allocated to this new growth in order to calculate the allowable impact fee (per service unit). The journal article by Ray Farabee, et.al, mentioned previously, states that the "Service unit' is one of the most important, but conceptually difficult, elements of the (new) law." This article also observes that "Cities may select their own standards for measuring service units, but any measure chosen must attempt to accurately reflect differences in service consumption between users." The service unit is based on the size of water meter sold, exactly as the fee unit was calculated. Table 3 illustrates the relationship between service units and meter sizes. The service unit calculation depends on the relative differences between the various sizes and types of meters as determined by their rated maximum flows and rated continuous flows.

Table 3: CALCULATION OF SERVICE UNITS

The size and type of water meter purchased determines number of service units in accordance with the following schedule:

METER SIZE	TYPE	SERVICE UNITS
5/8"	positive displacement	1
3/4"	positive displacement	1.5
1"	positive displacement	
1 1/2"	positive displacement	5
1 1/2"	turbine	8
2"	positive displacement	8
2"	turbine	10
3"	compound	16
3"	turbine	24
4"	compound	25
4"	turbine	42
6"	compound	50
6"	turbine	92
8"	turbine	160
10"	turbine	250
12"	turbine	330
6" x 2"	fire service	based on domestic demand
8" x 2"	fire service	based on domestic demand
10" x 2"	fire service	based on domestic demand

The service unit is determined on the basis of the American Water Works Association (AWWA) standards C700-09, C701-12 and C702-10 recommended maximum rate for continuous duty (flow) of the meter purchased at sale of tap. The service unit, as described here, has for years been in Austin's capital recovery fee ordinances; it is well accepted, and it is extraordinarily easy to calculate at time of collection. In addition, it is based on Uniform Plumbing Code meter size and type criteria counting plumbing fixtures that directly reflect the differences in service consumption between different users. Table 4 shows the latest count of all meters in the system in September 2011 by size. From that list is calculated the number of hypothetical service units installed in the system. That figure is 352,521 service units as shown on Table 4.

Table 4 - Estimate of Service Units in the Austin Water Distribution System

Meter Size	Meters September 2011 *	Service Unit Multiplier **	September 2011 Service Units
5/8"	185,342	1	185,342
3/4"	10,509	1.5	15,764
1"	9,087	2.5	22,718
1 1/4"	10	5	50
1 1/2"	4,063	6.58	26,719
2"	3,693	8.94	33,020
3"	1,221	18.98	23,170
4"	587	27.11	15,916
6"	300	56.07	16,822
8"	29	100.74	2,921
10"	39	250	9,750
12"	1	330	330
16"	0		0
Total	214,881		352,521

^{*} Meter count September 2011 without individual customers in wholesale utilities.

Existing Water System Service Units

To determine the flow equivalent of a water system service unit the weather normalized pumpage is divided by the total number of service units. The weather-normalized water pumpage for FY10 (October 2009-September 2010) is estimated to be 49,967 million gallons (actual FY10 usage was 43,827 million gallons). Therefore the current system-wide flow average is 388 gallons per day per service unit (or 0.27 gpm). Weather normalized pumpage estimates are used to minimize the impact of weather related variation. Water use and pumpage are significantly impacted by weather.

Existing Wastewater System Service Units

The wastewater collection system does not have individual meters for a majority of the customers. In most cases wastewater is billed based on water meter data. Therefore wastewater collection system service units are calculated as a percentage of the water distribution system service units. Based on 2010 census data 96.4% of the AWU water customers are also wastewater customers. It is assumed that there is a direct relationship between the number of

customers and the number of service units so the number of wastewater service units is estimated to be 96.4% of the water distribution system service units or 339.878 service units.

The wastewater collection system service unit flow equivalent is calculated using the weather normalized total system influent treated at the wastewater treatment plants. The FY10 weather normalized total wastewater collection system influent is estimated to be 35,604 Million gallons. Therefore the flow equivalent per wastewater service unit is estimated to be 287 gallons per day per service unit.

Future Water and Wastewater Service Units

The projection of new service units presents a challenge in that it depends on size, type and number of meters sold, while the basis for the forecasts are population and employment converted to water and wastewater flows. The projection estimates of future service units are based on relationships between population, employment, total flow, and per capita flow projections.

Future service unit forecasts are derived from projections of population and employment combined with planned water pumpage forecasts. 2020 water pumpage forecasts are calculated in accordance with The 140 Plan, Austin Water Utility's Conservation Plan, referring to a goal of reducing the per capita pumpage from 156 gpcd in 2010 (weather normalized) to 140 gpcd by 2020. Reducing the per capita pumpage, while increasing the population and employment, results in a reduced number of gallons per service unit. The 2020 water flow per service unit is expected to be reduced proportionally with the per capita flow so the 2020 water flow per service unit is estimated to be 348 gallons per day per service unit.

$$\frac{156 \ gpcd (2010)}{140 \ gpcd (2020)} = \frac{388 \ gallons \ per \ day \ per \ service \ unit (2010)}{348 \ gallons \ per \ day \ per \ service \ unit (2020)}$$

The 2020 total system water pumpage, calculated based on the 140 Plan and the projected population of 1,050,991, is 53,853 Million gallons (leap year). Dividing the total annual pumpage by 348 gallons per day per service unit gives a 2020 estimate of 422,813 service units. For water the 2010 service units are 352,521 and for 2020 they are 422,813, therefore, the 10-year growth increment is 70,292.

Future wastewater service units were calculated in a similar fashion. For wastewater projections the 140 Plan Water Conservation plans have been taken into account through a relatively small reduction in total annual influent flow projections. Many of the water conservation measures in the 140 Plan are aimed at outdoor use so it is not expected to influence the wastewater flows as much as the water pumpage. For these reasons, the wastewater flow per service unit estimate, 287 gallons per service unit per day is assumed to remain constant from 2010 to 2020. Total annual wastewater influent flows for 2020 are projected to be 42,967 Million gallons. 42,967 million gallons generated at an average of 287 gallons per day per service unit yields an estimate of 410,166 wastewater service units in 2020. For wastewater the 2010 service units are 339,878 and for 2020 they are 410,166, therefore, the 10-year growth increment is 70,288.

The spatial summary of the results of this exercise is presented in Table 5. Since the location of growth and the service unit growth increments for water and wastewater essentially track the same, a wastewater version of Table 5 is not included in the report. The population and employment projections of Section III Tables 1 and 2 were converted to average daily water pumpage and then to forecasts of new service units for the entire service area.

Table 5: Projection of Water Service Units

10 Year Service Unit Growth	3,155	685	428	450	2,773	1,314	2,302	1,081	1,099	5,732	2,295	671	961	1,398	2,069	1,190	2,002	28	1,860	3,510	7,224	8,700	4,125	6,406	5,683	3,122	70,292
2020 Total 2020 Service MGD Units	44,009	10,073	10,763	8,054	17,713	20,491	13,680	24,847	15,076	21,178	15,728	16,383	11,672	15,748	16,555	11,783	17,183	5,458	14,578	16,078	13,936	26,185	13,617	14,890	13,556	13,576	422,813
2020 Total MGD	15.3	3.5	3.7	2.8	6.2	7.1	4.8	9.8	5.2	7.4	5.5	5.7	4.1	5.5	2.8	4.1	0.9	1.9	5.1	2.6	4.8	9.1	4.7	5.2	4.7	4.7	147.1
2020 Employment MGD	9.7	1.2	6.0	0.5	1.4	3.4	1.0	2.3	2.2	3.2	2.0	1.9	0.8	9.0	1.2	1.0	1.8	0.8	1.6	1.2	1.0	3.6	2.1	2.9	1.7	0.7	50.7
2020 Residential MGD	5.7	2.3	2.9	2.3	4.8	3.7	3.7	6.4	3.0	4.1	3.5	3.8	3.3	4.8	4.6	3.1	4.2	1.1	3.5	4.4	3.8	5.5	2.6	2.3	3.0	4.0	96.5
2010 Total 2010 Service MGD Units	40,854	6,389	10,335	7,604	14,939	19,177	11,378	23,767	13,977	15,446	13,433	15,712	10,711	14,351	14,486	10,594	15,180	5,401	12,718	12,569	6,712	17,485	9,492	8,484	7,873	10,453	352,521
2010 Total MGD	15.9	3.6	4.0	3.0	5.8	7.4	4.4	9.5	5.4	0.9	5.2	6.1	4.2	5.6	5.6	4.1	5.9	2.1	4.9	4.9	2.6	8.9	3.7	3.3	3.1	4.1	136.9
2010 Employment MGD	10.2	1.2	6.0	0.5	1.2	3.7	0.8	2.3	2.3	2.2	1.9	2.0	0.7	0.5	1.1	1.0	1.7	6.0	1.5	1.1	9.0	2.7	1.8	1.7	1.1	0.5	45.9
2010 Residential MGD	2.6	2.4	3.1	2.5	4.6	3.8	3.7	7.0	3.1	3.8	3.4	4.1	3.4	2.0	4.6	3.1	4.2	1.2	3.5	3.8	2.0	4.1	1.9	1.6	1.9	3.6	91.0
Planning Area Summary	1	2	ĸ	4	2	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	56	Total within Boundary

Description of Impact Fee Boundary for 5-Year Update Adopted TBD (Ord -00)

All jurisdiction boundaries such as county lines, utility companies, municipalities, etc., used in this description are those boundaries as they exist on the date this boundary is adopted and are to be recognized as the most accurate location of the impact fee boundary if another landmark or distance reference creates an ambiguity.

All street and landmark names reflect one of the names shown in commonly available maps of the Austin area. The City of Austin GIS was used for street names in this description. Distances have been scaled from Austin GIS and are intended to approximately place the boundary when landmarks are not available or may be ambiguous. The referenced landmark is to be taken as the accurate location.

When a road, street, etc. is referenced, the boundary is assumed to follow the centerline, and only one side of the road, street, etc. is within the impact fee service area boundary.

Boundaries of any city's jurisdiction (ETJ or city limits), counties, and the service area of another utility, can be found by referring to maps available from those individual entities. The accuracy of those maps is not warranted by the City of Austin or the Austin Water Utility. Taxing authority records also indicate inclusion in the individual entities.

The impact fee service area described below shall not include the certificated service area of another utility providing water and/or wastewater service to its customers under a certificate of convenience and necessity from the Texas Commission on Environmental Quality or its predecessor and successor agency and with whom the City has no wholesale contract to provide water and/or sewer service providing for the payment of impact fees.

The impact fee service area described below shall not include land within the jurisdiction of cities other than Austin; provided, however, that within the jurisdiction of cities other than Austin, land is included within the impact fee service area where it is included in the service area of those utilities with whom the City has wholesale contracts to provide water and/or sewer service providing for the payment of impact fees or where that other city has executed an agreement with Austin for the City to supply retail water and/or wastewater service providing for the payment of impact fees.

Where the impact fee service area is described by the Austin jurisdiction passing through a tract, the entire tract which is partially in the Austin jurisdiction and not in the jurisdiction of another city will be considered to be in the service area.

In addition to land within the impact fee service area described below, the impact fee service area includes land in the service areas of those utilities with whom the City has wholesale contracts to provide water and/or wastewater service providing for the payment of impact fees, to the extent such land has been approved by the City to receive water and/or wastewater service from the City.

Any tract of land which is not entirely within the impact fee service area, as described below or according to the conditions described above, is not considered to be in the impact fee service area.

Accordingly, the City of Austin Impact Fee Service Area Boundary is described as follows:

- 1. Beginning at the junction of the east frontage road of IH-35 South and the common city limits of Austin and Buda, the boundary proceeds along the jurisdiction boundary of Austin in a generally east and south direction (to include the Sunfield #2 MUD) for about 3.0 miles until it turns generally NE.
- 2. Then proceeding in a general NE direction along the common jurisdiction boundary of Austin and Buda for about 0.5 mile to the jurisdiction boundary west of S. Turnersville Road.
- 3. Then proceeding in a general south direction along the common jurisdiction boundary of Austin and Buda west of S. Turnersville Rd., including the electric substation property, for about 1.7 miles to Satterwhite Road.
- 4. Then proceeding in a general east and SE direction along Satterwhite Rd. for about 2.1 miles to the common jurisdiction boundary of Austin and Niederwald near Williamson Road.

- 5. Then proceeding in a general NE direction along the common jurisdiction boundary of Austin and Niederwald for about 0.4 mile to the intersection of the common jurisdiction boundaries of Niederwald and Austin at Williamson Road.
- Then proceeding in a general NE direction along the common jurisdiction boundary of Austin and Creedmoor for about 5.7 miles including sections along Williamson Road, Graef Road, Wright Rd., Palmer Road and near FM 1327 and Carl Road.
- 7. Then proceeding in a general NNE direction along the common jurisdiction boundary of Austin and Creedmoor near Carl Road for about 0.9 mile to its intersection with Old Lockhart Hwy.
- 8. Then proceeding in a general SE direction along the common jurisdiction boundary of Austin and Creedmoor for about 3.9 miles until it intersects with the common jurisdiction boundary of Austin, Creedmoor, and Mustang Ridge and turns generally northeast.
- 9. Then proceeding in a general east direction along the common jurisdiction boundary of Austin and Mustang Ridge for about 3.8 miles to the vicinity of SH130 until it turns generally ESE.
- 10. Then proceeding in a general ESE direction along the jurisdiction boundary of Austin for about 3.8 miles across the common Travis/Bastrop County line to the common jurisdiction boundary of Bastrop and Austin and turns generally NE.
- 11. Then proceeding in a general NNE direction along the jurisdiction boundary of Austin for about 22.2 miles to the centerline of the Colorado River and turns generally NNW.
- 12. Then proceeding in a general NNW direction from the centerline of the Colorado River along the common jurisdiction boundary of Austin and Webberville for about 9.5 to the end of the Webberville jurisdiction on Blake Manor Rd. where it turns NE.
- 13. Then proceeding in a general NE and NW direction along the jurisdiction boundary of Austin following Blake Manor Road for about 1.3 miles and turns generally north.
- 14. Then proceeding in a general north direction along the jurisdiction boundary of Austin for about 5.0 miles to its intersection with Littig Road, which is also the common jurisdiction boundary of Austin and Manor, and continues east along the jurisdiction boundary.
- 15. Then proceeding in a general WNW direction along the jurisdiction boundary of Austin, which is also Littig Road, for about 2.2 miles along the common jurisdiction boundary of Austin and Manor and continues along the Austin jurisdiction boundary.
- 16. Then proceeding in a clockwise direction WNW, SW, NW and NE along the common jurisdiction boundary of Austin and Manor for about 5.6 miles until it intersects with Gregg Manor Road.
- 17. Then proceeding in a general NNW direction along Gregg Manor Rd., which is the jurisdiction boundary of Austin for about 0.4 mile until it intersects Fuchs Grove Road and the Austin jurisdiction.
- 18. Then proceeding in a general NE direction along the jurisdiction boundary of Austin near Fuchs Grove Road for about 3.0 miles until it intersects with Cameron Road.
- 19. Then proceeding in a general NW direction along the jurisdiction boundary of Austin for about 1.9 mile (Cameron Road) until it and the common jurisdiction boundary of Austin and Pflugerville turns generally SW.
- 20. Then proceeding in general SW direction along the common jurisdiction boundary of Austin and Pflugerville (Cameron Road) for about 1.2 mile until it and the common jurisdiction boundary of Austin and Pflugerville turns generally NW.

- 21. Then proceeding in a general NW direction along the common jurisdiction boundary of Pflugerville and Austin for about 2.4 miles until the jurisdiction boundary turns generally SW just east of the intersection of Immanuel Road and Killingsworth Lane.
- 22. Then proceeding in a general SW direction along the common jurisdiction boundary of Pflugerville and Austin (east of Immanuel Road) for about 0.5 mile until the jurisdiction boundary turns generally NW.
- 23. Then proceeding in a general NW direction along the common jurisdiction boundary of Pflugerville and Austin (south of Serenity Drive) for about 0.5 mile until the jurisdiction boundary turns generally NE.
- 24. Then proceeding in a general NE direction along the common jurisdiction boundary of Pflugerville and Austin for about 0.4 mile until the jurisdiction boundary turns generally NW.
- 25. Then proceeding in a general NW direction along the common jurisdiction boundary of Pflugerville and Austin (south of St. Croix Ln.) for about 0.4 mile until the jurisdiction boundary turns generally NE.
- 26. Then proceeding in a general NE direction along the common jurisdiction boundary of Pflugerville and Austin for about 0.1 mile until the jurisdiction boundary turns generally NW.
- 27. Then proceeding in a general NW direction along the common jurisdiction boundary of Pflugerville and Austin for about 0.3 mile until the jurisdiction boundary turns generally NE.
- 28. Then proceeding in a general NE direction along the common jurisdiction boundary of Pflugerville and Austin for about 0.5 mile until it turns generally NW.
- 29. Then proceeding in a general NW direction along the common jurisdiction boundary of Pflugerville and Austin (north of Olympic Drive) for about 0.2 mile until it turns generally SW.
- 30. Then proceeding in a general SW direction along the common jurisdiction boundary of Pflugerville and Austin for about 0.4 mile until it turns generally NW.
- 31. Then proceeding in a general NW direction along the common jurisdiction boundary of Pflugerville and Austin for about 0.4 mile until it turns generally SW.
- 32. Then proceeding in a general SW direction along the common jurisdiction boundary of Pflugerville and Austin for about 0.4 mile until the jurisdiction boundary turns generally NW at Wells Branch Parkway.
- 33. Then proceeding in a general NW direction along the common jurisdiction boundary of Pflugerville and Austin for about 0.3 mile until it turns generally NE.
- 34. Then proceeding in a general NE direction along the common jurisdiction boundary of Pflugerville and Austin for about 0.9 mile until it turns generally NW at or near Old Austin-Pflugerville Road.
- 35. Then proceeding in a general NW direction along the common jurisdiction boundary of Pflugerville and Austin (Old Austin-Pflugerville Road, Pecan St. and FM 1825) for about 0.7 mile until the jurisdiction boundary turns generally NE.
- 36. Then proceeding in a general NE direction along the common jurisdiction boundary of Pflugerville and Austin (also along or near Central Commerce Dr. and West Pflugerville Loop) for about 0.5 mile until the jurisdiction boundary turns generally WNW.
- 37. Then proceeding in a general WNW direction along the common jurisdiction boundary of Pflugerville and Austin for about 0.2 mile until the jurisdiction boundary turns generally west at or near White River Blvd.

- 38. Then proceeding in a general west direction along the common jurisdiction boundary of Pflugerville and Austin (also along or near Grand Avenue Parkway) for about 0.2 mile until the jurisdiction boundary turns generally NNW.
- 39. Then proceeding in general NNW and NNE directions along the common jurisdiction boundary of Pflugerville and Austin for about 0.3 mile until the jurisdiction boundary turns generally NW at or near Royston Lane.
- 40. Then proceeding in a general WNW direction along the common jurisdiction boundary of Pflugerville and Austin (also along or near Royston Lane) for about 0.1 mile until the jurisdiction boundary turns generally NW.
- 41. Then proceeding in a general north direction along the common jurisdiction boundary of Pflugerville and Austin (also along or near Central Commerce Dr.) for about 0.2 mile until the jurisdiction boundary turns generally NW.
- 42. Then proceeding in a general WNW direction along the common jurisdiction boundary of Pflugerville and Austin (also along or near Picadilly Dr.) for about 0.7 mile until the jurisdiction boundary turns generally NW.
- 43. Then proceeding in general NW and west directions along the common jurisdiction boundary of Round Rock and Austin for about 0.4 mile until the jurisdiction boundary turns generally SSW at or near Bratton Lane.
- 44. Then proceeding in a general SSW direction along the common jurisdiction boundary of Round Rock and Austin for about 0.2 mile (along or near Bratton Lane) until the jurisdiction boundary turns generally WNW.
- 45. Then proceeding in a general WNW direction along the common jurisdiction boundary of Round Rock and Austin for about 0.3 mile until it turns generally NNE.
- 46. Then proceeding in a general NNE direction along the common jurisdiction boundary of Round Rock and Austin for about 0.2 mile until it turns generally WNW.
- 47. Then proceeding in a general WNW direction along the common jurisdiction boundary of Round Rock and Austin for about 0.7 mile until it turns generally NW at or near FM 1325.
- 48. Then proceeding in a general NW direction along the common jurisdiction boundary of Round Rock and Austin for about 0.2 mile until it turns generally west in the vicinity of SH 45.
- 49. Then proceeding in a general west direction along the common jurisdiction boundary of Round Rock and Austin for about 1.0 mile until it turns generally SW at or near McNeil Road.
- 50. Then proceeding in a general SW direction along the common jurisdiction boundary of Round Rock and Austin (and also along or near McNeil Road) for less than 0.1 mile until it turns generally WNW.
- 51. Then proceeding in a general WNW direction along the common jurisdiction boundary of Round Rock and Austin for about 0.1 mile until it turns generally NNW.
- 52. Then proceeding in a general NNW direction along the common jurisdiction boundary of Round Rock and Austin for about 2.1 miles until it turns generally SW at or near RM 620.
- 53. Then proceeding in a general SW direction along the common jurisdiction boundary of Round Rock and Austin (and also along or near RM 620) for about 0.8 mile until it turns generally SSE.
- 54. Then proceeding in a general SSE direction along the common jurisdiction boundary of Round Rock and Austin (and also along the boundary of the Brushy Creek MUD) for about 0.8 mile until it turns generally WSW.
- 55. Then proceeding in a general WSW direction along the common jurisdiction boundary of Round Rock and Austin (and also along the boundary of the Brushy Creek MUD) for about 0.6 mile until it turns generally NNW.

- 56. Then proceeding in a general NNW direction along the common jurisdiction boundary of Round Rock and Austin (and also along the boundary of the Brushy Creek MUD) for about 0.3 mile until it turns generally SW at or near RM 620.
- 57. Then proceeding in a general SW direction along the common jurisdiction boundary of Round Rock and Austin (and also along or near RM 620 and the boundary of Brushy Creek MUD) for about 0.6 mile until it turns generally NNW.
- 58. Then proceeding in a general NNW direction along the common jurisdiction boundary of Round Rock and Austin (and also along the boundary of Brushy Creek MUD) for about 0.2 mile until it turns generally WSW.
- 59. Then proceeding in a general WSW direction along the common jurisdiction boundary of Round Rock and Austin (and also along the boundary of Brushy Creek MUD) for about 0.2 mile until it turns generally NNW.
- 60. Then proceeding in a general NNW direction along the common jurisdiction boundary of Round Rock and Austin (and also along the boundary of Brushy Creek MUD) for about 1.1 mile until it turns generally ENE.
- 61. Then proceeding in a general ENE direction along the common jurisdiction boundary of Round Rock and Austin (and also along the boundary of Brushy Creek MUD) for about 0.3 mile until it turns generally NNW.
- 62. Then proceeding in a general NNW direction along the common jurisdiction boundary of Round Rock and Austin (and also along the boundary of Brushy Creek MUD and Fern Bluff MUD) for about 1.3 mile until it turns generally WSW at or near Brushy Creek Road.
- 63. Then proceeding in a general WSW direction along the northern jurisdiction boundary of Austin that also generally meanders alongside South Brushy Creek, for about 5.0 miles until it turns generally SW at or near US 183.
- 64. Then proceeding along US 183 North, also called South Bell Blvd., which marks the common jurisdiction boundary of Cedar Park and Austin for about 0.7 mile until it turns generally WSW.
- 65. Then proceeding in a general WSW direction along the common jurisdiction boundary of Cedar Park and Austin for about 0.8 mile until it turns generally SSE.
- 66. Then proceeding in a general SSE direction along the common jurisdiction boundary of Cedar Park and Austin for about 0.8 mile until it intersects FM 620 North.
- 67. Then proceeding in a general WSW direction along FM 620 North, which marks the common jurisdiction boundary of Cedar Park and Austin for about 1.1 mile until it intersects with FM 2769.
- 68. Then proceeding in general WNW direction along FM 2769, which marks the common jurisdiction boundary of Cedar Park and Austin for about 0.9 mile until it turns generally SW along FM 2769.
- 69. Then proceeding in a general WSW direction along FM 2769 (part of which marks the common jurisdiction boundary of Cedar Park and Austin) for about 2.7 miles until it intersects with Bullick Hollow Rd.
- 70. Then proceeding in a general SSE direction along Bullick Hollow Rd. for about 2.2 miles until it intersects with the Austin Water Utility property and turns SW along the Austin Water Utility property.
- 71. Then proceeding in a general SSE along the Austin Water Utility property for about 0.6 until it intersects with Bullick Hollow Road and continues SW.
- 72. Then proceeding in a general SSE direction along Bullick Hollow Road for about 0.2 mile until it intersects with the Austin Water Utility property and turns south along the Austin Water Utility property.
- 73. Then proceeding in a generally south direction along the Austin Water Utility property for about 1.5 miles until it intersects with FM 620 at the Cortana habitat property.

- 74. Then proceeding in a general SSW direction along the west boundary of Cortana for about 2.7 miles until it turns generally SE.
- 75. Then proceeding in a general SE direction along the west boundary of Cortana for about 0.3 mile until it turns generally SSW.
- 76. Then proceeding in a general SSW direction along the west boundary of Cortana for about 1.5 mile until it intersects the Colorado River.
- 77. Then proceeding in a general WSW direction upstream along the Colorado River, along the border of Commons Ford Park, for about 0.3 mile.
- 78. Then proceeding in a general SW direction upstream along the Colorado River, along the border of the Balfour Tract, for about 1.0 mile.
- 79. Then proceeding in a general SSE and SSW direction along the common jurisdiction boundary of Austin and Bee Caves (which is the border of the Balfour Tract), for about 0.9 mile, until it turns generally SSE.
- 80. Then proceeding in a general SSE direction along the common jurisdiction boundary of Austin and Bee Caves (which is the border of the Balfour Tract), for about 0.7 mile, until it intersects FM 2244.
- 81. Then proceeding in a general east direction along FM 2244 for about 0.1 mile until it intersects the eastern boundary of the Balfour Tract.
- 82. Then proceeding in a general NNE direction along the border of the Balfour Tract for about 1.6 mile until it turns generally SE.
- 83. Then proceeding in a general SE direction along the border of the Balfour Tract and Commons Ford Ranch Park for about 0.2 mile to the south corner of Commons Ford Ranch Park.
- 84. Then proceeding in a general NNE direction along the border of Commons Ford Ranch Park for about 0.3 mile until it turns generally north in an arc.
- 85. Then proceeding in an approximate arc, following the boundary of Commons Ford Ranch Park for about 0.6 mile as it turns from north to NE.
- 86. Then proceeding in a general NNW direction along the border of Commons Ford Ranch Park for about 0.3 mile until it intersects the Colorado River.
- 87. Then proceeding in a general NE direction downstream along the Colorado River for about 1.9 mile.
- 88. Then proceeding in an approximate arc, following the course of the river for about 3.1 miles as it turns from east to south, and then from south to east.
- 89. Then proceeding in a general south direction along the WCID #10 boundary for about 1.7 mile until it intersects FM 2244 in the vicinity of Barton Creek Blvd.
- 90. Then proceeding in a general SW direction along the common WCID #20 and WCID #10 boundary (and along Barton Creek Blvd.) for about 0.4 mile until the district boundary turns generally SE.
- 91. Then proceeding in a general SE direction along the common WCID #20, Camelot WSC and WCID #10 boundary for about 0.5 mile until it turns generally SSW.
- 92. Then proceeding in a general SSW direction along the WCID #10 boundary for about 0.4 mile until its junction with the boundary of Lost Creek MUD and Country Club at or near Barton Creek.

- 93. Then proceeding in a varying direction from southwest to southeast along the western boundary of Lost Creek Country Club for about 2.4 mile until it turns generally NE.
- 94. Then proceeding in a general east direction along the boundary of Lost Creek Country Club, Lost Creek MUD and Barton Creek for about 1.0 mile until it intersects with the west property line of the Gaines Ranch.
- 95. Then proceeding in a general SSW direction along the west property lines of the Barton Creek Wilderness Preserve and Gaines Ranch subdivision to Foster Ranch Road for about 1.5 mile until it turns generally ESE.
- 96. Then proceeding in a general ESE direction along Foster Ranch Road for about 0.2 mile to Travis Country Circle until it turns generally SSW.
- 97. Then proceeding in a general SSW direction along Foster Ranch Rd. for about 0.4 mile to the full purpose Austin city limits at Southwest Parkway until it turns generally WNW.
- 98. Then proceeding in a general WNW direction for about 2.5 miles, along the Austin full purpose city limit at Amara Cove where it turns generally WNW.
- 99. Then proceeding in a general WNW direction for about 0.5 mile across the Austin jurisdiction to the corner of the Barton Creek Habitat Preserve just west of Barton Creek Blvd. until it turns SSW.
- 100. Then proceeding in a general SSW direction along the back lot lines on Barton Creek Blvd., and continues for about 0.5 mile until the boundary intersects the full purpose Austin city limits and turns generally west.
- 101. Then proceeding in a general west and SSW along the full purpose Austin city limits and along the boundary of the Uplands tract for about 0.6 mile until the boundary intersects with Old Bee Caves Road and turns generally west.
- 102. Then proceeding in a general west direction along Old Bee Caves Road for about 0.4 mile to the eastern right of way of Hwy. 71 and turns generally NE.
- 103. Then proceeding in a general NW direction along Hwy. 71, for about 2.1 miles until the boundary intersects with the common jurisdiction boundary of the Village of Bee Cave and City of Austin.
- 104. Then proceeding in a general arc from east to west along the common jurisdiction boundary of the Village of Bee Cave and City of Austin for about 3.5 miles until the jurisdiction intersects with the boundary of the Wong Tract which is also the LCRA CCN #11670 boundary.
- 105. Then proceeding in a general south direction along various portions of the east boundary of the Wong Tract which is also the LCRA CCN #11670 boundary for about 5.7 miles until it turns generally WNW.
- 106. Then proceeding in a general WNW direction along the southern boundary of the Wong Tract which is also the LCRA CCN #11670 boundary for about 0.9 mile until it turns generally NNE.
- 107. Then proceeding in a general NNE direction along the western boundary of the Wong Tract which is also the LCRA CCN #11670 boundary for about 0.1 mile until it turns generally east.
- 108. Then proceeding in a general east direction along the western boundary of the Wong Tract which is also the LCRA CCN #11670 boundary for about 0.5 mile until it turns generally north.
- 109. Then proceeding in a general north direction along the western boundary of the Wong Tract which is also the LCRA CCN #11670 boundary for about 0.5 mile until it turns generally west.
- 110. Then proceeding in a general east direction along the western boundary of the Wong Tract which is also the LCRA CCN #11670 boundary for about 0.5 mile until it intersects the Shield-Ayres City of Austin Conservation property and turns generally south.

- 111. Then proceeding in a general south direction about 0.4 mile along the boundary of the Shield-Ayres City of Austin Conservation Easement property until it turns generally WNW.
- 112. Then proceeding in a general WNW direction about 0.8 mile along the boundary of the Shield-Ayres City of Austin Conservation Easement property until it turns generally SSW.
- 113. Then proceeding in a general SSW and NW direction about 3.4 miles along the southern boundary of the Shield-Ayres Private Conservation Easement property until it intersects the Austin jurisdiction boundary and turns generally SSE.
- 114. Then proceeding in a general SSE and SSW direction 1.9 miles along the Austin jurisdiction until it intersects the county line boundary between Travis and Hays and it turns generally SE.
- 115. Then proceeding in a general SE direction 5.3 miles along the county line boundary between Travis and Hays until it turns generally south at the village limits of Bear Creek.
- 116. Then proceeding in a general south direction along the common city limits of Austin and Bear Creek and the common jurisdiction boundary of Austin and Dripping Springs for about 6.0 miles until it turns generally east.
- 117. Then proceeding in a general east direction along the common jurisdiction boundary of Austin and Dripping Springs for about 1.0 mile until it intersects with the common Austin jurisdiction and Hays jurisdiction.
- 118. Then proceeding in a general east direction along the common jurisdiction boundary of Austin and Hays for about 1.7 mile until it turns generally north.
- 119. Then proceeding in a general north direction along the common jurisdiction boundary of Austin and Hays which follows various subdivision boundaries for about 4.2 miles until it turns generally east.
- 120. Then proceeding in a general east direction along the common jurisdiction boundary of Austin and Hays for about 0.9 mile until it turns generally south.
- 121. The proceeding in a general south direction along the common jurisdiction boundary of Austin and Hays for about 1.4 mile until it turns generally east.
- 122. Then proceeding in a general east and south direction along the common jurisdiction boundary of Austin and Hays for about 1.5 mile until it intersects the common jurisdiction boundary of Austin and Buda and turns generally SE.
- 123. Then proceeding in a general SE direction along the common jurisdiction boundary of Austin and Buda for about 1.8 mile until it turns generally south.
- 124. Then proceeding in a general south direction along the common jurisdiction boundary of Austin and Buda for about 1.2 mile until it turns generally east.
- 125. Then proceeding in a general east direction along the common jurisdiction boundary and city limits of Austin and Buda for about 1.7 miles to the east frontage road of IH-35 South which marks both the end and beginning points of the Impact Fee Service Area Boundary.

IMPACT FEE CAPITAL IMPROVEMENTS PLAN

City of Austin, Texas Austin Water Utility



IMPACT FEE CAPITAL IMPROVEMENTS PLAN TABLE OF CONTENTS

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I. INTRODUCTION

The Texas Impact Fee Act (Chapter 395 of the Texas Local Government Code) provides methods and procedures that Austin must follow to continue to impose its water and wastewater impact fees. This act requires the determination of the costs of capital improvements attributable to new growth for a specified period of time. These costs are the principal building blocks on which the calculation of impact fees is based. The plan that identifies the capital improvements or facility expansions for which impact fees may be assessed is termed the "capital improvements plan". In 1990, the City of Austin achieved compliance with the Texas Impact Fee Act by approving land use assumptions on April 5, 1990 and then approving the impact fee CIP and amendments to the ordinance on June 7, 1990. In subsequent years, the City has maintained compliance with periodic updates. From 1990 to 2001, the Texas Impact Fee Act stipulated that the City is to update its land use assumptions and impact fee CIP at least every three years. Beginning September 1, 2001, the Texas Impact Fee Act stipulates that these updates are to be done at least every five years. The five-year period begins on the day the impact fee CIP is adopted. This document represents the update to the 2007 CIP. Both it and the land use assumptions can be adopted at the same time.

The law outlines a methodology for calculating the cost of particular facilities attributable to new growth based on a defined planning period (not to exceed 10 years). The planning period establishes a time frame in which to evaluate capacity made available for new growth as compared to the demand for that capacity represented by the land use assumptions. One of the keys to the methodology is the expression of both demand and capacity for a particular project in terms of service units. By knowing the number of service units associated with the impact fee projects that are expected to be used during the planning period, the capacity and cost attributable to new growth can readily be determined. Using this cost and the projected total number of new service units within the utility service boundary during the planning period, the "maximum fee per service unit" may be calculated as prescribed by the law. The methodology of the Capital Improvements Plan provides the framework for calculating the maximum allowable impact fee, which is simply the upper limit on the fee pursuant to the law.

The methodologies employed in this Impact Fee CIP comply with the provisions of the Texas Impact Fee Act. This update is as comprehensive as previous updates, extensively reworking the list of qualified CIP projects. It continues to exclude projects that are predominately dedicated to existing users, or that may not be constructed within the tenyear planning period. And in cases where other participants contributed funds, only the City of Austin's shares of the costs were included. In addition, capacity, costs, and service areas were studied on a project by project basis.

The Impact Fee CIP process calculates the maximum allowable fees. This calculation conforms to the state requirement for the Impact Fee CIP to include a plan for awarding a credit for the portion of water and wastewater utility service revenues generated by new service units connected during the program period that is used for the payment of improvements, including the payment of debt, that are included in the Impact Fee CIP. Note that, beginning September 1, 2001 Texas State Law required this type of revenue credit method. In previous City of Austin Impact Fee updates, the alternate credit method equal to 50 percent of the total projected cost of implementing the capital improvements plan was used. Discussion of a new rate revenue credit method applied in this Impact Fee 5-year update can be found in Section VII.

II. FACILITY PLANNING -- DEFINING THE LEVEL OF CAPACITY USAGE AND RESERVE CAPACITY NEEDS

To provide an overall comparison of the capacity and costs associated with new growth projects versus those associated with existing needs, the recent Capital Improvements Program projects of the Austin Water Utility have been divided into the three groups. Appendices C and D include those projects from the FY 2012/2016 CIP built in prior years or scheduled to be built in the next few years that are targeted to benefit existing users and to meet stricter safety, efficiency, environmental or regulatory standards. Tables 1 and 2 list those water and wastewater impact fees projects that have been built or plan to be built in the future and that will largely benefit new Utility customers during the next ten years. Table 3 is composed of projects that are anticipated to be built late in the ten-year planning period or beyond, and thus are not included in the group of projects on which impact fee calculations are based. Projects removed from the project listing adopted in the 2007 Impact Fee CIP are shown on Table 4. The Impact Fee CIP

projects along with major utility facilities are shown on Water Map 1, 1A, 1B, 1C, 1D, 1E, following Table 1 and Wastewater Map 2, 2A, 2B, 2C, 2D and 2E following Table 2.

A comparison of the dollar value of projects in the Appendices and Tables 1, 2, and 3 gives an indication of the relative investment in capacity to serve existing and future needs (as defined by the law) as a function of the Capital Improvements Programs of 1980s. Some of the projects in Appendices C and D will certainly benefit future users; however, in order to take a conservative approach to ensuring full compliance with the law, they will not be considered impact fee projects when they are made necessary by environmental and regulatory requirements. Other projects in Appendices C and D will also benefit future users as well as existing users (annexation areas, highway utility relocations, and certain trunk lines internal to the system), but when their benefit to existing users outweighs the benefit to future users, they are not included in Tables 1 and 2.

Analysis of the level of existing usage of capacity in the case of water and wastewater treatment plants is a straightforward examination of flow data. Flow data for pipes in the water distribution system and wastewater collection system is generally not available, so system calculations and hydraulic models are used to help estimate utilization levels of pipes under selected demand conditions (existing or future). The summary tables at the end of this document, Tables 8 and 9, include an estimate of the existing users and the total capacity of impact fee projects expressed in service units for water pressure zones and wastewater collection areas. Inspection of these figures gives an indication of the level of existing capacity usage and the reserve capacity associated with the facilities.

In sizing and timing new facilities, both population projections (the Land Use Assumptions) and historical flow data are used in predicting demands (flows) associated with future growth. The Utility's CIP planning employs cost-effectiveness analysis to identify the best infrastructure timing and sizing investment alternatives. The principle factors weighed in this analysis are:

- brainstorming of alternatives
- capital costs
- operation and maintenance costs
- time value of money
- economy of scale
- environmental and other key non-pecuniary impacts

The Utility seeks to maintain a prudent, cost-effective amount of reserve capacity in the water and wastewater system in order to carry out its mission of providing safe, reliable service. In this way, the commitments that the City makes to its customers in the form of tap sales, service extension requests, developer contracts, and MUD and other district contracts, can be fulfilled in a manner that allows all parties in the development process to plan efficiently. The impact fee methodology prescribed by state statute serves the function of quantifying the cost of the reserve capacity that constitutes the Utility's plan for serving new customers for a ten-year planning horizon.

This Impact Fee update is consistent with a number of core principles of the City's recently approved Imagine Austin comprehensive plan, including:

- Grow as a compact and connected city
- Develop as an affordable and healthy community
- Sustainably manage water and other environmental resources

Imagine Austin's planning framework and guidelines are part of Austin Water Utility's planning processes and are integrated into the development of the Utility's CIP. Additionally, this Impact Fee update incorporates the City's water conservation goal of reducing per capita water pumpage to 140 gpcd by 2020.

Table 1 Water Impact Fee Projects (Costs in 1000's)

		(Costs in 1000's)				
Subproject			Pressure	Completion	Cost to	Interest
/ Map ID	Project Description	Size	Zone	Date	Build	Cost
City Construction	tion					
3889.001	CANYON CREEK 30	30"	Northwest C	1987	1,231	1,311
5038.001	part NWC Pump Station (and tank)	11.2 MGD, 1.5 MG	Northwest C	2013	10,860	11,566
5038.001	part NWC Pump Station (and tank)	11.2 MGD, 1.5 MG	Northwest C	2013	1,331	0
5038.001	group NWC Pump Station (and tank) group	11.2 MGD, 1.5 MG	Northwest C	2013	12,191	11,566
5038.002	Anderson Mill/RR 620 Transmission Main	24"/36"	Northwest C	2012	4,581	4,879
2032.001	Four Points Reservoir	8mg	Northwest C	1988	5,194	5,532
2006.003	WEST BULL CREEK P.S. UPGRADES	5.8-B 10.4-C	Northwest C	2007	968	954
793.001	Anderson Mill Transmission Main III	16"	Northwest B	2000	4,736	5,044
793.002	Anderson Mill Transmission Main II-A & IV	24"	Northwest B	2000	2,085	2,221
1086.001	part Jollyville Transmission Main Ph. IIA & III	48"	Northwest B	2001	8,138	8,667
1086.002	part Jollyville Transmission Main Phase IIB	48"	Northwest B	2001	1,135	1,209
	group JOLLYVILLE TM group	48"	Northwest B	2001	9,273	9,876
3897.001	JOLLYVILLE PUMP STATION	45mgd	Northwest B	1989	6,160	6,560
3616.001	ANDERSON MILL RESERVOIR	3 mg	Northwest B	1989	4,148	4,418
2014.001	NORTHWEST A PRES ZONE RES Martin total	34 mg	Northwest A	1988	8,361	8,904
4758.002	16 in FM 1825 Interconnect	16"	Northwest A	2006	803	0
4814.002	HOWARD LANE EAST TM	36"	Northwest A	1998	4,765	5,075
4814.003	part HOWARD LN PUMP STATION & TM sizing >	54/42/36/24	Northwest A/B/C	2001	5,193	5,531
4814.003	part HOWARD LANE PRESSURE ZONE IMP (PS)	43/65 mgd	Northwest A/B/C	2001	10,000	10,650
4814.004	part HOWARD LANE PRESSURE ZONE IMPR (PS)	43/65 mgd	Northwest A/B/C	2001	1,922	0
	group HOWARD LANE PUMP STATION & TM group	43/65 mgd	Northwest A/B/C	2001	17,115	16,181
6935.016	Jollyville NWA Transmission Main (Plant 4)	84"	Northwest A/B/C	2014	110,542	117,727
2028.001	Martin Hill Transmission Main	54"	Northwest A/B/C	2016	19,752	21,036
2939.001	DESSAU RD TRANSMISSION MAIN	16"	North	1990	934	995
2090.005	DECKER LAKE TM/JOHNNY MORRIS	16/24"	North	1999	462	492
6935.021	Austin Film Society	16"	North	2011	1,021	1,087
6935.035	Howard Lane Extension	16"	North	2017	2,200	2,343
6935.003	Boyce Lane Transmission Main	24"	North	2015	7,130	7,593
3779.001	NORTHTOWN TRANS MAIN	48"	North	1988	610	650
2088.001		48"	North	1989	3,593	3,827
4814.001	NORTH/EAST AREA WATER IMP. Samsung	48"	North	1999	1,718	1,830
3783.001	NE AUSTIN PUMPING STATION	55 mgd	North	1989	1,974	2,102
844.001	NE AUSTIN TRANS MAIN	54/48"	North	1997	6,657	7,090

Table 1 Water Impact Fee Projects (Costs in 1000's)

		(Costs in 1000's)				
Subproject			Pressure	Completion	Cost to	Interest
/ Map ID	Project Description	Size	Zone	Date	Build	Cost
City Construction	tion					
3620.001	US 290 EAST RESERVOIR	12MG	Central	1987	2,144	2,283
6935.018	FM969 Decker to SH 130	24"	Central	2016	3,700	3,941
3618.001	East Austin TRANS MAIN	99	Central	1989	8,203	8,736
2937.001	SPRINGDALE ROAD 48" TM	48"	Central	1998	6,118	6,516
1168.004	part ULLRICH TO GREEN TM	72"	Central	2001	25,987	27,676
1168.003	part CENTRAL AREA WATER IMP. Engineering	72/48"	Central	2001	4,461	4,751
	group ULLRICH TO GREEN TM group	72"	Central	2001	30,448	32,427
3761.001	part GREEN WTP TRANS. MAIN SOUTH	.09	Central South	1989	1,572	1,674
3612.001	part GREEN WTP TRANSMISSION MAIN south funding	.09	Central South	1989	4,049	4,312
	group GREEN WTP TRANS MAIN SOUTH group	.09	Central South	1989	5,621	5,986
3769.001	BLUFF SPRINGS TRANS MAIN II	36"	Central South	1988	1,913	2,037
3626.001	BLUFF SPRINGS RESERVOIR PILOT KNOB	10 mg	Central South	1989	2,139	2,278
3617.001	part BLUFF SPRINGS TRANS MAIN PILOT KNOB	48"	Central South	1992	7,466	7,951
3898.001	part PILOT KNOB TRANS MAIN SECIII	48"	Central South	1992	1,805	1,922
3901.001	part BURLESON RD TRANSMISSION MAIN	48"	Central South	1992	478	209
	group PILOT KNOB TRANS MAIN group	48"	Central South	1992	9,749	10,383
3628.001	SOUTH CENTRAL TRANS MAIN	48"	Central South	1987	4,578	4,876
3871.001	E BEN WHITE BLVD TRANS MAIN	24"	Central South	1993	3,506	3,734
2097.001		36"	Central South	2010	4,996	5,321
2963.001	MOORE'S CRSG RESERVOIR & TRANS	36"	Central South	1990	2,402	2,558
3766.001	SOUTH IH 35 TRANSMISSION MAIN	36"	South	1988	2,812	2,995
3876.001	SLAUGHTER LN TRANSMISSION MAIN	36/30/24"	South	1992	2,673	2,847
6937.005	part S I-35, Pilot Knob Pump Station	24 MGD	South	2012	10,324	10,995
6937.003	part So. IH35 W/WW Infrastructure Improvs PMC	PMC	South	2012	8,576	9,133
6937.001	part IH 35 South Transmission Main	36"	South	2010	17	18
900'2869	part S I-35, Segment 21 - Pilot Knob Reservoir 48-inch Water Main		South	2011	089	724
6937.008	part S I-35, Segment 6 - I 35 South of Onion Creek, 36-Inch Water Main		South	2011	1,496	1,593
6937.009	part S I-35, Seg. 13/14 - Pleasant Valley Ext., Rinard Crk to E Slaughter Lr 42"	hter Lr 42"	South	2012	1,905	2,029
6937.010	part S I-35, Segment 17/18/19 - Slaughter Ln Ext to Thaxton, 48-inch Wate 48"	. Wate 48"	South	2011	3,212	3,421
6937.011	part S I-35, Segment 4 - I 35, N of FM 1626 to Onion Creek, 36-Inch Water 36"	Water 36"	South	2010	1,361	1,449
6937.012	part S I-35, Segment 7 - I 35, north of FM 1327, 42-Inch Water Main	42"	South	2011	2,058	2,192
6937.013	part S I-35, Segment 9.0 - FM 1327, I 35 to Bradshaw Rd, 42-Inch Water M 42"	ater M 42"	South	2011	2,242	2,388

Table 1 Water Impact Fee Projects (Costs in 1000's)

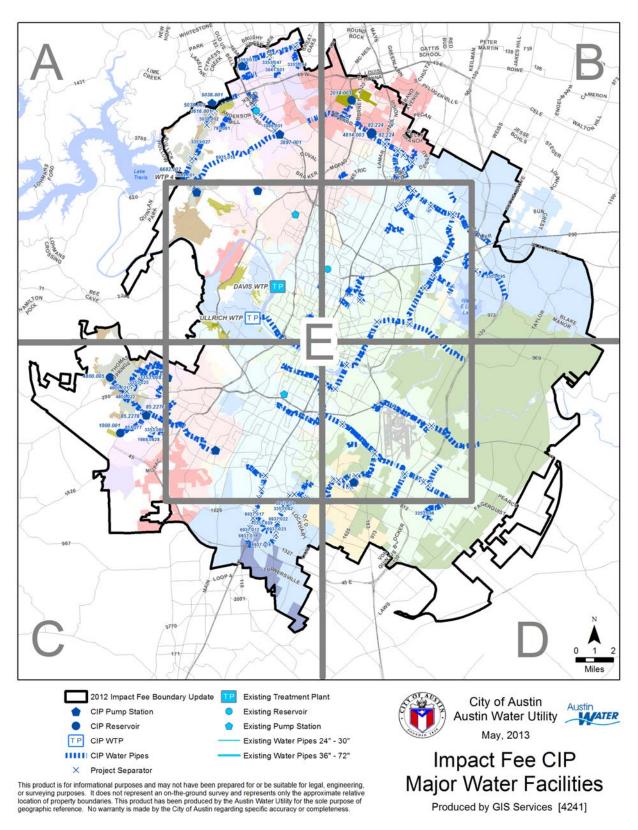
Poioradio		(COSIS III 1000S)	Droceliro	Completion	4	104010
/ Map ID	Project Description	Size	Zone	Date	Build	Cost
City Construction						
6937.014	part S I-35, Segment 9.1 - FM 1327 to Bradshaw Road north of FM 1327	42"	South	2012	2,810	2,993
6937.015	part S I-35, Seg. 18/19 - Slaughter Ln Ext., Marble Crk to Thaxton Rd, 48-Ir 48"	r 48"	South	2010	317	338
6937.016	part S I-35, Seg. 20.1/21 - Wm Cannon from McKinney Falls to Pilot Knob 48"	0.48"	South	2011	3,247	3,458
6937.017	part S I-35, Seg. 2/5 - I 35 Slaughter and Onion Crk Crossings, 36-In Water 36"	r 36"	South	2012	7,950	8,467
6937.018	part S I-35, Segment 8 - I 35 Crossing North of FM 1327, 42-In Water Main 42"	. 42"	South	2011	1,614	1,719
6937.019	part S I-35, Segment 20.0 - McKinney Falls Pkwy, Thaxton to Wm Cannon 48"	1 48"	South	2011	3,247	3,458
6937.020	part S I-35, Segment 15 - Goodnight Ranch Ph I, 48-Inch Water Main	48"	South	2010	1,011	1,077
6937.021	part S I-35, Segment 1 - I 35 Slaughter Ln to Slaughter Crk, 36-In Water Mr 36"	e 36"	South	2011	2,863	3,049
6937.022	part S I-35, Seg. 11/12 - S. Pleasant Val. Ext. at Legends Way, 42-In Wate 42"	€ 42"	South	2011	1,953	2,080
6937.023	part S I-35, Segment10 - Bradshaw Rd, S of River Plantation Dr, 42-In Watt 42"	€ 42"	South	2011	1,770	1,885
6937.024	part S I-35, Segment 16 - Goodnight Ranch Phase II, 48-Inch Water Main	48"	South	2010	1,366	1,455
6937.030	part S. IH 35, E. Slaughter ROW acquisition	site Seg. 17/18/19	South	2010	496	528
	group S F35 TM and PS Group	36"/42"/48", 24 mgd PS	South	2012	60,515	64,448
3825.001		16"	Southwest B	1992	504	537
3859.001	WINDMILL RUN SW B TRANS MAIN	36"	Southwest B	1990	1,962	2,090
4800.010	SWC Pressure Zone Pump Station	8.2 mgd	Southwest C	2006	5,862	6,318
4800.005	Circleville Reservoir	1.25 mg	Southwest C	2001	2,347	0
4800.022	SWC Pressure Zone TM Phase 1	30"	Southwest C	2007	5,546	5,906
4800.021	SWC PRESSURE ZONE TM PHASE 2	30"	Southwest C	2007	2,104	2,241
5335.001	part Ullrich WTP 160 MGD Expansion	67 mgd exp	Ullrich Service	2007	109,136	116,230
5335.002	part Ullrich WTP 160 MGD Expansion Contract 1 - LSPS	67 mgd exp	Ullrich Service	2006	2,567	2,734
	group ULLRICH WTP 100 to 167 mgd group	67 mgd exp	Ullrich Service	2007	111,703	118,964
6683.019	part WTP4 CMAR	50 mad	Plant 4 Service	2014	247.255	263.327
6683.019	part WTP4 CMAR	50 mad	Plant 4 Service	2014	26.451	. 0
6683.002	part Water Treatment Plant No. 4	50 mgd	Plant 4 Service	2014	98,386	104,781
6683.002	part Water Treatment Plant No. 4	50 mgd	Plant 4 Service	2014	2,073	0
6683.014	part WTP4 RW Pump Station Facility	50 mgd	Plant 4 Service	2014	7,243	7,714
6683.013	part WTP4 Raw Water Pump Station Excavation and Stormwater Facilities	; 50 mgd	Plant 4 Service	2014	3,438	3,661
6683.010	part WTP 4-Plant Site Storm Water Facilities	50 mgd	Plant 4 Service	2014	3,327	3,543
6083.008	part WTP #4-Environmental Commissioning	50 mgd	Plant 4 Service	2014	2,839	3,024
6683.020	part WTP4 Bullick Hollow Roadway Improvements	50 mgd	Plant 4 Service	2011	1,081	1,151
6683.018	part Value Engineering	50 mgd	Plant 4 Service	2014	574	611
6683.007	part Water Treatment Plant 4 - Property Fencing	50 mgd	Plant 4 Service	2009	328	382
	WTP #4 plant total cost (see also SPID 6935.016)	50 mgd		2014	393,026	388,195
	part Adjustment to upsized components for 50 mgd unit cost	50 mgd	4	2014	-14,130	-15,048
	group WTP 4 Adjusted cost for fee calculation	50 mgd	Plant 4 Service	2014	378,896	373,147
8702.003	Shaw Lane Sludge Facility Improvements	60 acre, 34 years	Entire System	2013	4,043	4,306

Table 1 Water Impact Fee Projects (Costs in 1000's)

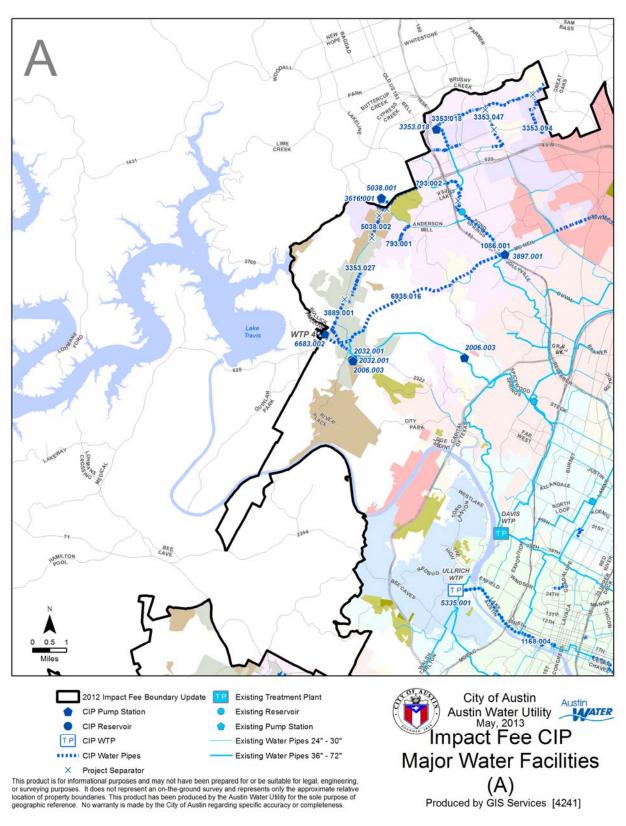
		(Costs In 1000's)				
Subproject / Map ID	Project Description	Size	Pressure Zone	Completion Date	Cost to Build	Interest Cost
Developer Re	Developer Reimbursements 3353 037 CANNON CBEEK Subdivision Doimbursement		C +sometroN	2002	5	1 170
3353.027	AMAX Self-Storage Reimblusement	24"	Northwest C	2002	1, 100	210
	orong Developer Deimbursements Northwest C = 2	- 70	CtamptoN	2007	1 260	1 382
	group Developer Nettriburseringths Nottriwest C = Z	+5		7007	1,203	700,1
3041.001	DAVIS SPRINGS SERVICE EXTENSION	24"	Northwest B	1997	941	0
3353.018	AVERY RANCH SERVICE EXTENSION	24/36/48" 3MG tank	Northwest B	2012	6,769	10,404
3353.018	AVERY RANCH SERVICE EXTENSION	24/36/48" 3MG tank	Northwest B	2012	3,756	0
3353.038	STONE HEDGE Subdivision	24"	Northwest B	2011	8.931	9.512
3353.094	Pearson Ranch-RRISD SFR 2869 and 2870	24"	Northwest B	2013	2,670	i of
	group Developer Reimbursements Northwest B = 4	36"	Northwest B	2012	26,067	19,916
3353.019	IBM TIVOLI	16"	Northwest A	2002	341	0
3353.032	HOWARD LANE SERVICE EXTENSION	24/16"	Northwest A	2000	220	0
3353.065	Schultz 45 Acre Tract WaterWells Branch Commerce Park	24"	Northwest A	2012	332	354
	group Developer Reimbursements Northwest A = 3	24"	Northwest A	2012	893	354
3353.009	DELL WATER	24"	North	1998	1,769	0
3353.042	PARMER PARK TM REIMBURSEMENT	24"	North	2002	871	928
3353.033	PIONEER CROSSING, ph2, ser1825	24"	North	2004	1.243	1.324
3353.007	Jourdan's Crossing Service Extension	24"	North	2001	282	0
2090.003	DECKER LAKE 24" TM (WSER 1745)	24"	North	1996	1.148	1.223
5028.002	RMMA Reimbursement	16/24"	North	2007	1,119	1,192
5028.004	RMMA Reimbursement	16"	North	2008	6,106	6,503
5028.006	RMMA Reimbursement	30"	North	2011	5,692	6,062
5815.002	Triangle - Infrastructure Incentives	16/24"	North	2005	413	440
3353.099	Pioneer Hill	16"	North	2012	430	458
3353.028	Wild Horse Ranch	24/36"	North	2010	2,414	2,571
	group Developer Reimbursements North = 11	16/24/30/36 "	North	2012	21,487	20,699
3353.095	Whisper Valley-Indian Hills CRA north line	24"	North	2015-2018	0	3,060
3353.049	Robertson Hill Development	16"	Central	2008	643	685
3353.069	University Neighborhood Overlay District	24"	Central	2007	1,828	1,947
	group Developer Reimbursements North Central = 2	24"	Central	2008	2,471	2,632
3353.095	Whisper Valley-Indian Hills CRA central line	48"	Central	2015-2018	2,000	20,477
3353.052	Del Valle Junior High Number 2	24"	Central South	2005	349	372
3353.059	PEARCE LANE TRACT	36"	Central South	2004	2,598	2,767
3353.073	Watersedge PUD	24"	Central South	2013	5,150	5,485
3353.096	Formula One United States	24/36"	Central South	2012	5,380	5,730
3353.100	71 Commercial	24"	Central South	2012	1,098	1,169
	group Developer Reimbursements South Central = 5	36"	Central South	2013	14,575	15,522

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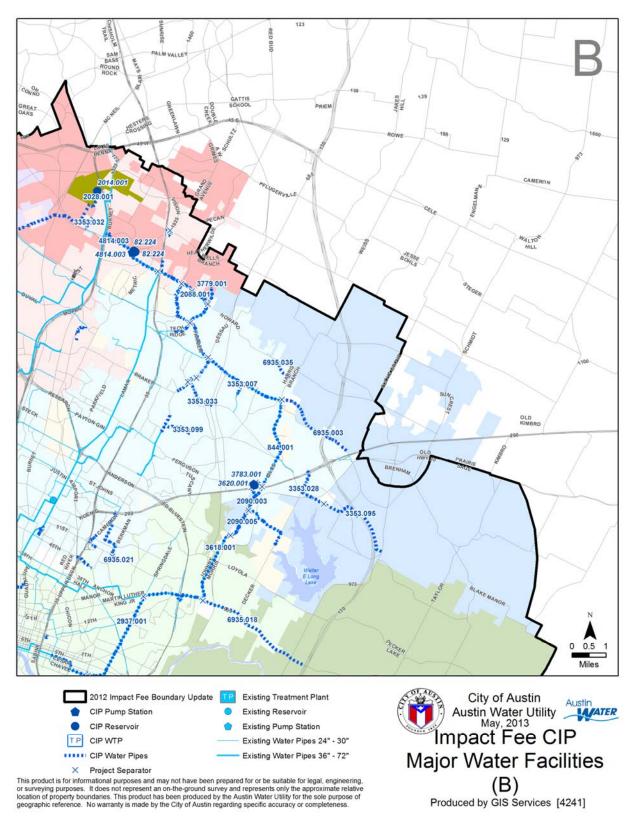
South 2009 1,240 1,321 24,38° South 2004 1,201 1,817 1,935 24,38° South 2016 3,776 4,021 36° South 2016 2016 3,776 4,021 36° South 2016 7,717 4,021 36° 16° Southwest B 2018 2,094 2,230 0 16° Southwest B 2018 2,946 2,230 0 2,439 0 16° Southwest A/B/C 1988 1,130 1,201 1
24,76 South 2009 1,240 24,76 South 2010 884 24,76 South 2011 1817 16/24" South 2015 7,717 16" Southwest B 2018 2,094 16" Southwest B 2018 2,046 16" Southwest B 2018 2,946 16" Southwest B 2018 2,946 22 mgd Southwest B 1988 2,290 36-inch Southwest B 1988 1,130 10 mg Southwest B 1988 1,903 10 mg Southwest A/B/C 1988 1,903 10 mg Southwest A/B/C 1988 1,903 10 mg Southwest A/B/C 1987 1,016 48-inch Southwest A/B/C 1987 4,501 6 mg Southwest A/B/C 1987 4,501 6 mg North 1987 3,824 20 mg North 1987 3,824 10 mg North 1987 1,016 20 mg North 1987 1,016 20 mg North 1987 1,011 20 mg North 1987 <t< th=""></t<>
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24.36" South 2010 884 24" South 2015 1,817 16.24" South 2015 3,776 36" Southwest B 2018 2,094 16" Southwest B 2018 2,094 16" Southwest B 2018 2,946 ment SW B&C 14 mgd PS Southwest B&C 2002 3,254 2.1 mgd PS, 16" Southwest B 1988 2,290 22 mgd Southwest B 1988 1,130 24" Southwest B 2018 2,946 36-inch Southwest B 1988 1,130 Southwest A/B/C 1988 1,130 Southwest A/B/C 1988 1,130 Southwest A/B/C 1987 2,20 48" Southwest A/B/C 1987 1,256 MUD 48-inch Southwest A/B/C 1987 1,256 R-MUD 6 mgd Southwest A/B/C 1987 1,256 R-MUD 6 mgd Southwest A/B/C 1987 1,256 R-MUD 6 mg North 1987 3,824 Total 20 mg North 1987 3,824
24" South South 2011 1,817 16/24" South South 2015 3,776 36" Southwest B Southwest A/B/C 1988 1,303 10 mg Southwest A/B/C 1987 2,200 56 mgd Southwest A/B/C 1987 1,016 R-MUD 8-sinch Southwest A/B/C 1987 4,501 R-MUD 6 mg North 1987 3,824 Totals 10 m1,155
16/24" South South South 2015 3,776 16" Southwest B 16" 2018 2,094 16" Southwest B 2018 2,094 2,094 16" Southwest B 2018 2018 2,094 16" Southwest B 2018 2002 3,254 16" Southwest B 2018 2003 1,680 21 mgd PS, 16" Southwest B 1988 2,093 1,680 10 mg Southwest B 1988 1,130 2,200 10 mg Southwest B 1988 1,130 1,130 19 Southwest A/B/C 1988 1,97 10 mg Southwest A/B/C 1987 1,016 AUD 48-inch Southwest A/B/C 1987 1,016 AUD 48-inch Southwest A/B/C 1987 1,016 AUD 48-inch Southwest A/B/C 1987 1,011,155 R-MUD 6 mg Southwest A/B/C 1987 1,011,155
16" Southwest B 2015 7,717 16" Southwest B 2018 2,094 16" Southwest B 2018 2,946 nent SW B&C 14 mgd PS Southwest B 2018 2,946 nent SW B&C 14 mgd PS Southwest B 2002 3,254 2 mgd Southwest A/B/C 1988 2,290 3 mgd Southwest B 1988 1,130 1 mg Southwest B 1988 1,313 1 mg Southwest B 1988 1,313 1 mg Southwest A/B/C 1988 1,313 1 mg Southwest A/B/C 1987 1,319 1 mg Southwest A/B/C 1987 1,016 AluD 48-inch Southwest A/B/C 1987 4,501 R-MUD 6 mg Southwest A/B/C 1987 4,501 R-MUD 6 mg North 1987 3,824 Totals 20 mg North 1011,155
uthwest B Southwest B Southwest B Southwest B Southwest B Southwest B Southwest B Southwest B Southwest B Southwest B Southwest C Southwest C Southwest B Southwest A/B/C Sout
uthwest B Southwest B 2018 852 nent SW B&C 14 mgd PS Southwest B 2018 2,346 nent SW B&C 14 mgd PS Southwest B&C 2002 3,254 2.1 mgd PS, 16" Southwest C 2003 1,680 #3-MUD 36-inch Southwest B 1988 2,290 Southwest B 1988 1,30 Ig 10 mg South 1988 1,819 Ig 10 mg Southwest A/B/C 1987 2,290 AB-inch Southwest A/B/C 1987 1,016 AB-inch Southwest A/B/C 1987 4,501 R-MUD 48-inch Southwest A/B/C 1987 4,501 R-MUD 6 mg Southwest A/B/C 1987 4,501 R-MUD 50 mg North 1,987 3,824 Againch 20 mg North 1,987 3,824
uthwest B 16" Southwest B 2.946 nent SW B&C 14 mgd PS Southwest B&C 2002 3,254 nent SW B&C 14 mgd PS, 16" Southwest C 2003 1,680 #3-MUD 10 mgd Southwest AB/C 1988 2,290 #3-MUD 10 mg Southwest B 1988 1,973 10 mg Southwest A/B/C 1988 1,903 10 mg Southwest A/B/C 1988 1,903 10 mg Southwest A/B/C 1987 2.20 AB-inch Southwest A/B/C 1987 4,501 R-MUD Southwest A/B/C 1987 3,224 R-MUD Southwest A/B/C 1987 3,234 R-MUD 1987 3,11,256
ment SW B&C 14 mgd PS Southwest B&C 2002 3,254 #3-MUD 2.1 mgd PS, 16" Southwest C 2003 1,680 #3-MUD 10 mg Southwest B 1988 2,290 SwB 1988 1,130 SwB 1988 1,130 SwB 1988 1,913 Ig 10 mg Southwest A/B/C 1987 2,290 MUD 48" Southwest A/B/C 1987 1,016 R-MUD 48-inch Southwest A/B/C 1987 4,501 R-MUD 6 mg North 1987 4,501 R-MUD 10tals 1,011,155 1,011,155
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#3-MUD 22 mgd Southwest B Southwest B Southwest B 1988 1988 1,130 2,290 #3-MUD 16-inch 2 mg SWB 1988 1,130 1,130 SWB 1988 1,130 1,903 1,903 Southwest A/B/C 1987 1,819 220 AUD 48-inch 3 couthwest A/B/C 5 outhwest A/B/C 6 outhwest A/B/C 7 outhwest A
#3-MUD
1 G-inch SWB 1988 197 1
I 2 mg Swb 1988 1,903 ig 10 mg Southwest A/B/C 1987 1,819 48" Southwest A/B/C 1987 5,758 AUD 48-inch Southwest A/B/C 1987 4,501 R-MUD 6 mg Southwest A/B/C 1987 4,501 R-MUD 6 mg Southwest A/B/C 1987 1,256 total 20 mg North 1987 3,824 Total 7,011,155
right 10 mg Southwest A/B/C 1988 1,819 48" Southwest A/B/C 1987 220 AUD 48-inch Southwest A/B/C 1987 1,016 R-MUD 48-inch Southwest A/B/C 1987 4,501 R-MUD 6 mg Southwest A/B/C 1987 1,256 total 20 mg North 1987 3,824
48" Southwest A/B/C 1987 220 56 mgd Southwest A/B/C 1988 5,758 48-inch Southwest A/B/C 1987 1,016 8-MUD 6 mg Southwest A/B/C 1987 1,256 total 20 mg North 1987 3,824
56 mgd Southwest A/B/C 1988 5,758 ANUD 48-inch Southwest A/B/C 1987 4,501 R-MUD 6 mg Southwest A/B/C 1987 4,501 R-MUD 6 mg 1,256 total 20 mg North 1987 3,824 Totals 1,011,155
AR-MUD 48-inch abinch Southwest A/B/C
al 20 mg North Totals 1,011,155
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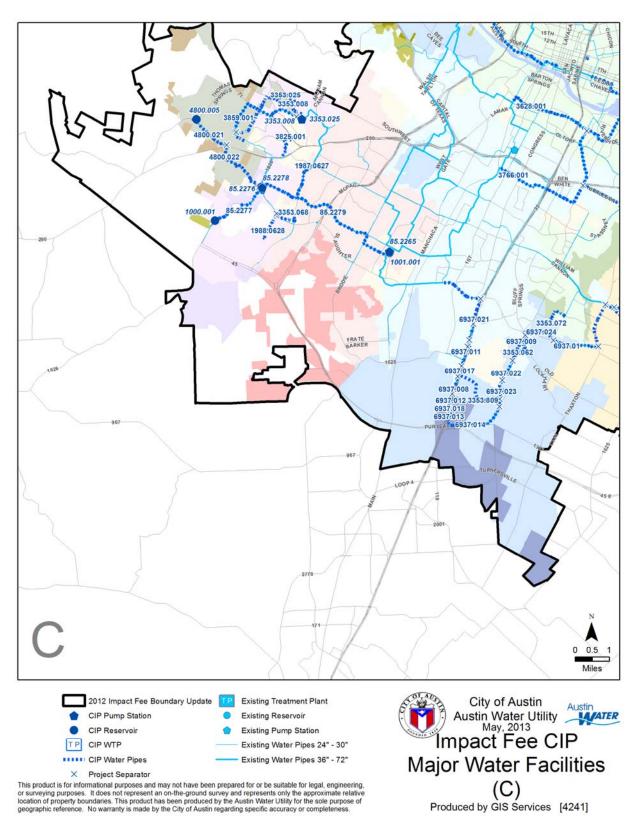
MAP 1



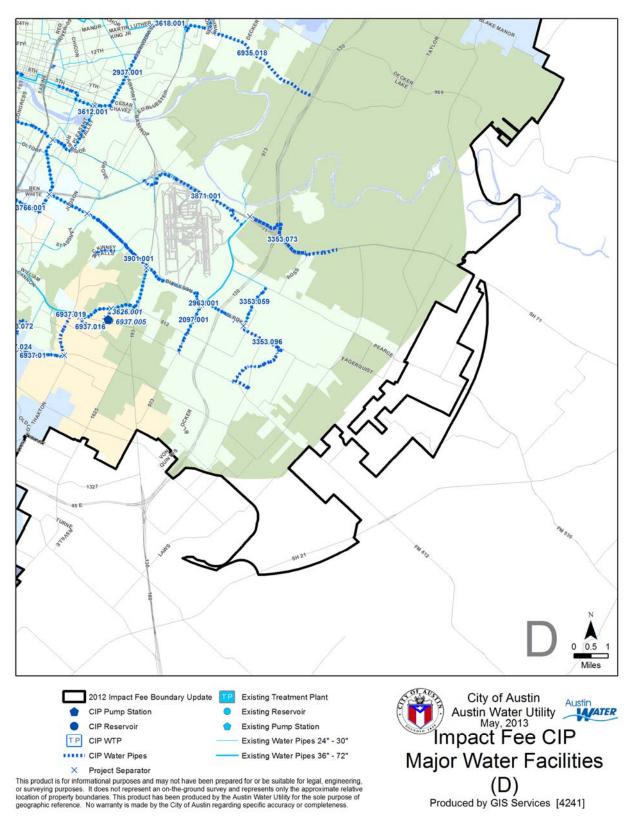
MAP 1A



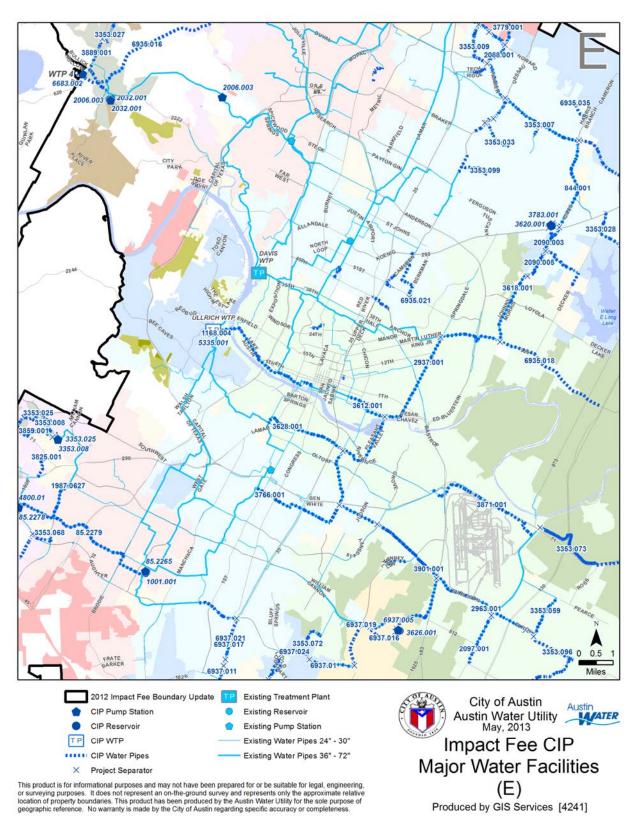
MAP 1B



MAP 1C



MAP 1D



MAP 1E

Table 2 Wastewater Impact Fee Projects (Costs in 1000s)

SubProject / Map ID	(Costs in 1000s) Project Description	Size	Drainage Basin	Completion Date	Cost to Build	Interest Cost
City Construction						
3168.037	Pearce Lane Lift Station Upgrade (900 to 1800 gpm)	900 gpm exp	Upper Dry Creek	2012	550	0
6937.003	part So. IH35 W/WW Infrastructure Improvs PMC	PMC	Upper Onion	2012	3,992	4,251
6937.003	part So. IH35 W/WW Infrastructure Improvs PMC	PMC	Upper Onion	2012	644	0
6937.025	part S I-35, Onion Creek Wastewater Interceptor - Rinard to Slaughter (N Tunnel)	54"	Upper Onion	2012	13,355	14,223
6937.026	part S I-35, Onion Creek Golf Course WW Int - I 35 to Rinard (South Tunnel)	42"	Upper Onion	2012	11,473	12,219
6937.027	part S I-35, Onion Creek Wastewater Tie-in Line - Phase 1	24"	Upper Onion	2012	2,508	2,671
	group S I-35, Onion Creek Wastewater Interceptor - group	54"	Upper Onion	2012	31,972	33,364
3353.062	part Zachary Scott Tract (both city const. and dev design)	36"	Rinard	2010	2,997	6,387
3353.062	part Zachary Scott Tract (both city const. and dev design)	36"	Rinard	2010	2,310	0
	group Zachary Scott Tract (both city const. and dev design) group				8,307	6,387
4197.001	part ONION CRK INTRCPTR	54"	Onion, Middle	1986	1,965	2,093
4292.001	part ONION CK INTER EXIST to BOGGY CK	54"	Onion, Middle	1989	2,351	2,504
4577.001	part ONION CREEK INTERCEPTOR	54"	Onion, Middle	1986	627	899
	group ONION CREEK INTERCEPTOR above tunnel group	54"	Onion, Middle	1986	4,943	5,264
4299.001	part ONION CK INTERCEPTOR PH 4 tunnel	84"	Onion Tunnel	1986	11,568	12,320
4577.001	part ONION CREEK INT REALLO tunnel	84"	Onion Tunnel	1986	10,576	11,263
	group ONION CREEK INTERCEPTOR TUNNEL group	84"	Onion Tunnel	1986	22,144	23,583
4221.001	WILLIAMSON CREEK INT PH II	42"	Up. Williamson	1989	820	873
4534.001	OAK HILL BR-OF WMSON CK INTER	30"	Up. Williamson	1989	1,533	1,633
6943.004	part Parmer Lane Interceptor	42"	Lake, Rattan	2017	483	514
6943.004	part Parmer Lane Interceptor	42"	Lake, Rattan	2017	26,598	0
	group Parmer Lane Interceptor group	42"	Lake, Rattan	2017	27,081	514
810.001	part Upper Walnut Creek Interceptor	36"	Up. Walnut	2002	8,362	8,906
810.001	part Upper Walnut Creek Interceptor	36"	Up. Walnut	2002	614	0
000	group Upper Walnut Creek Interceptor group	36"	Up. Walnut	2002	8,976	8,906
3168.039	vvaters park relief Main	36.	up. wainut	2015	4,087	4,353

Table 2 Wastewater Impact Fee Projects (Costs In 1000s)

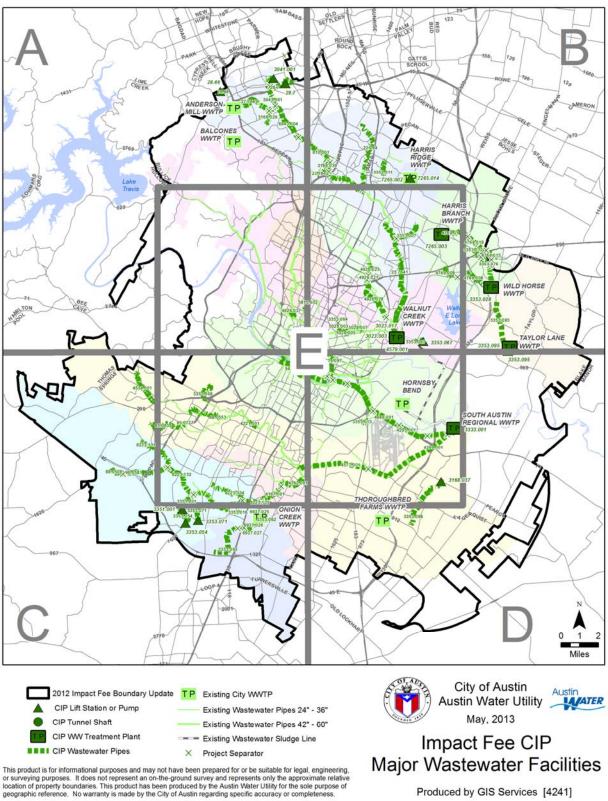
Interes. Cost		11,788	2,057	5,040	18,885	13,069	5,175	0	2,480	7,057	- - - - - -	3,877	0	4,793 8,793	6,297	40,561	46,959	56,745	0	56,745	20,306	4,197	31,297	27,269	0 ;	4- 0 	D D D D D	9,434	0	16,489	21,805	1
Cost to Bulld		11,069	5.5 1.88	4,732	23,485	12,270	959	2,597	2,329	6,626	1,050	3,640	2,061	8,500 1561	5,913	38,085	43,998	53,282	9,309	61,591	19,067	3,941	29,387	25,605	2,826	257.5.	#00 Ha	9'929	18,753	15,483	20,474	֚֚֚֚֡֝֜֝֜֝֜֝֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓
Completion Date		2008	5008 5008	2009	2009	2006	2010	2013	2005	2016	2015	2012	2006	2019	1990	1990	1990		2012		2006	2006	2006	2006	2006	7 00°	, nn 7	2004	2004	2004	2002 4002	1
Drainage Basin		Little Walnut	Little Walnut	Little Wainut	Little Walnut	Shoal Creek	Boggy Central	Decker-Gilleland	Decker-Gilleland	Harts-Gilleland	Harrie-Gilleland		Dessau/Hams	Dessau/Hams	Govalle/SAR part	Govalle/SAR part	Govalle/SAR part	Upper Gov/SAR part	Upper Gov/SAR part	Upper Gov/SAR part	SAR service	SAR service	SAR service	SAR service	SAR service			Walnut service	Walnut service	Walnut service	Walnut service	
s) Size			24			99		21"/24"	36"	30"	ක	24	.5 mgd plant,4100 gpm LS, 16" FM	e mgd EXP	96	-96 	96	98	-96		25 mgd exp	25 mgd exp	25 mgd exp	25 mgd exp	25 mgd exp	of modes with	dxa nāu ez	15 mgd exp	15 mgd exp	15 mgd exp	15 mgd exp	
(Costs in 1000s) Project Description		part ACWP - Little Walnut/Buttermlik - South	part ACVP-Little Wainut/Buttermilk at 290 and 163	part ACWP- Little Wainut/ Buttermilk at Centre Creek	group ACWP-Little Walnut/ Buttermilk group	ACWP - Shoal Greek WWV Improvements / 29th to 34th St.	ACWP Pedemaies (Line Y only)	Wildhorse Northwest Interceptor Phase 2	Northeast Service Area North Interceptor (Willdhorse North Interceptor)	Hards Branch Interceptor Lower A	Harrie Branch Interceptor Lower B	Tarins District Interceptor Lower D Wildhorse North Interceptor Ext. No. of 290	Purchase of Dessau Utilities	Dessau WWTP Expansion to 1.0 MGD GROUP	part GOVALLE I & D SYSTEM	part GOVALLE INTER AND DIVERSION	group GOVALLE INTERCEPT AND DIVERSION group	Downtown Wastewater T	part Downtown Wastewater Tunnel	group Downtown Wastewater Tunnel group	part SAR Expansion & Improvements Project (50 to 75 mgd)	SAR Lift Station Intercon	part SAR Train C South	part SAR Train C North	SAR Irain C North	Date Off New Flection and state of New Alexandra and Miscellaneous Alexandra Anna Anna Anna Anna Anna Anna Anna An		part Wainut Creek WWTP 75 MGD Upgrade	part Walnut Greek WWTP 75 MGD Upgrade	Dat WALNOT OREEK WWTP, PHIII	part Wainut Creek WWTP	
SubProject / Map ID	City Construction	4926,028	4926.021	4926,023		4926.037	4926,097	4769,008	4769.006	4769,010	4769.018	4769.015 4769.015	7265.002	7265.014	4295.001	4686.001		5481,001	5481.001		333.001	3333,005	3333.006	3333.007	3333,007	9999,000		3023.017	3023.017	4579.001	3023,003	

Table 2 Wastewater Impact Fee Projects (Costs in 1000s)

Interest	700	2,366		231 471 702	0 0	44	0	0	000	1,271 738 2,009	4,340 845 0 4,340	0 1,065 2,194 1,678 4,937	724	1,386	3,355 2,142 476 5,973
Cost to Build	000	2.22		217 442 659	761 459 1,220	4	151 151	8,127 8,127	2,406 652 3,058	1,193 693 1,886	4,075 793 845 5,713	1,476 1,000 2,060 1,576 6,112	089	1,301	2,539 3,150 2,011 447 8,147
Completion Date	7 700	2013		2007 2008 2006	1997 2000 2000	1997	2000	2012 2012	1998 2000 2007	2005 2008 2008	2009 2009 2009 2009	1996 2013 2016 2002 2016	2006	2009	2010 2010 2008 2010 2010
Drainage Basin		Upper Onion		Lower Bear Lower Bear Lower Bear	Slaughter Slaughter Slaughter	Williamson	Carson	Upper Dry Creek Upper Dry Creek	Walnut Creek Walnut Creek Walnut Creek	Waller Creek Waller Creek Waller Creek	Decker Decker Decker Decker	Lake Creek Lake Creek Lake Creek Lake Creek	Elm Creek	Tannehill To SAR	fannehill to WALNU fannehill to WALNU fannehill to WALNU fannehill to WALNU fannehill to WALNU
Size	GT/ O II. #30/00	15/18/24		350 gpm LS 500 gpm LS, FM 850 gpm	12"FM/18" 18" 18"	21"	24" 24"	30"	48" 18" 24"	18" 15" 15/18"	.75 mgd 18" 18" .75 mgd, 18/24"	16"FM/21" gravity 15/FM/1100gpmLS 12/24/FM/1100gpmLS 24" 12/24/FM/1100gpmLS	1000 gpm LS, FM	15"	15-inch 15-inch 18-inch 15-inch
(Costs in 1000s) Project Description	Action of Vollay Policy		Developer Reimbursemer	 MARBRIDGE FARMS WASTEWATER Rancho Alto Ventures group Developer Reimbursements Bear Creek = 2 	001 Culler/Southland Acquisition 016 Akin High School Reimbursement group Developer Reimbursements Slaughter Basin = 2	006 TRAVIS COUNTRY Developer Reimbursement Williamson Basin = 1	013 Metro Center Services Extension (#1537) group Developer Reimbursements Carson Creek Basin = 1	996 Formula One United States group Developer Reimbursements Mid Dry Creek Basin = 1	307 JOURDAN CROSSING WW LLINE (Samsung) 311 Dell 18 group Developer Reimbursements Walnut Creek Basin = 2	702 Triangle - Infrastructure Incentives 749 Robertson Hill Development group Developer Reimbursements Waller Creek = 2	 Wild Horse Ranch Wild Horse Addition Scots Glen group Developer Reimbursements Decker Creek = 3 	DAVIS SPRINGS SERVICE EXT. 3600 gpm LS #1, and > 46 3363.093 Lakeline Condos-Gencap Partners SER 2846 8.7 3353.094 Pearson Ranch-RRISD SER 2869 and 2870 929 Balcones Lift Station Relief (STANZEL BROTHERS) group Developer Reimbursements Lake Creek Basin = 4	067 Austin Blue Sky In Inc SER 2271	005 RMMA Redevelopment South SER 2281 (plans 2007-0016)	NOT RWMA SER 2282 Southeast WW Improvements NOT RWMA SER 2282 Southeast WW Improvements NO3 RWMA Airport Rd WW Improvs Phase Two SER 2279 NO7 RWMA Redevelopment Catellus SER 2263 group RWMA developer reimbursements Tannehill to WALNUT group
SubProject / Map ID	Developer Reimbursements	3353.092		3353.054 3353.071	3351.001 3353.016	3353.006	3353.013	3353.096	3353.007 3353.011	5815.002 3353.049	3353.028 3353.076 3353.077	3041.001 28.46 28.7 3168.029	3353.067	5028.005	5028.007 5028.007 5028.003 5028.007

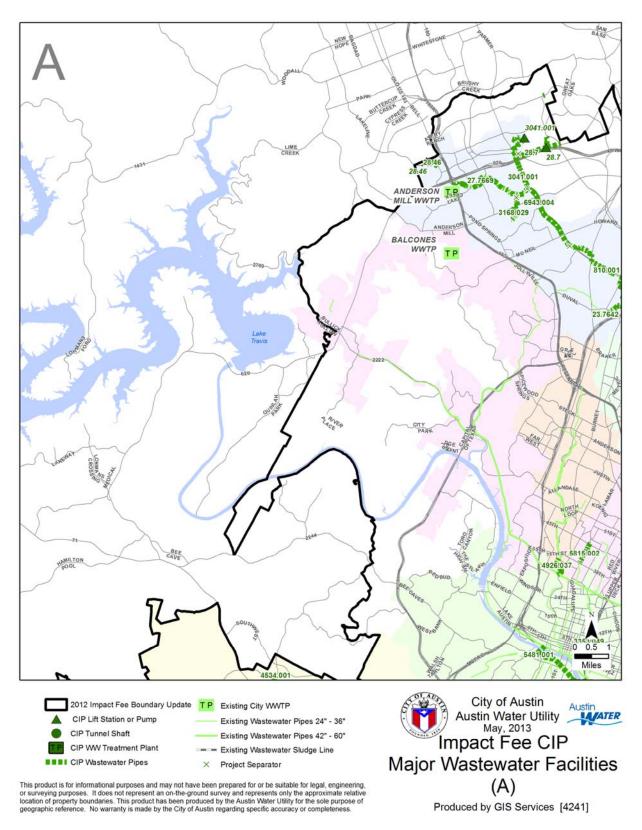
Table 2 Wastewater Impact Fee Projects

SubProject	(Costs in 1000s)		Drainage	Completion	Cost to	Interest
/ Map ID	Project Description	Size	Basin	Date	Build	Cost
Capital Investment in Bı NA	Capital Investment in Brushy Creek Regional Wastewater System NA NA	0.5 mgd increase	Brushy Creek	2010	12,063	12,847
Contract Revenue Bond Projects	Projects					
Circle C MOD #4 Staughter Creek Facility 89.0506 South Branch I Circle C M ID #3 Stauchter Creek Escilition	if Creek Facility South Interceptor and Extension CC#4 MUD	21-30-inch	Slaughter	1988	1,295	1,379
Olicie O MOD #3 Glaughie	60/00 40 North Book Throng Objection Calls A 8 D C 40 MILE	4000	101010	0007	010	4 757
8223.131	62/23-13 North Bank Opper Staughter Cr.Int. A&B CC#3 MOD 82/23-13 Staughter Creek Interceptor Phases 1, 2A & 2B CC#3 MUD	30-Inch 48-54-inch	Slaughter	1988 1988-1992	9.280	1,757 9,883
Southland Oaks MUD Slaughter Creek Facilities	ughter Creek Facilities					
8223.132	82/23-13 Slaughter Creek Interceptor 1 & 2 SO-MUD	48-inch	Slaughter	1990	701	747
8223.134	82/23-13 Slaughter North Branch Interceptor SO-MUD	30-inch	Slaughter	1990	1,595	1,699
8223.135	82/23-13 Slaughter Tunnel SO-MUD	54-inch	Slaughter	1988	3,442	3,666
Southland Oaks MUD Onion Creek Facility	on Creek Facility					
4197.001	Onion Creek Int Phase 3 (Slaught. To Boggy) SO-MUD	54-inch	Onion, Middle	1988	2,935	3,126
Village at Western Oaks MUD	UND THE PROPERTY OF THE PROPER					
88.055	North Williamson Creek Int & Easements VWO MUD	42-inch	Williamson	1989	3,097	3,298
88.084	South Williamson Trunk Phases 1 and 2 VWO-MUD	15-24-inch	Williamson	1989	919	626
Maple Run at Austin MUD	Maple Run at Austin MUD Williamson Creek Facility					
85.0777	Williamson Creek 30" WW Interceptor MR-MUD	30-inch	Williamson	1989	200	533
North Central Austin Grow	North Central Austin Growth Corridor MUD #1 Walnut Creek Facilities					
23.7641	72/23-05 Lower Walnut Creek WW Imp Phases A, B&C NCAGC-MUD	72-inch	Walnut	1987	12,221	13,015
23.7642	Upper Walnut Creek Int Phases 3A,3B,4&5 NCAGC-MUD	60-inch	Walnut	1987	6,253	6,659
North Austin GC MUD #1	North Austin GC MUD #1 Wells Branch Upper Walnut Facilties					
22.264	Wells Branch WW Trunk Line Phases, 1,1A, 2&3 NCAGC-MUD	18-24-inch	Walnut	1985	1,468	1,563
na	Upper Walnut Creek WW Trunk Line Phase 2 NCAGC-MUD	24"	Walnut	1985	1,325	1,411
North Austin MUD #1	Lake Creek Collection,					
27.7669	Lake Creek Wastewater System Improvements Contracts 1&2 (LS at capacity)	48"	Lake Creek	1989 Totals	3,627	3,863
			Total C	Total Cost to Build w/ Interes	· 🖵	1,050,393

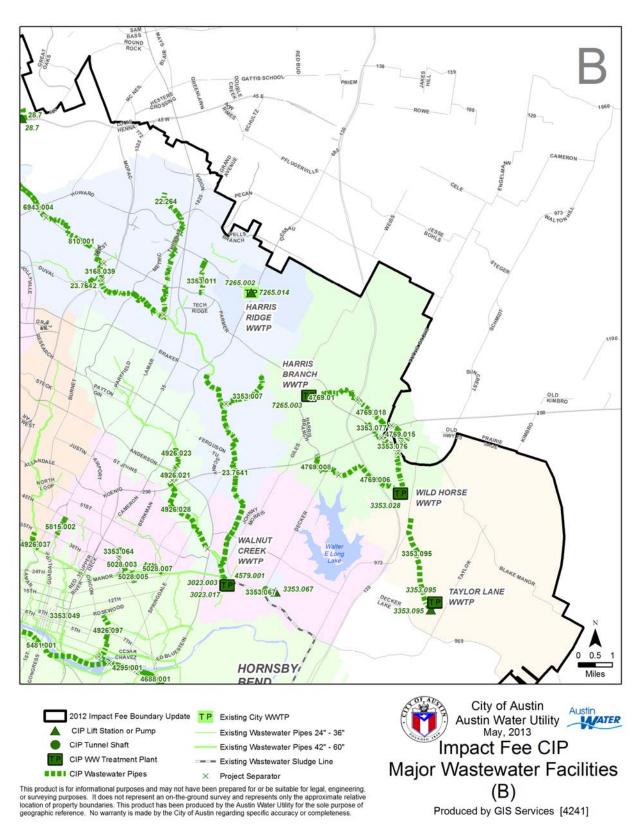


MAP 2

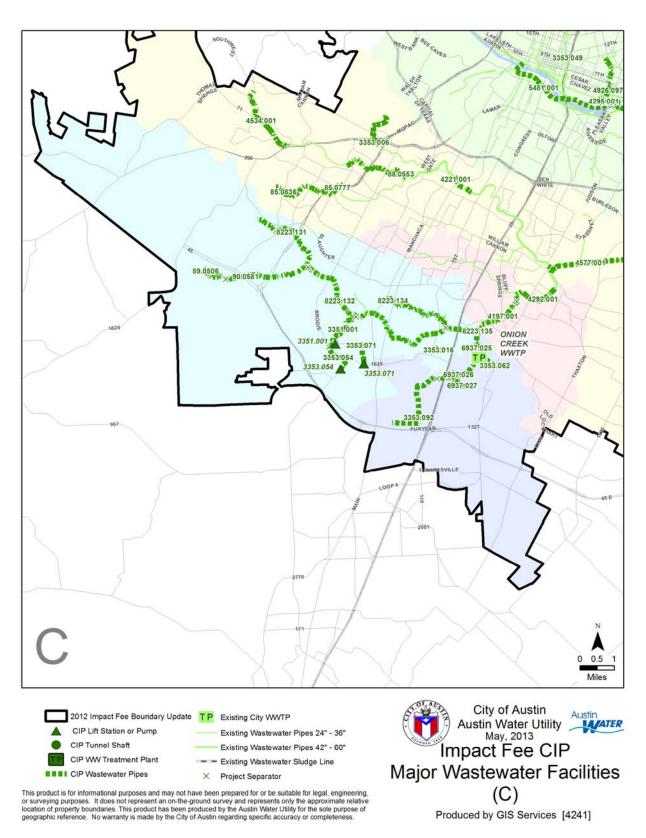
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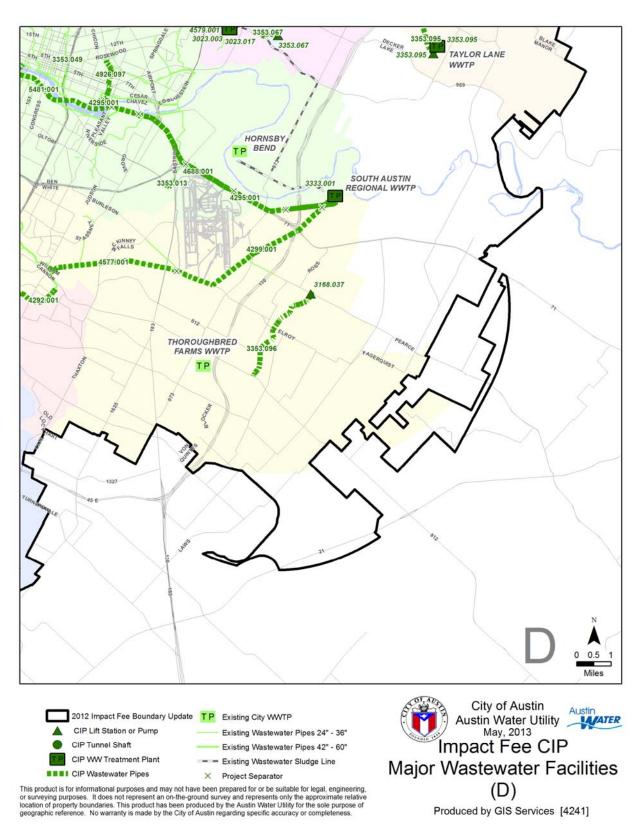
MAP 2A



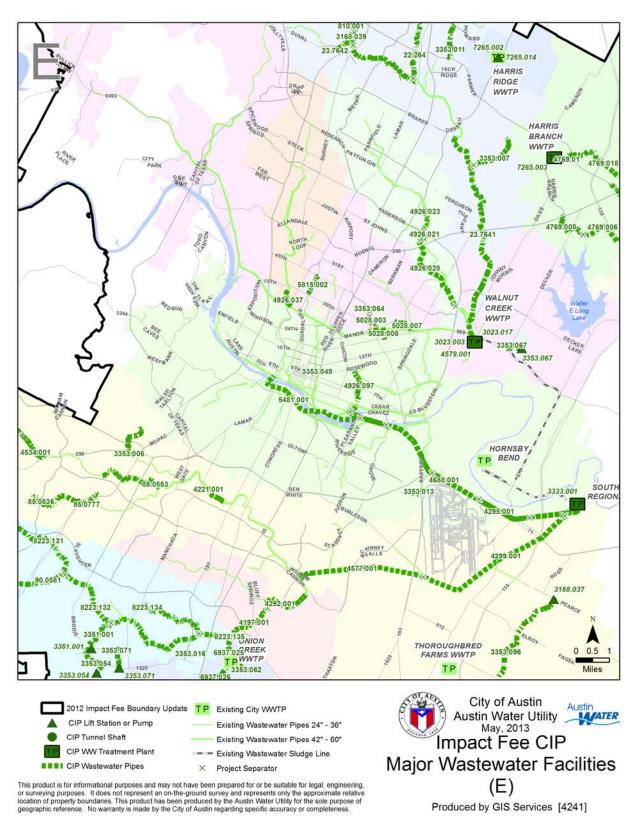
MAP 2B



MAP 2C



MAP 2D



MAP 2E

Table 3 Long-Range Future Growth Projects in the Capital Improvements Program

Capital Improvement Projects Targeted to Meet Long-Range Future Needs Timing uncertain, or beyond 2020, or not serving new users in 10-year planning horizon

WATER			(Costs in 1000s)
DEPT	SUBPROJECT ID	SUBPROJECT NAME	COST
2207	2006.013	Far South Zone Pump Station	\$6,000
2207	2127.016	Southwest Parkway SWB Elevated Reservoir	\$5,000
2207	2127.022	Far South Zone Reservoir	\$6,000
2207	3353.060	Pioneer Crossing Amended PUD (North)	\$1,170
2207	3353.079	Ridgeview Subdivison	\$165
2207	6935.001	Davis Medium Service TM	\$56,000
2207	6935.005	Springdale Road/US 183/Hwy 71 TM	\$9,400
2207	6935.007	East Highway 183 TM	\$4,720
2207	6935.013	Forest Ridge/NWA Transmission Main	\$1,123
2207	6935.019	Parmer & 620 Interconnect	\$2,220
2207	6935.022	Springdale/290 Improvements	\$3,250
2207	6935.024	EAPS to Cameron TM	\$22,000
2207	6935.025	Southwest Parkway TM (SWB)	\$3,600
2207	6935.026	Moore Rd TM	\$3,500
2207	6935.029	FM 812 TM	\$8,000
2207	6935.031	McNeil Rd TM	\$23,000
2207	6935.033	Johnny Morris/Hwy 290 Area Grid Extension	\$2,200
2207	6935.039	Cameron Rd Distribution Waterline(s)	\$3,627
2207	6936.002	Martin Hill Elevated Reservoir	\$6,000
2207	6937.002	South I-35 Elevated Tank	\$10,117

WASTEWATER			(Costs in 1000s)
DEPT	SUBPROJECT ID	SUBPROJECT NAME	COST
2307	448.002	Williamson Creek Tunnel And Gravity Interceptor	\$37,000
2307	3023.033	Walnut Creek WWTP Sludge Transfer Line	\$6,850
2307	3023.046	Walnut Creek WWTP 100 MGD Expansion	\$287,505
2307	3168.040	Boggy Creek Tunnel	\$8,400
2307	3168.059	Pearce Lane Lift Station Phase 2 Upgrade and New Forcemain	\$3,500
2307	3353.060	Pioneer Crossing Amended PUD (SER, North)	\$2,000
2307	3353.073	Watersedge PUD (SER)	\$8,163
2307	3353.083	The Vistas (SER)	\$4,239
2307	3353.098	Block 18 Alley WW Relocation	\$5,791
2307	3353.091	Pearson Avery Ranch (Future Wastewater SER)	\$2,132
2307	3353.101	Bellingham Meadows/Wm Wallace Way LS SER	\$2,280
2307	4769.011	Upper Harris Branch Wastewater Improvements	\$14,585
2307	4769.017	Upper Gilleland Interceptors-18 inch	\$15,949
2307	4769.019	Upper Gilleland Interceptor -24 inch	\$3,441
2307	6943.003	Lower Tannehill Interceptor (above Crosstown Tunnel)	\$5,000
2307	6943.020	WWTP Flow Transfer (Walnut growth capacity management)	\$2,100
2307	6943.023	Onion Interceptor Upgrade - Segment 2-Etj To Bear	\$2,500
2307	6943.024	Robinson Ranch Walnut Interceptor	\$6,000
2307	7265.004	Wildhorse WWTP Expansion to 1.5 MGD	\$8,000

Table 4 Projects Removed from Previous Impact Fee Listing

Cost to Build Reason		104 IIIIIIIII capacity lemaining	499 plan changed by new site location	8,362 moved to future, Table 3	1,170 no developer activity, to Table 3	1,545 no developer activity, to Table 3	300 minor cost to track in multi-zones	56,000 moved to future, Table 3	6,218 no developer activity, to Table 3	1,960 moved to future, Table 3	688 reconfigured in S 135 project	3,978 reconfigured in S 135 project	11,443 reconfigured in S I35 project	10,117 moved to future, Table 3	971 minimal capacity remaining	1,111 minimal capacity remaining		Cost to	Build Reason		10,247 replaced by later capacity purchase	500 replaced by Parmer Ln Int 6943.004	15,200 moved to future, Table 3	4,068 no developer activity, to Table 3	1,200 replaced by Harris Branch 4769.18	5,000 area plan is changing	2,690 no developer activity, to Table 3	988 replace by Pearce LS upgrade 3168.037	2,450 changed to MUD funding	40,020 moved to future, Table 3	785 plan change to developer only facility	1,657 master plan reevaluation underway	2,050 master plan reevaluation underway	1,000 master plan reevaluation underway	1,450 master plan reevaluation underway	950 master plan reevaluation underway
Completion Date	7	1993	2014	2014	2007	2007	2006	2024	2008	2013	2006	2006	2013	2020	2004	1995		Completion	Date		2010	2007	2020	2007	2007	2009	2007	2000	2013	2015	2006	2014	2014	2012	2012	2012
Pressure Zone		NOITHWEST D	Northwest B	Northwest A	North	North	Central	North Central	South Central	South Central	South	South	South	South	Southwest A	Entire System		Drainage	Basin		Brushy Creek	Lake Creek	Harris Branch	Harris-Gilleland	Harris Branch	Gilleland	Colorado River	Dry Creek	Dry Creek South	Williamson	Onion-Marble	Entire System	Entire System	Entire System	Entire System	Entire System
Size		0 0	36.	18#	24"	24"	misc.	72"	36"	24"	24"	36"	48"	3 mg	serr 16/24"	16/24"			Size		0.3 mgd exp.	4200 gpm exp.	24"/30"	24/30"	0.6 mgd	site for 15 mgd	2500 gpm LS	900 gpm LS	0.3 mgd	99	24"	15dt/day exp	15dt/day exp	15dt/day exp	15dt/day exp	15dt/day exp
Removed Water Impact Fee Projects (All costs in 1000s of dollars) Project Description	NAIL CONTRACTOR OF THE CONTRAC	MILIWOOD INVO HERISTIISSION MENT	Four Points/NWB IM	Forest Ridge/NWA TM	Pioneer Crossing Amended PUD (North)	Morse Tract/TND	SH130 Crossings	Davis Medium Service TM	Johnson Ridge Tract Water SER #2257	U S 183 South/McKinney Falls Pkwy TM	Colton Bluff Subdivision Water	Riddell/Adams Extract Tracts Water	Pilot Knob/Thaxton Road TM	South I-35 Elevated Tank and Site	Pickard Tract (old Barker Pickard) Developer Reimburser 16/24"	Approach Main Oversize	Removed Wastewater Impact Fee Projects (All costs in 1000s of dollars)		Project Description	Brushy 10-year payments on WWTP and Int. Capital	Imps from proforma	Lake Creek LS Capacity Increase	Upper Harris Branch Interceptor	Pioneer Crossing Amended PUD N	Harris Branch Pkg WWTP expansion to 0.6 mgd	Northeast Subregional WWTP Site	Watersedge PUD	Berdoll Farms LS & FM Reimburse. (Pearce Ln LS)	Garfield Tract 0.3 mgd WWTP	Williamson Creek Tunnel and Gravity Interceptor	Colton Bluff Subdivision	Hornsby Bend Inlet Screens (55 to 70 dry ton/day)	Hornsby Bend Sidestream Trmt Plant Rebuild	Hornsby Bend SAR Digester House Rebuild	Hornsby Bend 2 Add'l GBTs	Hornsby Bend Additional Inlet Screens
Subproject #	2000	2919.001	6683.005	6683.003	3353.060	3353.043	6935.010	6935.001	3353.063	6935.004	3353.053	3353.066	3368.002	6937.002	3353.030	3798.001			Subproject #		Ą		4769.011	3353.060	7265.003	7265.006	3353.073	3353.041	7025.001	448.002	3353.053	3164.016	3164.034	3164.033	3164.023	3164.024

III. IMPACT FEE FACILITIES AND FEE CALCULATION METHODOLOGY

The facilities that provide the bulk of water and wastewater capacity for new growth in Austin's service area are listed in Table 1 and Table 2 (and again in Tables 8 and 9 in Section VI). They were selected from the complete list of planned projects, including the major facilities built with contract bonds and developer contract reimbursements, according to the following criteria:

- Has the predominant function of serving new growth rather than existing growth;
- Does not provide repair, operation, or maintenance of existing facilities;
- Does not upgrade, expand or replace existing facilities serving existing development in order to meet stricter safety, environmental or regulatory standards.

These impact fee projects represent the individual projects that provide capacity necessitated by new development projected to occur within the next ten years. As shown in Table 1 and Table 2, most are already built as part of the City's CIP program, with only a portion not yet constructed. Impact fee facilities are shown graphically in Map 1 and Map 2.

To determine the costs of projects attributable to new growth, the Texas Impact Fee Act outlines a conceptually simple 4-step process based on quantifying the demand versus capacity relationship for projects in service areas. The process can be stated as follows:

- 1. Determine capacity of project in service units, and cost per service unit;
- 2. Determine future demand (capacity used up) for project in service units for the ten-year planning period;
- 3. Determine the impact project cost attributable to new growth, which is the cost per service unit (step 1) multiplied by the planning period demand (step 2).
- 4. Determine the cost per service unit by dividing the summation of the costs of the capital improvements (step 3) by the total number of projected service units for the ten-year planning period from the Land Use Assumptions.

The complex part of this methodology is step 2, determining the capacity that will be used in an individual project during the planning period. One might be tempted to simply add up the cost per service unit of each project to come up with a fee. This would be invalid because each new user does not use a service unit of capacity in every new project, and would result in double counting. Instead, the spatial allocation of new users from the Land Use Assumptions must be used to estimate the actual usage of a given project. To carry out this approach in a manageable manner, the water and wastewater service areas were divided up into subareas, pressure zones for water and drainage areas for wastewater. Sets of projects are assigned to each subarea, and the capacity addition to the subarea system is then defined. The assumption is made that each new user in a subarea uses a service unit of the available capacity associated with the selected set of impact fee projects in that subarea. The structure of Tables 8 and 9 illustrates this "subarea" methodology.

Calculation of the impact fee is not sensitive to the length of the planning period or the number of new growth users as long as all projects have more than enough capacity for growth (in excess of capacity serving existing users) in the planning period, as is the case with the great majority of Austin's impact fee improvements, because the number of new service units occurs in both the numerator and the denominator of the fee calculation. The calculation is more sensitive to the location of new users. If a large proportion of new users are projected to locate in areas with high cost per service unit for impact fee facilities, the calculated impact fee is correspondingly higher. If instead, more are projected to locate in areas with few or inexpensive impact fee facilities, the calculated fee will be lower.

IV. SERVICE UNIT DEMAND AND CAPACITY RELATIONSHIPS

See Land Use Assumptions Section IV, SERVICE UNITS, page LUA-6 and LUA-7 for service unit calculation discussion.

Water Service Unit Equivalency:

For 2010 residential use, 388 gallons per day per service unit divided by an average flow per capita of 103.9 gallons per capita per day (2010 residential pumpage divided by 2010 population) yields 3.74 residents per service unit. 2010 non-residential service unit equivalency is estimated at 4.90 employees per service unit by dividing 388 gallons per day per service unit by an average flow per employee of 79.2 gpcd (2010 non-residential pumpage divided by the 2010 number of employees. The number of residential customers per average service unit in Austin appears to be very high because this calculation is skewed by the large percentage of customers living in multi-family housing and by municipal utility districts with master meters. These types of customers typically have large master meters with more efficient ratios between number of users and maximum capacity (on which the number of service units is determined) than do small residential meters. A summary of this information is provided in Table 5 below.

Table 5. LAND USE - SERVICE UNIT EQUIVALENCY MATRIX FOR THE WATER SYSTEM: CONVERSIONS FOR A TEN-YEAR PERIOD

Year	Service Units	Average Number of Residents / Service Unit	Average Number of Employees / Service Unit	Average Number of Gallons / Day Water Use
2010	1	3.74	4.90	388
2020	1	3.78	4.95	348

Meter size selection usually involves a count of water-using fixtures and an analysis of the number of fixtures that may be used at one time, calculated by a builder, engineer or architect. The result is a determination of the flow characteristics of a structure, or other facility relating the land use, to continuous and maximum flow requirements, which in turn are compared against meter flow ratings to select a meter size. Thus, a given meter size reflects a user-defined level of use or consumption in terms of flow. The average daily flow of one service unit, defined above, was chosen as the basis of consumption in this analysis so that every customer charged an impact fee will be placed on a uniform, flow-based footing. This indicates that on an average, each meter purchaser would be expected to use about 388 gallons per day per service unit (gpd/su) (in year 2010) and 348 gpd/su (in year 2020) of meter capacity purchased. The corresponding maximum day and peak hour consumption (needed to determine the required capacity in facilities) are readily determined from the known relationships between these flows derived from flow measurements in the water pressure zones.

Service Unit Conversion Factors:

The foregoing basic service unit definitions are specific to particular terms for relating magnitude and duration of flow, average daily pumpage in the case of water service units and average daily flow for wastewater. Utility facilities are sized using varied design flow criteria. To calculate the capacity of a given facility in service units the basic service unit value must be converted to the necessary design flow basis for that type of facility using the appropriate peaking factor relationship. These relationships are shown on Tables 6 and 7 along with the capacity sizing basis for each type of facility. Note for example, that for wastewater lift stations and force mains, a peaking factor of 4 is used to convert the basic wastewater service unit (287 gpd/su) to a wet weather peak basis, so that an infiltration and inflow flow component is factored into the calculation of service unit capacity.

Table 6 Water Service Unit Conversion Factors for Facility Capacity

Water Facilities
Service Unit Flow Definition: Q/SU -- annual average flow basis
2012 analysis: 388 gpd/SU for 2010 and 348 gpd/SU for 2020. Average used for capacity calculation = 368 gpd/SU
2006 analysis: 445 gpd/SU all years
2001 analysis: 484 gpd/SU all years

Facility	Capacity Sizing Basis	2006 Peaking Factor	2006 Service Unit Flow gpd per SU	2012 Peaking Factor	2012 Service Unit Flow gpd per SU
Water Treatment Plant	max day flow = plant rated capacity	1.70	445×1.7 = 756	1.75 (Note 1)	368×1.75 = 644
Pump Station	1.25 x zone max day flow = pump station rated capacity				
NWC	=	2.488	445x2.488x1.25= 1384	2.04	368x2.04x1.25= 938
NWB	=	2.149	445x2.149x1.25= 1195	2.1	368x2.10x1.25= 966
NWA	=	2.149	445x2.149x1.25= 1195	1.95	368x1.95x1.25= 897
North	=	1.877	445x1.877x1.25= 1044	1.69	368×1.69×1.25= 777
Central	=	1.776	445x1.776x1.25= 988	1.4	368x1.40x1.25 = 644
South	=	1.923	445x1.923x1.25 = 1070	1.65	368x1.65x1.25= 759
SWA	=	2.126	445x2.126x1.25= 1183	2.29	368x2.29x1.25 = 1053
SWB	=	2.262	445x2.262x1.25= 1258	2.45	368x2.45x1.25= 1127
SWC	=	2.488	445x2.488x1.25= 1384	2.61	368x2.61x1.25 = 1201
Transmission Main	zone peak hour flow = pipe capacity at 5 fbs				
NWC		4.647	445x4,647 = 2068	4.09	368x4.09= 1505
NWB	=	3.595	445x3.595= 1600	3.82	368x3.82= 1406
NWA	=	2.806	445x2.806= 1249	3.15	368x3.15= 1159
North	=	3.018	445x3.018= 1343	2.59	368x2.59= 953
Central	=	2.46	445x2.46= 1095	1.93	368×1.93= 710
South	=	3.025	445x3.025= 1346	2.48	368x2.48= 913
SWA	=	3.727	$445 \times 3.727 = 1659$	4.01	$368 \times 4.01 = 1476$
SWB	=	3.576	445x3.576= 1591	5.47	368x5.47 = 2013
SWC	=	4.115	445x4.115= 1831	4.99	368x4.99= 1836
Storage Tank	city volumetric criteria 200 gal/capita	na	200gal/capita x 799,965 capita / 316,147 SU = 506 gal/SU	na	200gal/capita × 875,936 capita / 352,521 SU = 497 gal/SU

Note 1. The water plant peaking factor of 1.75 is the trended max day flow with 10% variation factor.

Table 7 Wastewater Service Unit Conversion Factors for Facility Capacity

Wastewater Facilities
Wastewater Service Unit Flow Definition: Q/SU -- annual average flow basis 2012 -- weather normalized flow based -- 287 gpd/SU 2006 -- at 61.73% return flow = 275 gpd/SU 2001 -- at 65% return flow = 318 gpd/SU

	2012 Service Unit Flow	287x1 = 287	287x4 = 1148	287x4 = 1148
	2012 Peaking Factor	-	4	4
	2006 Service Unit Flow	275x1 = 275	275x4 = 1100	275x4 = 1100
	2006 Peaking Factor	-	4	4
= 3.18 gpa/so	Capacity Sizing Basis	annual average flow = plant rated capacity	peak hour flow (5yr storm VI) = 80% pipe full capacity	peak hour flow (5yr storm VI) = rated firm capacity
2001 at 65% return 110w = 318 gpa/50	Facility	Wastewater Treatment Plant	Interceptor	Lift Station

V. SERVICE UNIT DEMAND PROJECTIONS

The Land Use Assumptions provide the foundation for estimating the cost of capital improvements attributable to new growth by making it possible to quantify the demand for service from those improvements. The source data obtained from the Planning and Development Review Department gives population and employment data distributed by traffic serial zone within the City's extraterritorial jurisdiction. The serial zone distribution not only allows the Utility to allocate growth to the selected impact fee service area, but it also can be translated into demands at specific points in the water and wastewater pipe networks using the computer.

The translation of population and employment demand data to flow based service units was described in the previous section. Land use data expressed in service units by Planning Area was included in Table 5 of the Land Use Assumptions. The traffic serial zone information was allocated to water pressure zones and wastewater drainage areas to quantify demand by subarea. Demand sets for 2010 and 2020 were developed for the ten-year growth period.

Demand projections describing the impact fee project subareas are presented in Tables 8 and 9. All water pressure zones include impact projects; and since they do not overlap, the ten-year growth summed by zones equals the system-wide growth total. Accounting for the growth service units in wastewater project drainage areas is more complex, since the drainage area of one interceptor project may be a subset of a downstream interceptor project drainage area. For example, the Slaughter Creek project drainage area is a subset of the Onion Creek project drainage area. Service unit totals by wastewater treatment plant drainage areas are also presented to indicate a system-wide total.

VI. CAPACITY AND COST ATTRIBUTABLE TO NEW GROWTH

Water and Wastewater Capacity and Costs

Tables 8 and 9 present the capacity and cost attributable to new growth according to the impact fee methodology outlined in Section III. The cost used in the impact fee calculation is simply the cost per service unit multiplied by the ten-year growth in service units derived from the land use assumptions for the subarea served by each set of facilities.

The following outline illustrates the methodology used to calculate the maximum impact fees allowed by law. The letters of each item correspond to the lettered columns in Tables 8 and 9.

- A. The reference table to the Impact Fee project listing tables.
- B. Project description. Columns A and B are used to identify the Impact CIP projects.
- C. Unused (part of project description)
- D. Project size. This is the design size of the facility.
- E. Pressure zone or drainage area.
- F. Completion date
- G. Cost to build. The cost to build a given facility includes the cost to the City for land acquisition, engineering, and construction, along with related cost components. The cost is listed in thousands of dollars, and excludes interest.
- H. Interest cost. The law allows interest cost to be added into the cost of a project if the impact fee will be used to repay both principal and interest. The amount of debt service assigned to each project was calculated by the Utility using the following assumptions: all bonds for the selected impact fee capital improvements projects were sold at the same time, an interest rate of 5.5% was assumed and the term of the bonds was thirty years. The amount of interest cost is indicated in thousands of dollars.
- I. Total cost to build (G plus H). Tables 8 and 9 provide cost figures with and without interest to provide a cost comparison.

- J. Design capacity of impact fee new facility or expansion. Capacity of the impact fee projects are expressed in service units for the subarea as a whole. All of the projects in a subarea are evaluated as a group to determine the best estimate of capacity added to the subarea by the facilities acting together. Typically one project "size" best represents the capacity addition for the subarea as a whole. See Tables 6 and 7 for capacity equations.
- K. Cost to build per service unit without interest (G divided by J).
- L. Cost to build per service unit with interest (I divided by J).
- M. Year 2010 land use assumptions. The population and land use level in a particular pressure zone or drainage area in the year 2010, expressed in service units.
- N. Year 2020 land use assumptions. The population and land use level in a particular pressure zone or drainage area in the year 2020, expressed in service units.
- O. Growth users (N minus M). The number of service units of new growth entering a particular pressure zone or drainage area in the ten year growth period. Each service unit of new growth uses a service unit of capacity in the set of facilities making up the subarea.
- P. Impact costs without interest (K times O). The cost per service unit of the facilities multiplied by the number of growth users in the specific pressure zone or drainage area, excluding interest.
- Q. Impact costs with interest (L times O). The cost per service unit of the facilities multiplied by the number of growth users in the specific pressure zone or drainage area, including interest.
- R. Existing users. The number of existing users (expressed in service units) whose service is enhanced by the addition of the facilities in the subarea; therefore, capacity attributable to existing needs.
- S. Excess service units in the subarea (J minus R minus O). The number of service units remaining unused in the subarea impact fee facilities after the 10-year planning period.

Steps A through S define the costs of the impact fee projects attributable to new growth. The procedure for summing these costs to calculate the maximum allowable impact fee is presented in the next section.

Water Plant Flow Distribution and Available Capacity

For the planning horizons of both recent 5-year updates, three major changes to the city's water plants take place, with corresponding changes in how water is distributed throughout the system now and how it will be distributed when Water Treatment Plant 4 (WTP 4) comes on line in 2014. In terms of the maximum allowable impact fee calculation, the fee is based on the units of capacity required by new growth served by the Ullrich plant expansion and the new WTP 4 as a function of which plant generally serves the location of projected growth. The amount of growth associated with each plant is shown on Table 8 on the line item for each facility and on the summary table at the end.

The first plant change came in 2007 with completion of the 67 mgd expansion at Ullrich WTP. The plant expansion together with the Ullrich to Green TM and other recent transmission mains made it possible to move more Ullrich water into the system including through an eastern pathway north to the East Austin Reservoir and Pump Station facility and beyond.

In late 2008 Austin's oldest plant, Green WTP, originally completed in 1925, was retired. In general, areas previously served by Green are now served by Ullrich. Using the 2010 weather normalized flow from existing users served by Ullrich (and previously Green) of 125.1 mgd, the Ullrich capacity available for growth is 41.9 mgd (167 - 125.1) at the start of the planning period.

In 2014 the new 50 mgd WTP 4 is scheduled to come on line, increasing system capacity to 335 mgd. WTP 4 is expected to be operated at full capacity to take advantage of the lower operating cost of the new plant as compared to

the older plants, which are at a lower elevation. It is projected that when WTP 4 is completed, Davis WTP will generally be operated at lower flow rates than currently. In terms of the impact fee calculation, it is noted that growth in the north and northwest pressure zones in what has traditionally been Davis Desired Development Zone service area is made possible by available WTP 4 capacity taking on some of the existing Davis users. Therefore the growth in the traditional Davis service area is attributed to WTP 4 for fee calculation purposes, as shown on Table 8.

Table 8 Water Impact Fee Calculation by Pressure Zone Areas (All costs in 1000s of dollars unless preceded by "\$")

တ	2020 Excess SU After 10 years J-R-O		7,836				9,306				21,214			122,639											
≃ 8	p _		3,170				29,242				36,298			50,511											
σ	Impact Cost with interest L x O		3,993				17,337				4,645			31,126											
۵	Impact Cost without interest K x O		1,986				9,051				2,361			15,175											
0	Tu-year Growth Users SU N-M		935				8,036				10,899			19,871											
z	-		5,161				37,278				71,395			113,834											
Σ	e ons /		4,226				29,242				60,496			93,963											
: ر	Cost to Build per SU As w/ interest		4.27				2.16				0.43			1.57											
Υ :	-		2.12				1.13				0.22			0.76											
	Facility Design Capacity SU		11,940				46,584				68,410		note 3												
- }	Cost to Build G+H		50,985				100,503				29,155			302,353											
I	Interest Cost	1,311 11,566 4,879 5,532 954	25,623	9,876	2,221 5,044	19,916	48,034	8,904	5.075	354	14,333	16,181	117,727	154,944	995	492	2,343	7,593	4,073	650	3,827	1,830	2,102	3.060	20,699
O	Cost to Build	1,231 12,191 4,581 5,194 896	25,362	9,273	2,085 4,736 4,148	4, 146 26,067	52,469	8,361	803	893	14,822	17,115	110,542	147,409	934	462	200,	7,130	3,824	610	3,593	,,78	1,974	3	21,487
ш	Completion Date	1987 2013 2012 1988 2007		2001	2000	2012		1988	2006	2012		2001	2012		1990	1999	2017	2015	1987	1988	1989	1999	1989	2018	2012
ш	Pressure Zone	30" Northwest C 24/36" Northwest C 24/36" Northwest C 8mg Northwest C 8mg Northwest C 24/36" Northwest C 24/36" Northwest C 24/36" Northwest C 24/36" Northwest C		Northwest B Northwest B	Northwest B Northwest B	Northwest B		Northwest A	Northwest A	Northwest A		Northwest A/B/C	Northwest A/B/C		North	North	North	North	North	North	North	North	North	North	North
Δ	Size	36" 36" 1 1 10.4-C	11.2 mgd PS	p6ı		D)	ngd PS	ng			34 mg tank	43/65 mgd		MT		<u>'</u> 4			ng			70	nga ""	2	16/24/30/36 "
O		30" 11.2 8 mg 5.8-	ion 11.2	48" 45mgd	24" 5" 16" total 3 mg	10tal 3 III 36"	ion 45 r		.9E						16"	16/24"	5 6	24"		48	84 6		32 mg	orth [24"	16/2
	tion	rank group 1 3GRADES orthweet C = 2	Capacity Additi	_	SSION MN 24" SSION MAIN 16		Capacity Additi	: RES Martin tot		orthwest A = 3	Capacity Additi	TION & TM group	also Plant 4)	Capacity Additi	MAIN	MORRIS	_		RS NCAGC-MU		TRANS MAIN	CIMP. Samsung	20	HILS CRA - p	orth = 11
Ø	Project Description Orgn Name	CANYON CREEK 30 NIVIC PUMP STATION AND TANK group ANDERSON MILL'RR 620 TM FOUR POINT'S RESERVOIR WEST BULL CREEK P.S., UPGRADES DRAGNOR BEIMPURSON NICHMART C. 2	Facility Size That Determines Capacity Addition	JOLLYVILLE TM group JOLLYVILLE PUMP STATION	ANDERSON MILL TRANSMISSION MN 24" ANDERSON MILL TRANSIMISSION MAIN 16" ANDERSON MILL PESERVOIR	Developer Reimbursements Northwest B = 4	Facility Size That Determines Capacity Addition 45 mgd PS	NORTHWEST A PRES ZONE RES Martin total	16 IN FM 1825 INTERCONNECT	Developer Reimbursements Northwest A = 3	Facility Size That Determines Capacity Addition	HOWARD LANE PUMP STATION & TM group	JOLLYVILLE NWA TM (see also Plant 4)	Facility Size That Determines Capacity Addition	DESSAU RD TRANSMISSION MAIN	DECKER LAKE TM/JOHNNY MORRIS	HOWARD I AND EXTENSION	BOYCE LANE TM	HOWARD LANE RESERVOIRS NCAGC-MUD	NORTHTOWN TRANS MAIN	HOWARD LINNORTHTOWN TRANS MAIN	NORTH/EAST AREA WATER IMP. Samsung	NE AUSTIN POMPING STATIC	WHISPER VALLEY - INDIAN HILLS CRA north 124"	Developer Reimbursements North = 11
⋖	Ref. Table	0 Z 4 <u>F</u> 3 Ç	. [π_	 > >		 (Q	ľπ	z:	ř;	. -	ΙĽ	ÍΣ		ļű		_ ·	(Ĭ	. <u> </u>	Ţ	Ż	T 2	z 2 - ,	z 2 	· >	_ _ _

Table 8 Water Impact Fee Calculation by Pressure Zone Areas (All costs in 1000s of dollars unless preceded by "\$")

	O P Q R 10-Year Impact 2010	Growth Cost Cost Benefitting E Users without with Existing S N-M K×O L×O SU SU	123.518 16.198 6.937 16.634 42.928 69.503	10, 195 0, 337 10,034 42,326 10,034 1	8,827 14,998 30,970 6,792	44.680 6.739 3.836 7.922 11.382 4.746
	M 2010	Land Use Assumptions A SU	1.03 107.320			1.18 37.941
9	K L Cost to Cost to	Build Build per SU per SU G/J w/ interest	643			0.57
(All costs in 1000s of dollars dilless preceded by	J Facility	Design Capacity SU	128,629			26,880 22,867
709 CI GCIIGIC CI	H Total	Interest Cost to Cost Build G+H	2,283 3,941 8,736 6,516 32,427 20,477 77,011 132,095			
(5) III 9) 900 III.)	D D	Completion Cost to Date Build	1987 2,144 2016 3700 1989 8,203 1998 6,118 2001 30,448 2018 2,000 2008 5,000	1989 5,621 1988 1,913 1989 2,139 1992 9,748 1997 4,578 1990 2,402 2013 14,578	1988 2,817 9 1992 2,673 1988 1,819 2012 60,515 2015 7,717 7 75,536 1988 5,758 1988 5,758 1987 1,016 1987 1,016 1987 1,0016 1987 1,0016 1988 1,7016 1987 1,0016 1987 1,0016	
	ш	Pressure Zone	Central Central Central Central Central Central	Central South	South South South Faculty South South South Southwest A/B/C	
	O C	Size	12 mg 24" 66" 48" 72" entra 48" ion 72" MM		36, 30/24" South 36/30/24" South 36/30/24" South 26/2/48", 24 m South 26/36" South 56/40 M South 48" South 66/40 M	ion 48" TM
	ω	Project Description Orgn Name	12 FAGAS DE CAST RESERVOIR FM969 DE CAKER TO SH 130 EAST AUSTIN TRANS MAIN SPRINGDALE ROAD 48" TM SPRINGDALE ROAD 48" TM SPRINGDALE ROAD 48" TM WHSPER VALLEY - INDIAN HILLS CRA centra 48" Developer Reinbrussements Rorth Cantral 48" Facility Size That Determines Capacity Addition 72"	GREEN WTP TRANS MAIN SOUTH group BLUFF SPRINGS TRESRNOOR PILOT KNOB PILOT KNOB TRANS MAIN II BLUFF SPRINGS TRESERVOIR PILOT KNOB PILOT KNOB TRANS MAIN E BEN WHITE BLUP TRANS MAIN E BELN WHITE BLUP TRANS MAIN ELEROY TRANSMISSION MAIN MOORE'S CRSG RESERVOIR & TRANS Develope Reimbursenents South Central = 5 Enchits Size That Dearmines Charchia.	radnity size that Determines Supportly Addition or INI SOUTH H 35 TRANSMISSION MAIN SIAUGHTER LIN TRANSMISSION MAIN DAVIS LANE RESERVOIR SO-MUD add 10 tc 10 mg SE 1-55 Than PROFILE SOUTH - 4 Z4/36/ Facility Size That Determines Capacity Addition 48° TM SOUTHWEST A SITE DEVELOPMENT CC#3-MU na DAVIS LANE TM (RS discharge) SO-MUD SOLYIS LANE PUMP STATTON WOO-MUD SIMA TIN HERCONNECTOR MR-MUD SIMA TIN HEASER 11, A2, 34, A4B MR-MUD SIMA TIN HEASER 11, A2, A3, A4, A4B MR-MUD SIMA TIN HEASER 11, A3, A4, A4, AB, MR-MUD SIMA TIN HEASER 11, A3, A4, A4, AB, MR-MUD SIMA TIN HEASER 11, A2, A4, A4, AB, MR-MUD SIMA TIN HEASER 11, A2, A4, A4, AB, MR-MUD SIMA TIN HEAR TIN HEA	Facility Size That Determines Capacity Addition 48" TM
	∢	Ref. Table				-

Table 8 Water Impact Fee Calculation by Pressure Zone Areas (All costs in 1000s of dollars unless preceded by "\$")

Project Description Size Presave Competed on Continuents Size Si	⋖	ш	ပ	۵	ш	L	O	I	- }	ا ح	Υ ,	_ ;	Σ	z	0	۰	σ	~	S
Cognitive Size Zize Zi	Ref.	Project Description			Pressure	Completion	Cost to	Interest	Total Cost to	Facility Design			2010 Land Use	2020 Land Use	10-Year Growth	Impact Cost			2020 Excess
Control of the cont	Table	Orgn Name		Size	Zone	Date	Build	Cost	Build	Capacity	_		Assumptions /	Assumptions SU	Users	without	with		SU After
## Southwest B	ĺ								H+5	3		ľ	3	3	∑ ×	X X O	L×O		J-R-O
Fig. 2 courthwest B 1982 2802 2809 1982 2802 2809 1982 2802 2809 1982 2802 2809 1982 2802 2809 1982 2802 2809 1982 2802 2809 1982 2802 2809 1982 2802 2809 1982 2802 2809 2802 2809 2800	_	Circle C CCR 103 Developer Reimbursements SV	3W 16"			2018	2,946												
MAD 2 mgd Southwest B 1989 2.280 2.880 MAD 2 mgd Southwest B 1988 1.303 2.27 MAD 2 mg Southwest B 1988 1.303 2.27 MAD 2 mg Southwest B 1988 1.303 2.27 MAD 2 mg Southwest C 2.001 2.34 2.05 MAD 4 mg Southwest C 2.001 2.34 2.05 MAD 4 mg Southwest C 2.007 11,703 118.094 MAD 4 mg Southwest C 2.015 2.35 2.35 MAD 4 mg Mad Mad		SWB CAMP BEN MC CULLOUGH REALL	16"			1992	504												
Auto-Residence Southwest B 1988 1,30 2,439 1,430		WINDMILL RUN SW B TRANS MAIN	36"			1990	1,962												
NU CERSSeich Southwest B 1988 1,30 1,203 Alu		SOUTHWEST B PUMP STATION CC#3 MUD	22 r	ngd		1988	2,290												
MUD First Southwest B 1989 197 270 210		SOUTHWEST B 36" TRANSMISSION MAIN CC#	C#336-ii	nch		1988	1,130												
Name		SOUTHWEST B 16" TRANS MAIN CC#3-MUD		nch		1988	197												
12 mg Southwest C 2006 5,882 6,318		SOUTHWEST B RESERVOIR #1 CC#3·MUD		5		1988	1,903	7			90	2	700 0	20,00	2007	25	2 007	000	0 40
125 mg Southwest C 2007 2,347 2347		raciiity size mat Determines Capacity Addition		Ξ			10,932				98.0	<u>.</u>	8,037	10,124	7,087	2,012	3,30	6,83	2,47
125 mg Southwest C 2007 5,46 5,906 Southwest C 2007 2,144 Southwest C 2007 2,144 Southwest C 2007 2,104 2,241 Southwest C 2007 11,703 118,964 Southwest C 2007 11,703 Southwest C 2007 2,245 Southwest C 2007 2,241 Southwest C 2,951 Southw		SWC PRESSURE ZONE PUMP STATION	8.2	mgd	Southwest C	2006	5,862												
30° Southwest C 2007 5,546 5,906 11				5 mg	Southwest C	2001	2,347												
10 2.1 mgd PS, Southwest C 2017 2.104 2.241 2.241 2.241 2.241 2.241 2.241 2.241 2.241 2.2458 3.211 7.53 1.532 2.951 2.951 2.351		SWC PRESSURE ZONE TM PHASE 1	30"		Southwest C	2007	5,546												
1		SWC PRESSURE ZONE TM PHASE 2	30"		Southwest C	2007	2,104												
17,539 16,254 33,733 8,622 2.03 3.92 2,456 3,211 753 1,532 2,981		TRAVIS COUNTRY WEST Reimbursement		mgd PS,	Southwest C	2015	1,680												
67 mgd exp Ullrich Sen/ce 2007 111,703 118,964 230,667 104,037 1.07 2.22 see notes 1 and 2 34,434 36,971 76,346 TM) 50 mgd Plant 4 Service 2014 378,896 373,147 Note 4 50 mgd Sorie, 34 years Entire System 2013 4,043 4,306 8,349 238,993 0.02 0.03 352,521 422,813 70,292 1,189 2,466 210,461		Facility Size That Determines Capacity Addition		₽			17,539				2.03	3.92	2,458	3,211	753	1,532	2,951	1,475	6,394
11,703 119,964 230,667 104,037 1.07 2.22 see notes 1 and 2 34,434 36,971 76,346 This county is a second of secon		ULLRICH WTP 100 to 167 mgd group	1 29	dxə pbu	Ullrich Service	2007	111,703	118,964											
TM) 56 mgd	•		67 r	dxə pbu			111,703		230,667		1.07	2.22	see notes	1 and 2	34,434	36,971	76,346	see note	s 1 and
S0 mgd 378,896 373,147 752,043 77,640 4,88 9.69 see notes 1 and 2 35,858 174,939 347,331	-			pgu	Plant 4 Service	2014	378,896												
60 acre, 34 years Entire System 2013 4,043 4,306 8,349 238,993 0,02 0,03 352,521 422,813 70,292 1,189 2,456 0 TOTAL 2,057,353 Service Unit and System-wide Impact Cost Totals 70,292 293,271 591,088 Calculated rate revenue credit per state law (See Appendix A) -210,461 Resultant amount to be used for calculation maximum allowable impact fee 380,627	•		50 r	pgu			378,896		752,043		4.88	69.6	see notes	1 and 2	35,858	174,993	347,331	see note	s 1 and
Addition 60 acre, 34 years 4,906 8,349 238,993 0.02 0.03 352,521 422,813 70,292 1,189 2,456 0 TOTAL 2,057,353 Service Unit and System-wide Impact Cost Totals 70,292 293,271 591,088 Calculated rate revenue credit per state law (See Appendix A) 210,461 Resultant amount to be used for calculating maximum allowable impact fee 380,627		Shaw Lane Sludge Facility Improvements	9 09	acre, 34 years	s Entire System	2013	4043												
92 293,271	•	Facility Size That Determines Capacity Addition	n 60 s	acre, 34 year	S		4,043	2	2,0		0.02	0.03	352,521	422,813	70,292	1,189	2,456	0	168,701
										Service U	nit and Sys	stem-wide I	Impact Cost T	otals	70,292	293,271	591,088		
									Resultanta	Calculate	d rate reve e used for	enue credit	t per state lav	/ (See Appen	ndix A) pact fee		-210,461 380,627		

\$5,415

Maximum Allowable Impact Fee (\$380,627,000 / 70,292 service units)

Table 8 Water Impact Fee Calculation by Pressure Zone Areas Notes and Plant Flow Distribution Table

Note 1	Note 1 Plant service to growth in the traditional Davis service area is made possible by Plant 4 taking on some Davis
	existing users. Thus, 86% of Davis area north zone growth is attributable to Plant 4 for fee calculation above.
	14% of north zone growth is attributed to Ullich. This is reflected in the plant flow distribution table to the
	right.

Note 2 Beyond 2020 Plant 4 capacity will continue to provide service units for growth along with the Ullrich expansion, at whatever distribution between existing and growth users for all 3 plants that fits the system hydraluic demand situation that occurs. Recognizing that the flow per service unit may continue to change over time, the 2020 system excess capacity is 77.5 mgd and 127,270 SU in the present analysis. See flow distribution table at right.

Note 3 Capacity of the new Jollyville and Martin Hill TMs is calculated based on the maximum day peaking factor in the same manner as for plants, since these major TMs operate in the same flow regime as the plant that

Note 4 WTP 4 cost is adjusted for upsized components. See Table 1 for WTP total cost and upsized component adjustment.

						note 1	note 1	note 1	note 2
	2010-2020	10-year	growth	by plant SU	attribution	35,858	0	34,434	70,292
	2010-2020	10-year	area	growth	S	19,871	18,658	31,763	70,292
imum Day)	2010-2020	10-year	area	growth	mgd	13.9	11.0	18.5	43.4
rribution (Max	2020	existing	nser	flow	mgd	36.1	61.9	116.1	214.1
Plant Flow DISI	2020	future	flow	regime	mgd	20	72.9	134.6	257.5
	2010	current	flow	regime	mgd	0	114.5	125.1	239.6
			plant	capacity	pgm	20	118	167	335
				Plant		Plant 4	Davis	Ullrich	All Plants

Table 9 Wastewater Impact Fee Calculation by Collection Drainage Areas (All costs in 1000's of dollars unless preceded by "\$")

υ	۵	Draipage	Completion	ව දි දි	H Interest	Total F	Facility C	Cost to C	Cost to	2010 2010 1 and 1 ke	2020 and Use	10-Year Growth	Impact	Impact	R 2010 Existing	S 2020 Fxcess
	Size	Uramage Basin Facility Area	Completion				_	_ ^	- ts	Land Use Land Use Assumptions Assumptions SU SU	Land Use ssumptions SU	Users	w/o interest KxO	vith interest LxO		Excess SU Affer 10 years J-R-O
α	Datelmer Paimhireamante Baar Craak to Claumhtar – 1980 mm .21 S	Ower Bear	9006	9	202											
) -	18" "11	Slauchter	0002	1220												
	21-30-inch	Slaughter	1988	1.295	1379											
	36-inch	Slaughter	1988	1,650	1757											
	48-54-inch	Slaughter	1988-1992	9,280	9883											
	48-inch	Slaughter	1990	701	747											
	30-inch	Slaughter	1990	1,595	1699											
4	54-inch	Slaughter	1988	3,442	3666											
4	54" at 0.17%	Bear/Slaughter		19,842	19,832	39,674	36,516	0.54	1.09	15,811	19,222	3,411	1,853	3,706	15,811	17,294
36"		Rinard	2010	8307	6387											
4 r	54"	Upper Onion	2012	31972	33364											
ò:	15/18/24"	Upper Onion	2014	7777	2366	0,000	000		!	4					٠	
	54" at 0.15%	Rinard-Upper Onion		42501	42118	84619	34,286	1.24	2.47	0	2,611	2,611	3,237	6,444	0	31,675
4	54"	Onion, Middle	1986	4,943	5264											
4	54-inch	Onion, Middle	1988	2,935	3126											
4	54' at 0.12%	Onion above tunnel		7,878	8390	16,268	38,328	0.21	0.42	23,300	30,681	7,381	1,517	3,133	23,300	Note 1
12		Williamson	1989	820	873											
30		Williamson	1989	1,533	1633											
21"		Williamson	1997	4	4											
ά	42-inch	Williamson	1989	3,097	3298											
5	15-24-inch	Williamson	1989	919	626											
ó	30-inch	Williamson	1989	200	533											
2	42" at 0.189%	Williamson Facility Area		6,910	7,359	14,269	24,652	0.28	0.58	21,076	23,913	2,837	795	1,642	21,076	Note 1
	dxe wdb 006	Upper Dry Creek	2012	550	0											
	30"	Upper Dry Creek	2012	8,127	0											
	30" at 0.06%	Upper Dry Creek Above Pearce LS	aarce LS	8,677	0	8,677	4,530	1.92	1.92	3,219	5,425	2,206	4,226	4,226	0	2,324
	"#8	Onion Tunnel Area	1986	22,144	23583											
4	84" at 0.1%	Onion Tunnel Area		22,144	23583	45,727	91,010	0.24	0.50	65,563	84,632	19,070	4,640	9,582	65,563	6,377

Table 9 Wastewater Impact Fee Calculation by Collection Drainage Areas (All costs in 1000's of dollars unless preceded by '\$')

S 2020 Excess SU After	2,875	5,549	2,344	2,787	2,416	883	66,611
R 2010 2 Existing Ex Users SU	12344	1,383	287	79,260	2,328	1523	22,116 6
Q Impact Cost Ex with U	749	2	129	22,321	5,695	283	260
P Inmpact In Cost (w/o)	363	2	83	11,266	3,286	137	271
O 10-Year In Growth C Users	1,227	106	28	9,800	3,207	312	2,005
	13,570	1,489	373	630'68	5,534	1,836	24,121
	12,344	1,383	287	79,260	2,328	1,523	22,116
Cost to Build Lar	0.61	0.02	1.49	2.28	1.78	0.91	0.28
K Cost to Co Build E per SU p	0:30	0.02	0.72	1.15	1.02	0.44	0.14
J Facility C Design Capacity F	16,446	7,038	962	91,847	7,951	2,718	90,732
Total Cost to Build	10,034	151	1,431	209,192	14,120	2,464	25,338
H Interest Cost 5,175	5,175	0 738	738 46,858 56,745	103,603	5,973	1,271	13,068
G Cost to Build 4,859	4,859	151	693 43,998 61,591	105,589	8,147	1,193	12,270
F Completion Date 2010	2000	2008	1990	2010	2005	2006	own Tunnel
E Drainage Basin Boggy Central	Facility Area Carson	Facility Area Waller Creek to SAR	Facility Area Govalle Tunnel to SAR Govalle Tunnel to SAR	Govalle Tunnel to SAR Tannehill to WALNUT	Facility Area Waller Creek to WALNUT	Facility Area Shoal Creek - upper	Shoal Creek above Crosstown Tunnel
D Size 36"	36" at 0.30% 24"	24" at 0.48% 12"	12" at 0.36% 96" 96"	96"at 0.05% 15/18/24"	18" at 2.83% 18"	18" at 0.33% 66"	66"at 0.36%
O				9			
B Project Description Orgn Name ACWP Pedemales (Line Y only)	Facility Size That Defines Capacity Addition Metro Center Developer Reimbursement	Facility Size That Defines Capacity Addition Robertson Hill Development	Facility Size That Defines Capacity Addition GOVALLE INTERCEPT AND DIVERSION group Downtown Wastewater Tunnel group	Facility Size That Defines Capacity Addition RMMA developer reimburse, to WALNUT group	Facility Size That Defines Capacity Addition 2 Triangle - Infrastructure Incentives	Facility Size That Defines Capacity Addition ACWP- Shoal Creek 29th to 34th	Facility Size That Defines Capacity Addition
A Ref. Table 2	0	2	2 2	7	7	8	

Table 9 Wastewater Impact Fee Calculation by Collection Drainage Areas (All costs in 1000's of dollars unless preceded by '\$")

ш	О	ш	ш	Ø	I	_ [المالية وا	¥ ;;	L L 100	N 60	Z	0 0	Ъ	o <u>i</u>	R 5	S
Project Description Orgn Name	Size	Drainage Basin Facility Area	Completion Date	Cost to Build	Cost	0		× 0		ons A	Land Use ssumptions SU	Growth Users SU	mpact Cost w/o interest KxO	Cost with interest LxO	_	Excess SU After 10 years J-R-O
UPPER WALNUT CREEK INTERCEPTOR group	38.	Upper Walnut	2002	8976	8906											
Waters Park Keliet Main	98	Upper Walnut	2015	4087	4353											
Developer Reimbursements Walnut Creek = 2	18"&48" 1000 gr.m. I S	Walnut Creek	2007	3,058	926											
Lower Walnut Creek WW Imp Phases A B&C	72-inch	Walnut Walnut	1987	12.221	13015											
NCAGC-MUD		5		ĺ												
Upper Walnut Creek Int Phases 3A,3B,4&5	60-inch	Walnut	1987	6,253	6999											
Wolls Branch WW Trunk Line Blaces 4.14 282	40 24 is ob	*i do/M	1005	1 160	1562											
Wells Brailer WW Hailk Eilie Fliases, 1,1A, 2&3 NCA GC-MUD	10-24-11011	Wallut	200	ę, ,	5051											
Upper Walnut Creek WW Trunk Line Phase 2 NCAGC-MUD	24"	Walnut	1985	1,325	1411											
Facility Size That Defines Capacity Addition	72" at 0.10%	Walnut Creek, part Elm		38,068	36,632	74,700	75,436	0:20	0.99	63,995	79,273	15,278	7,710	15,129	63,995	Note 1
ACWP-Little Walnut/Buttermilk group	09	Hitle Walnut	2009	23 485	18 885											
Control of all law Date lilling group	8	Little Walliat	5003	20,400	1	1										
Facility Size That Delines Capacity Addition	60" at 0.35%	Little Walnut		23, 485	18,885	42,370 tfe	69,408 OK cost in	0.34 crease from	0.61 much mor	69,408 0.34 0.61 36,773 38,446 tfe OK cost increase from much more growth same 60" pipe	38,446 ame 60" pipe	1,673	200	1,021	36,773	30,962
Developer Reimbursements Lake Creek = 4	12/24/FM/ Lake Ci 3600 dpm LS and 2-1100dpmLS	Lake Creek	2016	6,112	4,937											
Lake Creek Collection, and Interceptor Contract	184	Lake Creek	1989	3,627	3863											
Parmer I are Intercentor group	"27"	Lake Retain	2017	27 081	514											
Coolity Old That Defend One of the Addition	42" 24 0 38/	Lord Dates	1	000 30		ı	900 00	1 76	60.0	44 540	10.064	A 7EO	036.0	40.407	44 540	1 644
Facility Size That Delines Capacity Addition	42" at 0.2%	Гаке, катап		36,820	9,37	46,134	20,906	9/.1	2.21	14,510	19,201	4,752	g, 309	10,487	14,510	,- 440,
Purchase of Dessau Utilities	.5 mgd	Dessau/Harris	2006	2,061	0											
	plant,4100 gpm															
Dessau WWTP Expansion to 1.0 MGD	.5 mgd EXP	Dessau/Harris	2018	4500	4,793											
Facility Size That Defines Capacity Addition	1 mgd	Facility Area	2018	6,561	4,793	11,354	3,484	1.88	3.26	1,004	1,988	983	1,851	3,203	1,004	1,497
Wildhorse Northwest Interceptor Phase 2	21"/24"	Decker-Gilleland	2013	2.597	0											
Northeast Service Area North Int. (Wildhorse NW Int.)		Decker-Gilleland	2005	2.329	2.480											
Harris Branch Interceptor Lower A		Harris-Gilleland	2016	6,626	7,057											
Harris Branch Interceptor Lower B	36"	Harris-Gilleland	2015	1,050	1,118											
Harris Branch Interceptor Lower B	36"	Harris-Gilleland	2015	5,772	0											
Wildhorse North Interceptor Ext No. of 290	42"	Harris-Gilleland	2012	3,640	3,877											
Wild Horse Ranch developer reimbursement	.75 mgd	Decker	2009	4,075	4,340											
Wild Horse Addition developer reimbursement	18"	Decker	2009	793	845											
Scots Glen developer reimbursement	24"	Decker	2009	845												
Facility Size That Defines Capacity Addition	36" at 0.09% & 30" at 0.39%	Facility Area		27,727	19,716	47,443	20,139	1.38	2.36	2,359	7,516	5,156	7,099	12,146	2,359	12,624
	2000															

Table 9 Westewater Impact Fee Calculation by Collection Drainage Areas (All costs in 1000's of delian unless preceded by "5")

						₩	te in 1000's	(All costs in 1000's of dollars uniess preceded by "\$")	inless prect	(se ka pep	_									
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8 E		Project Description Orga Neme		2 2 6 0	Oralnege Baein Facility Area	O mpletion Date	2 p	00 to		Ospacity P	Mo Interest Ind		Assumptions Assump	Lend Use Assumptions SU	S C C C C C C C C C C C C C C C C C C C	Axoo Xx Xx O est Xx O est	Cost with Interest LxO	es of the state of	SU After 10 years	
8	Whisper Valley-	2 Whisper Valley-Indian Hills ORA	90	30"/36"/LS/TP	Gilleland	2015	11500	14804												
	Facility Size Th	et Defines Capacity Addition	æ	30" at 0.25%	Facility Area		11500	14804	26304	9,240	1.24	2.85	o	1,707	1,707	2,125	4,859	0	7,533	
8	Purchase of Bru now 0.84 mgd	Purchase of Brushy system capacity from LCRA, now 0.84 mgd		0.5 mgd increase	Brushy Oresk	2010	12063	12,847												
	Facility Size Th	Facility Size That Defines Capacity Addition	0.0	0.5 mgd Increses	Facility Area		12,063	12847	24,910	1,742	6.92	14.30	980	1,857	2967	969'9	13,828	0	775	
7	SAR WWTP 50	SAR WWTP 50 to 75 MGD EXPANSION group	32	25 mgd exp	SAR service	2006	94,064	97,168	191,232	87,108	90.	2.20	144,822	173,692	28,869	31,174	63,378	17,321	40,918	
2	WALNUT CREE	2 WALNUT CREEK WWTP60 TO 75 MGD group	10	15 mgd exp	WALNUT sewice	2005	63,568	47,728	111,296	52,265	1.22	2.13	186,395	216,679	30,284	36,833	64,489	21,199	782	
						Total Cost to Bulld w/ Interest	Bulld w/ Int	terest	1,050,393											

Note 1 The main interceptor in this group will reach capacity in the 10-year planning period according to the standard orients. By allowing the pipe to go bayond 90% full, it will provide capacity for growth during the remaining few years of the financing period, efter which time it will move off the impact fee

8ervice Unit and System-wide impact Coet Totale 70,288 134,735 249,368
Calculated rate revenue credit per state law (See Appendix B) 47,84
Resultant amount to be used for calculating maximum allowable impact fee (\$160,522,000 / 70,288 service units) \$ 2,284

VII. MAXIMUM ALLOWABLE FEE CALCULATION AND RATE REVENUE CREDIT

Once the portion of facilities cost associated with the 10-year growth users is calculated for water pressure zone and wastewater drainage basin analysis areas, the next step is summing these area costs to produce the total system growth cost -- the impact cost total. Then, in compliance with Section 395.014 (a) (7) of the law, a credit must be applied to take into account the amount of money the new growth users will pay in rate payments that go towards financing the growth CIP projects listed on the tables.

Previously, an amount equal to 50% of the impact cost total of the growth projects was credited as provided in the law for the case where a city-specific rate revenue credit has not been calculated. In this update, the Austin-specific rate revenue credits are calculated for water and wastewater, based on the idea that in any future year the study period growth users make rate payments in proportion to their number as a percent of total rate payers. And by extension, the growth user contribution to any particular component of the rate requirements (in this case the set of growth projects) can be estimated using this percentage. Applying this percentage to the amortized cost of the growth projects each year, and summing over all of the years costs are incurred, gives the rate revenue credit for the new users' share of the growth project rate payments. Note that the rate revenue credit calculation uses the same interest cost basis (30-year financing and 5.5% interest rate) that yields the individual project interest costs presented in Tables 1 and 2. The rate revenue credit spreadsheets are shown in Appendix A for water and in Appendix B for wastewater.

Using this method the rate revenue credit for water is \$210,461,000 and for wastewater it is \$87,843,000. To complete the maximum allowable fee calculation, the rate revenue credits are subtracted from the impact cost totals and the result is divided by the total number of 10-year growth service units to arrive at system wide maximum allowable fees.

As shown on Table 8 the water maximum allowable fee is \$5,415 per service unit.

As shown on Table 9 the wastewater maximum allowable fee is \$2,284 per service unit.

The Texas Impact Fee State Law provides for the timing of assessing fees for a given tract of land. Additionally, the local political subdivision is allowed to set the collected fees up to the maximum allowable amount. Refer to the ASSESSED AND COLLECTED FEES report for these aspects of the Impact Fee.

Update Report Preparation and/or Analysis:

City of Austin

Austin Water Utility

Randall Alexis

Tom Albin

Janet Atkinson, P.E.

Nolan Barborak, E.I.T.

Bob Butler, C.P.A.

Michael Castillo

Katie Clayton, E.I.T.

Cara Cooke

Tom Ellison, P.E.

Jeremy English, P.E.

Kristi Fenton

Kimberlee Harvey

Brian Long, P.E.

Teresa Lutes, P.E.

Gareth Nicely, P.E.

David Shannon

Joe Smith, P.E.

Margaret Thompson, E.I.T.

City of Austin

Planning and Development Review Department

Ryan Robinson, City Demographer

Appendix A Water Rate Revenue Credit Calculation

Method

Section 395.014 (a)(7) of the Impact Fee law requires that calculation of the maximum allowable fee include a rate revenue credit to account for the money new growth users will pay in rate payments that go towards financing the CIP growth projects. Previously, an amount equal to 50% of the impact cost of the growth projects was credited as provided in the law for the case where a CIP plan-specific rate revenue credit has not been calculated. The 5-year update is the first to calculate the rate revenue credit for Austin's impact fee CIP and the conditions of the 10-year planning period being analyzed.

The calculation method is based on the idea that in any future year the study period growth users make rate payments in proportion to their number as a percent of total rate payers. And by extension, the growth user contribution to any particular component of the rate requirements (the set of impact fee projects in this case) can be estimated using this percentage. Applying the year by year percentage of new growth users to the total amortized cost of the growth projects each year, and then summing all years gives the rate revenue credit for the new users' share of the growth project rate payments. This method is employed in developing the accompanying table. It has 3 basic steps:

1. Estimate the total cost of growth projects being financed each year during the financing life of the projects.

This is done in the top part of the table. Yearly totals are arrived at by adding together the amortized cost of the individual projects, beginning from the completion date of the earliest-built water project (1987) and carrying out to the end of the financing period for last-built project (2047). The amortization uses the same financing basis for project interest costs presented in CIP Tables 1 and 2 (30-year financing period and 5.5% interest rate). The resulting cost totals are shown in the row labeled Amortized Cost by Year. These totals estimate the rate revenue requirements for the impact fee growth projects for each year. Only the amortized cost totals for year 2013 and beyond are shown for clarity since these are the only years during which the study period new growth users will make rate payments.

2. Determine the percentage that the new growth users are of the total rate payers for each year in the future.

As shown in the lower part of the table, the study period new growth users (expressed in service units from the Land Use Assumptions) begin arriving in 2013, and are tallied by year as they come on line. At the end of the 10-year planning period, year 2022, the results row labeled Study Period Total Service Units shows the same 70,292 cumulative total of 10-year new growth water service units used in calculating the project impact costs in Table 8. Beyond 2022 the number of new growth service units that are the subject of the rate revenue credit for the 10-year planning period remains constant, but their percentage of total service units continues to change.

The total system service units are tallied by year starting with the existing 2012 water service unit total (365,576) adding in the subject 10-year new growth users for the planning period of 2012 – 2022 as they come on line, and then continuing to the end of the financing period in 2047 with the addition of future growth projected to occur in the period beyond 2022. The resulting year by year number of total system service units is shown in the table in the row labeled Total Service Units. The percentage that the study period new growth users are of the total service units for each particular year in the future is readily calculated by dividing the Study Period Total Service Units by the Total Service Units. The resulting percentages are shown in the row labeled Growth Percent of Total Service Units. The study period growth users as a percent of total users rises to a maximum of 16.1% in 2022 and then declines to 10.6% at the end of the financing period of the last project in 2047.

3. Calculate the amount the new growth users will pay towards the growth projects for each particular year. The sum of all years is the rate revenue credit.

Applying the Growth Percent of Total Service Units to the growth project Amortized Cost by Year gives the results labeled New Service Units Amount of Amortized Cost for each year (bottom row of table). Summing across for all years gives the Rate Revenue Credit Amount shown at the lower right hand corner of the table.

Using this method the water rate revenue credit is \$210,461,000. It is subtracted from the water impact project cost of \$591,088,000 developed in Table 8 in calculating the water maximum allowable fee. Note that the calculated rate

revenue credit equates to 36% of the water impact project cost which compares to 50% used previously. It may be said that of the \$591 M in impact project costs (including interest), that are associated with serving new growth users in the 10-year planning period, \$210 M of that amount will come from new growth user rate payments, so only the remainder, \$381 M, goes into calculating the maximum allowable fee.

Continue	Cost Cost Cost See 1.0		2015	90								024	2025	2026	2027	2028	2029	2030
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6.468 1.77 6.986	2016 New Service Units					6,831						6,831	6,831	6,831	6,831	6,831	6,831	6,831
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	Cost		\$3,374	,571	\$5,577	206	277	200		937	\$9,735	\$9,575	\$9,417	\$9,249	\$9,024	\$8,757	\$8,591	\$8,382

Annual Projected	Total																		
Cost	Cost	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
1987 Total 1987 Total 1989 Total 1990 Total 1991 Total 1993 Total 1993 Total 1995 Total 1995 Total 1995 Total 1998 Total 1998 Total 1998 Total 2000 Total 2000 Total 2000 Total 2000 Total 2000 Total 2001 Total 2001 Total 2001 Total 2001 Total 2001 Total 2001 Total 2011 Total	\$36,166 \$69,146 \$10,940 \$26,692 \$7,240 \$7,331 \$14,305 \$14,305 \$14,305 \$14,305 \$1,574 \$1,305 \$1,574 \$1,305 \$1,574 \$1,305 \$1,574 \$1,305 \$1,574 \$1,305 \$1,574 \$1,305 \$1,574 \$1,305 \$1,574 \$1,305 \$1,574 \$1,305 \$1,574 \$1,305 \$1,574 \$1,305 \$1,574 \$1,305 \$1,574 \$	\$256 \$116 \$284 \$52 \$609 \$83.36 \$110 \$10 \$1,514 \$1,514 \$1,514 \$1,514 \$1,514 \$1,514	\$116 \$2264 \$52 \$609 \$8316 \$465 \$710 \$31514 \$1,514 \$1,514 \$1,514 \$1,514	\$264 \$52 \$609 \$5316 \$465 \$310 \$310 \$31514 \$1514 \$1514 \$1514 \$1514	\$52 \$603 \$6316 \$5316 \$465 \$310 \$310 \$1,514 \$3,578 \$1,514 \$1,614 \$1,614 \$1,614 \$1,614 \$1,614	\$609 \$53.16 \$465 \$110 \$815 \$3.514 \$3.514 \$1.514 \$1.514 \$1.514 \$1.514	\$8.316 \$465 \$110 \$810 \$31,514 \$3,514 \$1,514 \$1,614 \$1,614	\$465 \$110 \$110 \$1514 \$1514 \$1514 \$1514 \$1514 \$1518 \$1611 \$1624 \$16	\$110 \$885 \$2,965 \$3,784 \$1,514 \$32,578 \$751 \$1,614 \$1,024	\$885 \$2,965 \$3,784 \$3,578 \$1,574 \$1,674 \$1,674	\$2,965 \$3,794 \$1,514 \$72,578 \$1,614 \$1,614 \$1,024	\$3.784 \$3.784 \$3.578 \$751 \$1.614 \$1.524	\$1,514 \$22,578 \$751 \$1,614 \$1,024	\$32.578 \$751 \$751 \$1,024 \$1,024	\$761 \$1614 \$1618 \$1,024	\$1.614 \$151 \$1,024	\$151 \$1,024	\$1,024	5
	,05,769	\$22,444	\$22,188	\$20,073	\$24,808	\$24,750	\$24,146	\$45,830		\$45,256	\$44,370	\$41,410	\$31,032	\$30,118	\$3,540	\$2,789	C/L'L¢	\$1,024	O#
2013 Forward Cumulative Total 1987 Forward Culumative Total		\$1,152,541 \$1,478,862	\$1,207,730 \$1,262,802 \$1,534,050 \$1,589,122	\$1,262,802 \$1,589,122	\$1,317,611 \$1,643,931	\$1,372,366 \$1,426,513 \$1,698,686 \$1,752,833			\$1,472,343 \$1,517,709 \$1,562,965 \$1,798,663 \$1,844,029 \$1,889,285		\$1,607,335 \$1,933,655	\$1,648,751 \$1,975,071	\$1,686,383 \$2,012,703	\$1,722,501 \$2,048,821	\$1,726,041 \$2,052,361	\$1,728,831 \$1,730,006 \$1,731,029 \$2,055,151 \$2,056,326 \$2,057,349	\$1,730,006 \$ 52,056,326 \$	1,731,029 2,057,349	\$1,731,029 \$2,057,349
2012 ExistingService Units		365,576	365,576	365,576	365,576	365,576	365,576	365,576	365,576	365,576	365,576	365,576	365,576	365,576	365,576	365,576	365,576	365,576	365,576
2013 New Service Units 2014 New Service Units		6,587	6,587	6,587	6,587	6,587	6,587	6,587	6,587	6,587	6,587	6,587	6,587	6,587	6,587	6,587	6,587	6,587	6,587
2015 New Service Units 2016 New Service Units		6,707	6,707	6,707	6,707	6,707	6,707	6,707	6,707	6,707	6.831	6,707	6,707	6,707	6,707	6,707	6,707	6,707	6,707
2017 New Service Units		6,956	6,956	6,956	6,956	6,956	6,956	6,956	6,956	6,956	6,956	6,956	6,956	6,956	6,956	6,956	6,956	6,956	6,956
2019 New Service Units		7,214	7,214	7,214	7,214	7,214	7,214	7,214	7,214	7,214	7,214	7,214	7,214	7,214	7,214	7,214	7,214	7,214	7,214
2020 New Service Units 2021 New Service Units		7,346	7,346	7,346	7,346	7,346	7,346	7,346	7,346	7,346	7,346 7,480	7,346	7,346	7,346	7,346	7,346	7,346	7,346	7,346
2022 New Service Units		7,619	7,619	7,619	7,619	7,619	7,619	7,619	7,619	7,619	7,619	7,619	7,619	7,619	7,619	7,619	7,619	7,619	7,619
Study Period Total Service Units Total Service Units		70,292	70,292	70,292	70,292 532,195	70,292	70,292	70,292	70,292	70,292	70,292	70,292	70,292	70,292 618,169	70,292	70,292	70,292 649,810	70,292	671,798
Growth Percent of Total Service Units	its	13.9%	13.7%	13.4%	13.2%	13.0%	12.8%	12.6%	12.4%	12.2%	12.0%	11.8%	11.6%	11.4%	11.2%	11.0%	10.8%	10.6%	10.5%
New Service Units Amount of Amortized Cost	tized Cost	\$7,698	\$7,536	\$7,396	\$7,239	\$7,113	\$6,918	\$5,759	\$5,606	\$5,500	\$5,304	\$4,869	\$4,351	\$4,107	\$396	\$307	\$127	\$109	\$210,461
																Rate Revenue Credit Amount	ue Credit A	mount	\$210,461

Appendix B Wastewater Rate Revenue Credit Calculation

Method

Section 395.014 (a)(7) of the Impact Fee law requires that calculation of the maximum allowable fee include a rate revenue credit to account for the money new growth users will pay in rate payments that go towards financing the CIP growth projects. Previously, an amount equal to 50% of the impact cost of the growth projects was credited as provided in the law for the case where a CIP plan-specific rate revenue credit has not been calculated. The 5-year update is the first to calculate the rate revenue credit for Austin's impact fee CIP and the conditions of the 10-year planning period being analyzed.

The calculation method is based on the idea that in any future year the study period growth users make rate payments in proportion to their number as a percent of total rate payers. And by extension, the growth user contribution to any particular component of the rate requirements (the set of impact fee projects in this case) can be estimated using this percentage. Applying the year by year percentage of new growth users to the total amortized cost of the growth projects each year, and then summing all years gives the rate revenue credit for the new users' share of the growth project rate payments. This method is employed in developing the accompanying table. It has 3 basic steps:

1. Estimate the total cost of growth projects being financed each year during the financing life of the projects.

This is done in the top part of the table. Yearly totals are arrived at by adding together the amortized cost of the individual projects, beginning from the completion date of the earliest-built wastewater project (1985) and carrying out to the end of the financing period for last-built project (2047). The amortization uses the same financing basis for project interest costs presented in CIP Tables 1 and 2 (30-year financing period and 5.5% interest rate). The resulting cost totals are shown in the row labeled Amortized Cost by Year. These totals estimate the rate revenue requirements for the impact fee growth projects for each year. Only the amortized cost totals for year 2013 and beyond are shown for clarity since these are the only years during which the study period new growth users will make rate payments.

2. Determine the percentage that the new growth users are of the total rate payers for each year in the future.

As shown in the lower part of the table, the study period new growth users (expressed in service units from the Land Use Assumptions) begin arriving in 2013, and are tallied by year as they come on line. At the end of the 10-year planning period, year 2022, the results row labeled Study Period Total Service Units shows the same 70,288 cumulative total of 10-year new growth wastewater service units used in calculating the project impact costs in Table 9. Beyond 2022 the number of new growth service units that are the subject of the rate revenue credit for the 10-year planning period remains constant, but their percentage of total service units continues to change.

The total system service units are tallied by year starting with the existing 2012 wastewater service unit total (352,899) adding in the subject 10-year new growth users for the planning period of 2012 – 2022 as they come on line, and then continuing to the end of the financing period in 2047 with the addition of future growth projected to occur in the period beyond 2022. The resulting year by year number of total system service units is shown in the table in the row labeled Total Service Units. The percentage that the study period new growth users are of the total service units for each particular year in the future is readily calculated by dividing the Study Period Total Service Units by the Total Service Units. The resulting percentages are shown in the row labeled Growth Percent of Total Service Units. The study period growth users as a percent of total users rises to a maximum of 16.6% in 2022 and then declines to 11.0% at the end of the financing period of the last project in 2047.

3. Calculate the amount the new growth users will pay towards the growth projects for each particular year. The sum of all years is the rate revenue credit.

Applying the Growth Percent of Total Service Units to the growth project Amortized Cost by Year gives the results labeled New Service Units Amount of Amortized Cost for each year (bottom row of table). Summing across for all years gives the Rate Revenue Credit Amount shown at the lower right hand corner of the table.

Using this method the wastewater rate revenue credit is \$87,843,000. It is subtracted from the wastewater impact project cost of \$248,365,000 developed in Table 9 in calculating the wastewater maximum allowable fee. Note that the

calculated rate revenue credit equates to 35% of the wastewater impact project cost which compares to 50% used previously. It may be said that of the \$248 M in impact project costs (including interest), that are associated with serving new growth users in the 10-year planning period, \$88 M of that amount will come from new growth user rate payments, so only the remainder, \$160 M, goes into calculating the maximum allowable fee.

jected jected																		
Cost	504	201	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
		3 \$1,703	\$1,703															
	∌																	
	\$19,250		\$642		\$642													
1969 lotal \$20	6		6		4884	4884	407											
			9		43,107 €0	49, 107 #20	45,107 40,104	Ş										
	8	8			\$639	\$639	\$639	\$639	\$639									
					%	9	\$	S	0\$	\$0								
1994 Total		\$0	\$0	\$0	\$0	\$	\$0	\$	\$0	\$0	\$0							
					\$0	\$0	\$0	\$0	8	\$0	0\$	\$0						
		19 \$49			\$49	\$49	\$49	\$49	\$49	\$49	\$49	\$49	\$49					
					\$28	\$28	\$28	\$28	\$28	\$28	\$28	\$28	\$28	\$28	6			
	\$2,406				089	089	084	08£	08¢	089	08¢	08.9	084	089	085	6		
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	\$0 \$0	ę.			\$40 \$40 \$40 \$40 \$40 \$40 \$40 \$40 \$40 \$40	\$40 \$40 \$40 \$40 \$40	\$ \$0	\$0£	\$ 40	\$708	\$40E	\$20E	\$0£	\$0 \$40 \$40 \$40 \$40 \$40 \$40 \$40 \$40 \$40 \$	\$0 \$40 \$40 \$40 \$40 \$40 \$40 \$40 \$40 \$40 \$	\$0 \$20E	\$20E	\$10E
					CD /#	CD /#	CD /#	60/4	60	CD / A	00/4	00/4	CD /#	CD /#	CO 6	CO 6	CO /#	60 / 0
	\$0 \$0 \$111	63 710			\$3 710	\$3 710	\$3 710	\$3 710	\$3 710	\$3.710	\$3.710	\$3.710	\$3 710	\$3 710	\$3.710	\$3.740	\$3 710	\$3 710
					\$242	017,00	6273	6272	6242	6273	6272	6242	6273	6242	6242	62/2	6242	62.42
4	2472 4242	747 4547 73 46,473	\$5.42 \$6.423		\$5.42 \$6.423	\$5.42 \$6.423	\$5.42 \$6.423	\$47¢	\$547 \$6.423	\$475 \$6.423	\$47¢	\$5.42 \$6.423	\$5.42 \$6.423	\$475 \$6.423	\$5.42 \$6.423	\$547 \$6.473	\$5.42 \$6.423	\$6.42
					\$426	\$426	\$926	8426	\$926	\$926	\$926	\$926	\$926	\$426	\$926	\$926	\$926	\$926
					\$1.496	41 406	\$1.406	\$1.496	\$1.496	\$1.406	\$1.496	\$1.406	\$1.406	\$1,406	\$1.406	\$1.406	\$1.406	\$1.406
					985	985	985	9828	92.58	985	92586	92.5	985	985	982	985	985	92.5
	6	6			\$1 987	\$1 987	\$1 987	\$1 987	\$1987	\$1 987	\$1 987	\$1 9.87	\$1 987	\$1 987	\$1 987	\$1 987	\$1 987	\$1 987
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	\$199.866	32 \$6.662			\$6.662	\$6.662	\$6.662	\$6.662	\$6.662	\$6.662	\$6.662	\$6.662	\$6.662	\$6.662	\$6.662	\$6.662	\$6.662	\$6.662
					\$155	\$155	\$155	\$155	\$155	\$155	\$155	\$155	\$155	\$155	\$155	\$155	\$155	\$155
		\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153	\$153
	\$42,683		↔	\$1,423	\$1,423	\$1,423	\$1,423	\$1,423	\$1,423	\$1,423	\$1,423	\$1,423	\$1,423	\$1,423	\$1,423	\$1,423	\$1,423	\$1,423
	\$17,937			\$298	\$298	\$598	\$298	\$298	\$298	\$598	\$298	\$598	\$598	\$298	\$298	\$298	\$598	\$298
	\$27,595				\$920	\$920	\$920	\$920	\$920	\$920	\$920	\$920	\$920	\$920	\$920	\$920	\$920	\$920
2018 Total \$9	\$9,293					\$310	\$310	\$310	\$310	\$310	\$310	\$310	\$310	\$310	\$310	\$310	\$310	\$310
Amortized Cost by Year \$1,050,393	,393 \$31,610	10 \$31,763	\$32,993	\$31,889	\$31,537	\$31,205	\$30,321	\$27,134	\$27,134	\$26,495	\$26,495	\$26,495	\$26,495	\$26,446	\$26,418	\$26,338	\$26,338	\$26,296
	Н	Ш														Ш		
2012 Forward Cumulative Total	\$63,064				\$191,246	\$222,451	\$252,771	\$279,905	\$307,039	\$333,535	\$360,030	\$386,525	\$413,020	\$439,466	\$465,884		\$518,559	\$544,855
1985 Forward Culumative Total	\$359,078	\$390,841	\$423,834	\$455,723	\$487,259	\$518,464	\$548,785	\$575,919	\$603,053	\$629,548	\$656,043		\$709,034	\$735,480	\$761,898	\$788,235	\$814,573	\$840,869
2012 ExistingService Units	352 899	352 899	352 899	352 899	352 899	352 899	352 899	352 899	352 899	352 899	352 899	352 899	352 899	352 899	352 899	352 899	352 899	352 899
2013 New Service Units	6,449			6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449	6,449
2014 New Service Units		6,572	6,572	6,572	6,572	6,572	6,572	6,572	6,572	6,572	6,572	6,572	6,572	6,572	6,572	6,572	6,572	6,572
2015 New Service Units			969'9	969'9	969'9	969'9	969'9	969'9	969'9	969'9	969'9	969'9	969'9	969'9	969'9	969'9	969'9	969'9
2016 New Service Units				0,00	0,023	0,023	0,023	0,023	0,023	0,023	0,023	0,023	0,023	0,023	0,023	0,023	0,023	0,023
2018 New Service Units					200	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085	7,085
2019 New Service Units							7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219	7,219
2020 New Service Units								7,356	7,356	7,356	7,356	7,356	7,356	7,356	7,356	7,356	7,356	7,356
2021 New Service Units									7,496	7,496	7,496	7,496	7,496	7,496	7,496	7,496	7,496	7,496
Study Period Total Service Units	6.449	13.021	19.717	26.541	33.494	40.579	47.798	55.154	62.650	70.288	70.288	70.288	70.288	70.288	70,288	70.288	70.288	70.288
Total Service Units	359,348	က	69	379,440	386,393	393,477	400,697	408,053	415,549	423,187	430,287	437,507	444,848	452,311	459,901	467,617	475,463	483,440
Growth Percent of Total Service Units	1.8%	% 3.6 <mark>%</mark>	2.3%	%0'.	8.7%	10.3%	11.9%	13.5%	15.1%	16.6%	16.3%	16.1%	15.8%	15.5%	15.3%	15.0%	14.8%	14.5%
Now Service Unite Amount of Amortized Cost	TSS 0	C4 130	C4 746	\$0.024	£2 724	£2 240	C2 C47	42 669	£4 004	£4 404	¢.4.200	£4.257	\$4 19G	£4 440	¢4 020	\$2 OEO	£2 004	£2 072
New Selvice Office Afficant of Afficiated					\$5,13¢	Φ3,210	410,00	\$3,000	160't¢	104,40	94,320	44,437	04, 100	011,40	04,U30	90,303	40,004	\$3,023

Annual Projected	Total	7007	COOC	6000	7000	3000	3600	7000	0000	ococ	0700	100	croc	2000	7000	2004	aroc.	2047	oroc
	\$57.68 \$31.49 \$19.25 \$31.45 \$19.25 \$31.45 \$0 \$19.163 \$0 \$1.476 \$24.06 \$1.262 \$1.262 \$1.262 \$1.262 \$1.262 \$1.262 \$1.262 \$1.262 \$1.263 \$1.273 \$1	705 \$0 423 226 226 226 226 2423 310	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$37.10 \$24.2 \$6.42.3 \$6.42.3 \$6.40.5 \$6.60.2 \$1.50.6 \$	\$242 \$6423 \$926 \$1496 \$1867 \$1,496 \$1,687 \$1,687 \$1,657 \$1,652 \$1,653 \$1	\$6423 \$926 \$926 \$1446 \$686 \$165 \$155 \$155 \$155 \$155 \$155 \$155 \$15	\$326 \$1466 \$1897 \$0 \$0 \$1423 \$	\$1,496 \$586 \$1,987 \$1,423 \$1,4	\$566 \$1,087 \$0 \$1,587 \$1,52 \$1,53 \$1,423 \$1,423 \$3310	\$1,987 \$0,682 \$1,453 \$1,423 \$1,423 \$1,423 \$1,423 \$1,53	\$6.662 \$155 \$1423 \$588 \$588 \$588 \$589 \$589 \$589	\$6.662 \$1.65 \$1.423 \$5.98 \$5.98 \$3.10	\$155 \$1,423 \$598 \$310 \$310	\$153 \$1,423 \$588 \$920 \$310	\$1,423 \$598 \$920 \$310	\$5.98 \$9.20 \$3.10	\$920 0310	8310	
Amortized Cost by Year \$	\$1,050,393	\$26,296	\$25,591	\$25,591	\$21,881	\$21,639	\$15,215	\$14,289	\$12,793	\$12,208	\$10,221	\$10,221	\$3,559	\$3,403	\$3,250	\$1,827	\$1,230	\$310	\$0
2012 Forward Cumulative Total 1985 Forward Culumative Total		\$571,151 \$867,164	\$596,742 \$892,755	\$622,333 \$918,346	\$644,214 \$940,227	\$665,853 \$961,866	\$681,068 \$977,082	\$695,357 \$991,371	\$708,151 \$1,004,164	\$720,358 \$1,016,372	\$730,579 \$1,026,593	\$740,800 \$1,036,814	\$744,359 \$1,040,372	\$747,762 \$1,043,775	\$751,012 \$1,047,026	\$752,840 \$1,048,853	\$754,069 \$1,050,083	\$754,379 \$1,050,393	\$754,379 \$1,050,393
2012 ExistingService Units 2013 New Service Units 2014 New Service Units 2016 New Service Units 2016 New Service Units 2017 New Service Units 2017 New Service Units		352,899 6,449 6,572 6,696 6,823 6,953	352,899 6,449 6,572 6,696 6,823 6.953	352,899 6,449 6,572 6,696 6,823	352,899 6,449 6,572 6,696 6,823 6,953	352,899 6,449 6,572 6,696 6,823 6,953	352,899 6,449 6,572 6,696 6,823 6,953	352,899 6,449 6,572 6,896 6,823	352,899 6,449 6,572 6,696 6,823	352,899 6,449 6,572 6,696 6,823	352,899 6,449 6,572 6,696 6,823 6,953	352,899 6,449 6,572 6,823 6,953	352,899 6,449 6,572 6,896 6,823	352,899 6,449 6,572 6,823 6,953	352,899 6,449 6,572 6,823 6,953	352,899 6,449 6,572 6,823 6,953	352,899 6,449 6,572 6,696 6,823 6,653	352,899 6,449 6,572 6,896 6,823	352,899 6,449 6,572 6,696 6,823 6,953
2018 New Service Units 2019 New Service Units 2020 New Service Units 2021 New Service Units 2021 New Service Units		7,085 7,219 7,356 7,496	7,085 7,219 7,356 7,496	7,085 7,219 7,356 7,496	7,085 7,219 7,356 7,496 7,638	7,085 7,219 7,356 7,496	7,085 7,219 7,356 7,496	7,085 7,219 7,356 7,496 7,638	7,085 7,219 7,356 7,496	7,085 7,219 7,356 7,496 7,638	7,085 7,219 7,356 7,496 7,638	7,085 7,219 7,356 7,496 7,638	7,085 7,219 7,356 7,496	7,085 7,219 7,356 7,496	7,085 7,219 7,356 7,496	7,085 7,219 7,356 7,496 7,638	7,085 7,219 7,356 7,496	7,085 7,219 7,356 7,496 7,638	7,085 7,219 7,356 7,496 7,638
Study Period Total Service Units Total Service Units		70,288 491,552	70,288	70,288 508,185	70,288 516,712	70,288 525,381	70,288 534,196	70,288 543,159	70,288 552,273	70,288 561,539	70,288 570,961	70,288	70,288	70,288	70,288 610,255	70,288 620,494	70,288	70,288	70,288 652,254
Growth Percent of Total Service Units	nits	14.3%	14.1%	13.8%	13.6%	13.4%	13.2%	12.9%	12.7%	12.5%	12.3%	12.1%	11.9%	11.7%	11.5%	11.3%	11.1%	11.0%	10.8%
New Service Units Amount of Amortized Cost	rtized Cost	\$3,760	\$3,599	\$3,540	\$2,976	\$2,895	\$2,002	\$1,849	\$1,628	\$1,528	\$1,258	\$1,237	\$424	\$330	\$374	\$207	\$137	\$34	\$87,843
																Rate Revenue Credit Amount	e Credit Amo	unt	\$87,843

		,	Current	ITD
DEPT	SUBPROJECT ID	SUBPROJECT NAME	Appropriation	Expenditures
2307	757.007	Waller Creek Center Improvement	\$485,175	\$382,522
2307	757.008	Webberville Improvements	\$559,335	\$482,720
2307	757.009	GLEN BELL SERVICE CTR IMPROVEMENTS	\$0	\$0
2307	757.010	East Service Center	\$160,000	\$0
2307	757.012	Old North Service Center (ONSC) Improvements	\$0	\$0
2307 2307	757.014	Glen Bell Solar	\$50,500	\$49,797
	757.016	Waller Creek Roof Replacement	\$287,283	\$284,690
2307 2307	757.019 757.021	Disaster Recovery System	\$318,000	\$310,445
2307	2231.065	Webberville Svc Ctr Reroof Misc. WW Rehabilitation	\$208,000 \$16,000	\$72,700 \$11,252
2307	2231.003	Onion Creek Tunnel Corrosion Protection Installation	\$10,000	\$11,232 \$0
2307	2231.104	WW Relay and Spot Rehabilitation	\$14,956,331	\$12,712,385
2307	2231.104	Airport at Chesterfield WW Improvs	\$8,428,675	\$5,875,598
2307	2231.125	Odor Control Assessment and Construction	\$70,000	\$68,817
2307	2231.128	Willowbrook at 40th St. Water and WW Improvements	\$341,183	\$176,417
2307	2231.131	Fletcher Euclid Reroute	\$701,562	\$671,657
2307	2231.134	Palma Plaza Reroute	\$0	\$0
2307	2231.135	Fort Branch Creek Stabilization	\$0	\$0
2307	2231.138	Private Lateral Loan and Grant Program	\$250,000	\$0
2307	2231.143	CBD Alleys W & WW Rehab	\$900,000	\$526,886
2307	2231.146	Pemberton Heights Water Rehab Ph 3	\$128,000	\$0
2307	2231.149	South Congress 12	\$1,665,167	\$1,528,911
2307	2231.179	Misc Water/WW Rehab FY09-10 Ph 3	\$5,000	\$5,000
2307	2231.181	East Austin SSO-Ongoing Rehab	\$358,448	\$290,018
2307	2231.182	North Austin Wastewater Overflow Abatement Project	\$1,358,600	\$1,296,004
2307	2231.183	South Austin SSO-Ongoing Rehab	\$235,634	\$141,978
2307	2231.184	West Austin SSO-Ongoing Rehab	\$1,690,450	\$1,639,803
2307	2231.188	CBD Alley Water Lines 2010-Ph 1-4th to 10th & San Antonio	\$40,000	\$33,042
2307	2231.197	Nueces Water Rehab for W 8th to MLK	\$114,880	\$27,134
2307	2231.199	Buttermilk Creek WW Reroute	\$203,000	\$185,873
2307	2231.211	Real Estate Svcs-Existing WW Pipelines	\$28,200	\$17,439
2307	2231.212	WW Manhole Rehabilitation	\$3,164,500	\$2,952,238
2307	2231.213	WW Cured-in-Place Pipe (CIPP)	\$8,827,690	\$6,163,705
2307	2231.215	Robert Dedman St. Reconstruction Utility Improvs	\$325,000	\$0
2307	2231.216	Nelray and Evans Utility Improvements	\$0	\$0
2307	2231.217	UT Campus Area Utility Improvements	\$0	\$0
2307	2231.221	Future Wastewater Pipeline Replace/Rehab	\$0	\$0
2307	2231.222	Future Wastewater Pipeline Replace/Rehab-Service Contracts	\$0	\$0
2307	2231.223	Future Wastewater Pipeline Replace/Rehab-AWU Crews	\$0	\$0
2307	2231.224	Little Walnut Creek Tunnel Odor Control Unit	\$66,690	\$18,836
2307	2981.001	Subdivision Engineering & Inspection	\$11,577,093	\$10,138,259
2307	3007.005	Govalle WWTP roofing	\$240,000	\$229,278
2307	3023.006	Walnut Creek WWTP Electrical Distribution Imp Phase II	\$28,675,384	\$21,968,252
2307	3023.019	Walnut Creek WWTP Headworks Improvements	\$0	\$0
2307	3023.021	Walnut Creek WWTP Plant Control System Upgrade	\$0 \$0	\$0
2307 2307	3023.022 3023.025	Walnut Creek Pumping System Improvements Walnut Creek WWTP Tertiary Filter Rehabilitation	\$0 \$482,000	\$0 \$404,807
2307	3023.025	Walnut Creek Outfall Bank Erosion Ph II	\$1,923,663	\$378,913
2307	3023.020	Walnut Creek Influent Flow Improvement and Equipment Replacement/Rehab	\$4,947,691	\$647,879
2307	3023.027	Walnut Creek WWTP Buildings Reroof	\$754,220	\$719,108
2307	3023.033	Walnut Creek WWTP Sludge Transfer Line	\$0	\$0
2307	3023.034	ADP-Walnut Crk WWTP-Parent	\$0	\$0
2307	3023.036	Walnut Creek Prim & Second Clarifier Rehab	\$0	\$0
2307	3023.038	ADP-Walnut Creek WWTP WAS Pump Replacement	\$45,000	\$0
2307	3023.039	Walnut Creek WWTP Secondary Process Improvements	\$0	\$0
2307	3023.040	Walnut Creek Influent Bank Erosion	\$5,000	\$0
2307	3023.041	Walnut Creek WWTP Lab and Admin Bldg HVAC Rehab - Phase I	\$0	\$0
2307	3023.043	Walnut Creek Alkalinity Delivery	\$0	\$0
2307	3023.044	ADP-Walnut Crk WWTP Effluent Flow Meter Replacement	\$26,000	\$0
2307	3023.045	ADP-Walnut Creek WWTP Bar Rack Replacement	\$55,000	\$0
2307	3023.046	Walnut Creek WWTP 100 MGD Expansion	\$0	\$0
2307	3159.003	Laboratory Information Management System	\$591,000	\$232,621
2307	3159.010	CMMS Hansen	\$500,000	\$0

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DEPT	SUBPROJECT ID	SUBPROJECT NAME	Appropriation	Expenditures
2307	3159.011	CMMS MP5	\$176,000	\$0
2307	3159.012	GIS	\$367,000	\$14,826
2307	3159.013	Data Management / Integration Tools	\$992,795	\$855,945
2307	3159.014	SCADA-Data Integration	\$479,000	\$165,740
2307 2307	3159.016 3159.017	SAN & Server Replacement	\$487,262 \$469,473	\$465,550 \$384,775
2307	3159.017	Router, Switch Replacement & Disaster Recovery AWU Phone Switch replacement-GAATN/Vol	\$341,119	\$233,427
2307	3159.021	Mobile Workforce	\$100,000	\$233,427
2307	3163.001	WW House Connections	\$150,000	\$100,000
2307	3164.010	Hornsby Bend Master Plan	\$1,267,000	\$707,587
2307	3164.021	HB Biosolids Storage Facility	\$0	\$0
2307	3164.030	ARRA Loan Hornsby Bend Compost Pad Expansion	\$1,204,974	\$1,086,767
2307	3164.036	HB Hazardous Gas Detection & Ventilation	\$404,718	\$392,286
2307	3164.038	ARRA Loan HB Digester Domes Rehab	\$33,697,102	\$25,655,837
2307	3164.040	ADP-HB Digester Feed Pump Replacement	\$90,000	\$0
2307	3164.041	Hornsby Bend Biogas Energy Project	\$5,812,000	\$919,493
2307	3164.047	Hornsby Bend Plantwide Electrical Replacent	\$0	\$0
2307	3164.048	Hornsby Bend SSTP Relief	\$0	\$0
2307	3164.052	Hornsby Bend Odor Control	\$0	\$0
2307	3164.053	Hornsby Bend SCADA Improvements	\$1,117,000	\$265,296
2307	3164.054	Hornsby Bend SCADA Control Room	\$0	\$0
2307	3164.059	Hornsby Bend Plant Road repairs	\$0	\$0
2307	3164.060	ADP-Hornsby Bend-Parent	\$0	\$0
2307	3164.061	Hornsby Bend Admin Building Repair	\$650,000	\$514,507
2307	3164.062	Hornsby Bend/SAR digester Complex	\$0	\$0
2307	3164.063	HB SAR Complex Pumps & Heat Exchangers Replacement	\$0	\$0
2307	3164.065	Hornsby Bend WWTP Lab and Admin Bldg HVAC Rehab - Phase I	\$0	\$0
2307	3164.067	ADP-HB Dewatering Building Enclosure	\$100,000	\$0 \$0
2307	3164.068	ADP-HB Thickener Lift Station Rehab	\$95,000	\$0
2307 2307	3168.014 3168.032	LS & FM Rehab & Relief Four Points Force Main	\$1,259,913 \$172,185	\$449,218 \$171,234
2307	3168.038	Lift Station Telemetry System Improvements	\$1,558,000	\$972,295
2307	3168.043	Boggy Creek LS Upgrade	\$3,567,270	\$2,023,502
2307	3168.046	Lake Creek LS Capacity Increase	\$500,000	\$486,835
2307	3168.048	Lift Station Abandonment	\$0	\$0
2307	3168.052	West Bank LS Rehab	\$282,150	\$95,504
2307	3168.054	Linger Lane Lift Station	\$1,250,000	\$4,285
2307	3168.055	Lake Creek LS Force Main Rehabilitation	\$89,000	\$0
2307	3168.057	Rock Harbour LS Improvements	\$0	\$0
2307	3168.058	Northwest Lift Station LRP Engineering Study	\$0	\$0
2307	3168.062	Lindshire LS Relief	\$18,375	\$1,251
2307	3168.063	Lockheed LS Relief	\$18,625	\$1,094
2307	3170.001	Bee Cave Woods LS Improvements	\$0	\$0
2307	3185.002	Capital Equipment - Vehicles	\$3,855,779	\$1,131,215
2307	3212.006	MISCELLANEOUS PAVING IMPROVEMENTS	\$65,000	\$35,682
2307	3212.025	Manhole and Valve Casting Adjustments	\$349,107	\$349,106
2307	3212.055	US 183 Water Relocations from Sprindale to MLK	\$128,426	\$122,078
2307	3212.056	W US 290-71 from Joe Tanner to Scenic Brook	\$433,691	\$392,822
2307	3212.065	US 183 - MLK Blvd. to Boggy Crk.	\$121,033	\$115,970
2307	3212.075	TXDOT-FM2222@Lakewood(Bull Creek)	\$160,386	\$160,089
2307	3212.079	SH 71 at Thornberry	\$135,000	\$76,192
2307	3212.116	Hwy 290 & Airport Blvd WWL Relocation	\$423,000	\$162,538
2307 2307	3212.125 3212.127	Future WW Pipeline Relocation-External Future WW Pipeline Relocations-Internal	\$0 \$0	\$0 \$0
2307	3333.010	SAR WWTP Plant Control System Upgrade	\$0	\$0 \$0
2307	3333.013	SAR Roof Replacement	\$432,065	\$424,170
2307	3333.014	SAR Scum Facilities	\$432,003 \$0	\$424,170 \$0
2307	3333.014	SAR Tertiary Filter Improvements	\$417,571	\$316,314
2307	3333.016	SAR Thickener Improvements	\$300,000	\$0
2307	3333.017	SAR Replace Drives on A & B Clarifiers	\$0	\$0
2307	3333.022	SAR Plant A Pri/Sec Clarifier Repair	\$0	\$0
2307	3333.025	SAR Admin Bldg Improvements	\$341,578	\$341,573
2307	3333.028	SAR Replace Plant A&B Blowers	\$0	\$0
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DEPT	SUBPROJECT ID	SUBPROJECT NAME	Appropriation	Expenditures
2307	3333.032	SAR Future Elect Sub-station (Sub 1 replacement)	\$0	\$0
2307	3333.033	SAR Train A Preliminary Treatment Building HVAC Rehabilitation	\$345,667	\$339,018
2307	3333.034 3333.037	SAR Lift Station 2 Debris Removal	\$500,000	\$95,406
2307 2307	3333.037	SAR WWTP Sludge Transfer Line	\$0 \$0	\$0 \$0
2307	3333.039	SAR WWTP-Valve and Gate Replacement ADP-SAR WWTP	\$0 \$0	\$0 \$0
2307	3333.040	ADP-SAR Train B RAS/Inlet Channel Restoration	\$250,000	\$0
2307	3333.041	SAR Chlorine Release Recovery Project	\$1,556,000	\$1,235,429
2307	3333.042	ADP-SAR Final Clarifier 4A Replacement	\$100,000	\$2,563
2307	3333.043	SAR Train A/B Secondary Treatment and Disinfection Improvs-Assessment	\$250,000	\$0
2307	3333.044	SAR Train A/B Secondary Treatment and Disinfection Imps-Design/Bid/Build	\$0	\$0
2307	3333.045	ADP-SAR Train A/B Aeration Basin Crack Repair	\$150,000	\$3,830
2307	3353.095	Whisper Valley-Indian Hills CRA	\$7,900,000	\$0
2307	3353.096	Formula One United States	\$8,126,619	\$4,431
2307	3353.098	Marriott Hotel Downtown	\$500,000	\$0
2307	4769.001	Northeast Area Regional Service Plan	\$186,000	\$177,140
2307	4769.011	Upper Harris Branch Wastewater Improvements	\$270,355	\$162,709
2307	4769.017	Upper Gilleland Interceptors-18 inch	\$99,410	\$99,409
2307	4769.019	Upper Gilleland Interceptor -24 inch	\$65,001	\$65,001
2307 2307	4769.021 4800.028	Northeast Regional WWTP	\$250,000 \$150,000	\$0 \$87,157
2307	4800.028	West Campus System Improvements West Campus Water & WW Improvements Area 5	\$856,192	\$469,502
2307	4857.010	Anderson Mill Estates STAA-Phase I	\$3,886,836	\$2,925,253
2307	4857.016	Anderson Mill Water / us 183 Wastewater Improvements	\$416,000	\$332,354
2307	4857.017	North Acres	\$690,000	\$345,742
2307	4857.019	STAA - Springwoods non-MUD and Kruger (wastewater)	\$250,000	\$0
2307	4857.021	STAA - Ferguson Cut-off (wastewater)	\$432,963	\$259,594
2307	4857.022	STAA - Pond Springs Road (wastewater)	\$422,963	\$381,597
2307	4857.023	STAA - 2222 Frontage (W&WW)	\$266,722	\$248,078
2307	4857.024	North Acres - Water and Wastewater Improvements-North	\$2,950,988	\$1,347,242
2307	4857.025	North Acres - Final Conveyance	\$971,992	\$507,800
2307	4857.026	North Acres - Wastewater Tunnel	\$1,254,600	\$493,052
2307	4857.027	North Acres - Water and Wastewater Improvements - South	\$1,668,653	\$4,764
2307	4857.028	Anderson Mill Estates STAA Phase II	\$858,787	\$131,336
2307 2307	4857.029 4926.081	Annexation Telemetry-River Place MUD & Lost Creek MUD ACWP - Barton Creek Lift Station Relief Tunnel	\$0 \$3,894,024	\$0 \$3,860,497
2307	4926.090	ACWP-Govalle 1-So. 2nd St. WW Improvements	\$18,391,519	\$18,353,109
2307	4926.115	ACWP-Tree Replacement Svc Agreement	\$999,000	\$720,285
2307	4926.129	ACWP-Joint Proj with PARD	\$720,618	\$697,709
2307	4927.007	Canterbury, Hwy, and Bergstrom Shafts and Lateral Rehab	\$5,482,179	\$4,964,390
2307	4927.008	Canterbury LS Demolition	\$1,531,932	\$1,484,724
2307	4927.011	Govalle Tunnel Centralized Odor Control	\$5,135,000	\$714,195
2307	4954.007	Bluffington L.S. Upgrades	\$780,851	\$649,704
2307	5261.002	Southern Walnut Creek Hike and Bike Trail	\$162,000	\$0
2307	5403.001	Rio Grande: from MLK to 24th St. Street Reconstruction & Utility Adjustment	\$175,001	\$133,981
2307	5408.002	West 34th Street from Shoal Creek Bridge to West Avenue Street Reconstruction	\$478,068	\$228,195
2307	5754.026	Bull Creek-Lakewood Dr. Low Water Crossing Improvements	\$178,178	\$177,435
2307	5771.060	Bike Blvd. Rio Grande and Nueces from 3rd to MLK	\$25,000	\$25,000
2307 2307	5789.019 5789.020	Blunn Creek - Long Bow Storm Drain Improvements Shoal Creek - Allandale Storm Drain Improvements	\$130,000 \$66,591	\$124,088 \$53,385
2307	5789.020	Shoal Creek - Anandare Storm Drain Improvements	\$451,864	\$139,323
2307	5789.086	Shoal Creek - Rosedale Storm Drain Improvements Phase 2	\$374,000	\$232,157
2307	5789.096	Little Shoal Creek Tunnel Realignment and Utility Relocations - Phase I	\$153,242	\$127,619
2307	5873.010	Wm Cannon Railroad Overpass	\$12,000	\$641
2307	5873.012	Red Bud Trail Bridges at Lake Austin	\$114,803	\$57,437
2307	5980.010	Congress Alley and Sixth Street Alley Reconstruction	\$71,000	\$13,852
2307	6055.004	E. 7th Street Improvments - Northwestern to Pleasant Valley	\$786,301	\$676,404
2307	6055.012	E. 7th Street Improvements - Navasota to Northwestern	\$994,802	\$978,777
2307	6621.007	Walnut Creek Security Access System Upgrade	\$0	\$0
2307	6621.008	Hornsby Bend Security Access System Upgrade	\$0	\$0
2307	6621.009	SAR Security Access System Upgrade	\$0	\$0
2307	6621.010	SCADA Cyber Security Remediation	\$0	\$0
2307	6621.011	Admin Buildings Security Access System Upgrade	\$837,000	\$491,814

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DEPT	SUBPROJECT ID	SUBPROJECT NAME	Appropriation	Expenditures
2307	6621.014	Govalle WWTP Security Access System Upgrade	\$0	\$0
2307	6659.002	Cost of Service Rate Study 2007	\$221,508	\$221,507
2307	6659.004	Facility Condition Assessment	\$1,026,000	\$904,757
2307	6659.006	WWTP Nutrient Removal Desktop Evaluation	\$0	\$0
2307	6686.001	Group 32-32nd St. Reconstruct.& utility adjustment from Duval to Red River	\$264,216	\$237,334
2307	6710.002	Thoroughbred Farms WWTP Rehab	\$50,000	\$0
2307	6755.002	Todd (Pleasant Valley) from Ben White to St. Elmo	\$0	\$0
2307	6943.016	Wastewater System Flow Monitoring and Analysis	\$0	\$0
2307	6943.020	WWTP Flow Transfer	\$0	\$0
2307	6960.001	Brazos St/Cesar Chavez-11th St E	\$367,796	\$366,105
2307	6961.001	Colorado Street Reconstruction and Utility Adjustment from 3rd to 7th St W	\$362,001	\$72,626
2307	6961.003	Colorado from 10th to 11th (Governor's Mansion)	\$95,782	\$3,848
2307	7265.001	Dessau WWTP Rehab - Lift Station	\$680,715	\$671,930
2307	7265.005	Pkg WWTP Rehab	\$300,000	\$174,641
2307	7265.007	Onion Creek WWTP Rehab	\$0	\$0
2307	7265.009	Lost Creek Package Plant Rehab	\$0	\$0
2307	7265.011	Package Plant Hypochlorite Systems	\$350,000	\$201,153
2307	7265.012	Harris Branch WWTP Decommissioning	\$0	\$0
2307	7267.001	Lab Casework Cabinets Rehab(3 sites)	\$355,000	\$167,574
2307	7467.001	Walnut Creek Basin Odor and Corrosion Improvements	\$1,569,200	\$1,084,807
2307	7531.003	Gp 22 - Oakland & Highland frm 6th to 9th, Tremont & W6.5 frm Oak to High	\$31,431	\$22,763
2307	7531.006	Gp 8-A - Forest Trail & Stamford Way St Reconstruction/Utility Adjustment	\$40,068	\$32,117
2307	7531.007	Gp 8-B - Elton Lane & Griswold Lane Street Recon/Utility Adjustment	\$371,001	\$339,572
2307	7531.008	Gp 8-C Vista Ln & Stamford Ln Street Reconstruciton & Utility Adjustment	\$0	\$0
2307	7532.001	Group 3 - Northeast Residential/Collector Streets	\$70,000	\$16,868
2307	7532.005	Group 19 Ph1 Recon & Utility Adj - Residential/Collector Streets Northeast	\$343,900	\$80,755
2307	7532.006	Group 19 Ph2 Recon & Utility Adj - Residential/Collector Streets Northeast	\$1,258,859	\$1,084,644
2307	7533.003	Group 12 - Justin Lane and Foster Lane Area - Street Reconstruction	\$345	\$344
2307	7534.001	5th Street from I35 to Onion Street Reconstruction and Utility Ad (Group 7)	\$231,657	\$23,612
2307	7534.002	Group 7 University Hills East	\$203,653	\$72,720
2307	7534.004	Pedernales ST Recon and Util Adjust from 6th to Webberville (Group 7)	\$115,000	\$10,344
2307	7534.006	Group 21 - Residential and Collector Streets Central East (North)	\$0	\$0
2307	7535.005	Group 11 Phase 2 - Southeast Residential/Collector streets	\$350,001	\$344,559
2307	7535.006	Group 4A - Montana St and Felix Ave	\$29,350	\$25,206
2307	7536.003	Group 10 - Collector/Residential Streets SW	\$1,021,460	\$297,707
2307	8098.001	Group 17 - 8th Street from Congress to West Ave.	\$231,250	\$79,899
2307	9084.001	Facilities IDIQ	\$18,000	\$0
2307	9324.001	6th Street, Congress to IH35, Streetscape Improvements	\$0	\$0

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DEPT	SUBPROJECT ID	SUBPROJECT NAME	Appropriation	Expenditures
2207	757.007	Waller Creek Center Improvement	\$587,548	\$473,077
2207	757.008	Webberville Improvements	\$676,098	\$602,936
2207	757.009	GLEN BELL SERVICE CTR IMPROVEMENTS East Service Center	\$0	\$0 \$0
2207 2207	757.010 757.012	Old North Service Center (ONSC) Improvements	\$160,000 \$0	\$0 \$0
2207	757.012 757.014	Glen Bell Solar	\$46,000	\$44,739
2207	757.014	Waller Creek Roof Replacement	\$273,616	\$270,993
2207	757.019	Disaster Recovery System	\$318,000	\$305,295
2207	757.020	South Svc Center	\$0	\$0
2207	757.021	Webberville Svc Ctr Reroof	\$222,000	\$102,507
2207	2006.001	Pump Station Improvements	\$0	\$0
2207	2006.005	Spicewood Springs Pump Station Improvements	\$5,696,334	\$4,821,170
2207	2006.006	Water Distribuition Control System Improvements	\$1,175,000	\$486,440
2207	2006.007	Retired Facility Decommissioning - PS	\$650,000	\$556,884
2207	2006.010	Guildford Cove PS back-up power generator	\$100,000	\$0
2207	2006.011	JOLLYVILLE PUMP STATION	\$457,000	\$456,119
2207	2006.012	North Austin Pump Station Improvements	\$100,000	\$0
2207	2006.014	Spicewood Springs PS Util Improvements-TM	\$1,814,095	\$14,336
2207	2006.016	Guildford Cove Property Purchase	\$50,000	\$1,100
2207 2207	2009.010 2009.011	Green Decommission Plant Green WTP Decommissioning TM Relocation	\$11,199,856 \$1,620,473	\$10,985,563 \$1,551,855
2207	2015.006	Davis WTP Power Distribution Upgrade	\$20,350,000	\$1,468,201
2207	2015.010	Davis WTP Treated Water Discharge System - Prelim Eng.+ First Priority Imp.	\$4,042,191	\$2,678,994
2207	2015.011	Davis WTP Flocculator Imp.	\$4,959,000	\$4,899,992
2207	2015.013	Davis WTP Process Improvements & Equipment Replacements/Rehab	\$20,979,400	\$20,623,074
2207	2015.015	Davis Basin Hand Rail Replacements	\$0	\$0
2207	2015.016	Davis Bldg Roof Replacement	\$1,135,000	\$1,131,089
2207	2015.017	Davis and Ullrich Hydraulic Efficiency Improvements	\$515,000	\$60,590
2207	2015.019	Davis SCADA System	\$0	\$0
2207	2015.026	Davis WTP Main Power Feed Replacement	\$0	\$0
2207	2015.027	Davis WTP On-Site Generation Chlorine	\$0	\$0
2207	2015.028	Davis Sludge Processing Improvements	\$449,060	\$441,319
2207	2015.029	Davis WTP Filter Improvs Phase 2	\$0	\$0
2207	2015.030	Davis Chemical Feed System Improvements	\$650,000	\$317,371
2207 2207	2015.031 2015.034	Davis Freight Elevator Davis WTP Maintenance Building	\$224,950 \$0	\$222,285 \$0
2207	2015.035	Air Handler Replacement-Davis	\$0	\$0 \$0
2207	2015.037	Dehumidifier (SS) Ducting Replacement-Davis	\$0	\$0
2207	2015.039	Davis WTP Site Improvements	\$21,369	\$21,369
2207	2015.040	ADP-Davis WTP	\$0	\$0
2207	2015.041	Davis WTP TWDS-Medium Service PS	\$2,228,631	\$429,443
2207	2015.042	ADP-Davis WTP Chlorine System Improvements	\$250,000	\$23,009
2207	2015.043	Davis WTP Liquid Ammonia Sulfate Impvs	\$0	\$0
2207	2015.044	ADP-Davis Facility Improvements 2012	\$150,000	\$0
2207	2056.004	WDCS/SCADA Ph 2 (Priority 1)	\$369,680	\$235,056
2207	2127.001	Reservoir Improvements - Parent	\$2,006,639	\$1,321,466
2207	2127.003	Forest Ridge Reservoir Access Road	\$0	\$0
2207	2127.012	North Austin Reservoir Replacement	\$100,000	\$0
2207	2127.015	East Austin Reservoir Recoating	\$2,878,283 \$703,963	\$2,875,988
2207 2207	2127.018 2127.019	Capital of Texas Reservoir Recoating Pilot Knob Reservoir Improvements	\$2,093,970	\$687,398 \$2,050,067
2207	2127.019	Highland Park Reservoir Improvements	\$2,033,970	\$2,030,007
2207	2127.021	Spicewood Springs Reservoir Improvements	\$30,000	\$22,418
2207	2127.023	Reservoir Evaluations	\$400,000	\$241,027
2207	2127.024	Forest Ridge Reservoir Improvements	\$115,000	\$49,975
2207	2231.091	Small Diameter Main Replacement	\$1,202,144	\$904,009
2207	2231.113	Pemberton Heights Phase II Water Rehab	\$919,636	\$919,632
2207	2231.122	Airport at Chesterfield WW Improvs	\$110,000	\$0
2207	2231.128	Willowbrook at 40th St. Water and WW Improvements	\$50,000	\$2,860
2207	2231.134	Palma Plaza Reroute	\$0	\$0
2207	2231.140	WRI-Duncan Ave Ext	\$245,062	\$234,336
2207	2231.141	Misc. Water Rehab. 08/09	\$1,070,005	\$975,593
2207	2231.142	North Shields Water Rehab	\$1,180,425	\$1,172,163

DEPT	SUBPROJECT ID	SUBPROJECT NAME	Current Appropriation	ITD Expenditures
2207	2231.143	CBD Alleys W & WW Rehab	\$2,512,722	\$1,057,613
2207	2231.146	Pemberton Heights Water Rehab Ph 3	\$897,667	\$776,254
2207 2207	2231.150 2231.155	Line and Fire Hydrant Replacement Elroy Rd Water Rehabilitation Ph 2	\$5,677,268 \$300,000	\$4,476,750 \$247,750
2207	2231.153	Elroy Rd Water Rehabilitation Ph 3	\$300,000	\$247,730 \$0
2207	2231.158	Condition Assessment of Transmission Lines	\$0	\$0 \$0
2207	2231.159	Plaza Saltillo Water Rehab Ph 1	\$500,000	\$392,652
2207	2231.164	Polygon 337 Water Rehab Except 32nd Red River to Duval	\$500,000	\$180,119
2207	2231.171	Meadowview Ln WL Improvements	\$75,450	\$11,099
2207	2231.172	Northwood Rd WL Improvements	\$73,800	\$11,290
2207	2231.173	Barton Hills Trenchless Water Improvements	\$60,676	\$60,676
2207	2231.175	Carsonhill Water Rehabilitation	\$533,000	\$520,110
2207	2231.176	Large Diameter Waterline On-Call Services ID/IQ	\$4,647,335	\$1,729,169
2207	2231.178	Misc Water Rehab Project 2009-10 Ph 2	\$2,612,000	\$899,115
2207	2231.179	Misc Water/WW Rehab FY09-10 Ph 3	\$190,000	\$140,497
2207 2207	2231.181 2231.185	East Austin SSO-Ongoing Rehab Plaza Saltillo Water Rehab Phase 2	\$41,836 \$510,393	\$41,835 \$431,041
2207	2231.185	Misc Water Rehab 2009-10 Phase 1 WL Improvs	\$268,800	\$55,756
2207	2231.187	Mildred and Willow Street Rehab	\$210,000	\$84,430
2207	2231.188	CBD Alley Water Lines 2010-Ph 1-4th to 10th & San Antonio	\$321,000	\$255,841
2207	2231.190	ID/IQ contract for Small Diameter Water Lines	\$1,278,511	\$11,340
2207	2231.197	Nueces Water Rehab for W 8th to MLK	\$235,869	\$138,138
2207	2231.198	Misc Water Rehab 2009-10 Phase A WL Improvs	\$275,400	\$39,714
2207	2231.201	Misc Water Rehab 09-10 Phase B WL Improvements	\$410,600	\$52,358
2207	2231.204	3101 Shoreline Dr. Meter Improvs	\$75,000	\$0
2207	2231.207	MIsc Water Rehab 2010-11 Phase A	\$60,300	\$38,758
2207	2231.208	MIsc Water Rehab 2010-11 Phase B	\$44,267	\$27,222
2207	2231.209	Misc Water Rehab Phase C	\$66,385	\$42,966
2207	2231.210	MIsc Water Rehab 2010-11 Phase D	\$81,207 \$650,000	\$52,589 \$41,709
2207 2207	2231.214 2231.215	Boggy Creek Water Line Replacement Robert Dedman St. Reconstruction Utility Improvs	\$75,000	\$41,709 \$0
2207	2231.216	Nelray and Evans Utility Improvements	\$0	\$0
2207	2231.218	Future Water Pipeline Replace/Rehab	\$0	\$0 \$0
2207	2231.220	Future Water Pipeline Replace/Rehab-AWU Crews	\$0	\$0
2207	2981.001	Subdivision Engineering & Inspection	\$13,185,021	\$10,445,803
2207	2982.001	Water Services & Meters	\$1,435,925	\$1,225,460
2207	3156.003	Water Resource Planning Study	\$716,034	\$688,669
2207	3159.003	Laboratory Information Management System	\$591,000	\$232,621
2207	3159.010	CMMS Hansen	\$401,000	\$0
2207	3159.011	CMMS MP5	\$176,000	\$0
2207 2207	3159.012 3159.013	GIS Data Management / Integration Tools	\$444,000 \$1,138,977	\$14,826 \$995,127
2207	3159.013	SCADA-Data Integration	\$1,138,977 \$404,000	\$995,127 \$234,681
2207	3159.014	SAN & Server Replacement	\$498,240	\$473,656
2207	3159.017	Router, Switch Replacement & Disaster Recovery	\$472,839	\$388,141
2207	3159.019	AWU Phone Switch replacement-GAATN/Vol	\$369,974	\$232,537
2207	3159.021	Mobile Workforce	\$100,049	\$0
2207	3185.002	Capital Equipment - Vehicles	\$1,502,046	\$581,034
2207	3212.006	MISCELLANEOUS PAVING IMPROVEMENTS	\$60,000	\$18,916
2207	3212.055	US 183 Water Relocations from Sprindale to MLK	\$809,120	\$778,824
2207	3212.056	W US 290-71 from Joe Tanner to Scenic Brook	\$235,330	\$231,774
2207	3212.065	US 183 - MLK Blvd. to Boggy Crk.	\$669,901	\$653,830
2207	3212.075	TXDOT-FM2222@Lakewood(Bull Creek)	\$1,870,028	\$1,859,828
2207	3212.079	SH 71 at Thornberry	\$720,000	\$315,186
2207 2207	3212.081 3212.085	FM 973 Projects US290 E. projects	\$498,304 \$14,535	\$210,456 \$13,992
2207	3212.083	Westgate from Cameron Lp to Cohaba	\$333,066	\$328,065
2207	3212.092	Howard Lane Projects	\$1,026,840	\$1,026,840
2207	3212.104	Manchaca Rd-Ravenscroft to FM 1626	\$2,297,500	\$2,277,048
2207	3212.109	Howard Ln/Metric Blvd Pressure Reducing Valve	\$92,483	\$78,630
2207	3212.113	SH 71 (W) WL Relocation: Upland ridge Dr to No. of SW Pkwy	\$822,764	\$818,852
2207	3212.114	RM 2769 (Volente Rd) WL Relocation: RM 620 to Wet	\$662,607	\$643,766
2207	3212.117	FM 734 Parmer Ln & Amherst Drive	\$179,599	\$174,396

DEPT	SUBPROJECT ID	SUBPROJECT NAME	Current Appropriation	ITD Expenditures
2207	3212.118	US 290(W Ben White) @SB Loop 1	\$78,031	\$66,626
2207	3212.120	SH71 (W) WL Reloc-Arroyo Canyon to S. of SW Pkwy	\$701,314	\$572,676
2207	3212.121	Old Manor Bridge at Tannehill Branch	\$373,200	\$355,453
2207	3212.122	SH71 @ Riverside	\$3,000,000	\$1,793,212
2207 2207	3212.123 3212.124	US290E Manor Expressway	\$790,000	\$64,841
2207	3212.124	Future Water Pipeline Relocations-External Future Water Pipeline Relocations-Internal	\$0 \$0	\$0 \$0
2207	3212.128	Cameron Rd Waterline Relocations	\$0	\$0 \$0
2207	3257.001	Water Laboratory	\$59,423	\$0 \$0
2207	3353.079	Ridgeview Subdivision	\$165,082	\$0
2207	3353.081	Bellingham Meadows	\$2,060,700	\$0
2207	3353.096	Formula One United States	\$5,373,734	\$1,389,058
2207	3353.097	Glenlake Water System	\$2,000,000	\$1,996,142
2207	4798.013	Valve Replacement Program - Combined	\$1,286,000	\$251,372
2207	4800.001	Westlake/West Rim Water System Improvements	\$0	\$0
2207	4800.023	McAllen Pass PRV	\$0	\$0
2207	4800.025	Northwest A & B Zone Boundary Projects	\$0	\$0
2207	4800.028	West Campus System Improvements	\$3,222,500	\$3,165,792
2207	4800.029	HWY 290 / 183 Low Pressure Project	\$0	\$0
2207	4800.030	IH 35 / Oltorf Low Pressure Project	\$0	\$0
2207	4800.033	West Campus Water & WW Improvements Area 5	\$4,917,001	\$4,453,018
2207	4857.010	Anderson Mill Estates STAA-Phase I	\$2,235,471	\$1,994,340
2207	4857.017	North Acres	\$537,363	\$449,218
2207	4857.023	STAA - 2222 Frontage (W&WW)	\$378,247	\$354,714
2207	4857.024	North Acres - Water and Wastewater Improvements-North	\$564,347	\$255,849
2207 2207	4857.025 4857.027	North Acres - Final Conveyance	\$125,568 \$160,085	\$24,596 \$5,102
2207	4953.002	North Acres - Water and Wastewater Improvements - South Real Estate Admin Costs	\$3,298,898	\$3,228,386
2207	4953.002	Property Improvements	\$148,554	\$63,258
2207	4953.011	Tabor Dam Repair	\$0	\$0
2207	4953.013	Hays County Ranch Boundary Fencing Section w and Spike Strip	\$66,100	\$53,739
2207	4953.015	Various Fencing	\$125,000	\$0
2207	4953.020	Rutherford Ranch Road	\$0	\$0
2207	4953.021	WFAD - Walk for a Day	\$250,000	\$95,352
2207	4953.022	Reicher Ranch Road Repair	\$287,000	\$261,617
2207	4953.023	Reicher Ranch-Emmaus House repairs	\$90,000	\$0
2207	4953.025	BCP Shop & Barn	\$225,000	\$0
2207	5028.006	RMMA Redevelpoment North WPZ Imp Phase 3 (SER 2278)	\$5,692,284	\$5,610,157
2207	5071.001	Loop 360 Water System Improvements	\$1,188,091	\$1,183,647
2207	5071.002	Loop 360 Water Imp - Allen Road Pump Station	\$5,834,000	\$5,270,708
2207	5071.003	Loop 360 Water Impr - Barclay Drive Pump Station and Ground Storage	\$5,049,000	\$4,721,573
2207	5071.004	Allen-Barclay Transmission Main	\$1,490,000	\$1,469,728
2207	5071.005	Loop 360 Water Impr - Misc Distribution Improvements	\$2,068,382	\$1,820,551
2207 2207	5267.027 5267.039	Walnut WRI Tank and Pump Station Rehab	\$1,040,000 \$510,000	\$345,604 \$0
2207	5309.005	Hancock GC Irrigation System and Reimbursement South Central Area PB Service Replacements	\$2,215,864	\$84,970
2207	5335.003	Ullrich WTP Contract II Raw Water Pipeline Construction	\$2,213,804	\$84, <i>9</i> 70 \$0
2207	5335.005	Ullrich DACS obsolescence	\$70,000	\$2,265
2207	5335.008	Ullrich WTP On-Site Generation of Chlorine	\$0	\$0
2207	5335.009	Ullrich Roof Replacement	\$800,000	\$792,701
2207	5335.010	ADP-Ullrich Repl Obsolete & Failed Equipment	\$140,000	\$84,530
2207	5335.011	Ullrich WTP Basin Coatings	\$500,000	\$390,553
2207	5335.012	Ullrich Basin Structural Repairs	\$320,000	\$268,138
2207	5335.013	Ullrich Grit Removal	\$500,000	\$362,233
2207	5335.014	Ullrich Chlorine Scrubber Caustic Replacement	\$0	\$0
2207	5335.015	Ullrich Lime Residual Process Valve Replacement	\$100,000	\$0
2207	5335.016	Ullrich 15kv SWGR Replacement	\$0	\$0
2207	5335.017	Air Handler Replacement-Ullrich	\$0	\$0
2207	5335.019	Maintenance Shop a/c Replacement-Ullrich	\$0	\$0
2207	5335.020	ADP-Ullrich RWPS Raw Water Header Corrosion Rehab	\$650,000	\$434,141
2207	5335.021	ADP-Ullrich-parent	\$0	\$0
2207	5335.022	Ullrich WTP Insulation Repair	\$100,000	\$44,518
2207	5335.023	Ullrich WTP Liquid Ammonia Sulfate Impvs	\$0	\$0

DEPT	SUBPROJECT ID	SUBPROJECT NAME	Current Appropriation	ITD Expenditures
2207	5385.002	Davis Lane from Leo Street to West Gate Blvd.	\$154,000	\$33,245
2207	5385.003	Davis/Deer from Brodie to Corran Ferry	\$36,000	\$0
2207	5403.001	Rio Grande: from MLK to 24th St. Street Reconstruction & Utility Adjustment	\$1,092,000	\$1,004,848
2207	5403.003	Rio Grande Street Reconstruction and Utility Adjustment from 24th to 29th	\$80,000	\$12,362
2207 2207	5408.002 5645.003	West 34th Street from Shoal Creek Bridge to West Avenue Street Reconstructi Davis & Ullrich O&M Manual Digital Archiving	\$1,196,451 \$0	\$544,400 \$0
2207	5754.048	Hoeke-Posten Lane Roadway and Drainage Improvments	\$10,032	\$3,600
2207	5771.060	Bike Blvd. Rio Grande and Nueces from 3rd to MLK	\$85,000	\$63,585
2207	5789.020	Shoal Creek - Allandale Storm Drain Improvements	\$758,504	\$616,285
2207	5789.022	Shoal Creek - Ridgelea Storm Drain Improvements	\$85,000	\$45,371
2207	5789.028	Lady Bird Lake -East 4th Street Storm Drain Improvements	\$353,000	\$343,134
2207	5789.033	Fort Branch - Oak Lawn Subdivision Storm Drain Improvements	\$275,666	\$269,222
2207	5789.086	Shoal Creek - Rosedale Storm Drain Improvements Phase 2	\$50,000	\$29,690
2207	5789.096	Little Shoal Creek Tunnel Realignment and Utility Relocations - Phase I	\$825,091	\$342,969
2207	5873.009	Riverside Dr Bridges over Country Club Creek	\$261,301	\$244,242
2207	5873.012	Red Bud Trail Bridges at Lake Austin	\$253,000	\$57,440
2207	5980.008	Downtown Alleys 5i and 5g	\$347,714	\$344,436
2207	6055.004 6055.012	E. 7th Street Improvments - Northwestern to Pleasant Valley	\$807,001	\$723,969
2207 2207	6055.015	E. 7th Street Improvements - Navasota to Northwestern Second Street Phase 2, Colorado to Congress	\$1,148,256 \$56,055	\$1,120,236 \$56,054
2207	6055.024	Second Street Phase 2, Colorado to Congress Second Street District Streetscape Street Recon. & Utility Adj. Phase 3	\$679,142	\$62,000
2207	6062.005	Onion Creek 24-inch South Zone WTM 36-inch Central Zone WTM Relocation	\$2,575,213	\$2,512,881
2207	6598.037	US 290 at FM 1826 and Convict Hill Road	\$496,745	\$38,975
2207	6621.005	SCADA Cyber Security Enhancements	\$660,000	\$640,704
2207	6621.006	Davis WTP Security Access System Upgrade	\$750,000	\$0
2207	6621.010	SCADA Cyber Security Remediation	\$0	\$0
2207	6621.011	Admin Buildings Security Access System Upgrade	\$877,000	\$532,149
2207	6621.012	Pump Stations/Reservoirs Security Access System Upgrade	\$413,594	\$12,103
2207	6621.014	Govalle WWTP Security Access System Upgrade	\$0	\$0
2207	6659.002	Cost of Service Rate Study 2007	\$271,433	\$271,432
2207	6659.004	Facility Condition Assessment	\$1,026,000	\$904,904
2207	6686.001	Group 32-32nd St. Reconstruct.& utility adjustment from Duval to Red River	\$653,014	\$625,639
2207 2207	6755.001 6755.002	Pleasant Valley from St. Elmo to Button Bend Todd (Pleasant Valley) from Ben White to St. Elmo	\$329,351 \$171,550	\$100,940 \$117,517
2207	6934.001	Motorola Oak Hill - Conversion	\$171,550 \$0	\$117,517
2207	6935.013	Forest Ridge/NWA Transmission Main	\$1,122,586	\$1,041,442
2207	6935.022	Springdale/290 Improvements	\$0	\$0
2207	6935.032	Tanglebriar System Improvements	\$0	\$0
2207	6935.033	Johnny Morris/Hwy 290 Area Grid Extension	\$0	\$0
2207	6935.034	Riverside & Pleasant Valley Transmission Main Interconnect	\$0	\$0
2207	6935.036	Riverplace Glenlake Interconnect	\$0	\$0
2207	6935.038	Parmer at US 290E TM	\$0	\$0
2207	6935.039	Cameron Rd Distribution Waterline(s)	\$0	\$0
2207	6939.003	Loop 360 Westlake to Waymaker	\$0	\$0
2207	6959.001	Group 30: Oltorf St E/Congress Ave-IH35	\$1,017,001	\$508,876
2207	6960.001	Brazos St/Cesar Chavez-11th St E	\$1,645,320	\$1,445,402
2207 2207	6961.001 6961.002	Colorado Street Reconstruction and Utility Adjustment from 3rd to 7th St W Colorado Street Reconstruction and Utility Adjustments from 7th to 10th St	\$698,769 \$0	\$55,696 \$0
2207	6961.003	Colorado from 10th to 11th (Governor's Mansion)	\$112,276	\$4,481
2207	6998.001	Rundberg Ln. Extension from Metric to Burnet	\$0	\$0
2207	7485.001	Wells Branch Parkway from Heatherwilde to near 135	\$213,037	\$196,944
2207	7531.003	Gp 22 - Oakland & Highland frm 6th to 9th, Tremont & W6.5 frm Oak to High	\$50,289	\$46,162
2207	7531.006	Gp 8-A - Forest Trail & Stamford Way St Reconstruction/Utility Adjustment	\$35,374	\$32,246
2207	7531.007	Gp 8-B - Elton Lane & Griswold Lane Street Recon/Utility Adjustment	\$375,045	\$342,541
2207	7532.001	Group 3 - Northeast Residential/Collector Streets	\$663,600	\$610,707
2207	7532.002	Group 9 Reconstruction & Utility Adj - NE Collector/Residential Streets	\$634,000	\$409,361
2207	7532.005	Group 19 Ph1 Recon & Utility Adj - Residential/Collector Streets Northeast	\$964,160	\$315,138
2207	7532.006	Group 19 Ph2 Recon & Utility Adj - Residential/Collector Streets Northeast	\$676,184	\$604,576
2207	7533.003 7534.001	Group 12 - Justin Lane and Foster Lane Area - Street Reconstruction	\$57,711	\$57,711
2207	7534.001	5th Street from I35 to Onion Street Reconstruction and Utility Ad (Group 7)	\$300,000	\$83,424
2207 2207	7534.002 7534.004	Group 7 University Hills East Pedernales ST Recon and Util Adjust from 6th to Webberville (Group 7)	\$462,000 \$52,000	\$128,619 \$40,497
2207	7534.004 7534.006	Group 21 - Residential and Collector Streets Central East (North)	\$60,000	\$40,497 \$55,628
2207	, 554.000	5.54p 22 Residential and concetor success central East (North)	φου,ουυ	<i>433,</i> 028

			Current	ITD
DEPT	SUBPROJECT ID	SUBPROJECT NAME	Appropriation	Expenditures
2207	7535.003	Group 11 Phase 1 - Southeast Residential/Collector streets	\$726,682	\$704,509
2207	7535.005	Group 11 Phase 2 - Southeast Residential/Collector streets	\$629,622	\$613,378
2207	7535.006	Group 4A - Montana St and Felix Ave	\$362,230	\$344,680
2207	7535.007	Group 45 - Residential/Collector Streets SE	\$10,000	\$0
2207	7536.003	Group 10 - Collector/Residential Streets SW	\$1,623,307	\$519,093
2207	8098.001	Group 17 - 8th Street from Congress to West Ave.	\$135,850	\$95,418
2207	8158.001	3rd St from Nueces to Congress	\$23,913	\$9,456
2207	8158.002	3rd Street Reconstruction from Congress to Brazos & San Jacinto to Trinity	\$63,324	\$17,744
2207	8158.003	3rd Street Reconstruction from Brazos to San Jacinto (CFA Brazos LP)	\$134,000	\$0
2207	8702.002	Lime Creek Quary	\$103,094	\$93,094
2207	9084.001	Facilities IDIQ	\$18,000	\$848
2307	757.007	Waller Creek Center Improvement	\$485,175	\$382,522

Appendix E Descriptions of the Zones for the Current Fees

Descriptions of the zones for the current fees are found in the Land Development Code Chapter 25-1-21(26) and (30), Chapter 25-8-2(D), Chapter 25-2-311, and Ordinance 990805-31 excerpted below. The boundaries are subject to change based on field work and plan review by Watershed Management Department.

Land Development Code Chapter 25-1-21 (30) DRINKING WATER PROTECTION ZONE means the areas within the Barton Springs Zone, the Barton Creek watershed, all water supply rural watersheds, and all water supply suburban watersheds, as described in Section 25-8-2 (*Descriptions Of Regulated Areas*), that are in the planning jurisdiction.

LDC 25-8-2(D): BARTON SPRINGS ZONE means all watersheds that contribute recharge to Barton Springs, including those portions of the Barton, Williamson, Slaughter, Onion, Bear and Little Bear Creek watershed located in the Edwards Aquifer recharge or contributing zones.

BARTON CREEK WATERSHED means the land area that drains to Barton Creek.

EDWARDS AQUIFER is the water-bearing substrata also known as the Edwards and Associated Limestones Aquifer and includes the stratigraphic rock units known as the Edwards Formation and Georgetown Formation.

EDWARDS AQUIFER CONTRIBUTING ZONE means all land generally to the west and upstream of the Edwards Aquifer recharge zone that provides drainage into the Edwards Aquifer recharge zone.

EDWARDS AQUIFER RECHARGE ZONE means all land over the Edwards Aquifer that recharges the aquifer, as determined by the surface exposure of the geologic units comprising the Edwards Aquifer, including the areas overlain with quaternary terrace deposits.

SOUTH EDWARDS AQUIFER RECHARGE ZONE means the portion of the Edwards Aquifer recharge zone that is located south of the Colorado River and north of the Blanco River.

WATER SUPPLY RURAL WATERSHEDS include the Lake Travis watershed and Lake Austin watershed, excluding the Bull Creek watershed and the area to the south of Bull Creek and the east of Lake Austin.

WATER SUPPLY SUBURBAN WATERSHEDS include:

the Bull, Eanes, Dry Creek North, Taylor Slough North, Taylor Slough South, and West Bull creek watersheds; the Town Lake watershed on the south side of Town Lake from Barton Creek to Tom Miller Dam; the Town Lake watershed on the north side of Town Lake from Johnson Creek to Tom Miller Dam; and the Town Lake watershed on the east side of Lake Austin from Tom Miller Dam to Bull Creek.

Land Development Code Chapter 25-1-21 (26) DESIRED DEVELOPMENT ZONE means the area not within the drinking water protection zone.

LDC 25-8-2(D): SUBURBAN WATERSHEDS include all watersheds not otherwise classified as urban, water supply suburban, or water supply rural watersheds, and include:

the Brushy, Carson, Cedar, Cottonmouth, Country Club East, Country Club West, Decker, Dry Creek NE, Dry Creek East, Elm Creek, Elm Creek South, Gilleland, Harris Branch, Lake, Maha, Marble, North Fork, Plum Creek, Rattan, Rinard, South Boggy, Walnut, and Wilbarger creek watersheds; the Colorado River watershed downstream of U.S. 183; and; those portions of the Onion, Bear, Little Bear, Slaughter, and Williamson creek watersheds not located in the Edwards Aquifer recharge or contributing zones.

LDC 25-8-2(D): *URBAN WATERSHEDS* include:

the Blunn, Buttermilk, East Boggy, East Bouldin, Fort, Harper Branch, Johnson, Little Walnut, Shoal, Tannehill, Waller, and West Bouldin creek watersheds; the north side of the Colorado River watershed from Johnson Creek to U.S. 183; and; the south side of the Colorado River watershed from Barton Creek to U.S. 183.

LDC 25-2-311(A): *CURE* means central urban redevelopment (CURE) combining district which is property located in the central urban area shown on the map adopted by Ordinance No. 001130-110, which is on file with the Planning and Development Review Department. This definition is used in the impact fee ordinance 990805-31 with an addition phrase expanding the fee zone to include the area bounded by Town Lake, Lamar Boulevard, 15th Street, and IH-35. (For the Impact Fee, Ordinance 9908-05-31 added "and area bounded by Town Lake, Lamar Blvd., 15th Street and IH-35")