Sanitary Sewer Conveyance Fee Nexus Study

Final Report
September 2025

DRAFT

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1. INTRODUCTION

This report summarizes updates to the sanitary sewer conveyance fee proposed to fund the City of Santa Clara's (City) sewer capital improvement plan (CIP) for capacity improvements. This report presents the results of a nexus study to justify a sanitary sewer conveyance impact fee under AB 1600. This report discusses the following:

- History of the sanitary sewer conveyance fee
- Existing conveyance fee structure and cost
- Summary of the current conveyance fee fund balance
- Identified capital improvement projects, project timing, and capital cost escalation
- Summary of future flow projections attributed to new development
- Summary of the future square footage associated with new development
- Allocation of capital costs to future users
- Conveyance fee fund cash flow projection
- Proposed updates to conveyance fee

Additional details of conveyance fee calculations are provided in the Appendices.

Please note that Woodard & Curran (W&C) is not a Registered Municipal Advisor or Financial Advisor. The findings in this report reflect W&C's professional engineering understanding of the capital programs scope, associated cost, and schedule. In conclusion, the report provides recommendations for sanitary sewer conveyance fees associated with the Master Plan's Capital Improvement Plan.

2. CONVEYANCE FEE BACKGROUND

2.1 Conveyance Fee History

The Sanitary Sewer Conveyance Fee was originally approved by City Council in June 2007. The fee was created to help mitigate impacts on the City's sewer conveyance system from increased sewer discharges generated by new developments. The basis of the fee utilizes findings in the City's Sanitary Sewer Master Plan related to the capacity required to accommodate new growth and the capital costs of those capacity improvement projects. This fee only recovers the capital costs of conveyance capacity projects to get sewer discharges from new developments and redevelopments to the San Jose/Santa Clara Regional Wastewater Facility (RWF), not treatment capacity at the RWF.

The ongoing need for the conveyance fee is driven by the City's adopted General Plan (projected through 2035), which promotes new development and will continue to lead to increased densities of land uses and sewer discharges.

2.2 Existing Fee Structure

The Sanitary Sewer Conveyance fee was last changed in June 2010 (Resolution No. 10-7741), setting the onetime residential fee at $4,218 per dwelling unit and the non-residential fee at $8.60 per gallon per day (gpd). No changes to the conveyance fee have been made since 2010 except for adding a provision to address Accessory Dwelling Units (ADUs) in 2018 per Ordinance 1968 and limited increases due to inflation. The residential conveyance fee is a flat fee that assumes the average residential single-family property discharges 245 gallons per day (gpd) of sewage. Ordinance 1968 requires the City to charge a pro-rated conveyance fee for ADU's. The City assumes an ADU is equivalent to an apartment and charges a conveyance fee equivalent to 62.9% of the fee for a single-family residential home. The 62.9% is based on the ratio of apartment average daily discharge (154 gpd) to that of a single-family residential home (245 gpd).

The 2010 Conveyance Fee Update Report[1] utilized the General Plan and the then current Sanitary Sewer Capacity Assessment Study[2] to determine the density of dwelling units per acre and the total number of potential dwelling units. Units already built and units approved but not built were subtracted from the total number of potential units to determine the remaining units to use in the 2010 conveyance fee calculation. The number of remaining dwelling units were then multiplied by 245 gpd to determine total residential demands. Non-residential demands utilized the remaining development from the General Plan based on the square fee (SF) of building floor space for various developments and applying a gpd/SF factor to determine total non-residential gpd demand. The total gpd demand (residential and non-residential) was divided by the estimated capital costs of capacity improvements needed to serve future development to calculate the cost per gpd.

As mentioned, the residential conveyance fee was calculated by multiplying the cost per gpd by 245 gpd. Non-residential users are charged on a cost per gpd basis and the conveyance fee is levied at 50% of the

[1] Exhibit A, City of Santa Clara Sanitary Sewer Outlet Charge Conveyance Fee Update Report (City, June 2010): https://santaclara.legistar.com/View.ashx?M=F&ID=7894429&GUID=C8520A4C-98A0-4029-9659-0D284EC51AFF

[2] Sanitary Sewer Capacity Assessment (RMC, May 2007)

cost per gpd. It is not entirely clear how or why the non-residential fee was set at 50% of the cost per gpd but some potential explanations are provided below:

- At the time, the conveyance capacity expansion projects were predominantly driven by residential growth.
- The 2010 fee update report stated "the area of the City where the majority of new residential growth is anticipated does not have sufficient conveyance capacity to get the wastewater from the homes and businesses to the Water Pollution Control Plant."
- City staff mentioned some areas of the City had large industrial/commercial users that are no longer active. Because of the former industrial uses, large collection/conveyance infrastructure remained with adequate capacity available.

As detailed in the 2010 Conveyance Fee Update Report, the calculated fee (for full cost recovery) was $4,850 per residential dwelling unit and $8.65 per gpd non-residential. To limit the extent of the fee increase, the 2010 report proposed an approximate 25% increase to the 2009 fees which were $3,375 per residential dwelling unit and $6.90 per gpd non-residential. The 2010 conveyance fee proposal was approved and the fees were revised to $4,218 per residential dwelling unit and $8.60 per gpd non-residential (less than full cost recovery).

3. PROPOSED CONVEYANCE FEE STRUCTURE

The information provided in this section reflects a change in the conveyance fee structure. It is proposed that the previous fee based on a cost per gpd of sanitary sewer flow be maintained for non-residential development and changed to a fee based on square footage (SF) for residential development. The proposed change for residential development makes the fee structure consistent with AB 602 in that the proposed fee will be proportional to the square footage of proposed residential units. AB 602, passed September 28, 2021, states "if the study is adopted after July 1, 2022, either calculate a fee levied or imposed on a housing development project proportionately to the square footage of the proposed units, or make specified findings explaining why square footage is not an appropriate metric to calculate the fees."

For non-residential development, the existing fee structure accurately represents the proportional demand that the development places on the sanitary sewer system capacity. As examples, a mini-storage warehouse use would generate only 0.02 gpd per square foot of development whereas a fast-food restaurant would generate 0.9 gpd per square foot, a multiple of 45 times the flow of a mini-warehouse. A fee based on the flow generated per square foot is the more equitable method for calculating non-residential fees since the potential range of flows varies widely.

3.1 Current Conveyance Fee Fund Balance

The current conveyance fee fund is accounted for in the City's Fund 594 and is classified as a development impact fee. The existing conveyance fee Fund 594 tracks the beginning balance, additions from developer fees, earnings from interest income, expenditures on sewer conveyance projects, and the ending balance. For the Fiscal Year ended June 30, 2025, the Conveyance Fee fund has an ending balance of $58,727,262. A summary of the conveyance fee fund balance is provided below:

TABLE 1: CONVEYANCE FEE FUND BALANCE

Fund 594	FY2019-20	FY2020-21	FY2021-22	FY2022-23	FY2023-24	FY2024-25
Beginning Balance	$34,179,296	$38,232,186	$39,419,207	$44,853,964	$54,098,272	$55,815,618
Developer Fees	$4,079,586	$3,126,854	$5,214,338	$9,053,180	$1,110,240	$1,328,550
Interest Income	$705,177	$559,621	$720,262	$811,032	$1,090,180	$2,048,922
Expenditures	($731,873)	($2,499,454)	($499,843)	($619,904)	($483,074)	($465,828)
Ending Balance	$38,232,186	$39,419,207	$44,853,964	$54,098,272	$55,815,618	$58,727,262

The conveyance fee fund balance totaled $58,727,262 for fiscal year ended June 30, 2025 (FY2024-25). The interest income is based on the annual weighted interest rate of the City's cash pool. In a prior year (FY2023-24), the interest rate was 1.992%. For subsequent years, interest income is assumed to be earned on the yearly beginning fund balance at a rate of 1.50%.

3.2 Needed Capital Improvements

Sewer capital improvements reflect the capacity improvement project details provided in Task 5 and TM #4 of the current Sanitary Sewer Master Plan Update 2025. Woodard & Curran identified thirteen capacity improvement projects in the CIP totaling $100,572,000[1] (in 2024$). In addition to these capacity improvement projects, the CIP also includes several other costs supported by the conveyance fee revenues. These include Hydraulic Model Maintenance & Support and Technical Analyses to Support System Verification and Hydraulic Model Accuracy for $75,000 and $25,000 (in 2024$), respectively. Also included is Future Master Plan Updates for $950,000 (in 2024$) occurring every seven years with the next update in 2029. These other costs total $1,950,000 (in 2024$) through 2035. A summary table of the CIP projects is provided in **Appendix A** and a summary of the escalated capital costs is provided in **Appendix D**. Each CIP project has a trigger categorized either by Long-Term Future Loads or Existing Loads. Note that while Near-Term future loads may be a possible trigger, by analysis, no project in the CIP is triggered in the Near-Term. For accurate forecasting of CIP costs, Existing Loads projects are assumed to be constructed in FY2028, with pre-construction costs incurred over two years in FY2026 and FY2027. Long-Term Future Loads are assumed to be constructed in FY2035, with pre-construction costs incurred over three years in FY2032, FY2033, and FY2034. Pre-construction activities reflect the engineering and administration cost line items provided in the CIP report. It is assumed that pre-construction costs are incurred evenly over a 2- or 3-year period.

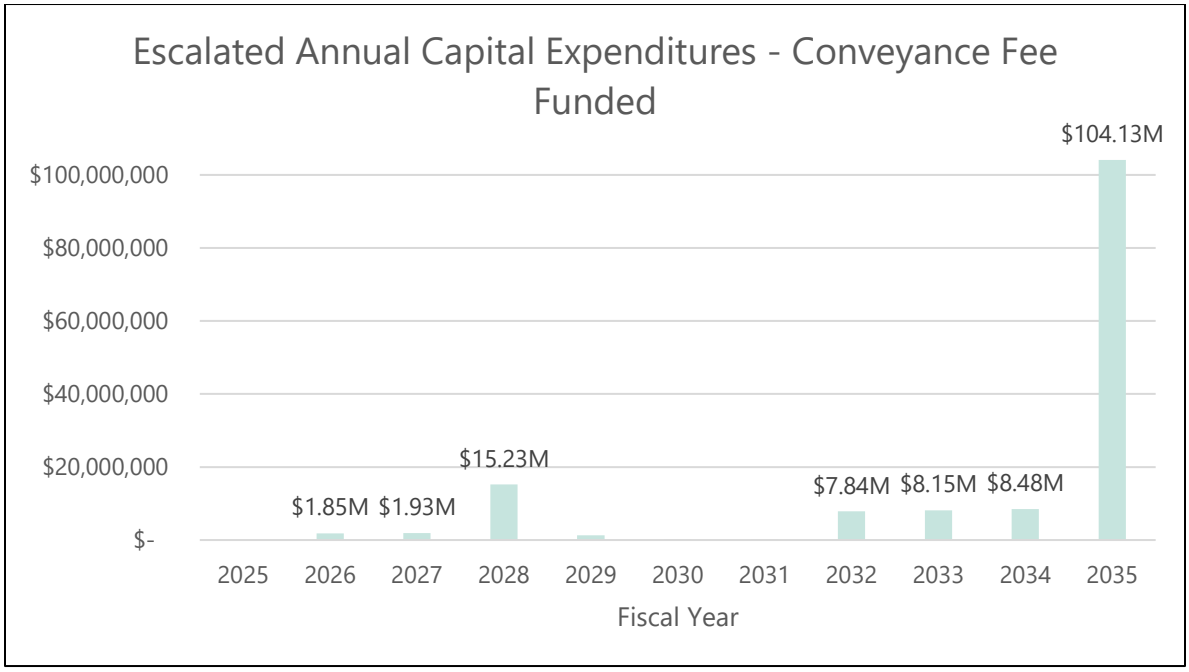
It is important to note that this study is the best estimate of future capital needs. The Capital Improvement Plan in the Sanitary Sewer Master Plan Update 2025 is the source of that best estimate of future capital needs. Moreover, the list of projects in the CIP is subject to change for several potential reasons, such as, changes in development patterns, changes in land uses not currently envisioned, changes in the collection system and/or hydraulic model due to new information, and other unforeseen changes.

While there are always unknown factors that may change construction timelines, FY2035 was used as the end of the planning horizon to conform with the City's current General Plan. Both pre-construction and construction cost estimates are escalated annually by a factor of 4% to account for cost increases. Escalated

[1] Costs are based on August 2024 ENR CCI of 15367.24 for the San Francisco Area

capital costs for the CIP total $149,149,000. Additionally, it is assumed that all capital costs associated with the CIP are cash funded solely by the conveyance fees collected. A breakdown of the escalated capital costs by project is provided in **Appendix D** and a summary of annual capital expenditures through FY2035 is provided in the figure below.

FIGURE 1: ANNUAL CAPITAL EXPENDITURES



3.3 Summary of Future Flow Projections

Future flow projections are summarized by existing, near-term future (next five years), and long-term future (by 2035) as identified in the current Sanitary Sewer Master Plan Update 2025. The flows represent average base wastewater flows during dry weather conditions[1] and are further separated by residential and non-residential user types. The table below presents the total existing flows, anticipated flows by the near-term future, and anticipated flows by the long-term future.

[1] Existing flows based on winter water use (consumption) from the City's billing database. These flows would represent the average daily sanitary sewer discharges from the City's customers during dry weather (non-rainfall) conditions.

TABLE 2: AVERAGE DRY WEATHER FLOWS SUMMARY (IN MGD) (SANTA CLARA FLOW ONLY)

Land Use	Residential	Non-Residential	Total	Notes
Existing	6.72	4.50	11.21	
Near-Term Future	10.11	6.09	16.20	
Long-Term Future	13.21	10.77	23.98	Excludes 5.085 MGD assumed for entitlements
*Note: Does not include sewer flows from the Cupertino Sanitary District (CuSD)				

To determine the flows attributable to the capacity improvement projects identified in the CIP, these flows were further summarized to show the incremental flows in the near and long-term future. Residential users are expected to add 3.39 millions of gallons per day (MGD) and 3.10 MGD in the near-term future and long-term future, respectively. Non-residential users are anticipated to add 1.59 MGD and 4.68 MGD in the near-term future and long-term future, respectively. Near-term future flows are expected to be added from FY2026-FY2030 and long-term future flows from FY2031-FY2035. Future flows for residential and non-residential users total 12.76 MGD. The incremental future flows are summarized in the table below.

TABLE 3: INCREMENTAL AVERAGE DRY WEATHER FLOWS SUMMARY (IN MGD) (SANTA CLARA FLOW ONLY)

Land Use	Residential	Non-Residential	Total	Notes
Existing	6.72	4.50	11.21	
Near-Term Future	3.39	1.59	4.99	
Long-Term Future	3.10	4.68	7.78	Excludes 5.085 MGD assumed for entitlements
Total Flows (by 2035)	13.21	10.77	23.98	
*Note: Does not include sewer flows from the Cupertino Sanitary District (CuSD)				

Both tables exclude 5.085 MGD assumed for entitlements in the long-term future flows[1] and do not include sewer flows from the Cupertino Sanitary District (CuSD). Based on flow monitoring, it was estimated that existing average dry weather flows from CuSD are approximately 3.45 MGD. Additionally, CuSD and the City have an existing agreement that allows CuSD to discharge a maximum of 13.8 MGD to the City's sewer system (maximum peak wet weather flow assumed in the model for future conditions.) As such, the total flows identified in Table 3 are not the total flows carried by the conveyance system but are reduced by the amount of the CuSD estimated flows.

The exact timeline of the future flow contributing to the system is not known on a year-by-year basis. For the purposes of this report, the total 5-year near-term and total 5-year long-term flows were averaged to determine the flows added on a year-by-year basis. For example, the near-term future residential flows total 3.39 MGD resulting in an annual flow of 678,400 gpd for each of the 5 years from FY2026 to FY2030.

[1] The entitlement flows of 5.085 MGD reflect approximately 0.374 MGD for residential users and 4.711 MGD for non-residential users.

TABLE 4: NEAR-TERM AND LONG-TERM FLOW (GPD) PROJECTIONS

Land Use	Residential	Non-Residential	Total
Near-Term Future Flow (aggregate)	3,392,000	1,593,000	4,985,000
Annual Flow (FY2026-FY2030)	678,400	318,600	997,000
Long Term Future Flow (aggregate)	3,098,000	4,681,000	7,779,000
Annual Flow (FY2031-FY2035)	619,600	936,200	1,555,800

3.4 Summary of Future Square Footage Projection

The future flows presented in Section 3.3 are based upon the near and long-term projected residential Dwelling Unit's (DU) and square footage of non-residential development as identified in the City's General Plan. The Residential DUs were converted to square feet using averages from an analysis of planning approvals from 2022, 2023, and 2024 (provided by the City). The average square feet for various residential developments and associated density category are as follows:

- Single Family: 2,650 SF – Low Density
- Condo/Townhouse: 1,660 SF - Medium Density
- High Density (all types): 800 SF – High Density

Table 5 provides the DUs, SF per DU, and total SF in the near-term and long-term for residential development. The values shown are incremental in order to determine the SF attributable to development in the near-term and long-term. As previously mentioned, it is proposed to utilize the future square footage estimates such that the conveyance fee can be a levied per square foot of development in compliance with AB 602.

TABLE 5: FUTURE DWELLING UNIT AND SQUARE FEET PROJECTION

			Value	Units	Square Feet per DU	Total Square Feet
Residential	**Near-Term**	Low Density	0	DUs	2,650	-
		Medium Density	1,870	DUs	1,660	3,104,200
		High Density	12,466	DUs	800	9,972,800
	Long Term	Low Density	132	DUs	2,650	349,800
		Medium Density	6,484	DUs	1,660	10,763,440
		High Density	13,581	DUs	800	10,864,800

The exact timeline of the future square footage of development is not known on a year-by-year basis. For the purposes of this report, the total 5-year near-term and total 5-year long-term square feet of development were averaged to determine the square footage added on a year-by-year basis. For example, the near-term future residential square feet of development total 13,077,000, resulting in annual square

feet of 2,615,400 for each of the 5 years from FY2026 to FY2030. The annualized square feet projections will provide the basis of when conveyance fee revenues are expected to be earned. The table below provides a summary of the aggregate and annual square feet of development projection.

TABLE 6: NEAR-TERM AND LONG-TERM SQUARE FEET PROJECTION

Land Use	Residential
Near-Term Future Square Feet (aggregate)	13,077,000
Annual Square Feet (FY2026-FY2030)	2,615,400
Long-Term Future Square Feet (aggregate)	21,978,040
Annual Square Feet (FY2031-FY2035)	4,395,608

3.5 Capital Cost Allocation to Future Users

The capacity improvement projects identified in the CIP are generally required across the entire sewer system to ensure adequate conveyance capacity to serve future development. Also, the total incremental flows due to future development roughly are split 50/50 between residential and non-residential development. For these reasons, the capital costs associated with capacity improvements use an equal 50/50 cost responsibility for residential and non-residential developments. The total escalated capital costs for future capacity of $149,149,000 are reduced by the FY2024-25 conveyance fee ending balance of $58,727,262, resulting in $90,421,391. This is further reduced by the assumed interest earnings on the fund balance from FY2026 – FY2035 of ~ $10,810,000, resulting in $79,611,391. The intent of reducing the capital costs by the existing fund ending balance and interest earnings over the forecast is to ensure the ending fund balance in 2035 is at or near zero such that all fees collected and expended are directly related to the projected development. The total capital cost attributed to residential development is divided by the total near and long-term square footage to calculate the cost per SF for residential fee. The total capital cost attributed to non-residential development is divided by the total additional gpd resulting from development to calculate the cost per gpd for non-residential fee. The following table provides the cost per SF for residential and cost per gpd for non-residential development types when considering the total escalated capital costs (less existing fund balance and less interest earnings), total near and long-term square footage for residential, and total near and long-term flow (gpd) for non-residential.

TABLE 7: CAPITAL COSTS ALLOCATION

Description	Residential	Non-Residential
Total Remaining Escalated Capital Costs for Future Capacity	$ 79,611,391	$ 79,611,391
Cost Share Percentage	50%	50%
Allocated Capital Cost	$ 39,805,696	$ 39,805,696
Total Near and Long-Term Square Footage	35,055,040	
Total Near and Long-Term Flow (gpd)		6,274,000
Conveyance Fee per Square Foot	$ 1.14	
Conveyance Fee per GPD		$ 6.34

3.6 Summary Conveyance Fee Revenues and Cash Flow Projection

As described in Section 3.3, near-term future non-residential flows are added annually for 5 years (fiscal years, 2026, 2027, 2028, 2029, and 2030), as shown in Table 4. Near-term future flows added annually are 318,600 gpd. Long-term future flows are added annually for 5 years (fiscal years 2031, 2032, 2033, 2034, and 2035). Long-term future flows added annually are 936,200 gpd. The annual flows are then multiplied by the $6.34 non-residential conveyance fee cost per gpd to determine total conveyance fee revenues from non-residential.

As described in Section 3.4, near-term future residential square footage is added annually for 5 years (fiscal years, 2026, 2027, 2028, 2029, and 2030), as shown in Table 6. Near-term future square footage added annually is 2,615,400 SF. Long-term future square footage is added annually for 5 years (fiscal years 2031, 2032, 2033, 2034, and 2035). Long-term future square footage added annually is 4,395,608 SF. The annual square feet are then multiplied by the $1.14 residential conveyance fee cost per square foot to determine total conveyance fee revenues from residential. Annual conveyance fee revenues (combined residential and non-residential) range from $5,002,000 to $10,947,000 over the forecast period. Reference **Appendix B** for full detail. The cash flow projections include the actual beginning and ending fund balance in FY2023, FY2024, and FY2025. The FY2026 beginning balance reflects the prior year ending balance and FY2026 is the year updated conveyance fees start to be collected. As previously mentioned, interest income is assumed to be earned at a rate of 1.50% based on the beginning fund balance for FY2026 and beyond. The ending fund balance in FY2035 is approximately $120,000. A summary of the cash flow projection through FY2035 is provided in **Appendix C**.

3.7 Conveyance Fee Recommendation

The recommended conveyance fee structure and rates are as follows:

- Residential - $1.14 per square foot
- Non-residential - $6.34 per gallon per day (gpd)

The residential rate is recommended to be changed from its current cost per dwelling unit to one assessed per square foot of development. The change makes the fee consistent with AB 602 as further described in Section 3. The methodology in establishing the rate is covered in Sections 3.4 and 3.5. The non-residential fee is recommended to stay on a cost per gpd basis as this accurately captures the wide range of flows dependent on the nature of the use (refer also to Section 3.) The methodology in establishing the rate is covered in Sections 3.3 and 3.5. The conveyance capacity expansion required is linked to the demands that future flows (associated with new development) will place on the conveyance system. Therefore, it is reasonable to require future users to pay for the cost of the capacity expansion based on the impact each user contributes to the conveyance system.

The recommended residential rate of $1.14 per square foot is rounded to the nearest cent and will result in a more straightforward application of the rate for any given development application. At this rate, the residential conveyance fee would be $3,021 for an average-sized single-family residential dwelling unit (2,650 SF X $1.14 per SF), $1,892.40 for a residential condo/townhouse (1,660 SF X $1.14 per SF), and $912 for residential high density (800 SF X $1.14 per SF). As previously mentioned, the square footage associated with residential developments reflects the averages based upon analysis of planning approvals from 2022, 2023, and 2024. These proposed fees compare to the current fee for residential of $4,218 per dwelling unit.

The proposed fees are between 28.4 and 78.4% lower than the current fee. The change in fee structure to a cost per square footage of residential development allows the City greater flexibility to assess the conveyance fee for a variety of property uses in an equitable manner. For example, a large 10,000 SF single family dwelling unit likely contributes more to the sewer conveyance system than a small 1,660 SF condo/townhouse.

The non-residential fee would change from the current $8.60 per gpd to $6.34 per gpd reflecting a reduction of 26.2%.

It is important to note that if any unforeseen expenses or larger than expected construction cost increases occur, the conveyance fee fund may not have adequate resources to absorb those costs.

Also, additional funding sources may be required to fund the conveyance improvements if the level of new development square footage and associated sewer flows do not occur as planned. The City should annually compare actual square footage and flow from new developments to those assumed in this report and make any adjustments as needed to the conveyance fee calculations. One example would be if there was a major change in development plans that resulted in lower total near and long-term square footage, the City would want to recalculate the fees with the new projections. On the other hand, if the actual capital costs exceed the initial costs provided in the CIP and escalation factors built into this analysis, the City may want to increase the total revenues to be raised by the fee thereby increasing the per unit fee. Ultimately the City should ensure the conveyance fee fund receives adequate revenues to support the timeline of planned capital expenditures. If there is a shortfall for one or several years, the fee structure may need to be reevaluated and updated to address a reduced inflow of revenues.

3.8 Conveyance Fee Rate Comparison

The following charts compare the City's current and proposed sewer conveyance fee to comparable agencies in the region. It is important to note that some agencies do not have separate fees for sewer conveyance capacity and treatment capacity and will show higher amounts in this comparison. Agencies with an asterisk * may include fees for both sewer collection and treatment or only provide a single sewer development impact fee. Agencies with combined conveyance and treatment capacity charges are shown in Figure 2. Agencies with separate conveyance fees are provided in Figure 3. The proposed conveyance fee of $3,021 (single family residential) would be one of the lowest fees of the agencies surveyed. The charts below provide the estimated conveyance fee for the various residential development types based on the average square feet of those developments (single family = 2,650 SF, condo/townhouse = 1,660 SF, high density = 800 SF). Additionally, the "Santa Clara SF Conveyance & Treatment (Proposed)" includes the combined single family residential fee for sewer conveyance ($3,021) and sewer treatment ($1,187).

FIGURE 2: COMPARISON OF RESIDENTIAL SEWER CAPACITY FEES – CONVEYANCE AND TREATMENT

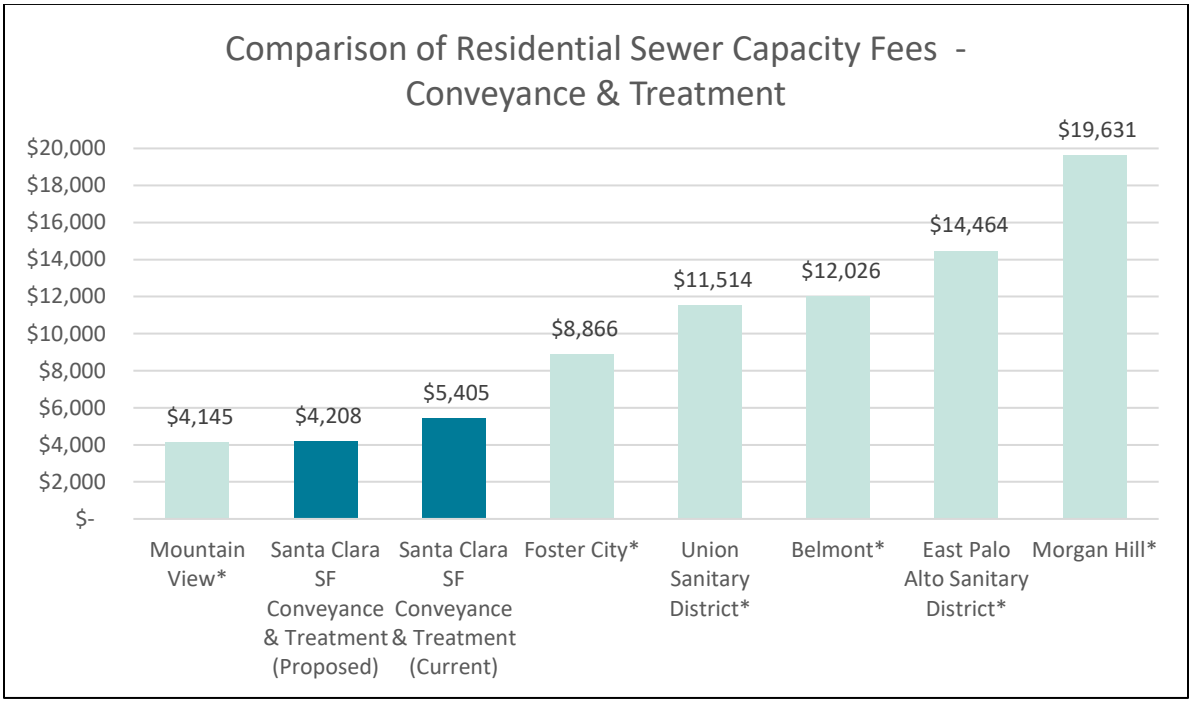
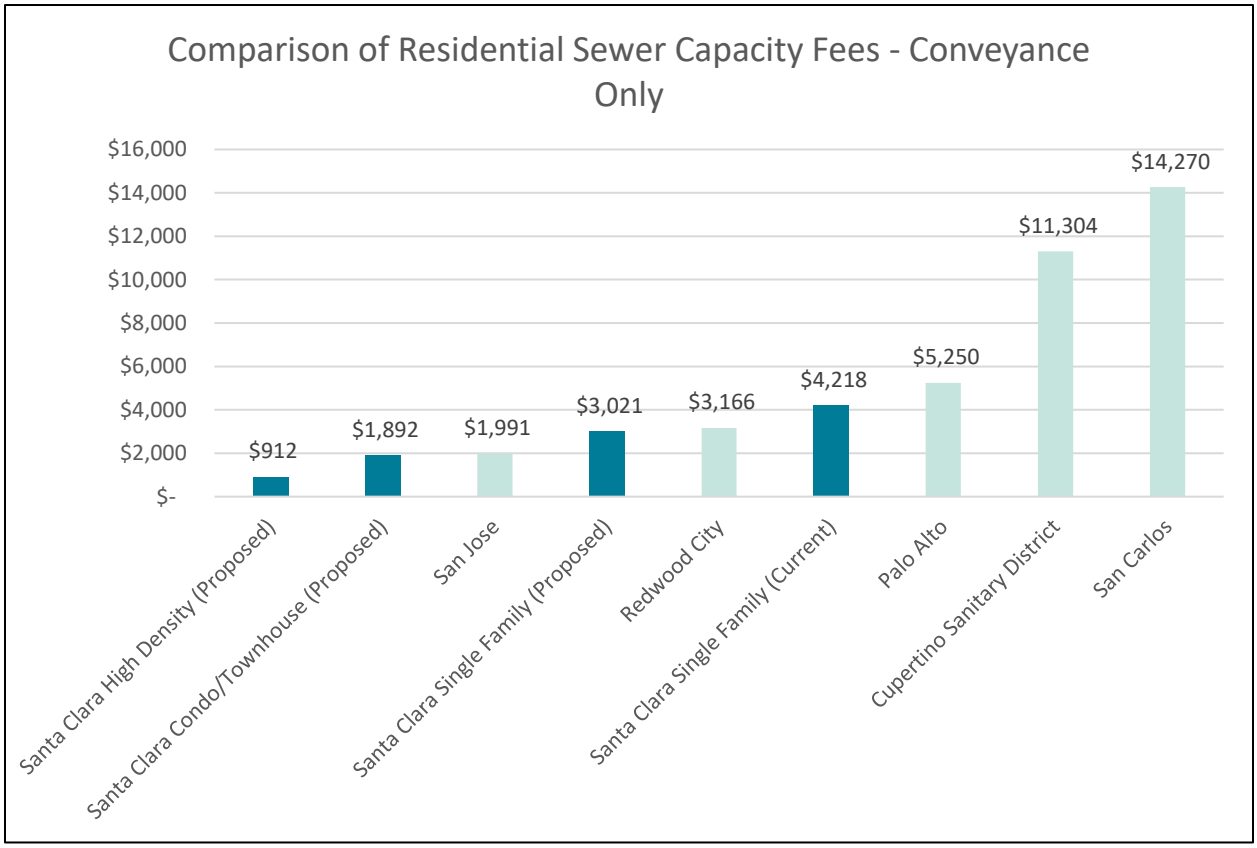


FIGURE 3: COMPARISON OF RESIDENTIAL SEWER CAPACITY FEES – CONVEYANCE ONLY FEES



The fees displayed above are based on the following units:

- San Jose – Sewer Connection Fee Per Acre for residential parcel sizes greater than or equal to 9,780 S.F.
- Redwood City – Sewer Collection Capacity Per Single Family Dwelling Unit
- Mountain View – Sewer Capacity Fee Per Residential Unit
- Palo Alto – Wastewater Capacity Charge for a 4-in connection with a 5/8-in meter
- Foster City – Sewer Service Connection Per Equivalent Dwelling Unit
- Cupertino Sanitary District – Sewer Development Fee Per Single Family Dwelling Unit
- Union Sanitary District – Sewer Capacity Fee Per Single Family Dwelling Unit (less than 4,500 S.F.)
- Belmont – Sewer Connection Fees Per Residential Dwelling Unit
- San Carlos – Sewer Capacity Charges Per Single Family Dwelling Unit
- East Palo Alto Sanitary District – Sewer Connection Fee Per Residential Unit

- Morgan Hill – Sewer Development Impact Fee Per Dwelling Unit

APPENDIX A – CAPITAL IMPROVEMENT PLAN EXCERPT

Appendix G: Sewer Capacity CIP Cost Estimates, Maps, and Profiles

Capital Improvement Project Summary Table

Project No.[1]	Project ID	Project Location	Pre-Project Pipe Diameter(s)[2]	Project Description	Priority[3]	Flow Confidence Level[4]	Loads Trigger[5]	Design Flow Trigger[5]	Physical Network Trigger[5]	Project Cost[6]
1	**Tracy/Pomeroy/Homestead/ Kiely**	Tracy Dr, Pomeroy Ave, Homestead Rd (S Trunk), Kiely Blvd	10 to 22.8-inch	12313 LF of 15 to 27-inch diameter pipe	7	N/A	LTFL (entitlement)	DWF	UMN	**$26,942,000**
2	**Homestead Road**	N Homestead Trunk from Swallow Wy to Saratoga Creek	18 to 30-inch	6407 LF of 24 to 33-inch diameter pipe	3	3	LTFL	WWF	UMN	**$17,156,000**
3	**Kiely Boulevard**	Orthello Wy to S of El Sobrante St	8-inch	266 LF of 10-inch diameter pipe	6	4	LTFL	WWF	UMN	**$513,000**
4	**Victoria Avenue**	Fowler Ave & Pomeroy Ave to Nobili Ave & Victoria Ave	8-inch	764 LF of 10-inch diameter pipe	6	3	LTFL	WWF	UMN	**$1,337,000**
5	**Cabrillo Avenue**	Halford Ave & Buckley St; St. Lawrence Dr, W of Lawrence Expwy	8-inch	Flow Diversion Weirs only. No pipe	1	3	EL	WWF	UMN	**$154,000**
6	**CMC Basin**	Santa Maria Ave & Francis Ave; Amethyst Dr	8 to 12-inch	3655 LF of 12 to 15-inch diameter pipe	1	1 & 2	EL	WWF	UMN	**$7,263,000**
7	**Bowers Avenue**	Bowers Ave from Chromite Dr to Walsh Ave	25.7-inch	2605 LF of 30-inch diameter pipe	4	5	LTFL	WWF	LMN	**$8,047,000**
8	**Calabazas Trunk**	Calabazas Creek from S of Agate Dr to Central Expwy	22.8 to 27-inch	2791 LF of 18 to 27-inch diameter pipe	2	5	EL	WWF	LMN	**$8,731,000**
9	**Mission College Boulevard**	Mission College Blvd from Freedom Cir to west of Great America Pkwy	12 to 15-inch	1886 LF of 15-inch diameter pipe	5	N/A	LTFL (specific development)	DWF	UMN	**$3,830,000**
12	**GAP West Trunk**	S of West Tasman Dr to Lafayette St	28.5 to 35.7-inch	4810 LF of 36 to 42-inch diameter pipe	3	2	LTFL	WWF	UMN	**$17,781,000**
13	**GAP East Trunk**	Old Glory Ln to S of Bunker Hill Ln; Stars and Stripes Dr	31.4-inch	231 LF of 39-inch diameter pipe	4	2	LTFL	WWF	LMN	**$1,002,000**
14	**Bunker Hill Lane East**	E of Great America Pkwy	6-inch	107 LF of 8-inch diameter pipe	7	N/A	LTFL (entitlement)	WWF	UMN	**$301,000**
15	**Lafayette Street**	N of Calle del Mundo to S of Great America Wy	34.2 to 40.3-inch	2290 LF of 42 to 48-inch diameter pipe	3	2	LTFL	WWF	UMN	**$7,515,000**
									CIP Total:	**$100,572,000**

[1]Projects are numbered from upstream to downstream. Table does not include Project Nos. 10 (Patrick Henry Drive) and 11 (Mission Point) because project costs will be paid for by the developers.

[2]Pre-project pipe diameters include future lining assumptions.

[3]Projects are prioritized based on wastewater flow, design flow, and physical network triggers as well as assumed structural condition.

[4]Rating assigned to validate the need for the project through review of flow monitoring data and reported surcharging and operational issues, and compatibility between flow meter data and the model. Descriptions of the flow confidence levels are as follows: N/A = Not assigned because project would be triggered by entitlement flow or specific development; 1 = Flow meter on or very near to the project reach surcharged during metered storm; 2 = Flow meter on or very near to the project reach confirms flow, but did not surcharge during metered storm; 3 = Flow meter near the project reach (upstream or downstream) confirms flow; 4 = No flow meter near the project reach to confirm flow; 5 = Conflicting flow between meter and model.

[5]EL = Existing Loads; LTFL = Long-Term Future Loads; DWF = Dry Weather Flow; WWF = Wet Weather Flow; UMN = Unlined Model Network; LMN = Lined Model Network.

[6]Costs are based on August 2024 ENR CCI of 15367.24 for the San Francisco Area and are Class 5 estimates (planning level).

Total Cost by Priority Category

Priority	# of Projects	Estimated Capital Cost	%
1	2	$ 7,417,000	7%
2	1	$ 8,731,000	9%
3	3	$ 42,452,000	42%
4	2	$ 9,049,000	9%
5	1	$ 3,830,000	4%
6	2	$ 1,850,000	2%
7	2	$ 27,243,000	27%
Total	13	**$ 100,572,000**	

Other Conveyance Fee Cost Items

Item	Description	Frequency	Amount *
Hydraulic Model Maintenance & Support	Continuously update model network to reflect changes and improvements to the sewer system, update base flow scenarios based on development status (proposed, approved, constructed), maintain consistent documentation in model files, and related tasks.	Annual	$75,000
Future Master Plan Updates	Comprehensive update of Master Plan to include hydraulic model update (with latest water and land use data), flow monitoring, model calibration, analysis of system deficiencies, development of projects to resolve deficiencies, funding analysis, and production of technical memoranda and reports.	Every 7 years with next funding need in 2029	$950,000
Technical Analyses to Support System Verification and Hydraulic Model Accuracy	Perform inflow/infiltration studies (to evaluate basins with high wet-weather response), conduct flow monitoring to verify system hydraulic conditions (including, but not necessarily limited to, flow split locations), analyze water usage and sewer generation rates to determine trends and potential system impacts, perform pump station capacity evaluations to identify firm capacities, evaluate proposed sewer improvements for sytem performance (when requested), and similar technical studies/analyses.	Annual	$25,000

* Cost is stated in 2024 dollars. Use escalation for subsequent years.

APPENDIX B – CONVEYANCE FEE REVENUES

Conveyance Fee Revenues

Fiscal Year	**FY2025**	**FY2026**	**FY2027**	**FY2028**	**FY2029**	**FY2030**	**FY2031**	**FY2032**	**FY2033**	**FY2034**	**FY2035**
Fiscal Year	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Residential:											
Future Development SF	-	2,615,400	2,615,400	2,615,400	2,615,400	2,615,400	4,395,608	4,395,608	4,395,608	4,395,608	4,395,608
Conveyance Fee Cost per SF	$ 1.14	$ 1.14	$ 1.14	$ 1.14	$ 1.14	$ 1.14	$ 1.14	$ 1.14	$ 1.14	$ 1.14	$ 1.14
Total Residential Conveyance Fees	$ -	$ 2,982,000	$ 2,982,000	$ 2,982,000	$ 2,982,000	$ 2,982,000	$ 5,011,000	$ 5,011,000	$ 5,011,000	$ 5,011,000	$ 5,011,000
Non-Residential:											
Future Development Flow (gpd)	-	318,600	318,600	318,600	318,600	318,600	936,200	936,200	936,200	936,200	936,200
Conveyance Fee Cost per GPD	$ 6.34	$ 6.34	$ 6.34	$ 6.34	$ 6.34	$ 6.34	$ 6.34	$ 6.34	$ 6.34	$ 6.34	$ 6.34
Total Non-Residential Conveyance Fees	$ -	$ 2,020,000	$ 2,020,000	$ 2,020,000	$ 2,020,000	$ 2,020,000	$ 5,936,000	$ 5,936,000	$ 5,936,000	$ 5,936,000	$ 5,936,000
Total Conveyance Fee Revenues	**$ -**	**$ 5,002,000**	**$ 5,002,000**	**$ 5,002,000**	**$ 5,002,000**	**$ 5,002,000**	**$ 10,947,000**	**$ 10,947,000**	**$ 10,947,000**	**$ 10,947,000**	**$ 10,947,000**

APPENDIX C – CASH FLOW PROJECTION

Cash Flow Projection

Fiscal Year	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035
Fiscal Year	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**	**2034**	**2035**
Beginning Fund Balance	$ 44,853,964	$ 54,098,272	$ 55,815,618	$ 58,727,262	$ 62,755,518	$ 66,770,013	$ 57,544,527	$ 62,132,209	$ 67,939,660	$ 79,774,162	$ 84,078,173	$ 88,133,161	$ 91,922,846
Conveyance Fees (Developer Fees)	$ 9,053,180	$1,110,240	$ 1,328,550	$ 5,002,000	$ 5,002,000	$ 5,002,000	$ 5,002,000	$ 5,002,000	$ 10,947,000	$ 10,947,000	$ 10,947,000	$ 10,947,000	$ 10,947,000
Interest Income	$ 811,032	$ 1,090,180	$ 2,048,922	$ 880,909	$ 941,333	$ 1,001,550	$ 863,168	$ 931,983	$ 1,019,095	$ 1,196,612	$ 1,261,173	$ 1,321,997	$ 1,378,843
Subtotal	$ 54,718,176	$ 56,298,692	$ 59,193,090	$ 64,610,171	$ 68,698,851	$ 72,773,563	$ 63,409,694	$ 68,066,192	$ 79,905,755	$ 91,917,774	$ 96,286,346	$ 100,402,158	$ 104,248,688
Existing Expenses Appropriated	$ (619,904)	($483,074)	($465,828)										
Future CIP Expenses	$ -	$ -	$ -	$ (1,854,653)	$ (1,928,839)	$ (15,229,036)	$ (1,277,486)	$ (126,532)	$ (131,593)	$ (7,839,601)	$ (8,153,185)	$ (8,479,312)	$ (104,128,417)
Ending Fund Balance	$ 54,098,272	$ 55,815,618	$ 58,727,262	$ 62,755,518	$ 66,770,013	$ 57,544,527	$ 62,132,209	$ 67,939,660	$ 79,774,162	$ 84,078,173	$ 88,133,161	$ 91,922,846	$ 120,272

APPENDIX D – ESCALATED CAPITAL IMPROVEMENT COST BY PROJECT

Escalated Capital Improvement Cost by Project

Project No.	Project ID	Phase	Loads Trigger	Estimated Capital Improvement Cost	Project Start	Escalated Capital Cost
1	Tracy/Pomeroy/Homestead/Kiely	Pre-Construction Yr 1	Long-Term Future Loads (LTFL)	$ 1,796,115	2032	$ 2,458,107
1	Tracy/Pomeroy/Homestead/Kiely	Pre-Construction Yr 2	Long-Term Future Loads (LTFL)	$ 1,796,115	2033	$ 2,556,432
1	Tracy/Pomeroy/Homestead/Kiely	Pre-Construction Yr 3	Long-Term Future Loads (LTFL)	$ 1,796,115	2034	$ 2,658,689
1	Tracy/Pomeroy/Homestead/Kiely	Construction	Long-Term Future Loads (LTFL)	$ 21,553,381	2035	$ 33,180,440
2	Homestead Road	Pre-Construction Yr 1	Long-Term Future Loads (LTFL)	$ 1,143,738	2032	$ 1,565,284
2	Homestead Road	Pre-Construction Yr 2	Long-Term Future Loads (LTFL)	$ 1,143,738	2033	$ 1,627,895
2	Homestead Road	Pre-Construction Yr 3	Long-Term Future Loads (LTFL)	$ 1,143,738	2034	$ 1,693,011
2	Homestead Road	Construction	Long-Term Future Loads (LTFL)	$ 13,724,851	2035	$ 21,128,778
3	Kiely Boulevard	Pre-Construction Yr 1	Long-Term Future Loads (LTFL)	$ 34,210	2032	$ 46,819
3	Kiely Boulevard	Pre-Construction Yr 2	Long-Term Future Loads (LTFL)	$ 34,210	2033	$ 48,692
3	Kiely Boulevard	Pre-Construction Yr 3	Long-Term Future Loads (LTFL)	$ 34,210	2034	$ 50,640
3	Kiely Boulevard	Construction	Long-Term Future Loads (LTFL)	$ 410,524	2035	$ 631,983
4	Victoria Avenue	Pre-Construction Yr 1	Long-Term Future Loads (LTFL)	$ 89,137	2032	$ 121,990
4	Victoria Avenue	Pre-Construction Yr 2	Long-Term Future Loads (LTFL)	$ 89,137	2033	$ 126,870
4	Victoria Avenue	Pre-Construction Yr 3	Long-Term Future Loads (LTFL)	$ 89,137	2034	$ 131,945
4	Victoria Avenue	Construction	Long-Term Future Loads (LTFL)	$ 1,069,644	2035	$ 1,646,668
5	Cabrillo Avenue	Pre-Construction Yr 1	Existing Loads (EL)	$ 15,357	2026	$ 16,610
5	Cabrillo Avenue	Pre-Construction Yr 2	Existing Loads (EL)	$ 15,357	2027	$ 17,274
5	Cabrillo Avenue	Pre-Construction Yr 3	Existing Loads (EL)	$ -	2027	$ -
5	Cabrillo Avenue	Construction	Existing Loads (EL)	$ 122,850	2028	$ 143,717
6	CMC Basin	Pre-Construction Yr 1	Existing Loads (EL)	$ 726,306	2026	$ 785,572
6	CMC Basin	Pre-Construction Yr 2	Existing Loads (EL)	$ 726,306	2027	$ 816,995
6	CMC Basin	Pre-Construction Yr 3	Existing Loads (EL)	$ -	2027	$ -
6	CMC Basin	Construction	Existing Loads (EL)	$ 5,810,445	2028	$ 6,797,399
7	Bowers Avenue	Pre-Construction Yr 1	Long-Term Future Loads (LTFL)	$ 536,486	2032	$ 734,218
7	Bowers Avenue	Pre-Construction Yr 2	Long-Term Future Loads (LTFL)	$ 536,486	2033	$ 763,587
7	Bowers Avenue	Pre-Construction Yr 3	Long-Term Future Loads (LTFL)	$ 536,486	2034	$ 794,130
7	Bowers Avenue	Construction	Long-Term Future Loads (LTFL)	$ 6,437,831	2035	$ 9,910,745
8	Calabazas Trunk	Pre-Construction Yr 1	Existing Loads (EL)	$ 873,069	2026	$ 944,311
8	Calabazas Trunk	Pre-Construction Yr 2	Existing Loads (EL)	$ 873,069	2027	$ 982,083
8	Calabazas Trunk	Pre-Construction Yr 3	Existing Loads (EL)	$ -	2027	$ -
8	Calabazas Trunk	Construction	Existing Loads (EL)	$ 6,984,549	2028	$ 8,170,934
9	Mission College Boulevard	Pre-Construction Yr 1	Long-Term Future Loads (LTFL)	$ 255,349	2032	$ 349,463

Escalated Capital Improvement Cost by Project

Project No.	Project ID	Phase	Loads Trigger	Estimated Capital Improvement Cost	Project Start	Escalated Capital Cost
9	Mission College Boulevard	Pre-Construction Yr 2	Long-Term Future Loads (LTFL)	$ 255,349	2033	$ 363,441
9	Mission College Boulevard	Pre-Construction Yr 3	Long-Term Future Loads (LTFL)	$ 255,349	2034	$ 377,979
9	Mission College Boulevard	Construction	Long-Term Future Loads (LTFL)	$ 3,064,189	2035	$ 4,717,178
12	GAP West Trunk	Pre-Construction Yr 1	Long-Term Future Loads (LTFL)	$ 1,185,368	2032	$ 1,622,258
12	GAP West Trunk	Pre-Construction Yr 2	Long-Term Future Loads (LTFL)	$ 1,185,368	2033	$ 1,687,149
12	GAP West Trunk	Pre-Construction Yr 3	Long-Term Future Loads (LTFL)	$ 1,185,368	2034	$ 1,754,635
12	GAP West Trunk	Construction	Long-Term Future Loads (LTFL)	$ 14,224,420	2035	$ 21,897,841
13	GAP East Trunk	Pre-Construction Yr 1	Long-Term Future Loads (LTFL)	$ 66,828	2032	$ 91,459
13	GAP East Trunk	Pre-Construction Yr 2	Long-Term Future Loads (LTFL)	$ 66,828	2033	$ 95,117
13	GAP East Trunk	Pre-Construction Yr 3	Long-Term Future Loads (LTFL)	$ 66,828	2034	$ 98,922
13	GAP East Trunk	Construction	Long-Term Future Loads (LTFL)	$ 801,936	2035	$ 1,234,544
14	Bunker Hill Lane East	Pre-Construction Yr 1	Long-Term Future Loads (LTFL)	$ 20,091	2032	$ 27,496
14	Bunker Hill Lane East	Pre-Construction Yr 2	Long-Term Future Loads (LTFL)	$ 20,091	2033	$ 28,596
14	Bunker Hill Lane East	Pre-Construction Yr 3	Long-Term Future Loads (LTFL)	$ 20,091	2034	$ 29,740
14	Bunker Hill Lane East	Construction	Long-Term Future Loads (LTFL)	$ 241,096	2035	$ 371,156
15	Lafayette Street	Pre-Construction Yr 1	Long-Term Future Loads (LTFL)	$ 500,997	2032	$ 685,649
15	Lafayette Street	Pre-Construction Yr 2	Long-Term Future Loads (LTFL)	$ 500,997	2033	$ 713,075
15	Lafayette Street	Pre-Construction Yr 3	Long-Term Future Loads (LTFL)	$ 500,997	2034	$ 741,598
15	Lafayette Street	Construction	Long-Term Future Loads (LTFL)	$ 6,011,962	2035	$ 9,255,139
16	Hydraulic Model Maintenance & Support	Ongoing	N/A	$ 75,000	2026	$ 81,120
16	Hydraulic Model Maintenance & Support	Ongoing	N/A	$ 75,000	2027	$ 84,365
16	Hydraulic Model Maintenance & Support	Ongoing	N/A	$ 75,000	2028	$ 87,739
16	Hydraulic Model Maintenance & Support	Ongoing	N/A	$ 75,000	2029	$ 91,249
16	Hydraulic Model Maintenance & Support	Ongoing	N/A	$ 75,000	2030	$ 94,899
16	Hydraulic Model Maintenance & Support	Ongoing	N/A	$ 75,000	2031	$ 98,695
16	Hydraulic Model Maintenance & Support	Ongoing	N/A	$ 75,000	2032	$ 102,643
16	Hydraulic Model Maintenance & Support	Ongoing	N/A	$ 75,000	2033	$ 106,748
16	Hydraulic Model Maintenance & Support	Ongoing	N/A	$ 75,000	2034	$ 111,018
16	Hydraulic Model Maintenance & Support	Ongoing	N/A	$ 75,000	2035	$ 115,459
17	Future Master Plan Updates	Ongoing	N/A	$ 950,000	2029	$ 1,155,820
18	Technical Analyses to Support System Verification and Hydraulic Model Accuracy	Ongoing	N/A	$ 25,000	2026	$ 27,040

Escalated Capital Improvement Cost by Project

Project No.	Project ID	Phase	Loads Trigger	Estimated Capital Improvement Cost	Project Start	Escalated Capital Cost
18	Technical Analyses to Support System Verification and Hydraulic Model Accuracy	Ongoing	N/A	$ 25,000	2027	$ 28,122
18	Technical Analyses to Support System Verification and Hydraulic Model Accuracy	Ongoing	N/A	$ 25,000	2028	$ 29,246
18	Technical Analyses to Support System Verification and Hydraulic Model Accuracy	Ongoing	N/A	$ 25,000	2029	$ 30,416
18	Technical Analyses to Support System Verification and Hydraulic Model Accuracy	Ongoing	N/A	$ 25,000	2030	$ 31,633
18	Technical Analyses to Support System Verification and Hydraulic Model Accuracy	Ongoing	N/A	$ 25,000	2031	$ 32,898
18	Technical Analyses to Support System Verification and Hydraulic Model Accuracy	Ongoing	N/A	$ 25,000	2032	$ 34,214
18	Technical Analyses to Support System Verification and Hydraulic Model Accuracy	Ongoing	N/A	$ 25,000	2033	$ 35,583
18	Technical Analyses to Support System Verification and Hydraulic Model Accuracy	Ongoing	N/A	$ 25,000	2034	$ 37,006
18	Technical Analyses to Support System Verification and Hydraulic Model Accuracy	Ongoing	N/A	$ 25,000	2035	$ 38,486
Total				**$ 102,522,098**		**$ 149,148,653**