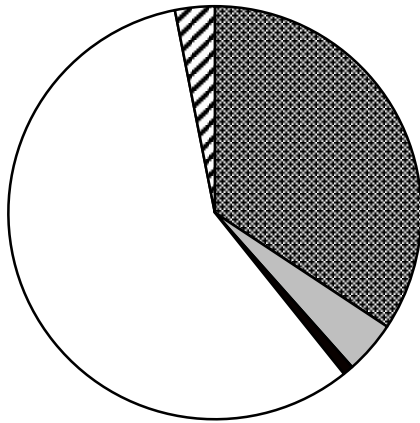


SANITARY SEWER SYSTEM

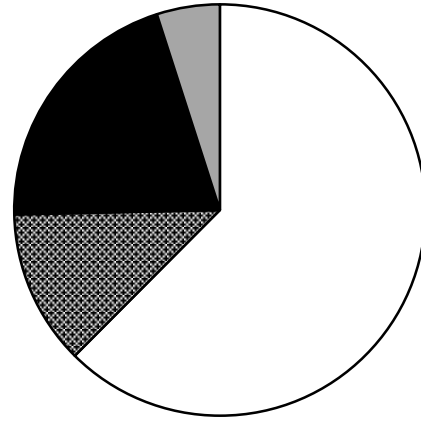
2022-2026 Capital Improvement Program

2021-2022 Proposed Source of Funds



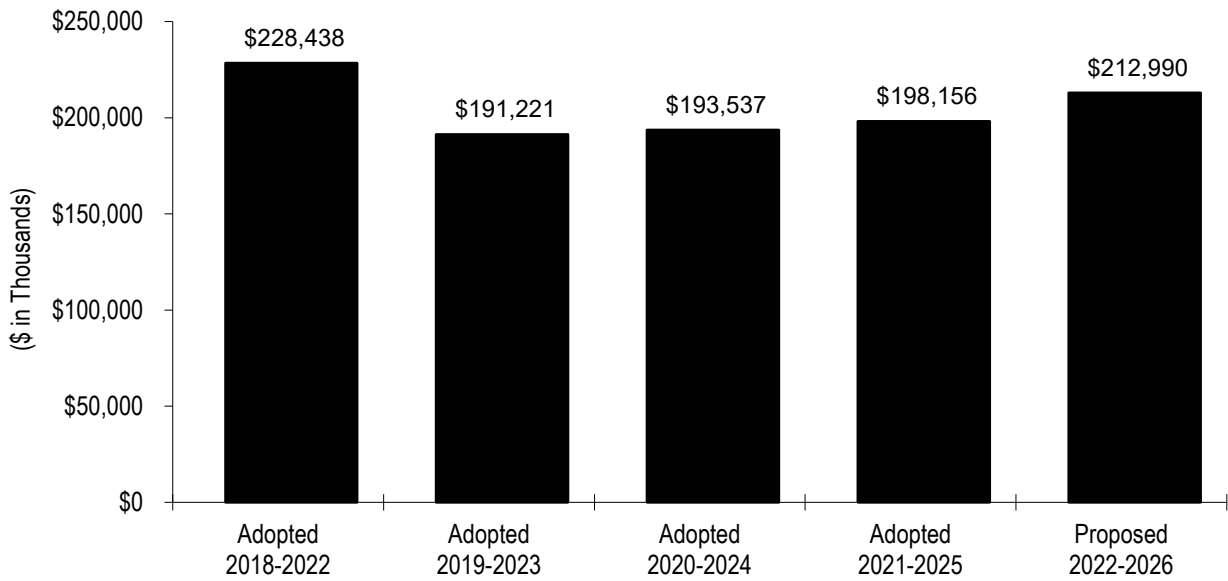
- Beginning Fund Balance
- Other Government Agencies
- Taxes, Fees and Charges
- Transfers
- Interest

2021-2022 Proposed Use of Funds



- Construction
- Non-Construction
- Ending Fund Balance
- Allocations and Transfers

CIP History



Sanitary Sewer System

2022-2026 Proposed Capital Improvement Program

- A) 60" Brick Interceptor, Phase VIA and VIB
- B) Technology Drive Sanitary Sewer Imp.
- C) Fourth Major Interceptor, Phase VIIA
- D) McKee Avenue Sanitary Sewer Imp.
- E) Sierra Road Sanitary Sewer Imp

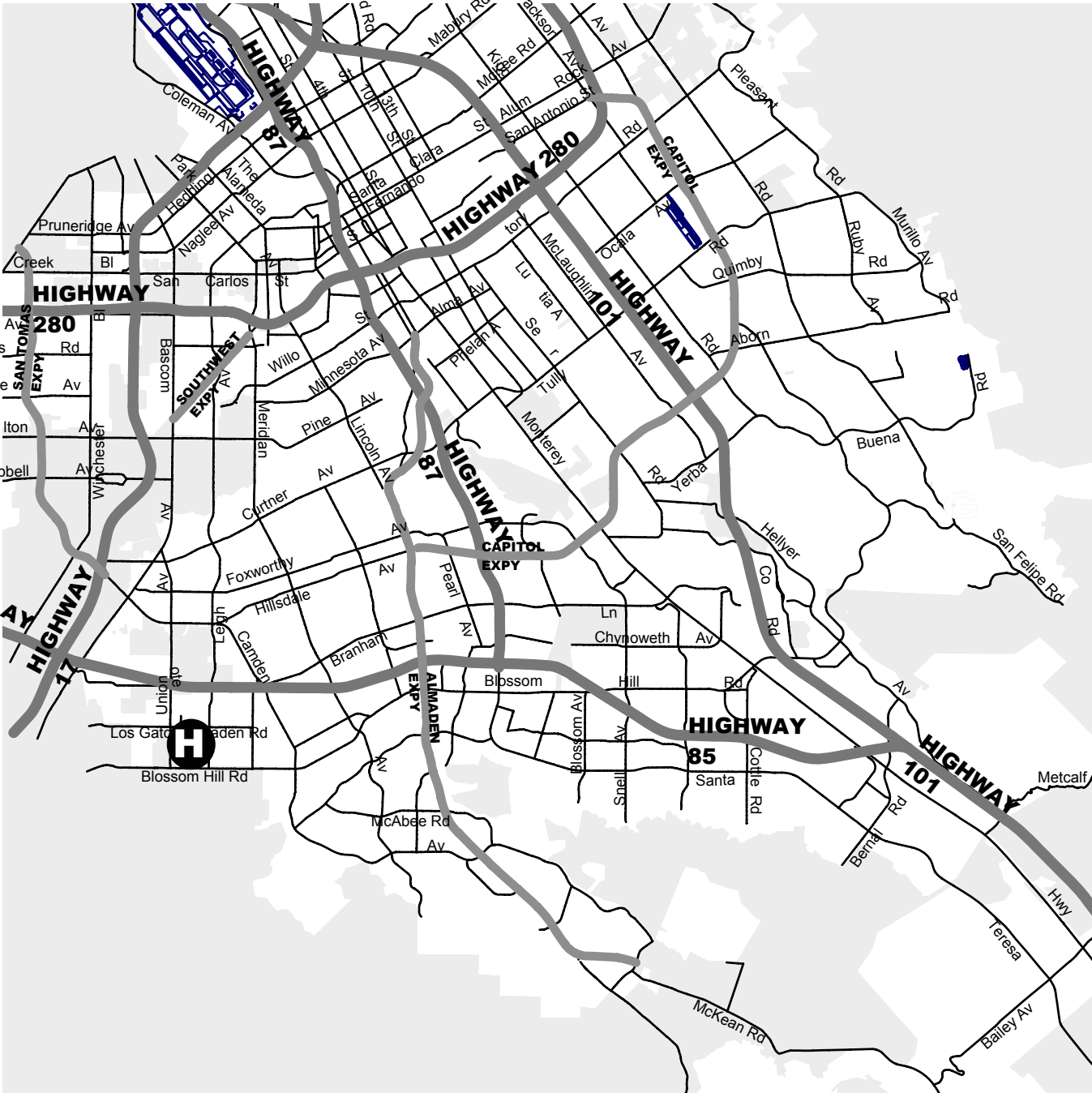
- F) Almaden Supplement Sewer Rehabilitation (North)



Sanitary Sewer System

2022-2026 Proposed Capital Improvement Program

H) Blossom Hill Road and Leigh Avenue



Sanitary Sewer System

2022-2026 Proposed Capital Improvement Program

Overview

INTRODUCTION

The Sanitary Sewer System of the City of San José consists of approximately 2,030¹ miles of sewer mains ranging in diameter from 6 to 90 inches. The system serves the City, as well as several other jurisdictions, including West Valley Sanitation District (WVSD), City of Santa Clara, County Sanitation Districts 2-3, and Burbank Sanitation District, and conveys sewage to the San José-Santa Clara Regional Wastewater Facility (RWF). The replacement value of the system is estimated at approximately \$3.5 billion.

SANITARY SEWER SYSTEM PUBLIC INFRASTRUCTURE	
MILES OF SEWER MAINS	
6" TO 8" in diameter	1,580
10" TO 12" in diameter	200
OVER 12" in diameter	250
NUMBER OF MANHOLES	39,469
NUMBER OF PUMP STATIONS	17

The 2022-2026 Proposed Capital Improvement Program (CIP) provides funding of \$213.0 million, of which \$60.7 million is allocated in 2021-2022. This program is part of the Environmental and Utility Services City Service Area (CSA) and supports the following outcome: *Reliable Utility Infrastructure*.

PROGRAM PRIORITIES AND OBJECTIVES

The 2022-2026 Proposed Sanitary Sewer System CIP supports the priorities and objectives of the Environmental and Utility Services CSA by maintaining the following strategic priorities:

- Ensure adequate capacity within the system and to reduce Sanitary Sewer Overflows (SSOs);
- Support the goal of preventing SSOs by providing sufficient system capacity and maintaining system structure integrity;
- Manage system capacity, assess the system's condition, and construct sewer improvement projects;
- Improve sewer capacity in substantially built-out areas and less-developed areas to accommodate economic development; and
- Rehabilitate existing sewers with a higher priority given to those with extensive, severe deterioration.

The Sanitary Sewer System CIP is guided by several interrelated plans, and chief among them is the Envision San José 2040 General Plan (General Plan). The General Plan provides a guide for all capital improvement programs to align public infrastructure investment with San José's plans for future growth. This means that the projects included in the Sanitary Sewer System CIP ensure adequate sewer capacity and reliability to safely convey sewage city-wide, as well as within those areas designated for future development. The land uses and growth included in the General Plan were also used in the development of the Sanitary Sewer Master Plan (Master Plan) that was completed in early 2013.

¹ Total length was updated in 2020 based on the latest GIS data to exclude sewer mains that were abandoned or owned by adjacent agencies or private developers.

Sanitary Sewer System

2022-2026 Proposed Capital Improvement Program

Overview

PROGRAM PRIORITIES AND OBJECTIVES

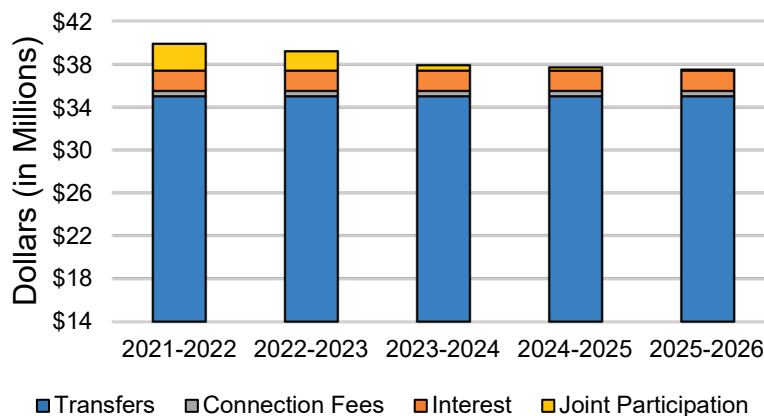
The Master Plan helped identify and address trunk sewer capacity deficiencies in the existing system and forecast additional capacity-enhancing projects required to meet future demands in the context of the General Plan.

As identified in the Status Report on Deferred Maintenance and Infrastructure Backlog accepted by the Transportation and Environment Committee on March 1, 2021, the Sanitary Sewer Collection System has estimated unfunded needs of approximately \$0.7 million per year. The City will continue to evaluate staffing levels and resources and overall strategic capital improvement priorities at both the RWF and the sanitary collection system to address the remaining unfunded needs in the future.

SOURCES OF FUNDING

The 2022-2026 Proposed CIP provides funding of \$213.0 million, of which \$60.8 million is allocated in 2021-2022. Revenue for this CIP is derived from the following sources: transfers from the Sewer Service and Use Charge (SSUC) Fund, Sanitary Sewer Connection Fees, and Joint Participation contributions from other jurisdictions served by the Sanitary Sewer System for the use of San José sewer lines. Among these revenues, the SSUC Fund transfer continues to be the primary funding source for the program. In recognition of the rehabilitation need for the system, the annual transfer from the SSUC Fund has increased from \$32.0 million to \$35.0 million to provide \$15.0 million over the CIP for the Sanitary Sewer Interceptor Management Program.

Summary of Revenues



PROGRAM HIGHLIGHTS

The Sanitary Sewer System Capital Program’s expenditures are organized to show the use of funds in several categories. The following highlights the major projects in the program. For further information on the program’s individual projects, please refer to the Detail Pages.

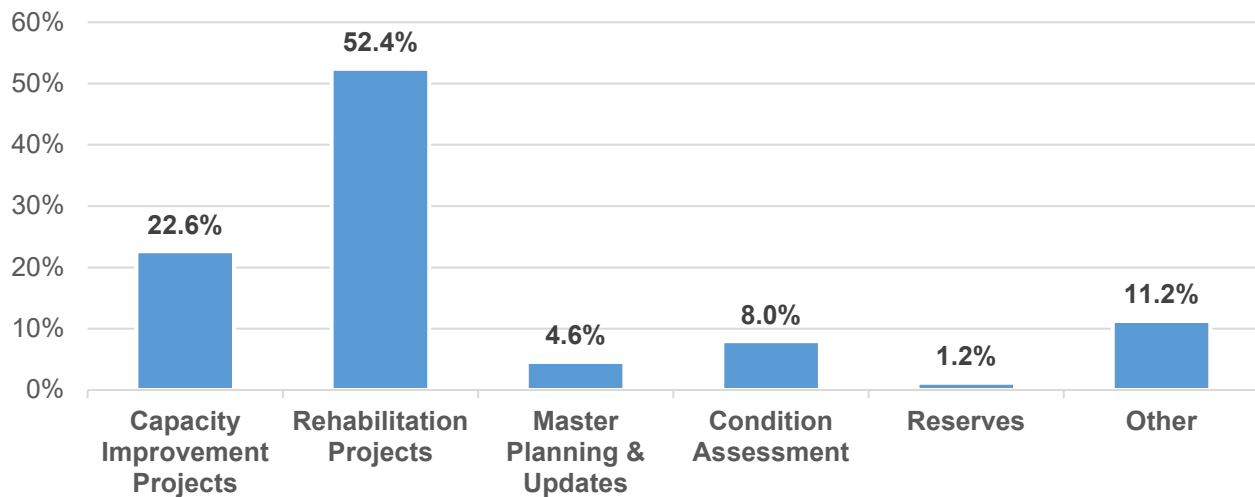
Sanitary Sewer System

2022-2026 Proposed Capital Improvement Program

Overview

PROGRAM HIGHLIGHTS

2022-2026 Sanitary Sewer System Capital Program Expenditures
\$201.3 million
(excludes Ending Fund Balance)



Capacity Improvement

About 22.6% of the budget, or \$45.6 million, is programmed in this Proposed CIP to improve capacity of the Sanitary Sewer system. These capacity improvement projects include \$5.5 million for the North Interceptor System, \$9.4 million for site-specific projects, and \$30.7 million for Immediate Replacement and Diversion Projects. Projects are selected using a computerized sewer flow model (which uses the General Plan to project sewage flows in the system), City maintenance records, and flow monitoring to identify sewer capacity constraints.

Funding totaling \$5.5 million is programmed in this Proposed CIP for the North Interceptor System to manage and complete the design of the Fourth Major Interceptor, Phase VIIA. The North Interceptor System is a collection of very large sanitary sewer pipes with diameters ranging from 54 to 90 inches. In general, an interceptor is a large pipe serving as a primary sewage collector. Interceptors carry flows from the sub-collector sewers in the drainage basin to the point of treatment or disposal of the wastewater. The North Interceptor System Master Plan, originally drafted in 1986, was updated in 2002 and includes an assessment of the hydraulic condition of the large sewers, a determination of the level of corrosion in the pipelines, and validated capacity of the system. The final recommendations for programmed rehabilitation of existing sewer interceptors and construction of new sewer interceptors have been incorporated into the Proposed CIP and will be referred to in the preparation of subsequent CIPs. Capital improvements to the interceptor system consist of large interrelated projects that must be staged in a specified sequence for logical construction of the system.

Sanitary Sewer System

2022-2026 Proposed Capital Improvement Program

Overview

PROGRAM HIGHLIGHTS

Presently, the City has three major sewer interceptors in the North Interceptor System that originate at the intersection of Seventh and Empire Streets and continue northward to the RWF, mostly along the full length of Zanker Road. A new, multi-phased fourth major interceptor is also under construction with five of seven phases completed. The construction of the Fourth Street 84-inch Interceptor, Phase VI-A, is anticipated to be completed in fall 2021. When completed, the fourth major interceptor will allow one of the three older interceptors to be removed from service during dry weather periods for the purpose of routine maintenance or rehabilitation. Such flexibility is important and currently not available in all reaches of the system.



Fourth Street 84-inch Interceptor Phase VI-A

Rehabilitation

Slightly more than half of the budget totaling \$105.4 million is programmed for sewer rehabilitation and replacement in other areas of the City, mostly targeted toward older neighborhoods facing structural deterioration or changes in sewage flow patterns. Rehabilitation projects are selected based on hydrogen sulfide studies that analyze pipe corrosion, condition assessment studies, video inspections, maintenance records and reports, and actual pipe failures, whether due to pipe corrosion or other physical deficiencies. This funding also is used to support the Exfiltration Abatement Program, a program implemented across a variety of ongoing repair and rehabilitation projects to assess and prioritize possible exfiltration risks. This program facilitates the search and repair of damaged sewer mains in order to prevent leakage into adjacent storm sewer mains.

In addition, rehabilitation funding will be used to support the new Sanitary Sewer Interceptor Management program with an annual budget of \$3.0 million for the next 5 years, for a total of \$15.0 million. Condition assessments will be performed and will include removing accumulated debris, cleaning and evaluating of the interceptors, and then prioritizing the portions of pipe that may require rehabilitation and/or repair. The program will also include the evaluation and rehabilitation of the City's soil bed filters that assist with removing odors and corrosive sewer gases from the interceptors.

Sanitary Sewer System

2022-2026 Proposed Capital Improvement Program

Overview

PROGRAM HIGHLIGHTS

Other Project Highlights

The Master Planning Program actively monitors and manages sewer system capacity needs using a computerized hydraulic model of the San José sewer system, supported by sewer flow monitoring that collects flow data at strategic locations within the system. The Master Planning Program continues to enhance the accuracy of the computerized model by incorporating land use changes and updated sewer and flow data. The Master Planning Program also supports economic development in the City by providing sewer capacity review and planning using the models.

The Sanitary Sewer Condition Assessment Program, initiated in 2009, is an ongoing program to assess the structural integrity of the collection system including pipes, force mains, manholes, junction structures, and pump stations. Data collected through visual and closed circuit television inspection and as-built information will be reviewed, analyzed, and prioritized based on a risk analysis approach using information such as pipe size, location, design flow, physical conditions, and maintenance histories. With this information, rehabilitation budgets and preventive maintenance and improvement programs can be planned and prioritized.

MAJOR CHANGES FROM THE 2021-2025 ADOPTED CIP

The overall size of the Sanitary Sewer System CIP has increased by \$14.8 million from \$198.2 million in the 2021-2025 Adopted CIP to \$213.0 million in the 2022-2026 Proposed CIP, mostly due to the addition of the Sanitary Sewer Interceptor Management Program (\$15.0 million). There are no major changes to project budgets within the Sanitary Sewer System included in the 2022-2026 Proposed CIP.

OPERATING BUDGET IMPACT

There are no additional maintenance and operating costs associated with the projects in the 2022-2026 Proposed CIP.

Sanitary Sewer System

2022-2026 Proposed Capital Improvement Program Source of Funds (Combined)

	Estimated						
	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	5-Year Total
Sewer Service and Use Charge Capital Improvement Fund (545)							
Beginning Balance	40,248,973	18,681,383	10,293,383	7,561,383	9,842,383	9,444,383	18,681,383*
Reserve for Encumbrance	35,067,711						
Transfers and Reimbursements							
Transfer from the Sewer Service and Use Charge Fund (541)	32,000,000	35,000,000	35,000,000	35,000,000	35,000,000	35,000,000	175,000,000
TOTAL Transfers and Reimbursements	32,000,000	35,000,000	35,000,000	35,000,000	35,000,000	35,000,000	175,000,000
Revenue from Use of Money and Property							
Interest Income	1,519,000	1,806,000	1,806,000	1,806,000	1,806,000	1,806,000	9,030,000
TOTAL Revenue from Use of Money and Property	1,519,000	1,806,000	1,806,000	1,806,000	1,806,000	1,806,000	9,030,000
Revenue from Local Agencies							
Sanitary Sewer Joint Participation-	2,820,000	2,400,000	1,700,000	400,000	200,000	100,000	4,800,000
TOTAL Revenue from Local Agencies	2,820,000	2,400,000	1,700,000	400,000	200,000	100,000	4,800,000
Total Sewer Service and Use Charge Capital Improvement Fund (545)	111,655,684	57,887,383	48,799,383	44,767,383	46,848,383	46,350,383	207,511,383*

Sanitary Sewer System
2022-2026 Proposed Capital Improvement Program
Source of Funds (Combined)

	Estimated						
	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	5-Year Total
Sanitary Sewer Connection Fee Fund (540)							
Beginning Balance	2,798,475	2,143,201	1,595,201	1,288,201	1,042,201	615,201	2,143,201*
Reserve for Encumbrance	386,399						
Revenue from Use of Money and Property							
Interest Income	71,000	79,000	79,000	79,000	79,000	79,000	395,000
TOTAL Revenue from Use of Money and Property	71,000	79,000	79,000	79,000	79,000	79,000	395,000
Revenue from Local Agencies							
Sanitary Sewer Joint Participation-	110,000	110,000	110,000	110,000	110,000		440,000
TOTAL Revenue from Local Agencies	110,000	110,000	110,000	110,000	110,000		440,000
Fees, Rates and Charges							
Sanitary Sewer Connection Fees	500,000	500,000	500,000	500,000	500,000	500,000	2,500,000
TOTAL Fees, Rates and Charges	500,000	500,000	500,000	500,000	500,000	500,000	2,500,000
Total Sanitary Sewer Connection Fee Fund (540)	3,865,874	2,832,201	2,284,201	1,977,201	1,731,201	1,194,201	5,478,201*
 TOTAL SOURCES	 115,521,558	 60,719,584	 51,083,584	 46,744,584	 48,579,584	 47,544,584	 212,989,584*

* The 2022-2023 through 2025-2026 Beginning Balances are excluded from the Five-Year Total Source of Funds to avoid multiple counting of the same funds.

Sanitary Sewer System
2022-2026 Proposed Capital Improvement Program
Use of Funds (Combined)

	Estimated 2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	5-Year Total
<u>Sanitary Sewer System</u>							
60 inch Brick Interceptor, Phase VIA and VIB	24,895,728						
Blossom Hill Road and Leigh Avenue Sanitary Sewer Improvement	200,000	5,200,000					5,200,000
Bollinger Road - Moorpark Avenue - Williams Road Sanitary Sewer Improvements	3,835,282						
Fourth Major Interceptor, Phase VIIA		500,000	5,000,000				5,500,000
Immediate Replacement and Diversion Projects	9,271,710	5,900,000	4,300,000	6,850,000	6,800,000	6,800,000	30,650,000
McKee Road Sanitary Sewer Improvement			1,500,000				1,500,000
Miscellaneous Capacity Improvements	1,349,000						
Sierra Road Sanitary Sewer Improvement	2,300,000	200,000					200,000
Technology Drive Sanitary Sewer Improvement					2,500,000		2,500,000
Westmont Avenue and Harriet Avenue Sanitary Sewer Improvements	834,630						
Capacity Improvement Projects	42,686,350	11,800,000	10,800,000	6,850,000	9,300,000	6,800,000	45,550,000
Almaden Supplement Sewer Rehabilitation (North)	200,000	2,930,000					2,930,000
Cast Iron Pipe - Remove and Replace	10,062,535	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	25,000,000
Condition Assessment Sewer Repairs	12,136,324	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	30,000,000
Inflow and Infiltration Reduction	200,000	200,000	200,000	200,000	200,000	200,000	1,000,000
Rehabilitation of Sanitary Sewer Pump Stations	1,853,996						
Reinforced Concrete Pipe Rehabilitation Program	500,000	500,000	500,000	500,000	500,000	500,000	2,500,000
Sanitary Sewer Interceptor Management Program		3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	15,000,000
Urgent Rehabilitation and Repair Projects	13,654,592	7,000,000	7,000,000	5,000,000	5,000,000	5,000,000	29,000,000
Rehabilitation Projects	38,607,446	24,630,000	21,700,000	19,700,000	19,700,000	19,700,000	105,430,000

Sanitary Sewer System

2022-2026 Proposed Capital Improvement Program

Use of Funds (Combined)

	Estimated						
	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	5-Year Total
Sanitary Sewer - Construction	81,293,796	36,430,000	32,500,000	26,550,000	29,000,000	26,500,000	150,980,000
Fee Administration - Sanitary Sewer	85,000	85,000	85,000	85,000	85,000	85,000	425,000
Flow Monitoring Program (Master Planning)	1,032,574	650,000	650,000	650,000	650,000	650,000	3,250,000
Infrastructure - Sanitary Sewer Condition Assessment	5,632,067	3,200,000	3,200,000	3,200,000	3,200,000	3,200,000	16,000,000
Master Planning Updates	1,772,376	1,850,000	1,850,000	1,850,000	1,850,000	1,850,000	9,250,000
Payments to West Valley Sanitation District	10,000	10,000	10,000	10,000	10,000	10,000	50,000
Permit Review and Inspection for Outside Agencies - Sanitary Sewer	25,000	25,000	25,000	25,000	25,000	25,000	125,000
Preliminary Engineering - Sanitary Sewer	950,000	950,000	950,000	950,000	950,000	950,000	4,750,000
Program Management - Sanitary Sewer	300,000	300,000	300,000	300,000	300,000	300,000	1,500,000
Public Works Engineering Services Equipment (Materials Lab)	56,988	40,000	40,000	40,000	40,000	40,000	200,000
General Non-Construction - Sanitary Sewer	9,864,005	7,110,000	7,110,000	7,110,000	7,110,000	7,110,000	35,550,000
Sanitary Sewer - Non Construction	9,864,005	7,110,000	7,110,000	7,110,000	7,110,000	7,110,000	35,550,000
Public Art Allocation	995,308	112,000	104,000	65,000	88,000	65,000	434,000
Public Art Projects	995,308	112,000	104,000	65,000	88,000	65,000	434,000
Capital Program and Public Works Department Support Service Costs	2,202,000	2,445,000	2,171,000	1,784,000	1,969,000	1,779,000	10,148,000
Infrastructure Management System	49,000	57,000	59,000	61,000	63,000	65,000	305,000
Allocations	2,251,000	2,502,000	2,230,000	1,845,000	2,032,000	1,844,000	10,453,000
City Hall Debt Service Fund	264,000	277,000	290,000	290,000	290,000	290,000	1,437,000
Transfers to Special Funds	264,000	277,000	290,000	290,000	290,000	290,000	1,437,000
General Fund - Interest Income	28,864						
Transfers to the General Fund	28,864						
Transfers Expense	292,864	277,000	290,000	290,000	290,000	290,000	1,437,000
Montague Sanitary Sewer Pump Station Reserve		2,400,000					2,400,000
Expense Reserves - Non Construction		2,400,000					2,400,000
Total Expenditures	94,696,974	48,831,000	42,234,000	35,860,000	38,520,000	35,809,000	201,254,000
Ending Fund Balance	20,824,584	11,888,584	8,849,584	10,884,584	10,059,584	11,735,584	11,735,584*
TOTAL	115,521,558	60,719,584	51,083,584	46,744,584	48,579,584	47,544,584	212,989,584*

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* The 2021-2022 through 2024-2025 Ending Balances are excluded from the Five-Year Total Use of Funds to avoid multiple counting of the same funds.

Sanitary Sewer System
 2022-2026 Proposed Capital Improvement Program
Detail of One-Time Projects

Almaden Supplement Sewer Rehabilitation (North)

CSA	Environmental and Utility Services	Initial Start Date	3rd Qtr. 2020
CSA Outcome	Reliable Utility Infrastructure	Initial End Date	2nd Qtr. 2022
Location	East Alma Avenue between Monterey Highway and South 9th Street.	Revised Start Date	
Dept Owner	Public Works	Revised End Date	
Council Districts	7	Initial Project Budget	\$3,130,000
Appropriation	A420V	FY Initiated	2020-2021

Description This project will rehabilitate approximately 3,690 feet of 42-inch and 48-inch diameter reinforced concrete pipe located on East Alma Avenue between Monterey Highway and South 9th Street with a Cured-In-Place-Pipe (CIPP) liner.

Justification This project is required to restore structural integrity and extend the service life of the system.

Notes

Major Cost Changes

	PRIOR YEARS	FY21 EST	FY22	FY23	FY24	FY25	FY26	5 YEAR TOTAL	BEYOND 5 YEARS	PROJECT TOTAL
Expenditure Schedule (000s)										
Design		200	130					130		330
Construction			2,800					2,800		2,800
Total		200	2,930					2,930		3,130

Funding Source Schedule (000s)										
Sewer Service and Use Charge Capital Improvement Fund (545)		200	2,930					2,930		3,130
Total		200	2,930					2,930		3,130

Annual Operating Budget Impact (000s)										
Total										

Sanitary Sewer System

2022-2026 Proposed Capital Improvement Program

Detail of One-Time Projects

Blossom Hill Road and Leigh Avenue Sanitary Sewer Improvement

CSA	Environmental and Utility Services	Initial Start Date	3rd Qtr. 2021
CSA Outcome	Reliable Utility Infrastructure	Initial End Date	2nd Qtr. 2024
Location	Willow Drive and Chevalier Drive to Little Branham Lane and Aspen Court	Revised Start Date	2nd Qtr. 2021
Dept Owner	Public Works	Revised End Date	2nd Qtr. 2022
Council Districts	9	Initial Project Budget	\$5,400,000
Appropriation	A420W	FY Initiated	2020-2021

Description This project will install approximately 1,900 linear feet of new 10-inch diameter sanitary sewer along Blossom Hill Road and Leigh Avenue and upsize approximately 4,300 linear feet of 8-inch to 12-inch diameter sanitary sewer along Leigh Avenue to reroute sewage flow to another system.

Justification This project is required to relieve the deficiency in 8-inch diameter pipe on various streets from the intersection of Willow Drive and Chevalier Drive to the intersection of Little Branham Lane and Aspen Court.

Notes

Major Cost Changes

	PRIOR YEARS	FY21 EST	FY22	FY23	FY24	FY25	FY26	5 YEAR TOTAL	BEYOND 5 YEARS	PROJECT TOTAL
Expenditure Schedule (000s)										
Design		200								200
Construction			5,200					5,200		5,200
Total		200	5,200					5,200		5,400

Funding Source Schedule (000s)										
Sewer Service and Use Charge Capital Improvement Fund (545)		200	5,000					5,000		5,200
Sanitary Sewer Connection Fee Fund (540)			200					200		200
Total		200	5,200					5,200		5,400

Annual Operating Budget Impact (000s)										
Total										

Sanitary Sewer System
 2022-2026 Proposed Capital Improvement Program
Detail of One-Time Projects

Fourth Major Interceptor, Phase VIIA

CSA	Environmental and Utility Services	Initial Start Date	3rd Qtr. 2018
CSA Outcome	Reliable Utility Infrastructure	Initial End Date	2nd Qtr. 2020
Location	North 5th Street/Commercial Street and North 7th Street/Empire Street	Revised Start Date	3rd Qtr. 2021
Dept Owner	Public Works	Revised End Date	2nd Qtr. 2023
Council Districts	3	Initial Project Budget	\$5,500,000
Appropriation	A410E	FY Initiated	2013-2014

Description This project will install approximately 7,200 linear feet of 66-inch reinforced concrete pipe. Completion of the Phase VIIA project will conclude capacity improvements for the Fourth Major Interceptor system between the intersections of North 5th Street and Commercial Street, and North 7th Street and Empire Street.

Justification The Fourth Major Interceptor is required for capacity, in addition to maintenance redundancy for the other three existing interceptors.

Notes

Major Cost Changes

	PRIOR YEARS	FY21 EST	FY22	FY23	FY24	FY25	FY26	5 YEAR TOTAL	BEYOND 5 YEARS	PROJECT TOTAL
Expenditure Schedule (000s)										
Design			500					500		500
Construction				5,000				5,000		5,000
Total			500	5,000				5,500		5,500

	PRIOR YEARS	FY21 EST	FY22	FY23	FY24	FY25	FY26	5 YEAR TOTAL	BEYOND 5 YEARS	PROJECT TOTAL
Funding Source Schedule (000s)										
Sewer Service and Use Charge Capital Improvement Fund (545)			500	5,000				5,500		5,500
Total			500	5,000				5,500		5,500

	PRIOR YEARS	FY21 EST	FY22	FY23	FY24	FY25	FY26	5 YEAR TOTAL	BEYOND 5 YEARS	PROJECT TOTAL
Annual Operating Budget Impact (000s)										
Total										

Sanitary Sewer System
 2022-2026 Proposed Capital Improvement Program
Detail of One-Time Projects

Sierra Road Sanitary Sewer Improvement

CSA	Environmental and Utility Services	Initial Start Date	3rd Qtr. 2020
CSA Outcome	Reliable Utility Infrastructure	Initial End Date	3rd Qtr. 2021
Location	Sierra Road from Morrill Avenue to Sabal Drive	Revised Start Date	
Dept Owner	Public Works	Revised End Date	
Council Districts	4	Initial Project Budget	\$1,200,000
Appropriation	A421B	FY Initiated	2020-2021

Description This project will upsize 2,240 linear feet of sanitary sewer pipe from 8-inch to 10-inch in order to meet existing capacity demands.

Justification This project is required to provide more capacity to meet existing and future demand. Capacity of existing sanitary sewer system in the area was found to be insufficient to meet existing demand.

Notes

Major Cost Changes 2021-2025 CIP - Increase of \$1.3 million due to a refined project scope and cost estimate.

	PRIOR YEARS	FY21 EST	FY22	FY23	FY24	FY25	FY26	5 YEAR TOTAL	BEYOND 5 YEARS	PROJECT TOTAL
Expenditure Schedule (000s)										
Design		300								300
Construction		1,950	200					200		2,150
Post Construction		50								50
Total		2,300	200					200		2,500

Funding Source Schedule (000s)										
Sewer Service and Use Charge Capital Improvement Fund (545)		2,100	200					200		2,300
Sanitary Sewer Connection Fee Fund (540)		200								200
Total		2,300	200					200		2,500

Annual Operating Budget Impact (000s)										
Total										

Sanitary Sewer System
2022-2026 Proposed Capital Improvement Program
Detail of Ongoing Projects

Cast Iron Pipe - Remove and Replace

CSA Outcome	Reliable Utility Infrastructure	Council Districts	City-wide
Department Owner	Public Works	Appropriation	A7472
Description	This project removes and replaces cast iron sewer pipes city-wide that are aging or corroded. It is estimated that between 38,000 to 40,000 feet of cast iron pipe will be replaced over the next five years.		

	FY21 Budget	FY21 EST	FY22	FY23	FY24	FY25	FY26	5 Year Total
Expenditure Schedule (000s)								
Project Feasibility Development	50	50	50	50	50	50	50	250
Design	200	200	200	200	200	200	200	1,000
Bid & Award	20	20	20	20	20	20	20	100
Construction	9,793	9,793	4,730	4,730	4,730	4,730	4,730	23,650
Total	10,063	10,063	5,000	5,000	5,000	5,000	5,000	25,000

Funding Source Schedule (000s)								
Sewer Service and Use Charge Capital Improvement Fund (545)	10,063	10,063	5,000	5,000	5,000	5,000	5,000	25,000
Total	10,063	10,063	5,000	5,000	5,000	5,000	5,000	25,000

Condition Assessment Sewer Repairs

CSA Outcome	Reliable Utility Infrastructure	Council Districts	City-wide
Department Owner	Public Works	Appropriation	A7356
Description	This allocation funds the identification and repair of damaged pipes in the sanitary sewer system, and includes multiple projects each year as they are identified. Areas in which a sanitary sewer overflow would have high consequences will be the focus of these identify-and-repair contracts.		

	FY21 Budget	FY21 EST	FY22	FY23	FY24	FY25	FY26	5 Year Total
Expenditure Schedule (000s)								
Project Feasibility Development	4	4	4	4	4	4	4	20
Design	200	200	200	200	200	200	200	1,000
Bid & Award	10	10	10	10	10	10	10	50
Construction	11,922	11,922	5,786	5,786	5,786	5,786	5,786	28,930
Total	12,136	12,136	6,000	6,000	6,000	6,000	6,000	30,000

Funding Source Schedule (000s)								
Sewer Service and Use Charge Capital Improvement Fund (545)	12,136	12,136	6,000	6,000	6,000	6,000	6,000	30,000
Total	12,136	12,136	6,000	6,000	6,000	6,000	6,000	30,000

Sanitary Sewer System
2022-2026 Proposed Capital Improvement Program
Detail of Ongoing Projects

Fee Administration - Sanitary Sewer

CSA Outcome	Reliable Utility Infrastructure	Council Districts	N/A
Department Owner	Public Works	Appropriation	A5241
Description	This allocation provides funding for the Public Works Development Program to collect Sanitary Sewer Connection Fees.		

	FY21 Budget	FY21 EST	FY22	FY23	FY24	FY25	FY26	5 Year Total
Expenditure Schedule (000s)								
General Administration	85	85	85	85	85	85	85	425
Total	85	85	85	85	85	85	85	425
Funding Source Schedule (000s)								
Sanitary Sewer Connection Fee Fund (540)	85	85	85	85	85	85	85	425
Total	85	85	85	85	85	85	85	425

Flow Monitoring Program (Master Planning)

CSA Outcome	Reliable Utility Infrastructure	Council Districts	City-wide
Department Owner	Public Works	Appropriation	A4696
Description	This allocation funds a city-wide sanitary sewer master planning effort to identify capacity improvement needs and provides for future updates, flow analysis, and condition assessments.		

	FY21 Budget	FY21 EST	FY22	FY23	FY24	FY25	FY26	5 Year Total
Expenditure Schedule (000s)								
Project Feasibility Development	900	900	650	650	650	650	650	3,250
Design	133	133						
Total	1,033	1,033	650	650	650	650	650	3,250
Funding Source Schedule (000s)								
Sewer Service and Use Charge Capital Improvement Fund (545)	877	877	550	550	550	550	550	2,750
Sanitary Sewer Connection Fee Fund (540)	156	156	100	100	100	100	100	500
Total	1,033	1,033	650	650	650	650	650	3,250

Sanitary Sewer System
2022-2026 Proposed Capital Improvement Program
Detail of Ongoing Projects

Immediate Replacement and Diversion Projects

CSA Outcome	Reliable Utility Infrastructure	Council Districts	City-wide
Department Owner	Public Works	Appropriation	A4272

Description This allocation funds immediate needs that arise from Department of Transportation (DOT) maintenance and response activities. DOT identifies areas that require immediate sewer replacement as part of their maintenance activities and in response to sanitary sewer overflows. If replacement of the sewer is not feasible or cost effective, sewage may be rerouted (diverted) by installing a new or supplemental sewer along a different route. If these needs are not addressed in a timely manner, additional operations and maintenance costs will be incurred, and an increased possibility of sanitary sewer overflows will result.

	FY21 Budget	FY21 EST	FY22	FY23	FY24	FY25	FY26	5 Year Total
Expenditure Schedule (000s)								
Project Feasibility Development	35	35	35	35	35	35	35	175
Design	600	600	400	400	400	400	400	2,000
Bid & Award	20	20	20	20	20	20	20	100
Construction	8,617	8,617	5,445	3,845	6,295	6,245	6,245	28,075
Post Construction					100	100	100	300
Total	9,272	9,272	5,900	4,300	6,850	6,800	6,800	30,650

	FY21 Budget	FY21 EST	FY22	FY23	FY24	FY25	FY26	5 Year Total
Funding Source Schedule (000s)								
Sewer Service and Use Charge Capital Improvement Fund (545)	8,872	8,872	5,500	4,000	6,500	6,500	6,500	29,000
Sanitary Sewer Connection Fee Fund (540)	400	400	400	300	350	300	300	1,650
Total	9,272	9,272	5,900	4,300	6,850	6,800	6,800	30,650

Inflow and Infiltration Reduction

CSA Outcome	Reliable Utility Infrastructure	Council Districts	City-wide
Department Owner	Public Works	Appropriation	A6444

Description This allocation funds the rehabilitation of sanitary sewers and manholes that have groundwater or storm water penetration. The Flow Monitoring Program and maintenance reports from the Department of Transportation identify sewers ranging from 6 inches to 36 inches in diameter in various locations throughout the City that require rehabilitation.

	FY21 Budget	FY21 EST	FY22	FY23	FY24	FY25	FY26	5 Year Total
Expenditure Schedule (000s)								
Construction	200	200	200	200	200	200	200	1,000
Total	200	200	200	200	200	200	200	1,000

	FY21 Budget	FY21 EST	FY22	FY23	FY24	FY25	FY26	5 Year Total
Funding Source Schedule (000s)								
Sewer Service and Use Charge Capital Improvement Fund (545)	200	200	200	200	200	200	200	1,000
Total	200	200	200	200	200	200	200	1,000

Sanitary Sewer System
2022-2026 Proposed Capital Improvement Program
Detail of Ongoing Projects

Infrastructure - Sanitary Sewer Condition Assessment

CSA Outcome	Reliable Utility Infrastructure	Council Districts	City-wide
Department Owner	Public Works	Appropriation	A6521
Description	This allocation funds an ongoing condition assessment program to inspect and evaluate the condition of the existing pipelines and identify the needs for pipeline rehabilitation and/or replacement.		

	FY21 Budget	FY21 EST	FY22	FY23	FY24	FY25	FY26	5 Year Total
Expenditure Schedule (000s)								
Project Feasibility Development	3,200	3,200	3,200	3,200	3,200	3,200	3,200	16,000
Construction	2,432	2,432						
Total	5,632	5,632	3,200	3,200	3,200	3,200	3,200	16,000

Funding Source Schedule (000s)								
Sewer Service and Use Charge Capital Improvement Fund (545)	5,632	5,632	3,200	3,200	3,200	3,200	3,200	16,000
Total	5,632	5,632	3,200	3,200	3,200	3,200	3,200	16,000

Master Planning Updates

CSA Outcome	Reliable Utility Infrastructure	Council Districts	City-wide
Department Owner	Public Works	Appropriation	A7242
Description	This allocation funds the updates to the sewer system database and computer models based on land use development, sewer system improvements, survey and field investigations, and record research.		

	FY21 Budget	FY21 EST	FY22	FY23	FY24	FY25	FY26	5 Year Total
Expenditure Schedule (000s)								
Project Feasibility Development	1,400	1,400	1,650	1,650	1,650	1,650	1,650	8,250
Maintenance, Repairs, Other	372	372	200	200	200	200	200	1,000
Total	1,772	1,772	1,850	1,850	1,850	1,850	1,850	9,250

Funding Source Schedule (000s)								
Sewer Service and Use Charge Capital Improvement Fund (545)	1,572	1,572	1,650	1,650	1,650	1,650	1,650	8,250
Sanitary Sewer Connection Fee Fund (540)	200	200	200	200	200	200	200	1,000
Total	1,772	1,772	1,850	1,850	1,850	1,850	1,850	9,250

Sanitary Sewer System
2022-2026 Proposed Capital Improvement Program
Detail of Ongoing Projects

Payments to West Valley Sanitation District

CSA Outcome	Reliable Utility Infrastructure	Council Districts	N/A
Department Owner	Public Works	Appropriation	A4230
Description	This allocation reimburses the West Valley Sanitation District for the City's share of potential joint sanitary sewer projects within the District's jurisdiction.		

	FY21 Budget	FY21 EST	FY22	FY23	FY24	FY25	FY26	5 Year Total
Expenditure Schedule (000s)								
General Administration	10	10	10	10	10	10	10	50
Total	10	10	10	10	10	10	10	50

Funding Source Schedule (000s)								
Sanitary Sewer Connection Fee Fund (540)	10	10	10	10	10	10	10	50
Total	10	10	10	10	10	10	10	50

Permit Review and Inspection for Outside Agencies - Sanitary Sewer

CSA Outcome	Reliable Utility Infrastructure	Council Districts	City-wide
Department Owner	Public Works	Appropriation	A5149
Description	This allocation provides for the review and inspection of projects for the Santa Clara Valley Water District (SCVWD) by City staff. As is customary practice between public agencies, as well as State law, the City and SCVWD do not charge one another for these services.		

	FY21 Budget	FY21 EST	FY22	FY23	FY24	FY25	FY26	5 Year Total
Expenditure Schedule (000s)								
General Administration	25	25	25	25	25	25	25	125
Total	25	25	25	25	25	25	25	125

Funding Source Schedule (000s)								
Sewer Service and Use Charge Capital Improvement Fund (545)	25	25	25	25	25	25	25	125
Total	25	25	25	25	25	25	25	125

Sanitary Sewer System

2022-2026 Proposed Capital Improvement Program Detail of Ongoing Projects

Preliminary Engineering - Sanitary Sewer

CSA Outcome	Reliable Utility Infrastructure	Council Districts	City-wide
Department Owner	Public Works	Appropriation	A4284
Description	This allocation supports preliminary engineering, including surveys and evaluations, that evaluates the potential effects of projects not yet funded in this program.		

	FY21 Budget	FY21 EST	FY22	FY23	FY24	FY25	FY26	5 Year Total
Expenditure Schedule (000s)								
Project Feasibility Development	950	950	950	950	950	950	950	4,750
Total	950	950	950	950	950	950	950	4,750

	FY21 Budget	FY21 EST	FY22	FY23	FY24	FY25	FY26	5 Year Total
Funding Source Schedule (000s)								
Sewer Service and Use Charge Capital Improvement Fund (545)	900	900	900	900	900	900	900	4,500
Sanitary Sewer Connection Fee Fund (540)	50	50	50	50	50	50	50	250
Total	950	950	950	950	950	950	950	4,750

Program Management - Sanitary Sewer

CSA Outcome	Reliable Utility Infrastructure	Council Districts	City-wide
Department Owner	Public Works	Appropriation	A4286
Description	This allocation funds the administration and management of this Capital Improvement Program.		

	FY21 Budget	FY21 EST	FY22	FY23	FY24	FY25	FY26	5 Year Total
Expenditure Schedule (000s)								
General Administration	300	300	300	300	300	300	300	1,500
Total	300	300	300	300	300	300	300	1,500

	FY21 Budget	FY21 EST	FY22	FY23	FY24	FY25	FY26	5 Year Total
Funding Source Schedule (000s)								
Sewer Service and Use Charge Capital Improvement Fund (545)	250	250	250	250	250	250	250	1,250
Sanitary Sewer Connection Fee Fund (540)	50	50	50	50	50	50	50	250
Total	300	300	300	300	300	300	300	1,500

Sanitary Sewer System

2022-2026 Proposed Capital Improvement Program **Detail of Ongoing Projects**

Public Works Engineering Services Equipment (Materials Lab)

CSA Outcome	Reliable Utility Infrastructure	Council Districts	N/A
Department Owner	Public Works	Appropriation	A4135

Description This ongoing allocation funds the purchase of equipment necessary to perform quality assurance testing on materials used in sewer rehabilitation projects.

	FY21 Budget	FY21 EST	FY22	FY23	FY24	FY25	FY26	5 Year Total
Expenditure Schedule (000s)								
Design	17	17						
Equipment, Materials and Supplies	40	40	40	40	40	40	40	200
Total	57	57	40	40	40	40	40	200

Funding Source Schedule (000s)								
Sewer Service and Use Charge Capital Improvement Fund (545)	57	57	40	40	40	40	40	200
Total	57	57	40	40	40	40	40	200

Reinforced Concrete Pipe Rehabilitation Program

CSA Outcome	Reliable Utility Infrastructure	Council Districts	City-wide
Department Owner	Public Works	Appropriation	A7361

Description This allocation is used to investigate the structural condition of approximately 70,000 feet of reinforced concrete pipe (RCP) and rehabilitate as necessary. Due to the wide range of lengths, diameters, and locations of RCP throughout the City's sanitary sewer system, projects which may contain multiple construction locations will be developed. This allocation provides the flexibility to develop and construct projects which group locations, pipe lengths, and diameters in a cost effective manner.

	FY21 Budget	FY21 EST	FY22	FY23	FY24	FY25	FY26	5 Year Total
Expenditure Schedule (000s)								
Project Feasibility Development	35	35	35	35	35	35	35	175
Design	140	140	140	140	140	140	140	700
Bid & Award	5	5	5	5	5	5	5	25
Construction	320	320	320	320	320	320	320	1,600
Total	500	500	500	500	500	500	500	2,500

Funding Source Schedule (000s)								
Sewer Service and Use Charge Capital Improvement Fund (545)	500	500	500	500	500	500	500	2,500
Total	500	500	500	500	500	500	500	2,500

Sanitary Sewer System
2022-2026 Proposed Capital Improvement Program
Detail of Ongoing Projects

Sanitary Sewer Interceptor Management Program

CSA Outcome	Reliable Utility Infrastructure	Council Districts	City-wide
Department Owner	Public Works	Appropriation	TEMP_692
Description	This allocation will fund a condition assessment program to inspect and evaluate the condition of the existing sanitary sewer interceptors and soil filter beds, and identify the needs for interceptor rehabilitation and/or replacement and filter bed system upgrade.		

	FY21 Budget	FY21 EST	FY22	FY23	FY24	FY25	FY26	5 Year Total
Expenditure Schedule (000s)								
Project Feasibility Development			100	100	100	100	100	500
Design			180	180	180	180	180	900
Bid & Award			20	20	20	20	20	100
Construction			2,700	2,700	2,700	2,700	2,700	13,500
Total			3,000	3,000	3,000	3,000	3,000	15,000

Funding Source Schedule (000s)								
Sewer Service and Use Charge Capital Improvement Fund (545)			3,000	3,000	3,000	3,000	3,000	15,000
Total			3,000	3,000	3,000	3,000	3,000	15,000

Urgent Rehabilitation and Repair Projects

CSA Outcome	Reliable Utility Infrastructure	Council Districts	City-wide
Department Owner	Public Works	Appropriation	A4271
Description	This ongoing allocation is used to investigate, prioritize, and rehabilitate neighborhood sewers that exhibit structural deterioration, root intrusion, and/or blockages. The projects will be developed to respond to the Department of Transportation's ongoing maintenance activities and sewer overflow incidents that are urgent and cannot be programmed during the annual CIP preparation process.		

	FY21 Budget	FY21 EST	FY22	FY23	FY24	FY25	FY26	5 Year Total
Expenditure Schedule (000s)								
Design	500	500	500	500	500	500	500	2,500
Bid & Award	40	40	40	40	40	40	40	200
Construction	13,105	13,105	6,450	6,450	4,450	4,450	4,450	26,250
Post Construction	10	10	10	10	10	10	10	50
Total	13,655	13,655	7,000	7,000	5,000	5,000	5,000	29,000

Funding Source Schedule (000s)								
Sewer Service and Use Charge Capital Improvement Fund (545)	13,655	13,655	7,000	7,000	5,000	5,000	5,000	29,000
Total	13,655	13,655	7,000	7,000	5,000	5,000	5,000	29,000

Sanitary Sewer System

2022-2026 Proposed Capital Improvement Program

Summary of Projects that Start After 2021-2022

Project Name	McKee Road Sanitary Sewer Improvement	Initial Start Date	3rd Qtr. 2022
5-Yr CIP Budget	\$ 1,500,000	Initial End Date	2nd Qtr. 2023
Total Budget	\$ 1,500,000	Revised Start Date	
Council Districts	5	Revised End Date	
Description	This project will install a weir at a manhole at the intersection of Capitol Avenue and McKee Road, and install approximately 710 linear feet of 15-inch pipe at McKee Road between Rough and Ready Road and Capitol Avenue.		

Project Name	Technology Drive Sanitary Sewer Improvement	Initial Start Date	3rd Qtr. 2021
5-Yr CIP Budget	\$ 2,500,000	Initial End Date	2nd Qtr. 2022
Total Budget	\$ 2,500,000	Revised Start Date	3rd Qtr. 2024
Council Districts	3	Revised End Date	2nd Qtr. 2025
Description	This project will upsize approximately 1,710 linear feet of 6- and 8-inch pipe with 10- and 15-inch pipe at Technology Drive from Skyport Drive to Airport Parkway.		

Sanitary Sewer System
2022-2026 Proposed Capital Improvement Program
Summary of Reserves

Project Name	Montague Sanitary Sewer Pump Station Reserve
5-Yr CIP Budget	\$ 2,400,000
Total Budget	\$ 2,400,000
Council Districts	4
Description	This reserve sets aside funding to rehabilitate and/or upgrade the pump station located on First Street and Montague Expressway. Due to real estate-related uncertainties, construction is currently delayed.
