ENVIRONMENTAL AND UTILITY SERVICES







MISSION

Provide environmental leadership through policy development, program design, and reliable utility services

Primary Partners

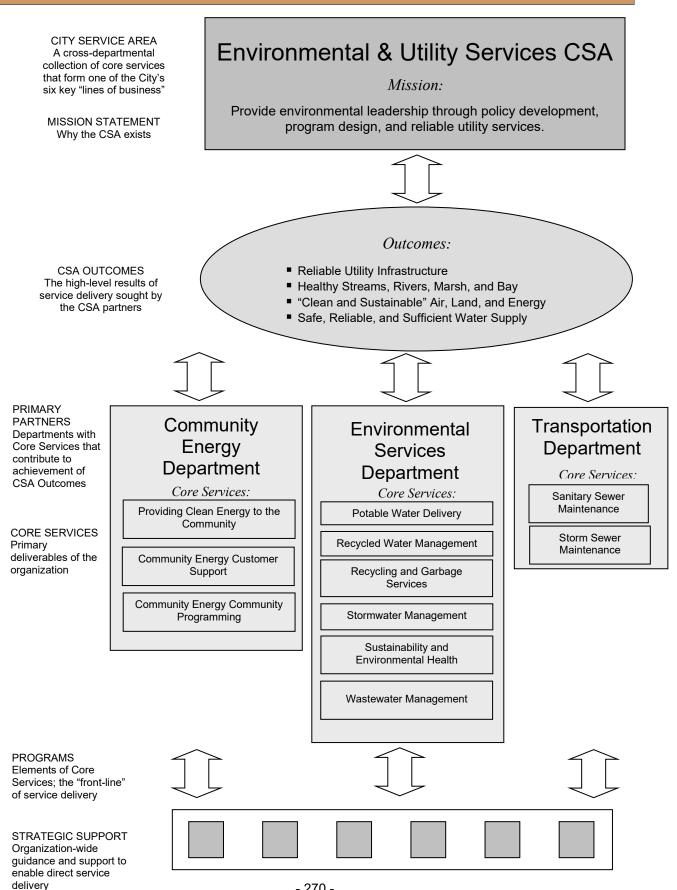
Community Energy Environmental Services Transportation

CSA OUTCOMES

- □ Reliable Utility Infrastructure
- Healthy Streams, Rivers, Marsh, and Bay
- Clean and Sustainable" Air, Land, and Energy
- □ Safe, Reliable, and Sufficient Water Supply

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SERVICE DELIVERY FRAMEWORK



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¹ Information not available from PG&E. Data is reported to become available in July 2022.

² Reduction greater than 100% represents the amount of credit given to implementation of control actions.

BUDGET SUMMARY

Expected 2022-2023 Service Delivery

- Utility Infrastructure Management Build, operate, and maintain the City's wastewater, stormwater, recycled water, and potable water utility infrastructure to ensure system reliability and public health and safety.
- Solid Waste Diversion Oversee programs to collect, process, recycle, compost, and dispose of solid waste to maximize diversion from landfills and protect public health, safety, and the environment.
- Promote Climate Action in the Community Provide leadership on climate action through policy, measures, or programs that reduces greenhouse gases and ensure a long-term water supply. Support environmentally sustainable practices throughout the community through education, public-private partnerships, and the implementation of the Climate Smart San José plan.
- San José Clean Energy Continue full operations of the City's Community Choice Aggregation program with the goals of providing residents and businesses with a choice of electricity providers while progressing towards meeting greenhouse gas emissions reduction goals.

2022-2023 Key Budget Actions

- Utility Rates
 - Storm Sewer Service Rates Maintains current rates in 2022-2023.
 - Sanitary Sewer Service Rates A maximum 9% adjustment in budgeted revenues to the Sewer Service and Use Charge fund.
 - Residential Garbage and Recycling Rates A maximum 8% increase in single family dwelling and a 4% increase in multi-family dwelling rates will maintain cost recovery as contract expenditures increase due to annual cost-of-living adjustments for solid waste haulers.
 - Municipal Water System A 12% budgeted revenue increase adjustment for 2022-2023, primarily to account for the increased cost of wholesale water.
- Community Energy Staffing Actions Adds 3.0 positions for a variety of strategic roles within the Community Energy Department. These roles will engage in key functional areas ranging from accounting, to human resources administration, to energy procurement.
- Storm Sewer Operations and Maintenance Adds one-time and ongoing funds for storm sewer operations and maintenance needs including the addition of 3.0 positions, and equipment for street sweeping, large trash capture devices, and pump station rehabilitation and repair.
- South Bay Water Recycling System Maintenance and Operations Adds one-time non-personal funding of \$1.65 million to support South Bay Water Recycling SCADA improvements, installation of recycled water truck fill station and dewatering facilities, communications improvements, pump station foundation assessments, and Zone 3 Reservoir drainage improvements that are crucial to the continued operation of the recycled water system.
- Climate Smart San José Implementation Funding Expands Climate Smart San José investment and implementation with the addition of staffing and non-personal funding in the Departments of Transportation and Environmental Services for Climate Smart plan updates and to accelerate the City's progress towards the City's 2030 carbon neutrality goal.

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BUDGET SUMMARY

City Service Area Budget Summary**

		2021-2022 Adopted	2022-2023 Forecast	2022-2023 Proposed
Dollars by Core Service *		•		•
Community Energy Department				
Strategic Support - Other - Environmental & Utility Services	13,180,062	3,953,884	6,386,977	6,525,910
Strategic Support - Environmental & Utility Services	3,327,312	5,978,026	4,888,487	5,193,013
Providing Clean Energy to the Community	278,379,158	289,678,802	314,277,796	314,460,320
Community Energy Customer Support	7,190,479	8,615,583	7,924,692	7,924,692
Community Energy Community Programming	177,064	1,521,961	5,687,411	5,687,411
Environmental Services Department				
Strategic Support - Other - Environmental & Utility Services	23,236,601	21,303,018	22,252,050	22,334,853
Strategic Support - Environmental & Utility Services	15,425,425	14,857,352	15,301,181	15,751,178
Recycling & Garbage Services	155,782,429	182,465,177	192,262,733	192,550,588
Potable Water Delivery	45,038,320	46,758,905	50,915,240	51,104,134
Recycled Water Management	10,672,164	14,137,185	14,182,312	15,824,392
Wastewater Management	80,213,957	96,915,851	118,997,212	120,462,652
Stormwater Management	8,403,865	10,012,603	9,853,269	9,999,684
Sustainability and Environmental Health	4,297,695	6,711,358	5,796,982	7,526,256
Transportation Department				
Sanitary Sewer Maintenance	19,245,442	21,744,300	21,446,089	21,546,089
Storm Sewer Maintenance	7,437,567	8,153,103	7,040,480	8,289,613
Strategic Support - Other - Environmental & Utility Services	5,299,929	5,199,813	6,079,690	6,118,668
Strategic Support - Environmental & Utility Services	1,942,439	2,256,583	2,148,407	2,148,407
Total CSA	\$679,249,908	\$740,263,504	\$805,441,008	\$813,447,860
Authorized Positions	761.36	769.16	762.56	778.56

* Fund Balance, Transfers, and Reserves for funds that may be managed by the departments in this CSA have been excluded from this display. This information can be found in Source and Use of Funds Statements elsewhere in this document.
 ** The positions displayed in the 2020-2021 Actuals column reflect those included in the 2020-2021 Adopted Budget. 2020-2021 Actuals may not

subtotal due to rounding.

OVERVIEW

Service Delivery Accomplishments

- In September 2019, City Council approved the Green Stormwater Infrastructure Plan that describes how the City will incorporate multi-benefit green infrastructure to improve water quality and supplement current traditional storm drain infrastructure. Staff focused on refining the implementation strategy, developing a public outreach plan, and identifying funding. Staff continued to make progress with the design and construction of the River Oaks project. Public meetings were conducted in March and May 2020, and the project is on track to complete the preliminary design and obtain California Environmental Quality Act clearance and permits this year, with construction expected to start in 2023.
- Climate Smart San José continued leading-edge progress on climate action by: releasing a draft Existing Building Electrification Plan; helping acquire \$6 million in direct external funding and/or resource, including \$5.1 million from the California Public Utilities Commission (CPUC) to implement energy efficiency programs; installing 33 miles of new bikeways; developing Move San José, a city-wide plan for equitable, safe, sustainable mobility; developing multiple area-wide plans for sustainable access (Downtown Transportation Plan and Urban Village Multimodal Transportation Plans); creating the Emerging Mobility Action Plan; completing the design for a Zero Emissions Neighborhood pilot to install neighborhood-prioritized Climate Smart measures in a disadvantaged neighborhood; bringing forward a Carbon Neutral by 2030 Resolution to City Council; initiating its first cohort of over 40 GoGreen Teams of residents who will work together to implement Climate Smart measures and track progress using the Climate Smart Challenge web platform; launching the CPUC-funded Solar Access program offering 100% renewable energy to low-income residents in disadvantaged communities; piloting a no-cost partnership with a demand response provider to drive demand response participation; beginning to disperse incentive funds for EV charger projects as part of the CALeVIP program; adding two new renewable energy projects, totaling 287 MW, to the grid that helps to improve grid reliability; and releasing a draft Natural and Working Lands Element for the Climate Smart San José plan.
- Regional Wastewater Facility (RWF) team completed many maintenance projects including: dissolved air floatation and sludge screening upgrades with a new odor control system and more efficient co-thickening process; Advanced Facility Meter Replacement Phase I; removal and replacement of existing high voltage switchgears; maintenance of two 115 KV substations; and the installation of five new Distributed Control Units as part of the Distributed Control Systems Upgrades Phase III project.
- San José Clean Energy (SJCE) began providing customers with clean, renewable power from two long-term renewable energy projects that began service in December 2021 – a wind project from Pattern Energy's Western Spirit Wind facility in New Mexico and an innovative solar plus battery storage project from Terra-Gen in Central California. Together these projects will provide nearly 300 megawatts of energy and help SJCE meet customer demand with clean energy during the crucial early evening hours when demand is high, helping reduce reliance on fossil fuels and bolstering reliability.
- The Department of Transportation's Sewer Division staff continued their daily round the clock work throughout the past two years of the COVID-19 pandemic which has resulted in another record low of only 35 sanitary sewer overflows (SSOs) in 2020-2021 while residents continued to shelter in place and work from home which increased impacts to the collection system.

OVERVIEW

Service Delivery Environment

- The RWF was reissued an National Pollutant Discharge Elimination System (NPDES) permit in April 2020 that governs pollutant removal at the facility with monitoring requirements remaining largely unchanged. Regional watershed permits that apply to all wastewater treatment plants discharging to San Francisco Bay were reissued in July 2019 for nutrients and in December 2017 for Polychlorinated Biphenyls (PCBs) and mercury. Permits are generally renewed every five years and new requirements can be expected. The Title V air quality permit from the Bay Area Air Quality Management District is currently in renewal and is expected to be issued this year. The RWF also has active Authority to Construct air permits for the new headworks, digester rehabilitation, filter rehabilitation, sludge dewatering, and cogeneration projects. The operating limitations in the current Authority to Construct permits will be added to the Title V permit after project completion.
- The City's sanitary sewer collection system pipes and outfall structures continue to age, and many have exceeded the standard life span for their type of material. The City's 17 sanitary sewer pump stations and 31 stormwater pump stations are an average of 33 years old, while the standard life of a pump station is up to 25 years. As infrastructure ages towards and beyond useful life expectancy, increased operating costs materialize in more frequent monitoring and condition assessment visits. Funding will be needed to rebuild pump stations and outfalls to prevent failure which could lead to sewage spiils or flooding.
- On November 19, 2015, the Regional Water Quality Control Board (RWQCB) adopted a new NPDES Stormwater Permit (Stormwater Permit) that regulates 76 municipalities in the San Francisco Bay Area. City staff, in conjunction with other regional stormwater agencies, are actively engaged in discussions regarding the requirements of the next Stormwater Permit which is currently in Administrative Draft form and scheduled to become effective July 1, 2022.
- A multi-year master planning effort for the storm sewer system is necessary due to an aging storm sewer infrastructure unsuitable for accommodating planned growth; deteriorating infrastructure, including outfalls; and increased regulatory interest in using "green infrastructure" approaches to address stormwater issues. As infrastructure deteriorates or otherwise does not support growth levels, increased operations and maintenance costs materialize in more frequent monitoring and condition assessment visits.
- The City is actively implementing SB 1383 requirements, which establishes statewide targets to increase organic waste recycling and divert it from landfills; City Council approved related ordinances in December 2021, in advance of the deadline. City solid waste programs are already providing organics collection and processing services to residents and businesses, so some elements of SB 1383 have already been implemented. Staff and haulers are providing outreach and education to residents and businesses. Staff are participating in a county-wide regional food recovery program to meet the SB 1383 requirements.
- As the default energy provider, SJCE provides customers with the ability to choose their source of energy and sets the generation retail rates for power used in the City. SJCE maintains a high customer participation rate, providing electric generation service to approximately 350,000 customer accounts, representing nearly all of the residents, businesses, and schools in the City.
- California's investor-owned-utilites, like PG&E, use the Power Charge Indifference Adjustment (PCIA) to recover above-market costs associated with their power portfolios. The PCIA fee is charged to all California electricity customers and has remained volatile every year since the launch of SJCE, imposing millions of dollars in added costs to SJCE customers. City staff is engaged in ongoing efforts to minimize the impact of the PCIA on consumers.

OVERVIEW

CSA Priorities/Key Services

- Operate and maintain the City's utilities, reliably, sustainably, and efficiently providing storm sewer, sanitary sewer, wastewater treatment, potable water, San José Clean Energy, and recycled water services.
- Continue to meet NPDES wastewater and Stormwater Permit compliance.
- Continue to implement critical capital improvement projects with an estimated value of \$1.4 billion over a ten-year period to rebuild and rehabilitate infrastructure at the Plant.
- Implement the Green Stormwater Infrastructure Plan to improve water quality.
- Make strategic investment to increase service levels and maintenance activity on the City's Sanitary Sewer Collection System in order to reduce the number and mitigate the impacts of SSOs.
- Develop and advance innovative strategies to create a more energy resilient City and advance community awareness of the Council-approved Climate Smart San José Plan which includes partnering with other agencies to pursue grants to promote a variety of goals such as energy efficiency, building electrification, and clean, renewable energy in the community.

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OVERVIEW

Budget Dollars at Work: Performance Goals

OUTCOME 1: RELIABLE UTILITY INFRASTRUCTURE

Strategic Goals	CSA Performance Measures	2020-2021 Actual	2021-2022 Target	2021-2022 Estimate	2022-2023 Target	5-Year Goal
Preserve the City's utility infrastructure to optimize service delivery capabilities	 % of utility assets in working condition: -SJ/SC Water Pollution 					
service delivery capabilities		98%	95%	99%	95%	95%
	- Storm Sewer Inlets	99%	96%	99%	96%	99%
	- SJ Municipal Water	95%	100%	94%	96%	98%
	- South Bay Water Recycling	93 <i>%</i> 94%	100%	98%	98%	90%
		83%	<100%	90 <i>%</i> 87%	<100%	<100%
	2. Ratio of Municipal Water	03%	<100%	07 %	<100%	<100%
	System average residential					
	water bill to weighted average residential water bill of the					
	San José water retailers ²	4 7		4.0		
	3. # of sanitary sewer overflows	1.7	2.0	1.8	2.0	2.0
	per 100 miles of sanitary					
	sewer mains (annualized)					
Provide for collection,	1. % of waste diverted from					
disposal & processing of solid waste	landfills					
	(State Goal: 50%) ³					
	- Overall ⁴	68%	70%	68%	70%	90%
	- Residential	75%	80%	81%	85%	90%
	- Commercial	61%	60%	42%	60%	75%
	 City Facilities 	85%	91%	82%	85%	90%
	2 # of debris removals that	1,792	1,975	1,770	1,751	1,665
	address safety and					
	obstructions in the public					
	right-of-way (Priority 1 illegal					
	dumping resources)					
	3 Cubic yards of debris	3,026	3,803	2,371	2,759	2,995
	removed (Priority 1 illegal				,	,
	dumping requests)					
	4 # of debris removals that	23,707	20,000	21,000	26,000	30,000
	reduce neighborhood blight	,	,	,	,	,
	(Priority 2 Illegal Dumping					
	requests) ⁵					
	5 Tons of items collected	N/A	N/A	N/A	11,786	15,688
	through the Junk Pickup Program ⁶				,	,
	6 Per Capita Disposal (includes	N/A	N/A	N/A	4.4 Lbs	3.7 Lbs
	residential and commercial) ⁶	,, .				0.7 200

¹ The % of utility assets in working condition for the Plant is calculated based on an average number of hours critical equipment is unavailable during the year due to repairs.

² Other San José water retailers include San José Water Company and Great Oaks Water Company.

³ To continue increasing solid waste diversion and support the Council-approved Zero Waste Strategic Plan, new solid waste management infrastructure and programs will be necessary in the coming decade. The private sector has invested over \$100 million in recycling facilities in San José since 2007 and this level of investment will need to continue.

⁴ The measurement for the Overall diversion category is based upon the State's guidelines, which use a per-capita standard. Moreover, the Overall measurement for the City includes solid-waste streams outside of the Department's collection, and includes construction, demolition, and self-haul categories. The remaining three categories are those directly within the City's collection process, and diversion in these are measured by total collected versus total recycled.

⁵ The performance measure "% of Illegal Dumping (Priority 2) work orders completed within 5 business days" is located in the Parks, Recreation and Neighborhood Services Department section under the Community Services Core Service.

⁶ New measure starting in 2022-2023.

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OVERVIEW

Budget Dollars at Work: Performance Goals

OUTCOME 2: HEALTHY STREAMS, RIVERS, MARSH, AND BAY

Strategic Goals	CSA Performance Measures	2020-2021 Actual	2021-2022 Target	2021-2022 Estimate	2022-2023 Target	5-Year Goal
Manage stormwater for suitable discharge into creeks, rivers, and the Bay	 % of residents surveyed who understand that any substances that get washed down the street end up in the Bay without treatment through the storm drain system¹ 	N/A ¹	70%	65%	70% ¹	70%
	2. % of trash reduced from the storm sewer system. ²	100.2%	100%	100.2%	109%	100% ³
Manage wastewater for suitable discharge into the Bay	 Mgd discharged to Bay during the average dry weather effluent flows (ADWEF) season³ 	75.3 mgd	<120 mgd	66.0 mgd	<120 mgd	<120 mgd
	 % of time pollutant discharge requirements for wastewater NPDES permit are met or surpassed⁴ 	100%	100%	100%	100%	100%
Develop, operate, and maintain a recycled water system that reduces effluent to the Bay	 Millions of gallons per day diverted from flow to the Bay for beneficial purposes during the dry weather period^{4/5} 	17.2 mgd	20.0 mgd	17.0 mgd	18.0 mgd	20.0 mgd

¹ Data for this measure is collected through a biennial survey, last conducted by ESD in February 2022. The next survey is planned to be completed in 2023-2024, and those results will be reported in the 2024-2025 Proposed Budget.

² The 100% or greater total represents the amount of credit given to implementation of control actions.

³ Trash load reduction is expected to increase slightly due to planned installations of small and large trash capture devices and implementation/expansion of on-land trash control measures through the BeautifySJ program.

⁴ In accordance with the NPDES permit, the maximum effluent to the Bay during the dry weather period is restricted to 120 mgd. These measures continue to be below this trigger point, which is set by the State to protect wildlife habitat. The RWF continues to consistently meet permit discharge requirements.

⁵ Dry weather period is defined as the lowest continuous three months average rainfall between May and October, which during the fiscal year report period is July to September.

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OVERVIEW

Budget Dollars at Work: Performance Goals

OUTCOME 3: "CLEAN AND SUSTAINABLE" AIR, LAND, AND ENERGY

Strategic Goals	CSA Performance Measures	2020-2021 Actual	2021-2022 Target	2021-2022 Estimate	2022-2023 Target	5-Year Goal
Reduce, reuse, and recycle solid waste at home, work, and play ¹	 % of residents rating the City's job of providing information on how to recycle as good or excellent² 	68%	83%	68%	75% ²	75%
Promote energy efficiency and clean, renewable energy in the community	2. Citywide greenhouse gas (GHG) emissions ^{3/4}	N/A	N/A	N/A	5,543,316	5,387,4204

¹ San José has one of the highest diversion rates among large cities in the country. The structure of the City's commercial and residential programs facilitate effective sorting of garbage and recycling by residents and businesses. Customer outreach to neighborhoods, schools, and businesses will continue to help reduce recycle cart contamination and blight, as well as account for commercial customers.

² Data for this measure is collected through a biennial survey, last conducted by ESD in February 2022. The next survey is planned to be completed in 2023-2024, and those results will be reported in the 2024-2025 Proposed Budget.

³ Due to limited staffing and budget constraints, the Climate Smart program can only complete community-wide GHG inventories once every other calendar year.

⁴ Figures above are Annual Citywide GHG Emissions and measured in Metric Tons Carbon Dioxide Equivalent (MTCO2e).

OUTCOME 4: SAFE, RELIABLE AND SUFFICIENT WATER SUPPLY

Strategic Goals		CSA Performance Measures	2020-2021 Actual	2021-2022 Target	2021-2022 Estimate	2022-2023 Target	5-Year Goal
Ensure availability of future water supplies.	1.	Millions of gallons of recycled water delivered annually ^{1/2}	4,098	3,950	4,017	4,000	4,500
Public is educated regarding water conservation, and the safe and appropriate use of recycled water and water	1.	% of Municipal Water System customers demonstrating water conservation knowledge ³	N/A ³	95%	95%	95% ³	95%
resources	2.	% of Municipal Water System customers with water saving fixtures in their home or property ³	N/A ³	95%	93%	95% ³	95%
	3.	% of residents who are in favor of using recycled water ²	N/A ³	85%	87%	95% ³	95%

¹ The South Bay Water Recycling Program (SBWR) delivers more than 10,000 acre feet per year of recycled water from the Plant to over 700 customers for reuse in irrigation, industrial cooling, and other beneficial purposes. SBWR supplies more than 75% of all recycled water used in Santa Clara County.

² Starting in 2013-2014, data reported is based on County-wide water savings from both indoor and outdoor water conservation programs, passive water savings (from behavioral, policies, and code changes), and recycled water use. The County-wide data is collected and provided by SCVWD.

³ Data for this measure is collected through a biennial survey, last conducted by ESD in February 2022. The next survey is planned to be completed in 2023-2024, and those results will be reported in the 2024-2025 Proposed Budget.

ENVIRONMENTAL AND UTILITY SERVICES

PROPOSED BUDGET CHANGES

Proposed Changes	Positions	All Funds (\$)	General Fund (\$)
COMMUNITY ENERGY DEPARTMENT			
Community Energy Power Procurement Staffing	1.00	182,524	0
Community Energy Human Resources and Administration Staffing	1.00	159,389	0
 Community Energy Budget and Financial Planning Staffing 	1.00	145,137	0
Subtotal	3.00	487,050	0
ENVIRONMENTAL SERVICES DEPARTMENT			
 South Bay Water Recycling Operational Improvements 		1,650,000	0
Climate Smart Plan Update and Carbon Neutrality Program	6.00	1,626,638	1,656,641
 Regional Wastewater Facility Instrumentation and Mechanical Maintenance 		510,000	0
Recycle Right Direct Customer Outreach		480,000	0
 Regional Wastewater Facility Service Process Control 		365,000	0
Waste Characterization Study		275,000	0
 Laboratory Equipment Replacement 		250,000	0
 Environmental Enforcement Data Management System and Laboratory Information Management System Procurements 		215,000	0
 Regional Wastewater Facility Process Control System Staffing 	1.00	192,825	0
 Municipal Water Utility Operations Compliance Management 	1.00	188,894	0
 Municipal Environmental Compliance Staffing 	1.00	153,946	110,482
 Watershed Protection Division Vehicle Replacement 		120,000	0
Wastewater Compliance Staffing	1.00	85,152	0
 Regional Wastewater Facility Asset Management Reorganization 	0.00	37,816	0
 Environmental Services Department - Climate and Seismic Resilience Planning and Development 	1.00	0	0
Building Performance Ordinance Staffing	(1.00)	(166,465)	(166,465)
 Watershed Protection Division Laboratory Restructuring 	0.00	(55,194)	0
 Watershed Protection Division Reorganization 	0.00	(18,657)	0
Subtotal	10.00	5,909,955	1,600,658
TRANSPORTATION DEPARTMENT			
 Full/Large Trash Capture Devices Maintenance 	2.00	704,018	0
 Street Sweeping for Protected Bike Lanes 	1.00	445,115	0
Storm and Sanitary Pump Stations Operations and Maintenance		200,000	0
1	3.00	1,349,133	0
Subtotal Departments	16.00	7,746,138	1,600,658
Total Proposed Budget Changes	16.00	7,746,138	1,600,658