

# Overview

## OVERVIEW

The Santa Clara Valley Water District's (District) Fiscal Year 2018-22 Five-Year Capital Improvement Program (CIP) is a projection of the District's capital funding for planned capital projects from Fiscal Year 2017-18 through Fiscal Year 2021-22. The purpose of the CIP is to document planned District projects to help integrate District work with the larger community by aligning District planning with other local agency planning efforts.

The District's CIP is developed following the guidelines of Government Code (GC) § 65403 which governs the development and annual review of Capital Improvement Programs developed by special districts in the State of California. State law requires that the program be reviewed and updated annually. It also requires circulation of the document to all agencies having land use authority within the District boundaries prior to adoption of the program. This document is intended to provide the information necessary to facilitate planning and construction of water related infrastructure to meet the needs of Santa Clara County.

The CIP is prepared in accordance with the guidelines established by the Government Finance Officer Association (GFOA). Capital projects in this document are defined by both the accounting criteria for capital investment and Public Contract Code definition of public works. They exceed \$50,000 in cost, have long-term life spans and are generally nonrecurring. They usually fall within one of the following six categories.

1. Acquisition of land for public purpose
2. Construction of a significant facility, i.e. a flood protection facility, a water treatment facility, or a building
3. Addition to or expansion of an existing facility

4. Nonrecurring rehabilitation or major repair to all or part of a facility provided the total cost is more than \$50,000
5. Specific planning, engineering study, or design work related to an individual project which falls within the above categories
6. Significant one-time investment in tangible goods of any nature, the benefit of which will accrue

over several years. Examples include items such as large initial investments or improvements in technology or the purchase of a new telephone system.

The CIP includes several Small Capital Improvement Projects in the various cost centers. These projects will be ongoing and will be used to fund multiple small projects to undertake repairs, replacements, and minor modifications to existing water utility, watershed or campus facilities. Small Capital Improvements generally meet the following criteria:

1. Project cost is less than \$1.5 million
2. Project can be completed within 2 fiscal years
3. Rights-of-Way acquisition is not required.

The proposed funding for the Water Supply Small Capital Improvement projects is anticipated to vary each year based on the work identified in the Water Utility Asset Management Plan. The Almaden Campus Small Capital Improvements project is funded at a flat rate each year. Unspent funds in these projects will not carry forward from previous years.

There are some miscellaneous capital expenditures incurred by the District that are not captured in the CIP. These capital expenditures include certain components of water purchases, indirect costs to manage and train staff that are fully engaged in capital work, and routine replacement of computers, vehicles and large equipment.

## Mission

SANTA CLARA VALLEY WATER

The mission of the district is to provide Silicon Valley safe, clean water for a healthy life, environment, and economy.

# Overview

## ALIGNMENT WITH ENDS POLICIES

The District plans, manages and carries out capital improvements to comply with the Ends Policies and Executive Limitations established by its Board of Directors. Under the District's Policy Governance Model, Ends Policies describe the outcomes or results to be achieved by District staff. Balancing the Ends Policies are the Executive Limitations, which set limits on staff activities in fulfilling the Ends.

Program plans or master plans are developed to achieve the results established by the Ends Policies and to further define the goals and objectives of each Ends Policy. The Board either formally approves the plans or provides direction to staff, confirming the goals and objectives. These plans then become the basis for staff to propose and develop individual capital projects. Project ideas that are proposed by Operation staff must be vetted via a feasibility study and then validated to prepare a business case for proceeding with a capital investment. Appendix E contains the project feasibility studies that are currently underway. Alignment of the CIP with program or master plans provides a direct link to Ends Policies and ensures the District's long-term capital investments are planned and executed according to the Board's priorities. Three Ends Policies directly drive program or master plans and the types of capital improvements described in the CIP.

- Ends Policy E-2 "There is a reliable, clean water supply for current and future generations.
- Ends Policy E-3 "There is a healthy and safe environment for residents, businesses and visitors, as well as for future generations."
  - E-3.1 "Provide natural flood protection for residents, businesses, and visitors"
  - E-3.2 "Reduce potential for flood damages"
- Ends Policy E-4 "There is water resources stewardship to protect and enhance watersheds and natural resources and to improve the quality of life in Santa Clara County."

(See flowchart "CIP Process Alignment with Ends Policies" on page I-5)

## CIP PLANNING PROCESS

The District conducts an annual planning process for its Capital Improvement Program. The purpose of the planning process is to ensure the capital projects included in the CIP:

- meet the Board's priorities and contribute to the objectives of the District's various programs
- have identified funding for the duration of the projects
- are coordinated with the local jurisdiction's General Plans.

The CIP planning process is carried out in accordance with the following Executive Limitations.

- Executive Limitation EL-4.3.1., "A BAO shall produce an annual Rolling Five-Year Capital Improvement Plan with the first year serving as the adopted capital budget and the remaining years in place as a projected capital funding plan."
- Executive Limitation EL-4.4.1., "A BAO shall demonstrate to the Board the planned expenditures for the identified and selected capital projects in the Rolling Five-Year Capital Improvement Plan are aligned with the Board's capital priorities."

The annual CIP process is the responsibility of the CIP Committee comprised of division managers, with the responsibility to initiate or implement capital projects. The detailed process is a documented ISO procedure. It includes the following key steps:

- Management review and approval, to ensure staff proposed projects are aligned with Board policies and approved program plans
- Validation of projects to ensure there is a business case for doing the project and that a capital investment is the best solution
- Prioritization of all projects, including continuing and newly proposed projects, to ensure the projects in the CIP reflect Board priorities
- Financial analysis, to determine the capacity of the District's capital funding sources to fund the proposed capital projects
- Outreach to local jurisdictions within Santa Clara County, to coordinate the District's Capital Improvement Program with their General Plans

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- Board review and direction at appropriate steps, to ensure the CIP reflects Board policies and priorities
- Board adoption of the CIP plan

The annual CIP planning process starts with collecting information on proposed new capital projects in July, followed by preliminary scoping, priority and financial analyses to produce a Draft CIP in February. The Draft CIP serves as a multi-year plan, together with other long-term planning efforts of the District, is the basis for the budget for the following fiscal year. This Draft CIP plan is also reviewed by local jurisdictions for consistency with their General Plans. While the CIP is being reviewed by the cities and County the budget is being reviewed and finalized. The Board concludes the outreach on the CIP with a public hearing. The first year of the CIP is reconciled with the budget and the two documents are presented to the board for formal adoption in May.

## Board Direction and CIP Outreach

The Board has many opportunities each year to provide direction on projects contained in the Capital Improvement Program. The CIP is developed in parallel with the budget and the water rates. It is presented to the Board on three separate occasions for review and input. Early in the process the project list is presented to the board so they can provide direction to staff, ensuring that the document is developed in accordance with board priorities. The direction received is used to develop the Draft CIP which is reviewed by the Board before staff is authorized to release the document for public review. The CIP is adopted by the Board in May following a public hearing.

The CIP Ad Hoc Committee met in May, July, September, October, and December of 2016 to review and discuss information related to the development of the CIP and provide input to staff. The Committee provided direction on issues ranging from resource utilization and funding requirements to the prioritization criteria that are applied to each capital project before it is added to the CIP. Over the course of 2016, the CIP Ad Hoc Committee's recommendations were incorporated into the CIP document or implemented by staff.

On January 10, 2017 the FY 2018-22 project list and prioritization criteria were reviewed and endorsed by the Board. The following are highlights of changes from the previous year that have been approved as the basis for the FY 2018-22 CIP:

- To fully fund the Water Supply projects in the FY 2018-22 CIP, an increase in the groundwater production charges of up to 9.9% in North County and 6.4% for South County will be required.
- Two new projects with a combined cost of \$6.6 million were added to the CIP. They are; Berryessa Creek, from Lower Penitencia Creek to Calaveras Boulevard –Phase 3, planning and design only, and E. Discovery Management System.
- The Expedited Purified Water Program has been separated into two projects. The first project would include expansion of the Silicon Valley Advanced Water Purification Center (SVAWPC) and the conveyance pipeline to the Los Gatos Recharge Ponds. The remaining potential elements of the Program address the District's long-term water supply portfolio beyond 2040. These elements have been removed from the five-year CIP, but will be included in the long-term forecast starting in FY2032. This has reduced the Water Utility category cost in the FY2018-22 CIP by \$345M.  
Resolution of several items in the Memorandum of Understanding being negotiated with the City of San Jose for the expansion of purified water production will require additional time. Staff estimates that an additional 1 to 2 years of collaborative effort may be needed. The Draft FY2018-22 CIP reflects this two-year shift.
- As work proceeds on the Anderson Dam Seismic Retrofit Project the investigations have shown that more extensive embankment retrofit is necessary, this will add about \$200M (2016 dollars) to the project cost.
- The timing of the IRP2 line valves Project has been moved forward, staff plans to design and install these line valves in conjunction with the 10-year Pipeline Rehabilitation Project
- The Watersheds Asset Rehabilitation Program (formerly the Erosion Repair Program), continues to be a priority. In addition to the approximately \$15M

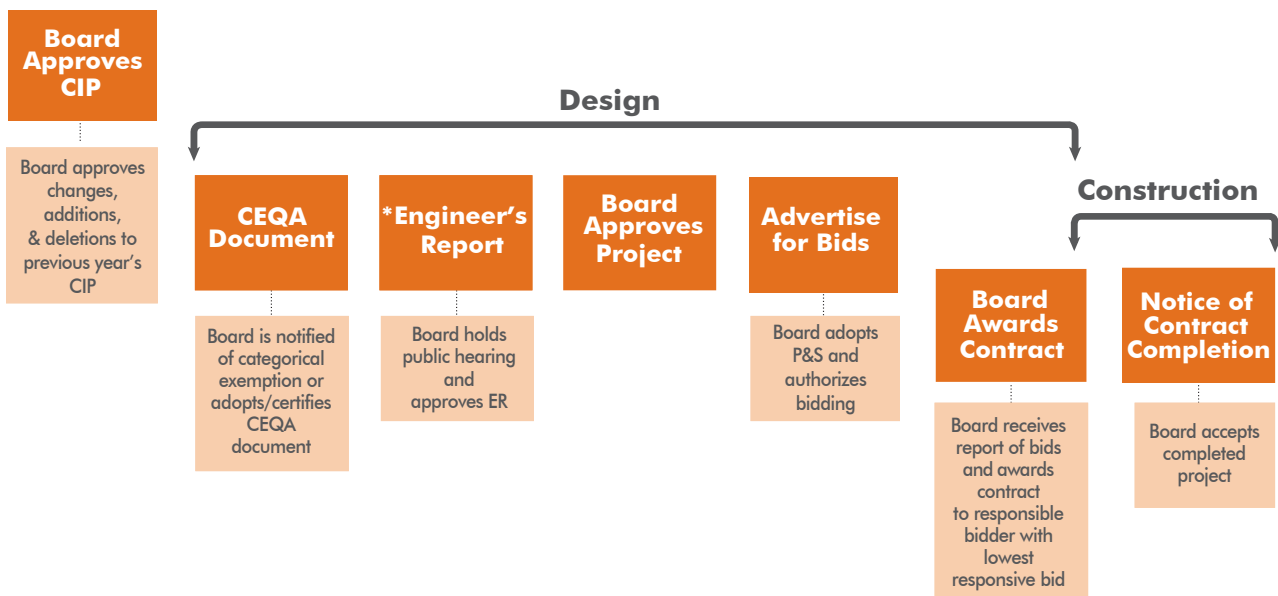
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of work completed or currently underway, the FY 2018-22 CIP includes \$55M in funding for the program. More than 30 erosion sites along District-owned portions of creeks throughout the county would benefit from repair. Staff continues to monitor and evaluate the priority of individual sites and refine the multi-year program. Approximately \$80M to \$100M of Identified work remains unfunded.

- To increase the visibility of the District's efforts to improve fish passage in local streams. Feasibility studies at Ogier Ponds, Metcalf Ponds and Stevens Creek are included in the Water Resources Stewardship section of the CIP.

Each project in the CIP goes through a planning phase, design phase and construction phase. The Board may determine to not implement a project based on various considerations such as financial constraints, environmental impacts or community desire during a project's planning or design phases. Approval of a capital project by the Board occurs at the end of the design phase when the Board approves the plans and specifications to solicit bids for construction of the project.

## OPPORTUNITIES FOR BOARD DIRECTION ON CAPITAL PROJECTS



\* Board approval of the Engineer's Report is required only on projects with zone funding.

## CIP PROCESS ALIGNMENT WITH ENDS POLICIES





# Overview

## FISCAL YEAR 2018-22 CIP SUMMARY

The recommended CIP for FY 2018-22 includes 63 priority projects to implement the goals and objectives of the District’s program plans and master plans. These projects are grouped into five types of improvements.

- **Water Supply Capital Improvements**  
29 projects contributing to Ends Policy E-2
- **Flood Protection Capital Improvements**  
17 projects contributing to Ends Policy E-3
- **Water Resources Stewardship Capital Improvements**  
8 projects contributing to Ends Policy E-4
- **Buildings and Grounds Capital Improvements**  
3 projects supporting District efforts to achieve the Ends Policies
- **Information Technology Capital Improvements**  
6 projects supporting District efforts to achieve the Ends Policies

Each of the 63 projects in the CIP has an identified funding source based on the type of improvement or function of the project.

The principal sources of revenue for the District are property taxes, a special parcel tax and water production charges for use of groundwater, treated water, and surface water. These revenues are organized into eight funds. Seven of the eight funds have a specific purpose and only finance the operational and capital expenditures related to that purpose. In 2008 the Board decided to combine the individual watershed funds into a county-wide watershed and stream stewardship fund to send the message that the watershed activities are managed for the benefit of the county. This also streamlines most tracking and accounting activities for staff. The District continues to receive a small amount of revenue from

benefit assessments that were approved by voters in the 80s and 90s. These funds are dedicated to specific watersheds and the accounting practices to ensure that they are spent and accounted for appropriately have been kept in place. As shown in the chart below, five of the eight funds are used to finance the five types of capital improvements in the CIP.

In November 2012 the voters overwhelmingly approved the Safe, Clean Water and Natural Flood Protection Program (Safe, Clean Water). This program replaced the Clean, Safe Creeks Program that would sunset in 2016. Safe, Clean Water has an expanded focus that includes funding for important Water Utility projects as well as additional funding for Flood Protection and Water Resources Stewardship projects. The Safe, Clean Water program will provide over \$750 million of special parcel tax revenue for operations and capital projects.

The District aggressively pursues external funding to supplement its principal revenue when practical. In recent years District projects benefited from \$43.4 million in American Recovery and Reinvestment Act (ARRA) funding. A number of District projects are receiving substantial State funding through grants from the Department of Water Resources (DWR) either directly or through local partner agencies. For a complete listing of grants and partnerships see Appendix C.

- \$25 million for Lower Silver Creek from DWR
- \$8 million for San Francisquito Creek through the Joint Powers Authority
- \$30 million Upper Berryessa, Lower Berryessa, and Lower Penitencia from DWR
- \$2.5 million for Wolfe Road Recycled Water Pipeline from DWR

DISTRICT PRIORITIES	District Funds				
	Water Utility Enterprise Fund	Watershed Stream Stewardship Fund	General Fund	Safe, Clean Water Fund	Information Technology Fund
<b>Water Supply</b>	●			●	
<b>Flood Protection</b>		●		●	
<b>Water Resources Stewardship</b>	●	●		●	
<b>Buildings and Grounds</b>			●		
<b>Information Technology</b>	●				●

This chart identifies which types of improvement are associated with each of the District’s five capital funds.

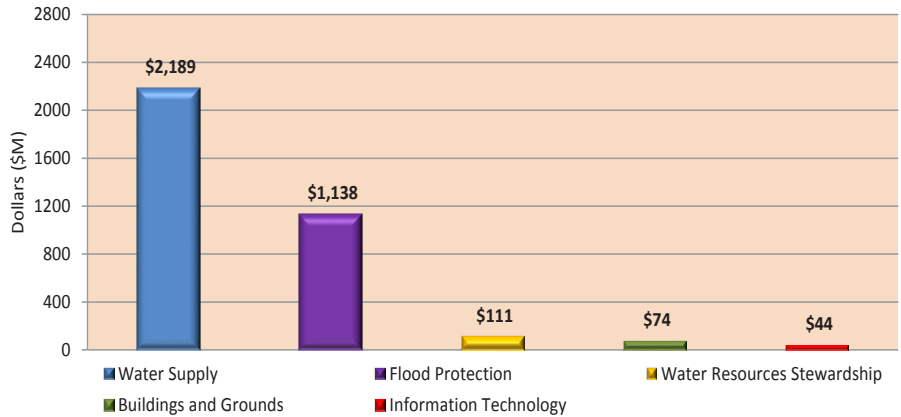
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The estimated total funding required to implement the 63 projects defined in the CIP is \$4.03 billion. The District has been and continues to be successful in leveraging funding for its capital projects through partnerships with federal, state, and local agencies. Of the \$4.03 billion total funding, \$691 million is expected from the District's various partners, such as the U.S. Army Corps of Engineers (USACE), and \$3.343 billion from the District. A list of projects that are funded cooperatively with the District's partners is summarized in Appendix C. Funding from partners for the cooperative capital projects generally come in two ways:

- Funds that are made available by the partners when needed, or
- Funds that are reimbursed by the partners after the District advances the needed funds.

Of the \$691 million that is expected from the District's partners, \$213 million is advanced by the District and reimbursed later. This \$213 million is included in the CIP, and increases the District's total funding requirement from \$3.343 billion to \$3.556 billion, to ensure that the District has adequate funding to advance the reimbursement.

## CIP Funding by Type of Improvement

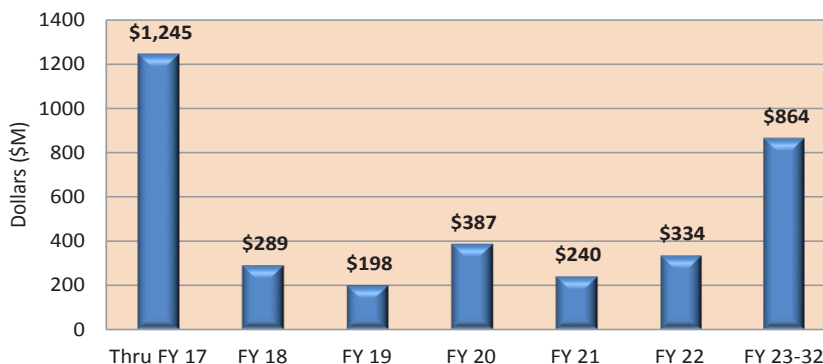


The chart above shows the distribution by type of improvement, of the \$3.556 billion total CIP funding as planned in the FY 2018-22 CIP.

The chart above shows how the \$3.556 billion to implement the 63 projects is allocated to each of the five Types of Improvements.

Of the \$3.556 billion in total funding for the 63 projects identified in the CIP, the Board has appropriated \$1.245 billion in prior years (through June 30, 2017 the end of Fiscal Year 2016-17). This year's CIP process identified additional funding needs of \$2.311 billion to complete the projects in the CIP, with \$289 million allocated in Fiscal Year 2017-18 and a total of \$2.023 billion proposed for future years. The table shown on page I-8 breaks down the fiscal year total by the five types of improvement and by applicable funding sources.

## CIP Funding Schedule



The chart above shows how the \$3.556 billion is distributed by fiscal year.

# Overview

## CIP Funding Schedule by Type of Improvement and Funding Sources (\$K)

	Through FY16	FY17	FY17 Unspent	FY18	FY19	FY20	FY21	FY22	FY23-32	TOTAL
<b>WATER SUPPLY</b>										
Water Utility Enterprise Fund	306,513	119,084	24,451	99,677	113,488	328,801	175,507	283,992	734,513	2,161,575
Safe, Clean Water and Natural Flood Protection Fund	1,807	892	-	12,672	302	1,046	1,314	9,244	192	27,469
<b>Water Supply Total</b>	<b>308,320</b>	<b>119,976</b>	<b>24,451</b>	<b>112,349</b>	<b>113,790</b>	<b>329,847</b>	<b>176,821</b>	<b>293,236</b>	<b>734,705</b>	<b>2,189,044</b>
<b>FLOOD PROTECTION</b>										
Watershed Stream Stewardship Fund	271,531	49,538	30,583	49,736	32,535	15,297	15,839	15,373	20,352	470,201
Safe, Clean Water and Natural Flood Protection Fund	385,116	48,632	14,028	113,180	29,938	18,277	24,475	13,031	34,660	667,309
<b>Flood Protection Total</b>	<b>656,647</b>	<b>98,170</b>	<b>44,611</b>	<b>162,916</b>	<b>62,473</b>	<b>33,574</b>	<b>40,314</b>	<b>28,404</b>	<b>55,012</b>	<b>1,137,510</b>
<b>WATER RESOURCES STEWARDSHIP</b>										
Water Utility Enterprise Fund	765	-	-	1,356	3,627	749	775	802	7,886	15,960
Watershed Stream Stewardship Fund	18,317	2,225	1	1,734	2,885	2,429	775	802	7,886	37,052
Safe, Clean Water and Natural Flood Protection Fund	5,124	3,784	396	5,134	10,980	15,033	9,510	802	7,886	58,253
<b>Mitigation Total</b>	<b>24,206</b>	<b>6,009</b>	<b>397</b>	<b>8,224</b>	<b>17,492</b>	<b>18,211</b>	<b>11,060</b>	<b>2,405</b>	<b>23,658</b>	<b>111,265</b>
<b>BUILDINGS AND GROUNDS</b>										
General Fund	10,479	7,989	14,239	2,062	2,371	4,001	10,387	8,989	27,526	73,804
<b>Buildings and Grounds Total</b>	<b>10,479</b>	<b>7,989</b>	<b>14,239</b>	<b>2,062</b>	<b>2,371</b>	<b>4,001</b>	<b>10,387</b>	<b>8,989</b>	<b>27,526</b>	<b>73,804</b>
<b>INFORMATION TECHNOLOGY</b>										
Water Utility Enterprise Fund	740	180	20	1,301	555	198	-	103	9,777	12,854
General Fund	1,199	-	-	-	-	-	-	-	-	1,199
Information Technology Fund	6,585	4,147	3,025	1,957	1,791	846	965	438	13,591	30,320
<b>Information Technology Total</b>	<b>8,524</b>	<b>4,327</b>	<b>3,045</b>	<b>3,258</b>	<b>2,346</b>	<b>1,044</b>	<b>965</b>	<b>541</b>	<b>23,368</b>	<b>44,373</b>
<b>TOTAL</b>	<b>1,008,176</b>	<b>236,471</b>	<b>86,743</b>	<b>288,809</b>	<b>198,472</b>	<b>386,677</b>	<b>239,547</b>	<b>333,575</b>	<b>864,269</b>	<b>3,555,996</b>
<b>CUMULATIVE TOTAL</b>	<b>1,008,176</b>	<b>1,244,647</b>		<b>1,533,456</b>	<b>1,731,928</b>	<b>2,118,605</b>	<b>2,358,152</b>	<b>2,691,727</b>	<b>3,555,996</b>	

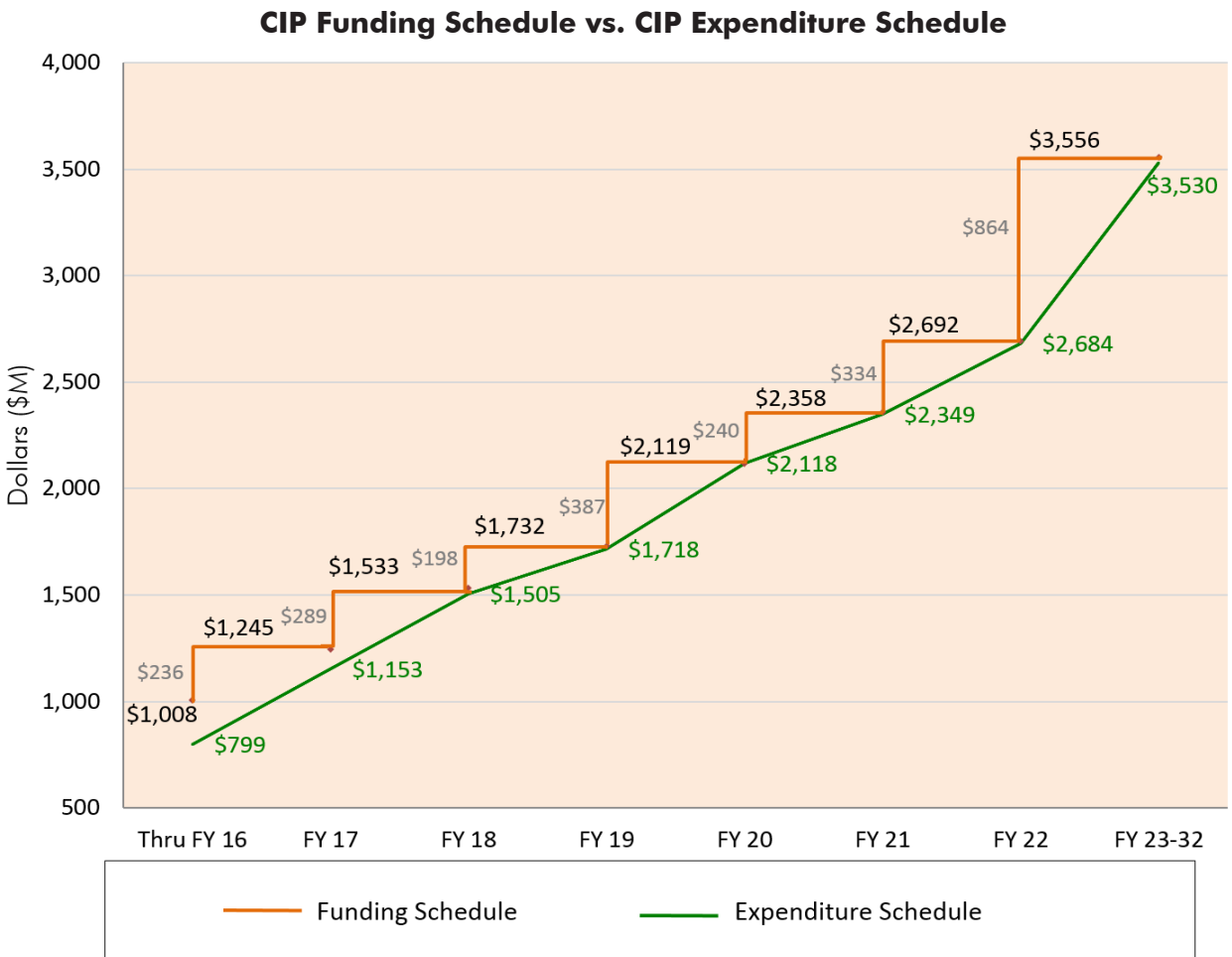
FY 2016-17 Funds to be reappropriated



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As shown in the table, CIP Funding Schedule by Type of Improvement and Funding Sources (on the previous page): approximately \$87 million of the already appropriated \$1.245 billion is not spent and is reappropriated to Fiscal Year 2017-18 for continued use

in those same projects in amounts consistent with the project expenditure schedule for Fiscal Year 2017-18. The following chart explains the relationship between the CIP Funding Schedule and Expenditure Schedule.



# Overview

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