



## Legislation Details (With Text)

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**Title:** 2016/17 Mid-Year Review of Capital Improvement Projects (CIP) Program and Presentation Regarding the Status and Future of the 5-Year CIP Program (Public Works Director Katsouleas).  
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**Sponsors:**

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**Attachments:** 1. List of 39 Active Projects, 2. List of 6 Completed Projects, 3. Capital Improvement Policies and Capital Budget - Fiscal Policies, 4. List of 39 Delayed Projects, 5. Staff Hours Demand for Active Projects, 6. Staff Hours Demand All Projects Scheduled in Current - FY 2020-2021, 7. PowerPoint Presentation

Date	Ver.	Action By	Action	Result
3/8/2017	1	City Council Regular Meeting		

**TO:**  
Honorable Mayor and Members of the City Council

**THROUGH:**  
Mark Danaj, City Manager

**FROM:**  
Stephanie Katsouleas, Public Works Director  
Prem Kumar, City Engineer  
Anna Luke-Jones, Sr. Management Analyst

**SUBJECT:**  
2016/17 Mid-Year Review of Capital Improvement Projects (CIP) Program and Presentation Regarding the Status and Future of the 5-Year CIP Program (Public Works Director Katsouleas).  
**RECEIVE AND FILE**

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**RECOMMENDATION:**  
Staff recommends that City Council:

- 1) Receive and file the CIP Mid-year update; and
- 2) Discuss and provide direction on the future implementation of the CIP Program based on the information presented herein and the FY 2016/17 and FY 2017/18 Adopted Capital Improvement Policy and Capital Budget Fiscal Policy.

**EXECUTIVE SUMMARY:**  
In FY 2016/17, City Council adopted a two-year budget, with a plan to focus specifically on the CIP Program in the "off year," or FY 2017/18. Since becoming the Public Works Director, I have had the

opportunity to review the entire CIP Program and the challenges it faces in achieving full and successful project implementation. This staff report provides a mid-year update on the adopted FY 2016/17 5-Year CIP, as well as a fresh look at how existing and future projects can best be implemented to achieve the proposed CIP schedule, with a specific focus on project demand versus available staff resources.

The Capital Improvement Projects (CIP) Program is a core function of the City; it includes projects and studies that address the City's comprehensive infrastructure needs. Between July - December, 2016 six (6) projects were completed. There are 39 projects currently underway totaling just over \$40 million, while an additional 39 projects (worth over \$12 million) have yet to be initiated due to limited resources. Implementing capital projects require significant staff time, as almost all projects follow a thorough 5-step process which is outlined in the Discussion section of this report.

Notably, given the City's existing and projected 5-Year CIP list, there remains a sharp imbalance between the hours needed to complete approved capital projects and the staff resources currently available. In order to successfully complete the planned projects and allow necessary projects to be added each year, staffing resources will need to be augmented. Without these additional resources, Public Works will be unable to meet the current and scheduled demand in a timely manner, and revisions to the 5-year CIP will be necessary. Note that City Council will be asked to consider two alternatives after reviewing the information presented in this staff report, which are to: a) reduce the forecasted number of capital projects that can be implemented over the next five years, or b) increase resources for project implementation to meet the current demand. The outcome of that decision will guide the upcoming CIP review process and actions recommended during the budget sessions, and will include a proposal that correctly aligns the Engineering Division resources with what can realistically be accomplished during each fiscal year moving forward.

### **FISCAL IMPLICATIONS:**

There are no fiscal implications associated with receiving and filing the CIP Mid-year Update. Any fiscal implications associated with the future implementation of the 5-year CIP program will be evaluated following direction received by City Council.

### **BACKGROUND:**

The City of Manhattan Beach has a robust Capital Improvement Project (CIP) Program, consisting of infrastructure projects and studies that address streets, buildings, parks, water and wastewater utilities and other public and right-of-way improvements. Many of the City's infrastructure projects are routine (e.g., slurry, street resurfacing, main replacements), while other projects are "one-time," unique projects (e.g., skate park, reservoir replacement, facility upgrade). The annual CIP program also needs to have the flexibility to address emergency repairs that cannot be anticipated (e.g., elevator repair, pump malfunction). Combined, these projects and studies place a heavy demand on engineering staff resources, whose overarching goals are to complete projects under budget and on-time in conformance with the adopted Capital Improvement Policies.

Funding for the City's CIP comes from at least 20 different sources, which are grouped into four basic categories:

- City Funds (General Fund, TOT and Citations)
- Enterprise Funds (Water, Wastewater, Storm Drain, Parking Meters, State Pier Fund)
- Special Revenues and Local Returns (Prop C, Measure R, Measure M, Gas Tax, Landscaping and Lighting)

- Grants (Community Development Block Grant, Safe Routes to Schools, Parks Grants, Metro, Federal Highway Administration, South Bay Highway Program)

Combined, the City, Enterprise and Special Revenue Funds yielded a net contribution to the CIP program of approximately \$10.7 million in FY 15/16. Over the last five years, the City has experienced growth in these funds. That trend is expected to continue, in particular with the addition of the Measure M funding starting in the fall of 2017. Collectively, these dedicated funds are and will continue to be used for future capital improvement projects. Grants fund contributions vary each year based on project awards.

Each year, the Department of Public Works proposes capital projects and studies for inclusion in the City's 5-year Capital Improvement Program. The projects proposed typically represent the basic infrastructure maintenance and replacement needs of the community, City facilities and the public right-of way. Prior to being added to the CIP, the proposed projects and studies are evaluated by the City's engineering staff for need, feasibility of implementation, cost effectiveness, potential hurdles, available funding resources and scheduling. The City Council reviews the draft list before it is presented to two commissions. Once finalized, the draft list is presented to the Planning Commission for conformance with the General Plan. The final draft is reviewed and ultimately approved by City Council (with or without modifications).

The adopted 5-year CIP is reviewed annually, and when necessary modifications are made by adding new projects, removing projects if priorities have changed, and/or rescheduling projects based on available resources. Often times, grant funding requirements or restrictions dictate how and when a project is implemented. Once the annual and 5-year CIP list is approved during the budget process, Public Works then provides a semi-annual update on their status. This staff report include a mid-year status update of the FY 2016/17 CIP Program, along with an assessment of the resources currently available the CIP versus what is needed to effectively carry out the mission of Capital Improvement Program itself.

## **DISCUSSION:**

Historically, Manhattan Beach has had limited staff resources to carry out the volume of capital projects proposed and approved, which in turn has led to a growing backlog of projects to be implemented. In addition to the mid-year update, this staff report and associated PowerPoint presentation (Attachment 7) provide data that compares the workload demand with available staff resources, and offers alternatives for moving forward to successfully implement the CIP program.

## **Mid-year Update:**

The 5-year CIP adopted for FY 2016/17 through FY 2020/21 identified 124 separate projects that included carry over projects from prior years as well as current projects and those scheduled to be implemented sometime within the next five years. The total allocation (appropriated and earmarked) for those projects is nearly \$108 million. However, it is worth noting that the actual number of projects that *should be* implemented by Public Works over the next five years is higher because the following projects were not listed on a previous plan but are needed:

- Water Main Replacements (annually for 5 years)
- Other Water Projects (to be determined)
- Additional Sewer Main replacements (annually for 4 years)
- Facility Improvements (listed as one line item, but will include many unique projects)

- Deferred Maintenance (listed as one line item, but will include several unique projects)
- Required Periodic Studies and Reports (e.g., Urban Water Management Plan, Sewer System Management Plan, Pavement Management Condition report, Speed Survey)
- Additional Streets Projects (new Measure M funding)
- 19 Newly Proposed Parks Projects, received in January 2017
- Unforeseen Repairs Subject to Public Contract Code Bidding Requirements
- Upcoming Joint Watershed Storm Water Projects
- Potential Council/Community Initiatives (e.g., Begg Pool, Fire Station 2, City Hall)

Attachment 1 includes a list of the 39 projects actively underway, along with their status (e.g., design, bidding, construction and funding sources). They total approximately \$40.2 million and include:

- 2 Water Projects
- 3 Wastewater Projects
- 2 Storm Water Projects
- 23 Streets/Sidewalk/Pedestrian Projects
- 8 Facilities Projects
- 1 Parking Lot Project

It is also worth noting that several projects currently underway are significant both in terms of funding and staff resource demand. They include the Sepulveda Bridge Widening Project, replacement of Peck Reservoir and the Pier/Roundhouse Renovation Project. Combined, they total about \$23 million out of the \$40.2 million allocated to the active list of projects.

Attachment 2 includes a list of the 6 projects completed between July - December, 2016. They include:

1. LED traffic Safety Lighting
2. Sewer Main Spot Repairs
3. Water Main Replacements and Fire Hydrant Installation
4. Fire Station Security Card Installation
5. Slurry Seal (Areas 2 and 3)
6. Energy Efficiency Implementation Study

Attachment 3 includes a list of 39 projects that were scheduled to begin in prior years or this year, but have yet to be initiated due to limited staff resources. These projects total approximately \$12.8 million.

As mentioned above, the current 5-year CIP program has identified a total of 124 separate projects scheduled for implementation.

### **Future of CIP Implementation**

Prior to fully evaluating the future of the CIP program, it is important to understand the level of effort required to implement a capital project, which can be divided into five separate stages. Please note that most, but not all, capital projects will require progressing through these five stages, which include:

#### **1. Request for Proposals (RFP)**

This stage includes gathering preliminary information that must be included in the RFP for design service; preparing exhibits; writing and releasing an RFP; issuing addendums (if necessary); evaluating proposals; scheduling and hosting interviews; selecting a consultant; negotiating; awarding the project; and executing a contract. The RFP stage typically demands about 15% of the total project's staff time.

## **2. *Design Services***

This stage includes preparing and providing relevant documents; hosting a kick-off meeting and other regular meetings; conducting field visits (if needed); overseeing design progress; processing invoices; reviewing draft and final plans and specifications; submitting for plan check; and often times conducting public outreach. The Design Services stage typically demands about 28% of the total project's staff time.

## **3. *Bidding and Contract Award***

Once plans and specifications are developed and approved, the project is ready for bidding. The bidding stage includes advertising for receipt of public bids; preparing for and hosting a pre-bid meeting; releasing addenda as needed; evaluating the bids received for conformance with bidding requirements; awarding the project; executing a contract; and responding unsuccessful bidders. The Bidding and Contract Award stage typically demands about 5% of the total project's staff time.

## **4. *Construction***

This stage is where largest percentage of staff time is spent. Activities include hosting a preconstruction meeting; coordinating outreach to affected communities; public meetings (if necessary), daily visits to the project site; hosting regular progress meetings; reviewing and processing requests for information (RFIs) and change orders; processing invoices; and reviewing the work completed for any deficiencies in workmanship (i.e., creating punch lists). The Construction stage typically demands about 47% of the total project's staff time.

## **5. *Closeout***

This stage includes ensuring punch list items are completed; processing the final invoices; accepting the project as complete; finalizing as-builts; releasing the retention; and preparing the file for audit. The Closeout stage typically demands about 5% of the total project's staff time.

Attachment 4 includes a detailed summary of the estimated hours required for the 39 active projects underway as the progress through each of the five stages listed above.

The Engineering Division of Public Works is the primary group responsible for implementing the CIP program using the five stages. Currently, the Division has three (3) full time engineers dedicated to the CIP program, which include two Senior Civil Engineers and one City Engineer. When feasible, the Division also utilizes the support of its Engineering Technician. The CIP program also includes some portion of administrative staff for document management and other secretarial duties. The total number of working hours that each engineer has available to work on CIP projects over the course of one year is about 1,700 hours. With three (3) current engineers at 1,700 hours each, the total annual resource value for CIP projects comes to 5,100 hours.

Given the small staff available, historically it was not uncommon for the Division to help address its CIP demand by supplementing the Engineering Division with other resources, including using other

Public Works staff and on-call consultants. However, those approaches are not sustainable for several reasons, including other staff have their own core responsibilities and workload, working staff out-of-class in a prolonged manner presents equity challenges, consultants experience staff turnovers and/or reassignments, and lastly, recent developments in state and federal characterization of employees.

As mentioned above there are currently 39 active projects and another 39 that were scheduled to begin between FY 10/11 and FY16/17 but have not yet begun. Combined, they require nearly 18,000 hours of engineering staff time for implementation. The remaining carry over projects and those scheduled to begin this coming year (FY 17/18) will require another 12,900 hours of staff time to implement. And the remaining three years of CIP projects require an estimated 30,950 staff hours to complete (see Attachment 5). Combined, the 5-year CIP total resource demand is over 61,000 hours of staff time if the projects are to be initiated and completed according to the projected schedule. With the current annual staff resources of 5,100 hours available to the Engineering Division, it will take just over 11 years to complete the current 5-year CIP. And during that time, undoubtedly the list of needed projects will have also grown.

It is abundantly clear that the Engineering Division is significantly understaffed when compared to CIP project demand. And, as mentioned above, this need does not account for any projects that will be added to the list over the next five years or any unplanned/emergency projects subject to public contracting code, and it does not include the demands placed on the Engineering Division to complete reports and studies not listed in the CIP program but which are required on a periodic basis. In order to successfully complete the planned projects and allow necessary projects to be added each year, staffing resources will need to be augmented. Without these additional resources, Public Works will be unable to meet the current and scheduled demand in a timely manner, and revisions to the 5-year CIP will be necessary. Therefore, following direction given by City Council on March 8, 2017, staff will prepare a new 5-year CIP during the upcoming budget sessions based on the policy alternative chosen below.

#### **POLICY ALTERNATIVES:**

In preparation for presenting a revised CIP Program and budget, City Council has several options for consideration, which include:

**ALTERNATIVE # 1:** Consider reducing the number of capital projects forecasted to be implemented over the next five years.

**PROS:** The City will not need to increase staffing resources to implement CIPs, and there will not be any additional financial impact to the various capital project funds for personnel.

**CONS:** The number of deferred capital projects and associated fund balances will continue to grow because projects will not be implemented in a timely manner. The Engineering Division will not be adequately staffed to carry out the core mission of the CIP Program, and facilities will continue to deteriorate while the actual cost of construction will continue to increase as a result of the deferrals.

**ALTERNATIVE 2:** Consider increasing Engineering Division staffing levels to more accurately align CIP resources and forecasted demand.

**PROS:** Capital projects can be implemented in a timelier manner and in accordance with the City's Capital Budget Fiscal Policies. Staff can begin clearing the backlog of capital projects that has

developed over the last five years. Staff resources will more closely align with the current and foreseeable future CIP demand. The Engineering Division will be able to better meet the demands of the community, various City departments and new City Council initiatives. New positions can be funded with no net impact to the General Fund.

**CONS:** The number of capital projects that can realistically be implemented each year will fall well short of the need, demand and funding available to implement them. The current 5-year CIP will be revised into a 10-year CIP to more accurately match existing staff resources. Engineering staff will not be able to meet the needs of the community, various City departments and City Council initiatives.

### **CONCLUSION:**

In summary, ensuring the proper care and management of the City's infrastructure is a core function of the City of Manhattan Beach. And as such, the CIP implementation schedule must be realistically forecasted moving forward by properly aligning staff resources with project demand. This means that either the staff resources available to implement projects must increase, or the number and complexity of infrastructure projects must decrease. Under the current framework, it will take the City's engineers more than a decade to implement the existing 5-year CIP, while fund balances will continue to grow because they cannot be drawn down in a timely manner. Alternatively, more engineers will need to be hired in the immediate future if staff is to adequately meet the current and future annual CIP program demand. Overall, increasing staff resources in lieu of deferring projects can be cost-effective when considering the rising cost of construction for each year a project is delayed.

Therefore, staff recommends that City Council consider the following:

- 1) Direct staff to bring back a revised CIP schedule as part of budget adoption that realistically aligns project implementation with the staff resources currently available. This will include revising the current 5-year CIP into a 10-year CIP so that it is in conformance with adopted Budget and CIP Policies (see Attachment 6); or
- 2) Direct staff to provide a financial analysis on how increased Engineering staff could be funded with no net impact to the General Fund, such that it would better align personnel resources with the current CIP demand. Staff would bring the item back as part of the budget adoption process, or sooner if desired, with additional information on how each position will be funded.

### **PUBLIC OUTREACH/INTEREST:**

No public outreach has been conducted on this topic.

### **ENVIRONMENTAL REVIEW**

This is not a project, and thus no environmental review is required.

### **LEGAL REVIEW**

The City Attorney has reviewed this report and determined that no additional legal analysis is necessary.

### **Attachments:**

1. List of 39 Active Projects

2. List of 6 Completed Projects
3. List of 39 Delayed Projects
4. Staff Hours Demand for Active Projects
5. Staff Hours Demand for All Projects Scheduled in Current - FY 2020-2021
6. Capital Improvement Policies and Capital Budget - Fiscal Policies
7. PowerPoint Presentation