



CITY COUNCIL STAFF REPORT

ITEM NO. 6.4

DATE: September 27, 2021
TO: Honorable Mayor and City Council
FROM: Scott Lanphier, Public Works Director
SUBJECT: Asset Management and Stormwater Update

RECOMMENDED ACTION

Staff recommends the City Council receive an update about the Asset Management and Stormwater Program Council Priority and conduct public opinion research to gauge support for an asset management revenue measure.

SUMMARY

The City's infrastructure is vital to maintaining community character, ensuring public safety, and encouraging economic vitality. The City of Livermore owns over \$3 billion in assets. While approximately \$1 billion of enterprise infrastructure, such as the water and sewer systems, is maintained and replaced through user fees, more than \$2 billion of City infrastructure competes for General Fund dollars. Due to limited funding, many maintenance tasks and replacement of assets have been deferred.

To address this issue, the City Council selected Asset Management as a City Goal and Priority in 2015, 2017, 2019, and added an emphasis on Stormwater in 2021. Council created the Community Asset Management Program (CAMP) Committee to help develop the Asset Management Program. The CAMP Committee reviewed asset data, recommended a risk-based method for prioritizing asset repair and replacement, and is currently developing and implementing a public outreach campaign.

Staff recently deployed NEXGEN, an asset management and materials management software system to streamline information processing, increase internal efficiency, and implement effective maintenance recommendations for near- and long-term asset management. Staff is also developing various tools to assist with maintenance reporting and to assist Council and community members visualize budgetary funding impacts.

Additionally, Council and staff have implemented a variety of policies and projects to reduce long-term funding needs. However, the findings of the Asset Management program show that there remains a significant gap between resources and needs, and that additional policy direction and funding will be

required to properly repair and replace the various infrastructure systems. Staff recommends Council conduct public opinion research to gauge support for an asset management revenue measure.

DISCUSSION

The City's Asset Management and Stormwater Program focuses on policies, projects, and practices to efficiently maintain and improve community-owned infrastructure. The City Council selected Asset Management as a City Goal and Priority in 2015, 2017, 2019, and added an emphasis on Stormwater in 2021. The following provides a brief synopsis of accomplishments over the past year and highlights upcoming efforts.

Asset Management Activities

Stormwater Update

- Staff contracted with a consultant for the next year to continue to coordinate and oversee efforts to improve Stormwater Management on a City-wide basis, clarify staff roles, and improve data collection efforts in anticipation of the addition of a Stormwater Program Manager in Fiscal Year (FY) 2022-23.
- In the past year, City staff and consultants have made progress in better understanding the City's stormwater management needs across departments. All aspects of the City's current stormwater management program have been documented. This will help the City better understand the current level of effort involved in the program and what necessary elements of stormwater maintenance are not currently able to be completed on a routine basis without additional staff capacity and funding.
- A preliminary transition plan of stormwater responsibilities from Community Development Department to Public Works has been developed which outlines how a comprehensive Citywide approach to stormwater management would fit into the current City structure. This transition plan identifies staff roles over the course of the next year with continued reliance on consultants and outlines a final division of responsibilities in the event of the anticipated addition of a Stormwater Program Manager in FY 2022-23.
- Staff and consultants have continued to engage with Zone 7, Livermore Area Recreation and Parks District (LARPD), and other regional partners on stormwater issues. The City is awaiting opportunities to engage as a stakeholder with Zone 7 as part of their Flood Management Plan update process. This process will help determine future Capital Improvement Program (CIP) projects on Tri-Valley creeks and waterways, as well as potential policy changes in Zone 7's creek acquisition policies.
- City staff and consultants are currently working to renew the Livermore Stream Maintenance Program Permit with the Regional Water Quality Control Board. Staff and consultants are working to improve the efficiency of the program and extend the permit term through 2026. Staff are also working to incorporate additional mandates related to the new Municipal Regional Permit and new requirements for climate change assessments into the City's maintenance programs.
- Staff are also supporting efforts to improve data collection and management and integrate creek and open space assets into the City's asset management system. Consultants have developed a map of City creek and culvert maintenance responsibilities and staff have begun collecting data on GIS-enabled digital platforms. This data will allow City staff to better prioritize future maintenance projects. Staff have also begun a stormwater asset condition assessment to obtain accurate data

on the City's stormwater assets. This data will improve the City's understanding of ongoing maintenance costs.

Capital Improvement Program (CIP) Projects

- The Holmes Street Wall Pilot Project Phase 1, consisting of eight residential lots north of Hampton Road, was accepted in November 2020. Phase 2, consisting of seven residential lots north of Phase 1, was accepted in June 2021. Phase 3, which consists of replacing the wall along the four residential lots on Holmes just south of Concannon Boulevard (including the lots with the Italian Cypress trees) and along two residential lots along Concannon Boulevard between Holmes and Evans Street is currently under design with construction funding programmed in the CIP FY 2021-23.
- In the next couple of months staff will enter into an agreement with a designer to develop fence/wall design guidelines for arterial backing lots to preserve consistent aesthetics along major arterials and gateways.
- Staff continues to utilize the Council's approved risk-based criteria to prioritize the repair and replacement of various community-owned assets. This is highlighted in the FY 2022-23 CIP budget where over 42% of all expenditures is programmed for infrastructure rehabilitation and replacement activities.
- General Fund Assets - Nearly \$16 million annually is programmed for General Fund infrastructure rehabilitation and replacement which represents about 40% of the estimated average annual need. Major projects programmed in this category includes street resurfacing, slurry seals and arterial rehabilitation, streetlight and traffic signal work, the Holmes Street wall project, park landscape rehabilitation, generator replacement at Fire Station 6, HVAC/chiller replacement for Civic Center buildings, and rehabilitation of building exteriors.

Community Asset Management Program (CAMP) Committee / Public Outreach

- The CAMP Committee was originally established in 2016 and focused on infrastructure data analysis. In January 2020, Council adjusted the CAMP committee's mission and duties to focus on public outreach. Since that time, the committee membership and mission has evolved to focus on sharing information about the City's community-owned assets with City residents and business owners.
- In March 2021 Council extended the term of the CAMP Outreach Committee through December 2022 to allow for further public outreach efforts, both online and in person.
- Staff and CAMP Outreach members have been working diligently on a public outreach campaign utilizing a variety of tools to increase the community's awareness about the City's infrastructure, and to gather public feedback. Specifically, CAMP Outreach members and staff developed an Outreach and Communications Strategy, brand identity, community survey which reached over 1,100 respondents, comprehensive program website (www.livermoreassets.net), interactive web-based quizzes, newsletter articles, social media posts, educational video, and an all-ages asset geocache.
- Staff and CAMP Outreach members are currently developing a set of fact sheets, each which will highlight a specific asset class with high-level information that is easy to understand and relevant to the general public. These fact sheets will be released in a serial progression with a new fact sheet published in regular installments via a social media campaign. The fact sheet development and release schedule is determined based on the asset classes with the most comprehensive information readily available. After completion, each fact sheet and supporting documents will be

available on the program website.

- In June 2021, the CAMP Outreach Committee participated in a joint meeting with the Climate Action Plan Advisory Committee. This unique collaboration focused on the interconnectedness of infrastructure and climate change. A key-note speaker from Arizona State University lead a lively discussion about infrastructure resiliency and how cities need to adapt infrastructure projects to account for climate change.
- In July 2021, staff and CAMP Outreach members began a “Community Connections Campaign,” speaking at stakeholder meetings with Livermore residents and business owners. These events provide an opportunity to present information about the City’s Asset Management Program and discuss associated challenges and opportunities.
- Over the upcoming year, staff and CAMP Outreach members will develop visual tools such as an infrastructure dashboard to assist Council and community members visualize budgetary funding impacts. Other activities may include a cyclical infrastructure scorecard and asset management plan updates.

Technology

- In July 2020 Council approved an agreement with NEXGEN to replace antiquated software and become the City’s asset management and materials management software. This technology will help staff focus on properly timed repair and rehabilitation projects, moving away from reactive efforts. Over the past year staff has been working diligently to assimilate existing asset data into this software system, identify and prioritize data gaps, refine data, and develop workflow and business practices. In the past two months staff developed and implemented a training program for maintenance workers. Staff fully transitioned to the NEXGEN software system on September 13, 2021. Over the next few months staff will provide continuous training and support to ensure effective deployment.
- In coordination with the transition to NEXGEN, field staff have begun receiving mobile devices. The devices (smart phones and tablets) are critical to the success of the asset management program as they will allow for staff to rate asset condition in the field, provide real-time data collection, and recommend updates in the GIS system related to the asset location and characteristics during regular inspections. This will systematize asset life cycle planning, risk analysis, and capital project prioritization.
- Staff developed an easy-to-use tool for community members to report maintenance issues such as malfunctioning streetlights or downed tree branches. This system is available on the City’s website and downloadable as an application on a personal smart device. In the near future, City staff will advertise this tool to the general public.

Financial Findings

Over the past six years, Council and staff have gained a better understanding of the City’s infrastructure long-term financial and operational needs. While Council has approved various policies and staff has implemented a number of projects that have reduced long-term funding needs, the findings of the Asset Management program show that there remains a significant gap between resources and needs, and that additional policy direction and funding will be required to properly maintain an/or replace various infrastructure systems.

To help with this issue, in June of 2016, Council directed staff to establish an Infrastructure Repair and Replacement Reserve by setting aside \$2 million per year. At the end of the FY 2019-20, the

Infrastructure Repair and Replacement Reserve had an accumulated balance of \$10 million. Due to financial constraints, the FY 2021-23 Financial Plan does not provide funding to this reserve. However, any unspent General Fund appropriations and revenue in excess of projections (up to a maximum of \$2 million) will be contributed into this reserve at the end of each fiscal year if possible.

While this reserve fund is a positive step forward to address the City's aging infrastructure issues, overall spending on Asset Management including Stormwater needs to increase significantly. As mentioned previously, the FY 2021-23 CIP budget for General Fund assets is approximately \$16 million each year for the next two years. However, the City needs to spend approximately \$20 million annually (to address high risk annual needs only) or approximately \$40 million annually (to address full maintenance needs).

With no change to the typical annual allocation, the backlog of deferred repair or replacement projects will total approximately \$900 million in 20 years. If the City increases spending to approximately \$27 million per year, the backlog would grow to approximately \$500 million in 20 years.

The lack of funding described above is not unique to Livermore. Deferral of maintenance has been the common practice in California for virtually all agencies over the last 50 years due to new unfunded mandates, reduction in revenue generation resulting from economic conditions, revenue sources not keeping pace with inflation, tax revenue shifts to the State, more complex regulatory and environmental compliance requirements, and other variables. To help bridge the gap, the City is currently implementing many of the following options to reduce the infrastructure rehabilitation and replacement burden; without significant new funding sources many of these efforts will need to be significantly expanded.

- Focus funding on public safety repairs and improvements by repairing and replacing critical infrastructure before other assets.
- Focus repairs and replacement efforts on assets that benefit the most people.
- Reduce frequency and level of maintenance.
- Sell or transfer some community-owned assets.
- Do not replace non-essential assets when they are beyond repair.
- Share maintenance costs with property owners when the asset benefits a specific property owner in addition to the community at large.
- Replace high-maintenance assets with lower-maintenance alternatives.
- Institute a new parcel related fee.
- Develop a City-wide Community Facilities District.
- Propose a sales tax measure.

As mentioned previously, the City is already implementing many of the options above to reduce infrastructure funding needs. Various examples of these actions include the following:

- Council approved a risk-based method for prioritizing the repair and replacement of various City assets. Specifically, Council authorized the City to maintain high-risk roadways which focused repairs on high-risk streets and helped reduce the annual maintenance need from \$8.1 million to \$6.3 million. The reprioritization required a reduced service level for lower risk streets.
- The City successfully sought additional pavement maintenance funds through Senate Bill 1. This funding source increased the City's annual pavement maintenance budget by \$1.5 million. This means the City can repair more than just high-risk roadways.
- By revamping the City's sidewalk repair program and eliminating an inefficient subsidy, the City

reduced the maintenance deficit by approximately \$1.5 million annually.

- At various city-owned locations staff is replacing turf with plant material that requires less maintenance and irrigation. Additionally, staff is implementing median landscaping that is visually attractive and reduces pruning and other maintenance requirements.
- Council authorized the sale of the SBC Building located at 2324 Second Street to a private developer which will reduce the City's asset liabilities regarding building repair and replacement activities.

These and other policies and projects help reduce the overall maintenance backlog, however continuing to defer maintenance will result in the need for substantially larger funding allocations to reconstruct and replace infrastructure systems that have failed before the end of their anticipated useful lives. Moreover, long-term failure to adequately address the lack of identified funding sources or to reduce deferred maintenance and future replacement liabilities will accelerate the deterioration of public infrastructure and lead to an overall decline in the quality of life.

Due to the magnitude of the deferred maintenance backlog, the challenge to find ways to sustainably manage public infrastructure will likely be a continuing concern for the City. The CAMP Outreach Committee, at their August 2021 meeting, requested further details outlining funding needs and resources; staff and the CAMP Outreach Committee will include this information in the current public outreach campaign. In the meantime, staff recommends conducting public opinion research to better understand the community's concerns about the condition of citywide infrastructure and gauge the support for a ballot measure to create a financing vehicle for funding this program.

FISCAL AND ADMINISTRATIVE IMPACTS

Approximately \$25,000-\$30,000 is necessary to conduct a professional public opinion poll. An additional \$7,500 per month retainer is needed for consultant support. These funds are currently available in the FY 2021-23 General Fund budget.

ATTACHMENTS

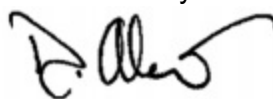
Prepared by: Debbie Bell
Management Analyst II

Approved by:



Marc Roberts
City Manager

Fiscal Review by:



Douglas Alessio
Administrative Services Director