



DATE: November 28, 2016

TO: Honorable Mayor and City Council

FROM: Darren Greenwood, Public Works Director
Paul Spence, Community Development Director

SUBJECT: Asset Management Program for Buildings

RECOMMENDED ACTION

Staff recommends the City Council approve a new risk based prioritization approach for building repair, rehabilitation, and replacement in the development of the Asset Management Program.

SUMMARY

On February 9, 2015, Council directed staff to develop an Asset Management Program (AMP). The purpose of the AMP is to develop policies and prioritize funding to effectively manage assets which are maintained by the City's General Fund. Council directed that staff return with information and proposed policies related to individual asset classes (roadways, buildings, etc.) for consideration. This report addresses buildings owned by the City. The City currently owns more than 50 buildings valued at over \$100 million that are primarily funded by the General Fund. Currently, staff prioritizes the repair, rehabilitation, and replacement of building components (assets) and the buildings themselves in a primarily reactive manner. Staff is recommending that the City use a risk-based prioritization method for building assets as part of the development of an overall Asset Management Program.

BACKGROUND

On February 9, 2015, Council directed staff to develop an Asset Management Program (AMP). Over the course of that year, staff completed the Request for Proposal process, and recommended executing a contract with Kayuga Solutions. On September 28, 2015, Council approved the contract. The AMP will evaluate the current status of the City's non-enterprise assets, as well as develop recommended financial and operational policy

options. On January 11, 2016, Kayuga and staff presented a work plan for the development of the program to Council. On March 28, 2016, Council directed staff to include information regarding the balance of funds dedicated to asset expansion and enhancement versus rehabilitation and replacement costs in future capital improvement programs. Staff then presented a proposed risk-based methodology and initial model results for the pavement management program to Council on June 27, 2016. At that meeting, Council directed staff to utilize a risk-based prioritization method for spending road rehabilitation funds, and asked staff to continue to refine the model and methodology of the AMP.

DISCUSSION

City-owned buildings include administration facilities, fire and police stations, maintenance facilities, and historic properties. The City also owns buildings located at the Golf Course, Airport, and Water Reclamation Plant which are not included in this discussion because they are funded by various enterprise funds and managed under a separate program. Currently, staff prioritizes the repair, rehabilitation, and replacement of these General Fund supported buildings in a primarily reactive manner. The central goal of an Asset Management Program is to develop a sustainable practice for repair, rehabilitation and replacement of assets at the lowest life-cycle cost that meets the required level of service. To achieve this goal, the City needs to create a prioritization scheme that moves towards proactive management of the City's various assets. To this end, City staff and the consultant are developing the Building Management System (as a subset of the overall Asset Management Program).

Since buildings typically have a long useful life, the buildings are broken down into their component assets for most management decisions. The consultant has completed their initial inventory and condition assessment of the City's buildings which are maintained by the General Fund. These buildings represent a wide variety of structures, with various functions, ages, and sizes and more than 8,000 component assets.

Prioritization of Building Asset Repair and Replacement


Staff recommends that the prioritization of buildings utilize a two-tiered system which integrates criticality ratings at both the building level and the component asset level. This two-tiered approach will allow one rating to recognize the importance of both the building itself and its component assets.

Prioritization at the building level will include the three following categories:

- Essential Facility / Core City Service – Buildings in this category are required in order for the City to fulfill its core mission of providing vital services to the community. These buildings provide services such as life safety, mobility, and public participation in the governing process.
 - Buildings include: Fire Stations, Police Headquarters, City Hall, Council Chambers, and Maintenance Service Center.

- Enrichment Facilities General Usage Cultural/Historic value – These facilities enhance the quality of life for Livermore residents and either provide services to a large portion of the community or have a high value cultural/historic component.
 - Buildings include: Civic Center Library, Downtown Parking Garage, Bankhead Theatre, Multi-Service Center, Ravenswood, the Barn, and the Carnegie Library.
- Enrichment Facilities Specific Usage –Cultural/Historic Value – These facilities enhance the quality of life for Livermore residents and provide services to a limited portion of the community.
 - Buildings include: Hagemann Farm, Duarte Garage, Southern Bell, Rincon Library, Springtown Library, Shea Plaza restrooms, and miscellaneous leased facilities.

Prioritization at the component level will score assets that are “mission-critical” within a building as high priority, and other items as medium or low priority, depending on their importance to the function of the building and their function in protecting other assets within the building. High priority assets would include things like roofing, structural components, and security items whereas low priority assets would include things like site amenities. Following is a table illustrating a sample of the component-level criticality ratings, with mission-critical items on the left and non-essential components on the right.

<i>Mission Critical</i>				<i>Non-Essential</i>
Roofing	Exterior Doors	Interior Doors	Drinking Fountains	Cabinetry
Structure	Exterior Windows	Interior Walls	Parking Lots	Bike Racks
HVAC	Gates	Interior Windows	Car Wash	Picnic Tables
Electrical	Exterior Lighting	Sinks	Flooring	Trash Bins
Security	Water Heaters	Toilets		
Communications		Driveways		

Staff has reviewed this proposed methodology for prioritizing the repair and replacement of building assets with the Community Asset Management Program Committee. The Committee met twice with staff to review and discuss the methodology of prioritization and provided valuable input in the areas of developing definitions for building-level criticality and the building replacement criteria. The group recommends the proposed method for prioritizing the repair, rehabilitation, and replacement of building assets.

Building Replacement

While the repair or replacement of individual assets will represent a large portion of the Building Management System, eventually, buildings need to be replaced in their entirety. Since the prioritization primarily occurs on the component asset level, evaluation criteria are needed to assess the need to replace a building instead of continuing to maintain it. Staff and the consultant have created the following evaluation criteria to assist in understanding the need for a replacement building. It is important to note that these

criteria are designed to help bring attention to buildings that may require replacement, not to make the decision itself.

Replacement Criteria

- Mortality
 - Asset Consumption – Is the average remaining useful life of the component assets lower than 20%?
 - Remaining Life of Structural Components – Do the structural components of the building have an average remaining useful life of less than seven (7) years?
- Functionality
 - Does the building serve the its required function?
 - Does the building meet capacity requirements?
 - Does the building align with City strategic goals/vision?
- Code Compliance
 - Does the building meet required building codes (electrical, plumbing, fire, seismic, etc.)?
 - Does the building meet health and safety codes?
 - Does the building meet Americans with Disabilities Act access guidelines?
- Financial Efficiency
 - Does the cost of replacing the high-risk component assets exceed 75% of the total building replacement cost?

These evaluation criteria are assigned a rating of red, yellow, or green, depending on their outcomes. Buildings with a high number of red criteria are the most likely candidates for replacement. This rating process will be updated periodically to ensure that ratings are kept current. Once a building is identified as high priority for replacement, it will be considered for inclusion in the Capital Improvement Program (CIP) budget.

The consultant has completed a preliminary analysis of the General Fund funded facilities using these criteria. For comparison purposes a more detailed evaluation of four City buildings, that are easily recognized to be in various stages of their useful lives, is attached, which includes the Barn, Council Chambers, Fire Station 9 and Fire Station 6. The Barn and the Council Chambers had a majority red rating, Fire Station 6 had a majority yellow rating, and the brand new Fire Station 9 had a green rating.

Potential Future Policy Options

Staff will return to Council in the upcoming year with potential policy options to address the anticipated shortfall between what is needed to mitigate risk for these assets and what is currently budgeted. Such policy options may include:

- New funding sources – Are there other sources of revenue or funding available?
- Public/private partnerships – Can a private partner help the City deliver services?

- Changes in levels of service delivery – Analyze alternate service delivery methods? Should the City match service levels to meet available funding?
- Alternative service delivery methods – Is there a different way to deliver the service?
- Risk tolerance level – Should the City focus only on the highest of the high risk items?
- Divestment of certain assets or buildings – Does the City need to own the building? Can another entity own the building and provide the service? Should the City lease a facility instead?

As with other components of the overall Asset Management Plan, staff plans to bring the final recommendations for new or updated policies regarding building assets when staff is able to complete an evaluation of all General Fund funded assets and weigh the relative funding needs, risks and criticality of each asset category.

FISCAL AND ADMINISTRATIVE IMPACTS

To date, staff has presented two of the asset classes and the initial results show the need for a General Fund contribution of approximately \$2.7 million per year for pavement and \$3.5 million per year for buildings, given current levels of service. These numbers are preliminary and will change as the project continues to develop and policy options are weighed.

ATTACHMENTS

1. Sample Evaluation of Building Replacement Criteria

Prepared by:

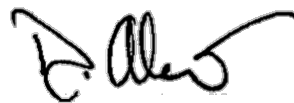
Anthony Smith
Management Analyst

Approved by:



Marc Roberts
City Manager

Fiscal Review by:



Douglas Alessio
Administrative Services Director

Attachment 1 – Sample Evaluation of Building Replacement Criteria

Failure Modes	Criteria	The Barn	Council Chambers	Fire Station 6	Fire Station 9
Mortality	Average Remaining Asset Life				
	Remaining Life of Structural Components				
Functionality	Functional Needs Met				
	Capacity Needs Met				
Level of Service	Building Codes				
	Health and Safety				
	ADA				
	Strategic Goals and Vision				
Financial Efficiency	Ratio of High-Risk Asset Replacement to Total Replacement Cost				