



DATE: June 12, 2017

TO: Honorable Mayor and City Council

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

SUBJECT: Asset Management Program for Sidewalks and Pedestrian Access Ramps

RECOMMENDED ACTION

Staff recommends the City Council approve a prioritization method for sidewalk and pedestrian access ramp repair and replacement in the development of the Asset Management Program.

SUMMARY

There are currently approximately 16.2 million square feet of sidewalk and 8,000 pedestrian access ramps within the City of Livermore. The City currently provides a 25% construction cost subsidy to property owners for the repair and replacement of sidewalks but bears the full cost of repairing and replacing pedestrian access ramps. The cost of addressing identified sidewalk problems is significantly higher than the current budget allocated. In order to start addressing this situation, staff recommends that the City Council adopt a new prioritization method for these assets in the development of the Asset Management Program.

DISCUSSION

Asset Inventory and Condition Assessment

Approximately 16.2 million square feet of sidewalk with a total valuation of about \$194 million is located with the City of Livermore. These sidewalks are typically located within the public right-of-way or public easements. The California Streets and Highways Code Section 5610 places the burden of maintenance for sidewalks on the adjacent property owners stating that they "... shall maintain any sidewalk in such condition that the sidewalk will not endanger persons or property and maintain it in a condition which will not interfere with the public convenience in the use of those works or areas..." The City,

because of adjacent property ownership, is directly responsible for approximately 156,000 square feet of sidewalk. The primary level of service concerns for sidewalks are accessibility and safety.

The City's consultant has performed condition assessments on approximately 671,000 square feet of sidewalk (this represents about 4% of the estimated total). This condition assessment found nearly 3,000 locations where a vertical or horizontal offset existed in excess of one-half inch. It is important to note that the data collected represents only a snapshot in time.

Initial data points to a majority of the sidewalk issues being caused by tree roots. These tree roots are looking for water and tend to find it at a very shallow level when surrounded by lawn. Typically the watering for a lawn is not very deep, and if this is the easiest source of water, the tree's roots will follow, staying shallow and thereby leading to an increase in the amount of damage to nearby sidewalks. New plantings include measures to help alleviate this problem such as engineered soil, deep watering holes, bubbler-based irrigation and root barriers. When addressing the sidewalk problems caused by tree roots, additional steps may need to be taken such as removing the existing tree and replanting with a species of tree that is less invasive and in accordance with current City standards. This, of course, can significantly increase the cost of a sidewalk repair.

Currently, the City's tree preservation ordinance requires the abutting property owner to maintain street trees. Typically, when a street tree is causing a recurring sidewalk issue and the abutting property owner decides to remove the tree, the property owner bears the full cost of removing and replacing any street trees.

An extrapolation of the initial sidewalk inventory and condition assessment data to the entirety of the City's sidewalks estimates that approximately \$17.2 million would be needed to address the backlog of sidewalk repair work, not including any tree work that may be necessary. This amount represents the anticipated construction cost of the sidewalk replacement but does not include any project delivery costs such as bidding, engineering, or inspection. Under the current cost sharing policy, the City would be responsible for approximately \$4.4 million of the \$17.2 million total.

The City currently spends an average of \$34,500 per year in addressing trip and fall claims arising from defective sidewalks. Approximately 145 hours of staff time per year are dedicated to investigating and processing the claims, which is reflected within the annual average cost.

The City also has an estimated 8,000 pedestrian access ramps with a total valuation of about \$48 million. Currently, these ramps are managed by the City with the full burden of repair and replacement falling on the City. The primary level of service concerns for ramps are usability and compliance with the Americans with Disabilities Act Access Board design guidelines (ADA guidelines).

Based on the inventory and condition assessment of a sample of the City's pedestrian ramps, it is estimated that 28% are currently compliant, 59% need to be updated, and 13% are non-existent (no ramp at a location where a ramp would traditionally be located for accessibility in crossing the street). Some of the ramps that need to be updated can be retrofitted at a cost lower than full replacement. This inventory and condition assessment leads to an estimate of \$18.4 million in backlog for bringing all of the existing ramps into compliance with current ADA guidelines and installing ramps at those logical locations where none currently exist. Staff estimates that the current cost of installing new ramps where none currently exist would total approximately \$6.2 million (this total is included in the \$18.4 million total backlog mentioned above). Annual funding needed to remain compliant is unknown as the ADA guidelines tend to change over time.

Estimated costs listed above include construction costs only, and do not include engineering, bidding, or project delivery costs (these costs typically represent about 30-40% above construction costs). Staff has chosen to reflect asset repair and replacement prices as direct construction costs since there is some variability depending on the size of the project, and non-construction costs may be different should any of the responsibility be shifted away from the City.

Current Practices

The City currently administers a sidewalk repair program on behalf of its residents. Staff maintains a list of defective sidewalk areas generated both from staff inspections and resident notifications. Staff then uses an annual construction contract to repair as many locations as possible using the existing funding of \$300,000 per year. This typically results in about 7,500 square feet of sidewalk being repaired each year as part of the City-run program. The current funding level does not allow the City to catch up on the list of defective areas, let alone keep up with newly-identified areas. This results in an increasing backlog of repair work which means that many defective areas of sidewalk may not be addressed for a number of years after notification.

The City also administers a ramp retrofit and replacement program. Staff maintains a list of deficient or non-existent ramps and repairs or replaces them with a fixed budget of \$140,000, per year. This typically results in an average of about 30 ramps being upgraded or installed, per year. In addition to ramps replaced through the City's direct funding program, the City replaces or adds pedestrian ramps using Federal funds during road improvement projects. Federal funding of road improvements stipulates that any pedestrian ramps within the project limits must be brought into compliance with current guidelines. This requirement leads to a slight reduction in funding available for asphalt rehabilitation.

In both the sidewalk and pedestrian ramp replacement programs, prioritization is based on the length of time on the waiting list and the amount of usage of the facility (high-pedestrian areas are higher priority).

Proposed Sidewalk Prioritization Method

Staff is proposing a sidewalk prioritization method similar to the current practice. Staff is recommending using the Active Transportation Plan (ATP) demand areas to assist in defining the prioritization method.

<i>Consequence of Failure Rating</i>	<i>Asset Characteristics</i>
Very High	Vertical offsets greater than an inch in high pedestrian areas, ATP high demand areas, and historical claim areas.
High	Offsets less than an inch in high pedestrian areas, ATP high demand areas, and historical claim areas. Offsets greater than an inch in residential areas or ATP medium demand areas.
Medium	Offsets less than an inch in residential areas or ATP medium demand areas. Offsets greater than an inch alongside collector roads.
Medium-Low	Offsets less than an inch alongside collector roads. Offsets greater than an inch alongside arterial roads.
Low	Offsets less than an inch alongside arterial roads. Offsets in other low pedestrian traffic areas.

Proposed Ramp Prioritization Method

Staff is proposing a ramp prioritization method similar to the current practice. Staff is recommending using the ATP areas and other identified areas of need for informing the prioritization method.

<i>Consequence of Failure Rating</i>	<i>Asset Characteristics</i>
Very High	Non-existent ramps in areas of high demand.
High	Non-existent ramps in areas of medium demand.
Medium	Non-existent ramps in areas of low demand. Non-conforming ramps in areas of high demand.
Medium-Low	Non-conforming ramps in areas of medium demand.
Low	Non-conforming ramps in areas of low demand.

Staff presented these proposed prioritization methods to the Community Asset Management Program (CAMP) committee who agreed with the recommendation. Staff also presented some of the following policy options. Members of the CAMP committee agreed that it made sense for the replacement and updating of ramps to remain a City responsibility. However, the committee was divided on whether or not the property owners should bear the full cost of sidewalk repairs.

Potential Policy Options

The City has several different policy options when addressing how to balance the City's resources for the repair, rehabilitation, and replacement of sidewalks with the actual costs to maintain this infrastructure at an acceptable level of service. At this time, staff is recommending that the City retain full responsibility for pedestrian access ramps, as there are many criteria for compliance and a higher level of complexity than sidewalks. The policy options below may be used in conjunction with one another or independently:

- End the subsidy of sidewalk replacement – this scenario would end the City's practice of subsidizing the construction cost of sidewalk repairs. Regardless of what form the sidewalk program takes, the property owners would bear the full cost of sidewalk repair or replacement costs. Two variations of this approach include:
 - End the City-managed sidewalk repair program: efforts by City staff would shift from management of a construction contract to strict enforcement of the requirement for property owners to repair sidewalk in a timely manner. The City could generate a list of qualified contractors for residents to use and streamline the encroachment permit process, however, the burden of having the sidewalk repair completed would be solely on the private property owners.
 - End the subsidy, but City continues program management – in this scenario, the City would continue to manage a sidewalk repair program and hire a contractor, but would not contribute towards the construction cost. The City would bear the cost of administering the program on behalf of property owners. This would reduce the burden on residents by allowing them to skip the process of hiring a contractor and securing an encroachment permit.
- Shift liability for sidewalk claims to property owners through an ordinance – this scenario would transfer the liability arising from trip and fall claims to the adjacent property owners and therefore significantly reduce the City's financial liability for these claims. Research performed by the Office of the City Attorney indicates that a typical homeowner's insurance policy would cover liability arising from sidewalk defects and shifting the liability for sidewalk claims would not have a noticeable impact on insurance premiums.
- Continue current program and funding levels – this scenario will most likely lead to a larger backlog, longer wait times for repair work, and more potential problems for the City and its residents. Staff does not recommend this option.
- New funding mechanism – this scenario would see the City take back the responsibility for all sidewalks and fund these activities through an assessment district or parcel tax. However, voter approval of the new funding mechanism would be required to implement this scenario.

FISCAL AND ADMINISTRATIVE IMPACTS

Funding sources that are potentially available for the repair and replacement of sidewalk and ramps include: the General Fund, Measure B, Measure BB, Federal transportation grants and State Gas Tax funds. Senate Bill 1 has increased the amount of funding available for Gas Tax-eligible expenditures, such as sidewalk and ramp repair and replacement. The proposed 2017-19 Capital Improvement Program is set to allocate all of this additional Gas Tax revenue to road repairs.

Depending on the level of service selected and the policy options chosen, the need for funding the sidewalks and ramps could range from the current budget of \$440,000 to approximately \$515,000, per year on an ongoing basis. Elimination of the existing backlog would require an additional \$22.8 million either up front, or over a short period of time. The backlog could also be reduced by choosing a policy option that reduces or eliminates the current 25% City construction cost subsidy. The potential for change in ADA guidelines for ramps is not included in this estimate, as it is an unknown.

The table below summarizes the initial findings of the asset management program to date regarding current, recommended minimum, and full service budget scenarios. Final funding strategies and decisions will be made after all of the asset classes have been presented to Council.

Asset Class	Current Average Annual Budget	Recommended Minimum Average Annual Budget	Full Service Average Annual Budget
Pavement	\$4.3 million	\$5.5 million	\$7.1 million
Buildings	\$2.6 million	\$4.0 million	\$6.75 million
Walls	\$100,000	\$2.8 million	\$3.3 million
Sidewalk and Ramps	\$440,000	\$440,000	\$515,000
<i>Total</i>	<i>\$7.4 million</i>	<i>\$12.7 million</i>	<i>\$17.7 million</i>

ATTACHMENTS

1. Resolution 2007-043

Prepared by:

Anthony Smith
Management Analyst

Approved by:

Fiscal Review by:



Marc Roberts
City Manager



Douglas Alessio
Administrative Services Director

**IN THE CITY COUNCIL OF THE CITY OF LIVERMORE
STATE OF CALIFORNIA**

A RESOLUTION ADOPTING A SIDEWALK REPAIR PROGRAM POLICY

The City's current sidewalk repair program policy provides for a 50% City/50% owner split on the cost of sidewalk repairs and places a ceiling of \$1,000 on the amount of repairs made by the City and charged to an owner-occupied residence. For properties other than owner-occupied residences, the cost is split 50/50 with no ceiling. This policy also allows for up to 50% reimbursement to an owner who has the repairs done per City Standards and pays for them.

In order to minimize the liability for both property owner and City, and to better keep pace with needed repairs, staff has proposed to modify the policy.

Therefore, the City contribution shall be a minimum of 25% of the repairs, and the \$1,000 property owner ceiling established in 1988 shall be adjusted to a 2007 value of \$1,588 based on the change in the San Francisco Bay Area Consumer Cost Index since 1988. The property owner share shall include capital administrative costs. The amount of additional funds collected shall be added to the appropriation for sidewalk repair in the CIP budget.

The revised Sidewalk Repair Policy shall change the current 50/50 cost sharing to a 25% City/75% owner split. The new policy shall provide money to increase funding for sidewalk repairs, resulting in an increase in the number of sites repaired annually, and a reduction in the amount of time between notification of a defect and repair of the sidewalk.

NOW, THEREFORE, BE IT RESOLVED the City Council of the City of Livermore hereby approves the Sidewalk Repair Program Policy, attached hereto as Exhibit A.

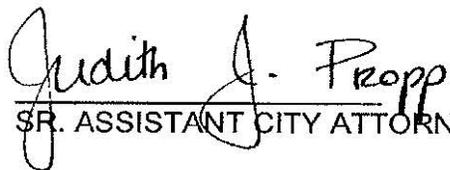
On the motion of Vice Mayor Marchand, seconded by Councilmember Leider, the foregoing resolution was passed and adopted this 12th day of March, 2007, by the following vote:

AYES: Councilmembers Leider, Reitter, Vice Mayor Marchand and Mayor Kamena
NOES: None
ABSENT: Councilmember Dietrich
ABSTAIN: None

ATTEST:


CITY CLERK

APPROVED AS TO FORM:


SR. ASSISTANT CITY ATTORNEY

SIDEWALK REPAIR PROGRAM POLICY

Defective Sidewalk Area

Defective Sidewalk Area shall include but is not limited to those sidewalks, curbs, curb and gutters with $\frac{1}{2}$ " or greater step separation between adjacent panels, those that have lifted to a peak that is 4" greater than the level of the sidewalk 4 feet away in either direction, those that have an opening measuring $\frac{5}{8}$ " or greater, those with a hole that is $\frac{3}{4}$ " or deeper, and/or those that have subsided 3" or more within an 8-foot section of sidewalk. See drawing entitled "Sidewalk Repair Criteria".

Sidewalk Repair Waiting List

The City shall keep a record of when notification is sent to a property owner that the City has received notice and has confirmed a defective Sidewalk Area per Section 12.04.130, requiring repair of the Sidewalk Area. If repairs are not made by the property owner after 30 days from date of notification, the property address will be put into the queue for repair as part of an annual sidewalk repair contract as funds become available. The list shall be kept in chronological order with earlier requests being given priority. Also given priority will be those properties that are in high-pedestrian areas, near schools, parks, and retail/commercial areas; and those sidewalks adjacent to sound walls and City facilities, and wherever the City is 100% responsible. Properties to be repaired under the annual sidewalk repair program will be drawn from the list in priority order until all funds available for the repair contract are encumbered. Those properties that remain on the list will be moved up in order for repair in the subsequent year(s).

Recovery of City's Costs of Sidewalk Maintenance and Repair.

Although maintenance and repair costs ultimately remain the property owner's responsibility, if the owner does not fix the sidewalk within thirty (30) days of Notice by the City per section 12.04.130 "Notice to Repair", the City reserves the right, but shall not be obligated, to include the repairs in its annual sidewalk repair project as funds become available. The City shall pay for the required work as part of its annual contract, and shall bill the property owner for his or her share per Section 12.04.140. When the City elects to repair a defective Sidewalk Area per Section 12.04.140, the amount collected from the property owner shall be 75% of the costs incurred. Costs recoverable by the City includes a charge for the City's costs of inspection and administration whenever the City awards a contract for such maintenance and repair and including the costs of collection of assessment for the costs of maintenance and repair or the handling of any lien placed on the property due to the failure of the property owner to promptly pay such assessments. For owner-occupied residential property, the maximum chargeable amount shall not exceed \$1,588 plus the cost of the handling of any lien placed on the property due to the failure of the property owner to promptly pay such assessments. This maximum amount shall be adjusted annually in December, beginning December, 2007, using the San Francisco Bay Area Construction Cost Index as published in the Engineering News Record.

Reimbursement for Repairs by Property Owner

Encroachment permits to repair Defective Sidewalk Areas as defined in Section 12.04.100 (B) shall be issued at no cost.

If a property owner elects to repair his or her Defective Sidewalk Area before the City does, the City shall reimburse 25% of what the construction repair cost would have been under the current sidewalk repair contract, or 25% of the amount paid by the owner for the repairs, whichever is less. This reimbursement will not be made until such time as the property reaches sufficient priority on the list of properties to be included in an annual contract.

Requirements for reimbursement are as follows:

1. A pre-construction visit by a City inspector, to document the extent of qualifying work.
2. Completion of the encroachment permit process (with permit finalized)
3. An original invoice from the contractor showing that the amount has been paid in full.

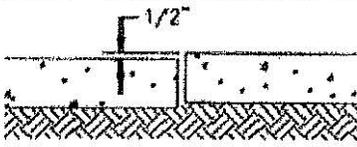
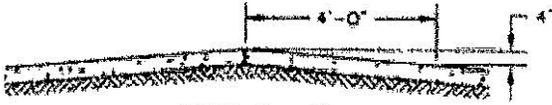
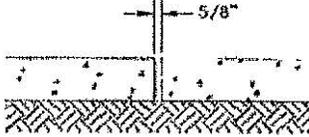
Only that work outlined by the inspector shall be included for reimbursement. Property owner shall be 100% responsible for any extra work.

Transition to New Policy

Those sites on the waiting list as of the date of adoption of this policy shall be governed by the rules of the new policy with the exception that the co-payment shall remain at 50% for both city-performed and owner-performed repairs. The owner-occupied residence ceiling for those sites shall be the adjusted \$1,588. Additions to the list after the date of the adoption of this policy shall be billed 75% according to the revised policy or reimbursed up to 25% according to the revised policy.

Sidewalk Repair Criteria

If your sidewalk defect meets the following criteria, it may be eligible for the City of Livermore 50/50 Sidewalk Repair Program:

<p>Step Separations If a sidewalk panel has lifted or subsided, and it is 1/2" or more higher or lower than an adjacent panel</p>	 <p style="text-align: center;">STEP SEPARATIONS</p>
<p>Grade Change If two sidewalk panels have lifted into a peak, and the peak is 4" or more higher than the level of the sidewalk 4 feet away in either direction</p>	 <p style="text-align: center;">GRADE CHANGE</p>
<p>Opening in Sidewalk If there is an opening in the sidewalk measuring 5/8" or greater</p>	 <p style="text-align: center;">OPENING IN SIDEWALK</p>
<p>Spalling of Surface If a chunk of the sidewalk has broken out, and the result is a hole 1/2" or deeper</p>	 <p style="text-align: center;">SPALLING OF SURFACE</p>
<p>Sunken Sidewalk If the sidewalk has subsided, and within a stretch of 8 feet of sidewalk, there is a place that is 3" or more that is lower than the rest of the sidewalk</p>	 <p style="text-align: center;">SUNKEN SIDEWALK</p>