“Our mission is to maintain the character of our “small town” community while striking an appropriate balance between economic development and preservation of our quality of life. We help create a dynamic and vital City by providing quality, cost-effective municipal services and by forming partnerships with residents and organizations in the constant pursuit of excellence.”

<table>
<thead>
<tr>
<th>ITEM</th>
<th>STANDING AGENDA ITEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Call to Order &amp; Roll Call</td>
</tr>
<tr>
<td>2.</td>
<td>Special Presentations &amp; Announcements: None</td>
</tr>
<tr>
<td>3.</td>
<td>Public Comment: This is an opportunity for members of the public to address the Committee. The Committee reserves the right to reasonably limit the length of individual comments and/or the total amount of time allotted to public comments. For items which are on this agenda, speakers may request that their comments be heard instead at the time the item is to be acted upon by the Committee. The Committee may ask questions but may take no formal action on items addressed during the Public Comment period except to direct staff to prepare a report or place the item on a future agenda.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ITEM</th>
<th>COMMITTEE BUSINESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.</td>
<td>Approval of Minutes: August 15, 2019 Regular Meeting</td>
</tr>
<tr>
<td>5.</td>
<td>Discussion and Possible Action Regarding Sidewalk Management Plan.</td>
</tr>
<tr>
<td>6.</td>
<td>Discussion and Possible Action Regarding Mid-Town Trail Signage and Sharrows</td>
</tr>
<tr>
<td>7.</td>
<td>Discussion and Possible Action Regarding Bus Stops</td>
</tr>
<tr>
<td>8.</td>
<td>Discussion and possible action regarding Mt. Shasta Municipal Code Chapter 15.44, and more specifically 15.44.130, pertaining to bicycle parking</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ITEM</th>
<th>FUTURE AGENDA ITEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.</td>
<td>At this time, members of the Committee may ask questions of staff, request that reports be made at a later date, or ask to place an item on the agenda, on any subject within the Committee’s jurisdiction</td>
</tr>
<tr>
<td>10.</td>
<td>Adjourn Availability of Public Records: All public records related to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body will be available for public inspection at City Hall located at 305 North Mt. Shasta Blvd., Mt. Shasta, CA at the same time the public records are distributed or made available to the members of the legislative body. Agenda related writings or documents provided to a majority of the legislative body after distribution of the Agenda packet will be available for public review within a separate binder at City Hall at the same time as they are made available to the members of the legislative body.</td>
</tr>
<tr>
<td>The City of Mt. Shasta does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in employment or provision of services. In compliance with the Americans with Disabilities Act, persons requiring accommodations for a disability at a public meeting should notify the City Clerk or Deputy City Clerk at least 48 hours prior to the meeting at (530) 926-7510 in order to allow the City sufficient time to make reasonable arrangements to accommodate participation in this meeting.</td>
<td></td>
</tr>
</tbody>
</table>
August 15, 2019 - minutes of ATC meeting

Persons Present - Mike Quinn, Justi Hensen, Laurel Harkness, Michael Williams, Bruce Pope, Ken Ryan, Tim Stearns, Glenn Mix

#3 - Public Comment - The Siskiyou Outdoor Recreational Alliance (SORA) is interested in having input to the ATC conversations.

#4 - Approval of minutes - Unanimous

#5 - Discussion and possible action regarding Goals and Responsibilities of the ATC - An initial focus of ATC was to get the bike and pedestrian plan defined and written. As for actions of ATC, it was determined that if something falls within the ATC’s purview, do it; otherwise consult with City Council first.

#6 - Discussion and possible action regarding Sidewalk Management Plan - City Staff is requesting ATC to develop a prioritization plan, as one currently doesn’t exist. ATC is reading plans from other cities to use as possible templates. Continued until next meeting.

#7 - Discussion and possible action regarding General Plan goals - Determined need to get local recreational trails included in the General Plan. ATC is to communicate to SORA what documents are wanted for inclusion. Regarding the trails, it needs to be ermined who will own and/or maintain them. There was discussion regarding the desirability of a city sanctioned summit to coordinate “trails” type groups from the area for input to the General Plan. Continued until next meeting.

#8 - Discussion and possible action regarding Bus Stops - The need was noted for improving the bus route/stop location at the Medical Center on Pine Street. There was discussion of installing alternate turn-around accommodations on the street. ATC requests staff to contact Stage to learn the turning radius of their buses and the required clearances for a turn-around/roundabout solution. Continued until next meeting.

#9 - Discussion and possible action regarding Bike Racks - The current inventory of racks are at random locations. A suggestion be made that standards for consistent locations be developed. Discussed need to revise and/or remove existing city ordinance. Continued until next meeting.

#10 - Discussion and possible action regarding Mid-Town Trail Update - ATC needs an update on signage and sharrows. Continued until next meeting.
SIDEWALK MANAGEMENT PLAN

INTRODUCTION

An effective sidewalk network provides numerous benefits to a community. It provides a safe and inexpensive means of travel connecting residential areas, schools, church, community activities, and commercial areas. Sidewalks provide a horizontal and vertical separation from streets and parked cars, which improves safety by reducing potential conflicts between pedestrians and motor vehicles. Curbs and gutters constructed along with sidewalks help control rain runoff and eliminate the erosion that normally occurs in a roadside ditch.

To be most effective, a sidewalk network should be continuous with no gaps. Curb ramps should be constructed at all street intersections to provide access to all citizens. The sidewalks should be maintained by removing vegetation that encroaches on or over the sidewalk, and by replacing sections that are unsafe.

The City of Mt. Shasta requires curbs, gutters, and sidewalks to be constructed by the property owner when a property is developed (Municipal Code Chapter 12.04). Property owners are also required to repair or replace the sidewalk adjacent to their property when it becomes damaged or unsafe (Municipal Code Chapter 12.08). The Code gives the Director of Public Works “the official duty” to notify property owners when the sidewalk needs to be repaired or replaced. All work within the public right-of-way is required to be performed by a licensed contractor.

PURPOSE AND SCOPE

The purpose of the Sidewalk Management Plan is to:

- Map the location of existing sidewalks and curb ramps.
- Determine the condition of the existing sidewalks and curb ramps.
- Identify corridors where new sidewalks and curb ramps are needed.
- Integrate the information into the City’s GIS system.

DESCRIPTION OF THE EXISTING SIDEWALK SYSTEM

The locations of the existing sidewalks and curb ramps were determined by a field review, and are shown on Plate 2 and Plate 3, respectively. The condition of each segment of sidewalk was classified as being in good condition or poor condition. An entire segment was classified as being in poor condition when 25% or more of the sidewalk was in poor condition. A segment was classified as being in good condition when 75% or more of the sidewalk was in good condition.

The City of Mt. Shasta has approximately 21.7 miles of existing sidewalk. Approximately 17.7 miles are classified in good condition, and 4.0 miles are in poor condition. If new sidewalks were constructed where red lines are shown on Plate 2 (the red lines indicate no existing sidewalk),
another 22.6 miles of sidewalk would be added to the system. However, most of the sections of road without sidewalk are along Mt. Shasta Blvd. and Spring Hill Drive north of East Ivy Street, and on Mt. Shasta Blvd. south of Mountain View Drive. These areas are mostly undeveloped or are sparsely populated. Consequently, the current need for sidewalks along these streets is very low.

A section of sidewalk was rated in poor condition if it had one or more of the following defects:

- Excessive cracking (See Photo 1).
- Settlement (See Photo 1).
- Buckling (See Photo 2).
- Raised sidewalk (See Photo 2).
- Excessive cross slope.
- Spalling (See Photo 3).
- Sidewalk width is 3 feet or less.

The area of the section of concrete classified as poor was determined based on the area of sidewalk that would need to be removed and replaced to fix the defect.

Many of the street corners in Mt. Shasta have curb ramps where sidewalks are present. Unfortunately, most of the existing ramps do not comply with Title 24 of the California Building Code or with the Americans with Disabilities Act (ADA), a Federal regulation.

The curb ramp design standards have changed several times since the Americans with Disabilities Act was enacted in 1990. Some of the curb ramps may have complied with the standards in effect when they were constructed, but many of them never complied with the standards. None of the ramps constructed before 2010 comply with the current standards. No attempt was made to determine if the older curb ramps complied with the standards in effect at the time they were constructed, however most of them probably did not.

Plate 3 shows the locations of the existing curb ramps in green and the location of future curb ramps in red.

**CONDITIONS LEADING TO SIDEWALKS IN POOR CONDITION**

**Excessive Cracking and Settlement**

All concrete cracks. Normal cracking is caused by expansion and contraction of the concrete due to loss of water in the hydration process, and due to changes in temperature. As concrete ages, the cracks typically become wider and more extensive. Water can enter the cracks, freeze, and expand the crack or lead to spalling.

Cracking can be reduced by using crack control joints, expansion joints, rebar, and an appropriate mix design. Excessive cracking is an indication of a bigger problem. Some of the causes of excessive sidewalk cracking in Mt. Shasta are settlement, inadequate thickness (typically in
**PENDING PROJECTS**

Over the past three years, the City of Mt. Shasta has spent approximately $30,000 to $50,000 per year to replace sections of the sidewalk on Mt. Shasta Blvd. with pavers. The work has included removing and replacing the trees that were damaging the sidewalk, and providing conduits for seasonal street lighting.

The City of Mt. Shasta currently has funding lined up for two sidewalk projects. Construction of the “Alma Street Rehabilitation Project” is scheduled for summer 2014. In addition to reconstructing the street and replacing sewer and water lines, the project includes replacing the curbs, gutters, and sidewalks on Alma Street from Chestnut Street to Rockfellow Drive. The project is funded by the California State Transportation Improvement Program (STIP).

The City recently received a Regional Surface Transportation Program (RSTP) grant from the State of California for sidewalk and curb ramp improvements on Pine Street and Maple Street. The work includes two new curb ramps at the intersection of Maple Street and Lake Street; and sidewalks and curb ramps along Pine Street between Lake Street and Kingston Way. The grant funding is not sufficient to fix all the deficiencies along Pine Street. The priorities are to provide curb ramps along the east side of Pine Street, fill in the gaps in the sidewalk on the east side of Pine Street, add a new curb ramp on the west side of Pine Street at Kingston Way, replace the buckled sidewalk on the west side of Pine Street near Lake Street, and to fill in the gap in the sidewalk on the west side of Pine Street at Castle Street. Work is scheduled for construction in summer 2013.

**CONCLUSIONS AND RECOMMENDATIONS**

Many of the problems with the existing sidewalks are due to poor construction. Require future sidewalks to be constructed in accordance with the City of Mt. Shasta Construction Standards. Provide construction inspection of future sidewalks to verify compliance with the construction standards. Provide proper compaction and preparation of the sidewalk subgrade. Construct the sidewalk across driveways a minimum of 6 inches thick. For commercial driveways with heavy truck traffic, a thicker section of concrete may be necessary.

Trees are a major cause of damage to sidewalks. Avoid planting trees near sidewalks. If trees are planted, plant trees with deep root systems and use root barriers.

Funding for new sidewalks and for replacing existing sidewalks in poor condition is very limited. Occasionally grants are available for sidewalks through various State programs, like the RSTP grant, the Safe Routes to School program, and occasionally by voter approved propositions. These grant programs are typically very competitive and only cover a small portion of Mt. Shasta’s needs. Substantially more money than has been spent in the last 20 years is needed if the City wants to fill in the gaps in the sidewalk and to replace the existing sidewalks that are in poor condition.
The City Municipal Code requires property owners to repair or replace the sidewalk adjacent to their property when it becomes damaged or unsafe. Relying on the Municipal Code for repairs to the sidewalks requires the cooperation of the property owners and the political will of the City Council to enforce the code when the property owner is unwilling or unable to comply. When sidewalks are damaged, the adjoining curb and gutter is often damaged as well, whether it is from tree roots, settlement, poor construction methods, etc. When damaged sidewalks are replaced, the curb and gutter should also be replaced, if needed.

The City may want to establish primary pedestrian routes and focus the limited funds available for sidewalks and curb ramps on those routes. For example, constructing sidewalks and curb ramps along Lake Street from the commercial area east of Interstate 5 to the schools on Rockfellow Drive would establish an east/west corridor for pedestrians. Most of Mt. Shasta Blvd. has sidewalks and curb ramps from Mountain View Drive to East Ivy Street. A goal could be established to provide an accessible (compliant handicap ramps) path of travel on at least one side of the street along that reach of Mt. Shasta Blvd. by filling in the gaps in the sidewalk, replacing the sidewalk that is in poor condition, and constructing curb ramps at the intersections.
driveways), poor concrete mix design, and tree root damage. When settlement occurs, it is usually the result of poor subgrade preparation during construction. The City of Mt. Shasta’s Construction Standards require the sidewalk thickness be at least 6 inches thick across driveways, compared to the 4-inch thickness required for the rest of the sidewalk. The excessive cracking in many of the driveways in poor condition is due to inadequate concrete thickness.

![Photo 1: Sidewalk with excessive cracking and settlement on Pine Street.](image)

**Buckling Sidewalks and Raised Sidewalks**

Buckling sidewalks and raised sidewalks can be caused by frost heave, tree roots, poorly controlled expansion/contraction of the concrete (e.g. not enough joints), and moving structures. Tree roots are the primary cause of buckling sidewalks in Mt. Shasta. Photo 2 shows one of many examples of a sidewalk damaged by tree roots.

![Photo 2: Sidewalk damaged by tree roots on Pine Street.](image)
Excessive Cross Slope

Some of the sidewalks in Mt. Shasta were constructed with excessive cross slope, defined as slopes that exceed the slopes allowed by the City's Construction Standards. This was most often done in driveways or where the contractor tried to match the adjacent grade instead of grading the adjacent ground to match the sidewalk. Excessive cross slope is not typically a problem for most pedestrians, but for vision impaired pedestrians and people in wheelchairs, it can create an obstacle that limits their accessibility.

Spalling

When the concrete surface chips, flakes, or scales, it is called spalling. This creates an uneven surface that is unsightly and can become a safety hazard. See Photo 3 for an example of spalled concrete. Spalling can be caused when water seeps into the surface and freezes, causing the surface to chip away. Spalling in Mt. Shasta is typically caused by improperly finishing the concrete. When excess water is used to finish the surface it becomes brittle and is susceptible to spalling. Excessive use of rock salt to melt snow or ice can enter the concrete surface and crystalize, which can also lead to spalling. Spalling can also occur when the layer of concrete over the reinforcing steel (rebar) is insufficient. Water can more easily enter cracks to cause the steel to corrode and expand. The expansion of the steel causes pieces of the concrete to spall. Sidewalks typically do not have rebar, and no evidence of spalling due to rebar corrosion was observed in Mt. Shasta’s sidewalks.

When sidewalks are damaged to the point where they are unsafe, the damaged section should be replaced.
In August 2014, the City Council instructed this Office with assistance from various other City departments, to report back with recommendations for a comprehensive sidewalk repair strategy that addresses pending litigation through consideration of such items as, but not limited to, a cost sharing program for residential sidewalk repairs, point-of-sale, point-of-permit, assessment districts, and alternative sidewalk materials (Council Files 14-0420-S1, 14-0163-S4, and 14-0163-S3).

Since then, a Settlement Agreement has been negotiated relative to the class action lawsuit Willits versus the City of Los Angeles. The lawsuit alleges that the City of Los Angeles has violated the Americans with Disabilities Act and the Rehabilitation Act of 1973 by failing to maintain sidewalks in a condition that is usable by class members who rely on wheelchairs, scooters, and other assistive devices to get around. The settlement terms were approved by the City on April 3, 2015, are subject to final approval by the United States District Court and impact the specific goals and activities of the City as it relates to future sidewalk repair. The final Settlement Agreement will allow the City the discretion to determine how repairs will be accomplished.

This report recommends a sidewalk repair policy that is:

- Permanent and ongoing;
- Consistent with the Willits Settlement Agreement;
- Shares the responsibility for sidewalk maintenance and repair with the adjacent property owners; and,
- Ensures accessibility in the highest utilized areas.
This Office consulted with various City departments, including the Department of Public Works (Board, Bureaus of Street Services, Engineering and Contract Administration), Department of Transportation, Department of Aging, City Attorney, and the Department on Disability. Based on discussions with these departments and the framework of the draft Settlement Agreement, this Office recommends the following relative to a long-term comprehensive sidewalk repair program:

Long-Term Sustainability
The intent of this report is to provide response to the requests for information as they relate to sidewalk repair and to assist the Mayor and Council in shaping the restored City Sidewalk Repair Program for sidewalks adjacent to private property. Sidewalks play an integral role in providing access to transit, economic districts, residential housing and other activities. The approach presented in this report strives to be fiscally responsible, sustainable in the long-term, and achieve an overall improved pedestrian network for greater mobility and accessibility. This will be achieved by first reducing the current backlog of sidewalk reconstruction. Once that is achieved, the City will be able to transition to a program that is more focused on ongoing enforcement and maintenance. The overall goal is to ensure that the City institutionalizes a program to achieve and maintain accessibility now and into the future.

Sidewalk Repair Trust Fund
This Office supports the establishment of a fund for sidewalk repair and access ramp construction. Given the long-term ongoing nature of the Settlement Agreement and the dollar value of the required financial commitment from the City, this will help the City to maximize transparency and accountability for sidewalk repair and will keep unspent funds from reverting annually. The Council has ordered creation of the fund. It is expected that the fund will be created prior to June 30, 2015.

Sidewalk Repair Program Implementation Options
Numerous options for a sidewalk repair program exist. This Office has reviewed several funding and implementation mechanisms, including a Citywide Bond, Assessment Districts, Point of Sale, Point of Service, and Point of Permit. However, we do not recommend moving forward on any of these options at this time as the City desires to begin the repair of sidewalks immediately and the development of a Citywide Bond or Assessment Districts would require a significant outlay of staff time and funds to produce a proposal presentable to the City Council and to the voters, with varying thresholds for approval by the electorate. Programs like Point of Sale, Point of Service or Point of Permit are not recommended at this time, because these programs require a significant outlay of time to develop and would not result in contiguous blocks of sidewalk repair. These options should be considered in the context of the other recommendations contained in this report.

Sidewalk Inspection and Repair Program
It is recommended that a sidewalk inspection program be reinstated through the Department of Public Works, and that Notices to Repair again be issued in accordance with the State Streets and Highways Code (Section 5600-5630). Sidewalks that are free of damage, with an overall
acceptable condition, will be issued a certificate of compliance. This program should include both responsive and pro-active components.

The most effective and efficient program will require that concentrated inspections be conducted to identify sidewalks in need of repair in order to provide for complete unobstructed pathways and to "package" or "group work" work in relatively small areas that would be attractive to contractors to bid on and cost-effective for the City.

Legislative Action and Shared Responsibility
This Office recommends that the City repeal the Limited Exception to the 1911 Act returning the responsibility for sidewalk repair, even when the cause of the sidewalk damage is a street tree, back to the adjacent property owner. For over 40 years, the City has had the responsibility for repair of sidewalks damaged by street parkway tree root growth. However, during that time, this responsibility has not always been consistently funded due to funding constraints. The City recognizes that it is unfair to property owners to return responsibility for repair of broken sidewalks, and therefore a phased in approach to the transfer of responsibility is recommended by this Office.

If the goal of the City is to immediately and expediently effect repair of damaged sidewalks, the City could repeal the Limited Exception to the 1911 Act and begin enforcement Citywide immediately. Sidewalks would be inspected by the City and property owners with damaged sidewalks could receive a citation, directing that repairs be made in a prescribed period of time. Currently, Section 62.104 of the Los Angeles Municipal Code specifies that the time permitted for repairs is two weeks and in the event that repairs are not made within this period of time, the City could perform the repairs and charge the property owners for said costs. Adoption of this option would result in the greatest amount of repairs made, as the City could focus its financial resources on the cost of inspection, versus inspection and sidewalk repair construction costs. The entire City would be covered in a time frame directly related to the resources allocated for the program.

Residential Property
Anecdotally, it is believed that most of the damage to sidewalks is caused by tree root growth and the majority of street trees are planted in residential areas of the City. Therefore, in instances where a residential sidewalk has been damaged by a street tree and has become the responsibility of the City to repair, we recommend that the City make sidewalk repairs prior to returning the responsibility for the sidewalk repair back to the adjacent property owner. If the sidewalk is not damaged at the time of inspection, a certificate of compliance will be issued, and the responsibility for future sidewalk repairs will be returned immediately to the adjacent property owner. This policy will be known as "Fix and Release."

Commercial Property
We do not recommend "Fix and Release" for commercial property. Instead, once the exception to the 1911 Act is approved, a one year moratorium is recommended for the issuance of Notices to Repair Sidewalks adjacent to commercial properties. This will allow the City sufficient time to thoughtfully restore this program and will provide commercial properties with extra time to make
repairs before an inspection program commences. Property owners will also have one year to make repairs after they have been cited. This will provide a total of two years for commercial properties to achieve compliance. We also recommend that the City create a pre-qualified list of contractors that constituents can use directly.

No-Fee A-Permits for Sidewalk Repair
Sidewalk repair typically requires an A-Permit. The purpose of the A-Permit is to allow minor street construction in the public right-of-way and is the City’s process of ensuring that minor street construction meets the City’s design and materials specifications and that construction work is properly inspected.

It should be noted that currently, an A-Permit for the repair of sidewalk damage due to tree roots does not require the applicant to pay a permit fee and is considered a “No-Fee” permit. A pilot program is in place which allows for the City to issue no-fee A-Permits to all residential homeowners repairing sidewalks regardless of the reason. The City Council instructed the City Attorney to prepare and present an ordinance that will make this pilot program permanent and expand the program to all property owners, such as commercial and industrial. On November 4, 2014, the City Attorney transmitted a draft ordinance to the City Council for consideration.

Constituent Request System for Sidewalks and Access Ramps
We recommend that the Department of Public Works, with assistance from the Department on Disability, develop a comprehensive sidewalk repair program that includes a response driven element. Constituent calls help the City to identify problems that it might not have been aware of otherwise. The primary point of entry for these requests should be the City’s 311 system. Each request shall be assigned a specific identification number and logged into a database that records the requestor’s name, contact information, date of the request, description of damage, and the location. Constituents should also be provided with the ability to see the status of their request.

Program Management and Oversight
We recommend that the Board of Public Works oversee, manage, and coordinate implementation of the repair of sidewalks adjacent to both City and private property. This will establish clear oversight of the program. The City Engineer will act as the Citywide Program Manager in charge of the repair of sidewalks adjacent to both City and private property.

In addition, consistent with the Willits Settlement Agreement, we recommend an Americans with Disabilities Act (ADA) Coordinator for Pedestrian Rights-of-Way, who must be a licensed architect or engineer, with the requisite credentials to provide technical advice relative to sidewalk repairs and to ensure that ADA requirements are satisfied. This position will also be responsible for reporting publicly on the progress for the Sidewalk Inspection and Repair Program. The City Engineer will hire this person immediately in 2014-15 through contract. For 2015-16, this position is included in the Mayor’s Proposed Budget. The CAO, City Engineer, and the Personnel Department will work together to create the long-term position.
Program Development, Implementation, and Delivery

This Office recommends a combination of City staff, contractors, and a pre-approved list of contractors that constituents can use directly. The Department of Public Works should be instructed to report back with a complete staffing plan and recommendations regarding how work can be grouped in the most effective way possible and divided between City staff and contractors. Additionally, the Department should be directed to begin the process to establish a prequalified list of contractors.

Sidewalk inspections and repairs will be prioritized as follows:

1. City of Los Angeles government offices and facilities;
2. Transportation Corridors;
3. Hospitals, medical facilities, assisted living facilities, and other similar facilities;
4. Places of public accommodation such as commercial and business zones;
5. Facilities containing employers; and,
6. Residential neighborhoods and other areas.

Highest priority will go to the sidewalk related access improvements needed to address the most severe access barriers and the most significant safety hazards. However, the goal is that the program will result in the inspection of every sidewalk over the course of the settlement agreement, and repair if necessary.

Given the demand for sidewalk repair throughout the City, it is anticipated that there will be sidewalk repair projects in every City Council District. It is recommended that the Department of Public Works work to prioritize sidewalk repair project locations with input and assistance from each of the City’s 15 Council Districts.

Continual assessment of the overall program implementation and delivery will be necessary to ensure the City’s policies and procedures properly address the changing needs of the City’s pedestrians.

Street Trees

The City is proud of its urban forest and should make reasonable efforts to protect and replace lost trees. However, in compliance with the Willits Settlement Agreement, priority will be given to accessibility.

The City’s Municipal Code provides for guidelines related to street trees. Additionally, the City also has long-standing practices related to tree removals and replacement. It is recommended that the Board of Public Works and the Bureau of Street Services report back with recommendations on how the City’s current tree removal and replacement policies and practices can be streamlined and simplified to ensure that tree related issues do not hinder the speed at which sidewalk repairs are made and to ensure that tree replacement, consistent with City policies, occurs in a responsible and effective manner.
Sidewalk Inventory and Asset Management System

It is recommended that the Department of Public Works establish a sidewalk inventory and asset management system. Sidewalks are an important component of the City’s infrastructure. This information should be collected as City employees inspect sidewalks and verify their condition. Managing this particular infrastructure asset is more important than ever as the City prepares to implement a comprehensive sidewalk management strategy that will extend far into the future.

The City currently does not maintain an inventory of all of the locations of its sidewalks or even know for sure exactly how many miles of sidewalks exist in the City, or the condition of those sidewalks. There is also no central repository or database of all of the City’s existing curb ramps and when they were constructed or last repaired. Without this information, it will be difficult to measure progress as the City implements its new sidewalk management strategy. Mapping and geographic information services (GIS) technology will be essential to the creation of a Sidewalk Asset Management System. There could be an opportunity to leverage existing resources, such as the Los Angeles Region Imagery Acquisition Consortium Data Refresh (LAR-IAC4) Project to capture a GIS dataset of with the location of every sidewalk and curb ramp in the City.

Additionally, a sidewalk inventory and asset management system could be used to:

- Plan and prioritize work;
- Prepare cost estimates;
- Implement and track progress and costs;
- Change plans; and,
- Show progress of sidewalk repair to the City’s constituents.

The sidewalk inventory could also be a useful aid in identifying and evaluating projects and opportunities for the new Mobility Element, the People Street Initiative, and the Great Streets Initiative.

RECOMMENDATIONS

That the Council, subject to the approval of the Mayor:

1. Request the Board of Public Works, to reinstate a sidewalk inspection program;
2. Request the City Attorney to prepare and present an ordinance that amends all relevant sections of the Municipal Code that require the City to bear the cost of repairing sidewalk damage caused by tree roots (e.g. Los Angeles Municipal Code Section 62.104);
3. Approve a phased in approach to the transfer of sidewalk repair responsibility back to property owners;
4. Approve a fix and release program for sidewalks adjacent to residential property;
5. Request the City Attorney to prepare and present an ordinance implementing a Fix and Release Sidewalk Policy for residential property owners;
6. Instruct the Department of Public Works to institute a one year moratorium for the issuance of Notices to Repair Sidewalks adjacent to commercial properties to allow property owners extra time to make repairs before an inspection program commences;
7. Instruct the Department of Public Works to develop a system to track constituent calls and requests for sidewalk repair;
8. Designate the City Engineer as the program manager for the City's Sidewalk Repair Program, including sidewalks adjacent to City and private property, under the oversight of the Board of Public Works;
9. Instruct the Bureau of Engineering to work with the Personnel Department and the City Administrative Officer to create the position of ADA Coordinator for the Pedestrian Rights-of-Way;
10. Instruct the Department of Public Works and the CAO to report back with the framework and resource needs to implement a Sidewalk Inspection and Repair Program and Sidewalk Asset Management System, including how the options for a capture of planimetric features and a sidewalk assessment offered through LAR-IAC4 could be beneficial to the City;
11. Instruct the Department of Public Work to prioritize sidewalk inspections and repairs, consistent with the Willits Settlement Agreement, as follows:
   a. City of Los Angeles government offices and facilities;
   b. Transportation Corridors;
   c. Hospitals, medical facilities, assisted living facilities, and other similar facilities;
   d. Places of public accommodation such as commercial and business zones;
   e. Facilities containing employers; and,
   f. Residential neighborhoods and other areas.
12. Instruct the Department of Public Works to work with each Council Office on an annual basis to allow for input relative to sidewalk repair project location selection.
13. Instruct the Department of Public Works to establish pre-qualified contractors for sidewalk repair for use by the City or the public and to work with the CAO to establish a complete staffing plan to implement the Sidewalk Repair Program and report back to Council by August 31, 2015;
14. Instruct the Board of Public Works and the Bureau of Street Services to report back with recommendations on:
   a. Simplifying and streamlining the City tree removal and replacement policies and procedures so that they do not hinder the progress of sidewalk accessibility repairs;
   b. Ensuring that any trees removed are replaced and that the health and size of the City urban forest is protected;
   c. Ensuring that tree replacements are consistent with the City goals of protecting infrastructure (i.e. sidewalks, curbs, streets), minimizing operations and maintenance costs (i.e. location near street lights and traffic signs) and minimizing use of water for landscaping; and,
   d. Policies and procedures addressing the potential use of alternatives to tree removals such as meandering sidewalks, grade separations and tree relocations.
15. Instruct the Department of Public Works to develop and implement a sidewalk inventory and asset management system.

FISCAL IMPACT STATEMENT
There is no impact to the General Fund at this time.
BASIS FOR REPORT

In August 2014, the City Council instructed this Office with assistance from various other City departments, to report back with recommendations for a comprehensive sidewalk repair strategy that addresses pending litigation through consideration of such items as, but not limited to, a cost sharing program for residential sidewalk repairs, point-of-sale, point-of-permit, assessment districts, and alternative sidewalk materials (Council Files 14-0420-S1, 14-0163-S4, and 14-0163-S3).

1. SIDEWALK PROBLEM AND REPAIR SCOPE

It is estimated that there are between 10,000 and 11,000 miles of sidewalks in the City of Los Angeles. While it has been estimated that 40 percent or more of sidewalks are damaged, it is not known for sure. Cost estimates to repair the sidewalks have ranged between 1.2 and 1.5 billion dollars. Additionally, the City pays out between four and six million dollars in liability claims each year.

2. SIDEWALK MANAGEMENT AND REPAIR TRUST FUND

In November 2014, the Mayor and City Council requested the City Attorney to work with the CAO to report back with an ordinance to create a Sidewalk Repair Fund to expediently and transparently fund program costs related to sidewalk repair and curb ramp inspection, repair, and management (C.F. 14-0163-S4).

This Office supports creation of a special fund specifically for sidewalk repair due to the special circumstances that exist because of the relationship between sidewalk repair and the Settlement Agreement that was recently negotiated and subject to approval by Council. This Office believes that the creation of a fund will allow for a greater level of transparency with regards to the City’s sidewalk repair efforts. The amounts in the fund should be specifically designated for use to repair the City’s sidewalks and administration of any programs that are necessary to achieve that goal. The ordinance to establish the fund will be developed once the Settlement Agreement is approved by Council, and as it should take into consideration the terms of the Agreement.

The Council has ordered creation of the fund. It is expected that the fund will be created prior to June 30, 2015.

3. LEGISLATIVE ACTION AND SHARED RESPONSIBILITY

The responsibility for sidewalk maintenance varies between cities. A 2008 survey of 82 cities in 45 states found that 40 percent of cities require the property owners to pay the full cost of repairing sidewalks, 46 percent share the cost with property owners, and 14 percent pay the full cost of repairing sidewalks.

The State of California Improvement Act of 1911 provides cities the authority to require property owners to effect repairs to sidewalks abutting their property (California Streets and Highways
should the property owner fail to effect such repairs, city forces are authorized to make the repairs and the property owner is assessed for the cost. However, the Los Angeles Municipal Code (Section 62.104, Ordinance No. 146,040 effective July 3, 1974) exempts property owners from the responsibility for sidewalk repairs caused by street tree root growth and places the responsibility for these repairs with the City.

Prior to 1973, property owners in the City of Los Angeles were held responsible for repair of curbs, sidewalks, and driveways under the provisions of Chapter 22 of the Streets and Highways Code of the State of California. In January 1973, the City Council decided to provide no-cost sidewalk repairs to take advantage of Federal funding. However, by July 1978, with a reduction in federal programs and lower property tax revenue, the City Council ended the no cost sidewalk repair program. From 1978 to 2000 the City did not have a full scale permanent sidewalk repair program. For the first time in 25 years, the 2000-01 Adopted Budget provided approximately $9 million to permanently repair 46 miles of the most damaged sidewalks. Funding varied from year to year, and for a time included a 50/50 Sidewalk Repair Program, until the recession when the program was eliminated.

The City has struggled to fund sidewalk repair through the years. Even in years when funding was prioritized, only a small percentage of the City’s damaged sidewalks were being repaired in any given year. If the City were to repeal the Limited Exception to the 1911 Act returning the responsibility for sidewalk repair, even when the cause of the sidewalk damage is a street tree, back to the abutting property owner, the City would be able to focus its efforts on enforcement. This transfer of responsibility back to adjacent property owners will help realign the City’s workload with available funding resources and allow the City to focus on timely inspection, enforcement of the State law, and managing the safety of the public right-of-way. Sharing the cost and responsibility for sidewalk repair with property owners would also increase the number of sidewalks repaired in a given year because the City would no longer be responsible for the full cost to repair the City’s broken sidewalks. Under this approach, property owners through their stewardship will do their part to keep sidewalks, a critical aspect of the City’s public right-of-way, maintained. This approach is fiscally responsible, sustainable in the long-term and will achieve an overall improved pedestrian network for greater mobility and accessibility.

Additionally, based on a report recently published by the League of California Cities, the majority of cities in California impose the responsibility for sidewalks on adjacent property owners. According to a survey of 82 cities in 45 states, only 14 percent of cities pay the full cost of repair. It should be noted that there is some diversity to the extent of the obligation and how it is imposed.

4. SIDEWALK MAINTENANCE TRANSFER PLAN

In order to sustain a safe and accessible sidewalk network, this Office is proposing to standardize maintenance responsibility such that, in general, fronting property owners will be responsible for the maintenance of sidewalks in the public right-of-way, even when the cause of the sidewalk damage is a street tree. The City’s resources are limited and the City does not have the resources to continue to retain the responsibility for repairing sidewalks damaged by street trees.
Lack of sidewalk repair and maintenance impedes accessibility and mobility in the public right-of-way, and risks to public safety.

However, for over 40 years, the City has had the responsibility for repair of sidewalks damaged by street parkway tree root growth. During that time, this responsibility has not always been consistently funded due to City funding constraints. The City recognizes this, and therefore a phased in approach to the transfer of responsibility is recommended by this Office as follows:

**Fix and Release for Residential Property Owners** – All residential sidewalks will be inspected by the City. A sidewalk certificate will be issued if the condition of the sidewalk is found to be acceptable and any future damage to the sidewalk will be the responsibility of the property owner. If a sidewalk is damaged, it will be repaired by the City prior to issuance of a sidewalk certificate. Any subsequent repairs will be the responsibility of the property owner.

*Residential Property* – Defined as a single family dwelling serviced by the Bureau of Sanitation’s Refuse Collection.

**Sidewalk Inspection and Certification Program for Commercial Properties** - Property owners will be given one year to make voluntary repairs before an inspection program is implemented by the City. Property owners will have one year to make repairs once a notice to repair has been issued. If repairs are not made within that year, the City will begin the repair process and charge those costs back to the property owner. Fines/penalties are proposed if a sidewalk is not repaired within the allotted period of time. Inspection costs will be waived for the first inspection. A fee for subsequent inspections will be charged if the sidewalk is non-compliant. A fix and release program is not recommended for commercial properties.

It is estimated that it will take approximately one full year to develop each of these programs and the infrastructure to administer the programs. The planning phase should be utilized to begin outreach to the public regarding the new sidewalk policy and the implementation period. As with any new program, it is critically important to ensure time to develop and nurture new processes, implement, and evaluate success.

5. **SIDEWALKS ADJACENT TO CITY FACILITIES**

During the program planning and development phase of the Sidewalk Inspection and Certification Programs, it is recommended that the City continue to repair sidewalks adjacent to all City facilities. This priority was previously established in Fiscal Year 2013-14 because the City is clearly responsible for sidewalks adjacent to City facilities. It also appears that a significant amount of work remains to be completed, with over 235 locations identified with sidewalk damage. Staffing and funding resources for this purpose will be considered during the annual budget formulation process.
6. SIDEWALKS ADJACENT TO OTHER GOVERNMENTAL AGENCIES

This Office recommends that the Fix and Release policy not be extended to other governmental agencies. Title II of the Americans with Disabilities Act (ADA) requires State and local governments to make their programs and services accessible to persons with disabilities. This requirement includes physical access at government facilities, programs, and events. Those entities with damaged sidewalks adjacent to their facilities will be responsible for the cost of those repairs. The City will provide notice to the respective agency if defects are discovered during the sidewalk inspection process.

7. CONSTITUENT REQUEST SYSTEM FOR SIDEWALKS AND ACCESS RAMPS

A comprehensive sidewalk repair program should include a response driven element. Constituents play an important role in observing the City's condition on a daily basis. Constituent calls help the City to identify problems that it might not have been aware of otherwise. Requests for sidewalk repair and access ramps should be input into a single central repository. The City's 311 system should be the primary point of entry for these requests. This will trigger an inspection by City staff to assess the condition of the sidewalk or access ramp and determine the next steps. Consistent with the Willits Settlement Agreement, the City will use its best effort to investigate requests within 30 days and, if appropriate, schedule repairs as resources allow within 120 days. The Department of Public Works should be instructed to report back with staffing or a resource strategy to attain these goals. A separate form will be developed for requests that are made by or on behalf of persons with mobility disabilities.

8. DESIGN, CONSTRUCTION STANDARDS, AND ALTERNATIVE MATERIALS

The Bureau of Engineering was instructed (Krekorian-Wesson-Buscaino Motion C.F. 14-0163-S3) to develop and maintain design and construction standards for sidewalks that serve the City's objectives of maximizing mobility, increasing groundwater recharge and stormwater infiltration, maintaining aesthetic compatibility with distinctive neighborhood styles and historic designs, and provide a process for innovation and pilot programs utilizing new materials and construction techniques as they are developed.

The Bureau of Engineering is currently responsible for maintaining all sidewalk design and construction standards. Standard Plans are a series of numbered drawings showing the details, dimensions, and specifications of standard items in the construction of the public works, such as sidewalks. Standard Specifications for concrete sidewalks can be found in the Bureau's Permit Manual. Additionally, all materials and products that are placed in the City's public right-of-way must be approved by the City's Engineer of Design. A database of approved products can be found in the Technical Document Center of the City's Bureau of Engineering website. Currently, it does not appear that any alternative materials to Portland Cement Concrete (PCC) have been approved.

In the past, the Bureau of Street Services has experimented with alternative sidewalk materials to Portland Cement Concrete (PCC), including rubber panels, recycled mixed plastic materials,
poured rubber materials, and pervious concrete. Early versions of rubber sidewalk weathered quickly and did not last very long. Surfaces of more recent recycled materials wear relatively quickly leaving smooth and possibly slippery sidewalk finishes when wet. Warping has also been observed with more current iterations of recycled materials. Pervious concrete requires frequent maintenance (vacuuming) to preserve its environmental qualities and its relatively rough texture may not be suitable in all urban conditions. The total cost of sidewalk reconstruction using alternative materials is normally higher than conventional PCC, but may offer other advantages that PCC does not offer.

Alternative materials to PCC do exist. In the past the City has mostly relied on vendors to bring new materials to the City for testing. However, a more proactive approach is recommended where the City proactively seeks out alternative materials that would meet the City’s standards. One way of accomplishing this would be to hire a consultant to report back with recommendations regarding alternative materials that are currently available and also review the City’s current standards and provide recommendations as to whether any of our current requirements should be revised. Testing and pilot projects may also be necessary to examine these new products before the City can accept them for use in the public right-of-way. The Bureaus of Engineering and Street Services, in collaboration with the General Services Department should be instructed to continue researching developments in alternative sidewalk materials and report on these findings every three years. A Request for Quotations (RFQs) from manufacturers could also be utilized to assess the materials market on a triennial basis. In the interim years between reviews, manufacturers, distributors, contractors or owners may still initiate the approval process of a product by contacting the City’s Engineer of Design to begin the formal product assessment process.

9. PROGRAM DEVELOPMENT, IMPLEMENTATION, AND DELIVERY

The Sidewalk Inspection and Certification Program should be housed in the Department of Public Works, with oversight provided by the Board of Public Works. Unfortunately, none of the Public Works Bureaus have existing staff available to implement a Sidewalk Inspection and Repair Program. Additional City staff will need to be hired in multiple departments to oversee the administrative aspects of the program. Three options exist for performing the actual repairs: 1) Hire additional City staff, 2) Hire contractors, or 3) Create a pre-approved list of contractors that constituents can use directly.

This Office recommends a combination of all three options above. The Department of Public Works should be instructed to report back with a complete staffing plan.

10. ADA COORDINATOR OF THE PEDESTRIAN RIGHTS-OF-WAY

ADA standards have and will continue to evolve. For example, on September 15, 2010, the Department of Justice published revised enforceable accessibility standards called the 2010 ADA Standards for Accessibility Design (2010 Standards). The 2010 Standards set minimum requirements for newly designed and constructed or altered State and local government facilities, public accommodations, and commercial facilities to be readily accessible to, and usable by,
individuals with disabilities. Additionally, the United States Access Board is developing new guidelines for public rights-of-way that will address various issues, including constraints posed by space limitations, roadway design practices, slope, and terrain. The new guidelines will cover pedestrian access to sidewalks and streets, including crosswalks, curb ramps, street furnishings, pedestrian signals, parking, and other components of the public rights-of-way. These guidelines will ensure that access for persons with disabilities is provided wherever a pedestrian way is newly built or altered, and safety afforded to the public generally is available to pedestrians with disabilities. Once these guidelines are adopted by the Department of Justice, they will become enforceable standards under Title II of the ADA. A copy of the Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (112 page document) can be found at https://www.access-board.gov/attachments/article/743/nprm.pdf.

With all of the above in mind, it is critical that the City keep abreast of changes to the evolving accessibility standards, guidelines and best practices. Therefore, in the Willits Settlement Agreement the City agreed to hire an ADA Coordinator designated specifically for the Pedestrian Rights-of-Way to ensure that the City’s standards for constructing sidewalks meets or exceeds the requirements of the law. Consistent with the Settlement Agreement, the ADA Coordinator will be responsible for reporting publicly every six months on the status of the City’s compliance for the first five years. After that time, such reports shall be provided on an annual basis. Reporting should include the following:

- Compliance efforts that have been made since the last report;
- Access work performed;
- Status of scheduled work;
- Reason why any previously scheduled work has not been completed;
- Access requests received by the City and actions taken;
- Grievances or complaints received by the City, including copies of same, and the City’s response thereto;
- Monies spent since last report; and,
- Summary of new construction and alterations performed by the City that result in improvements to the pedestrian rights-of-way.

Consistent with the Settlement Agreement, the minimum requirements for this position include the following: licensed architect or engineer, with the requisite credentials, such as Certified Access Specialist (CASP) certification, and no less than five years of experience. This position should be created and filled as soon as possible to assist with the development of the sidewalk repair program and all related materials, especially as they pertain to design standards.
11. PRIORITIZATION

Consistent with the Settlement Agreement, sidewalk inspections and repairs will be prioritized as follows:

1. City of Los Angeles government offices and facilities;
2. Transportation Corridors;
3. Hospitals, medical facilities, assisted living facilities, and other similar facilities;
4. Places of public accommodation such as commercial and business zones;
5. Facilities containing employers; and,
6. Residential neighborhoods and other areas.

Consistent with the Settlement Agreement, highest priority will go to the sidewalk related access improvements needed to address the most severe access barriers and the most significant safety hazards for Willits class members, such as but not limited to, the following:

a. Missing curb ramps;
b. Tree root upheavals and displacements in level of one inch or more;
c. Curb ramps with a running slope greater than 9.3%;
d. Curb ramps and landing and transitions to crosswalks that do not comply with the 2010 ADA Standards;
e. Sidewalks and crosswalks with surfaces that have an abrupt change in level of more than ½ inch;
f. Grates with openings that are more than ½ inch wide;
g. Curb ramps with cross slopes greater than 2.5%; and,
h. Cross slopes on sidewalks, crosswalks, and other paths of travel other than curb ramps, cross slopes in excess of 2.5% shall be re-graded to 2%. However, cross slopes between 2.5% and 3% shall not be required to be re-graded unless such a cross slope extends for a distance of more than six feet within the path of travel in the direction of travel.

12. COST SHARING, FINANCIAL ASSISTANCE, AND INCENTIVE PROGRAMS

No Fee A-Permits

Sidewalk repair typically requires an A-Permit. The purpose of the A-Permit is to allow minor street construction in the public right-of-way and is the City's process of ensuring that minor street construction meets the City's design and materials specifications and that construction work is properly inspected.

Currently, an A-Permit for the repair of sidewalk damage due to tree roots does not require the applicant to pay a permit fee and is considered a "No-Fee" permit. A pilot program is in place which allows for the City to issue no-fee A-Permits to all residential home owners repairing sidewalks regardless of the reason. The City Council instructed the City Attorney to prepare and present an ordinance that will make this pilot program permanent. On November 4, 2014, the City Attorney transmitted a draft ordinance to the City Council for consideration.
Additional cost sharing programs or loan programs are not recommended at this time, because the City will pay for sidewalk repairs adjacent to residential properties during the first years of the program. However, below is a list of options that the Council could consider implementing now or in the future to encourage sidewalk repair:

1. No cost tree trimming/root pruning of parkway trees when permanent repairs (sidewalk, curb, driveway, gutter) are made by the adjacent property owner.
2. City pays for 50 percent (or some other amount) of permanent repairs.
3. City pays for permanent sidewalk repairs if the property owner pays for curb and gutter repairs and tree related mitigation.

13. OTHER FUNDING STRATEGIES AND PROGRAM OPTIONS

Five other funding strategies and program options exist and have been considered over the years. They include the following:

1. Citywide Bond
2. Assessment Districts
3. Point of Sale
4. Point of Service
5. Point of Permit

In the case of options 1 and 2, each requires a significant outlay of staff and funds to produce a proposal presentable to the City Council and to the voters. Furthermore, depending on how they were formulated, the strategies will have varying thresholds for approval by the electorate and, no matter which strategy, guidelines must be established to define hardship exemptions, situations where sidewalks are impractical, and addressing property owners with verified inability to pay. The following descriptions are only intended to describe key characteristics of each strategy. Prior to engaging staff and resources to develop any of the strategies, the City Attorney's Office should be consulted to ensure all mandated steps and procedures are identified and adhered to.

1. General Obligation Bond
   General obligation (GO) bonds have historically provided local agencies with the lowest borrowing costs among the types of long-term bonds they may issue because of their broad security pledge, which yield the highest possible bond rating and widest investor acceptance. In California, GO bonds are backed either by a pledge of full faith and credit of the issuer or by a promise to levy ad valorem property taxes in an unlimited amount as necessary to pay debt service. Local governments use the latter approach because they generally are not authorized to issue full faith and credit bonds. Because of this pledge of revenues, the State Constitution requires that local government seek voter approval prior to issuing GO bonds.

   GO bonds that are issued by local agencies require two-thirds voter approval. Article XVI, Section 18 of the State Constitution, states that local agencies, (i.e., county, city, town, or school district) may not incur indebtedness without two-thirds voter approval.
To pursue this option, staff from the CAO, CLA, and other City departments would work together to determine a viable size, scope and structure of a bond proposal, repayment terms, and costs. This would also require development of the bond proposal itself, and could take up to one year to develop before a proposal is ready for placement on the ballot.

2. Assessment District(s)
   An assessment district is an alternative method for financing public improvements. Property owners within the City can form assessment districts to repair their sidewalks using the procedures in the State Streets and Highways Code. These districts do not require contiguous properties and the districts can be of any size. However, should property owners vote and fail to approve the assessment; the City is at risk for the considerable time, effort and expenses expended to propose the district. Besides the assessment district formation costs, the ongoing administrative costs are approximately 20 percent of the assessment amount. Property owners are also generally offered the ability to pay in installments with interest.

   After the repair scope is established, the Bureau of Engineering has resources to process only a few small districts each year so the formation of a large assessment district or a large number of smaller assessment districts would require significant additional resources to develop and bring forward for a public vote and, if approved require more resources to administer the program over an extended period. Since sidewalk repair assessments have minimal precedents, it is expected to require additional staff time to establish methods and standards for calculating the proportional benefit of the sidewalks.

3. Point of Sale
   A Point of Sale program would require the seller or buyer of a property to ensure an accessible sidewalk. This would require approval of an ordinance requiring that all damaged curb, gutter, sidewalk, and driveways be repaired prior to the sale of property. The program could be supported by fees charged to property owners.

4. Point of Service
   Point of Service would require that sidewalk repairs be made each time new utility services are requested. The program could be supported by fees charged to property owners.

5. Point of Permit
   Point of Permit would require that sidewalk repairs be completed by the property owner each time a permit is obtained. This option would be paired with a minimum permit valuation. The cooperation of the Department of Building and Safety would be required to implement this option. The program could be supported by fees charged to property owners.
14. STREET TREES AND SIDEWALKS

The City is proud of its urban forest and should make reasonable efforts to protect the trees. However, tree roots are the predominate cause of damage to sidewalks. Anecdotally, 80 percent or more of sidewalk damage is believed to be caused by street trees. Therefore, priority needs to be given to accessibility. Per the Los Angeles Municipal Code, the planting, maintenance, and care of plants in City streets falls under the jurisdiction and control of the Board of Public Works. Currently, a permit is required for tree planting, pruning, removal, and tree root pruning. Tree removal permits are typically issued for the following reasons: damage to sidewalk/curb/driveway that cannot be repaired without tree removal, installation of driveway that cannot be relocated, and development public improvement conditions requiring street tree removal. It may be necessary to revise the City’s policies as they pertain to trees in the near future to streamline the current practices of the City.

A clear streamlined process is needed for street tree removal and replacement. Revisions to the City’s current policies and practices will likely be an ongoing process, as the City has time to see the full impact of the new Sidewalk Repair Program on the number of permit applications for tree removals received.

15. SIDEWALK INVENTORY AND ASSET MANAGEMENT SYSTEM

Sidewalks are an important component of the City’s infrastructure. Managing this particular infrastructure asset is more important than ever as the City prepares to implement a comprehensive sidewalk management strategy that will extend far into the future.

The City currently does not have an inventory of all of the locations of its sidewalks or even know for sure exactly how many of miles of sidewalks exist in the City or their condition. There is also no central repository or database of all of the City’s existing curb ramps and when they were constructed or last repaired. Without this information, it will be difficult to measure progress as the City implements its new sidewalk management strategy. Additionally, a sidewalk inventory and asset management system could be used to:

- Plan and prioritize work;
- Prepare cost estimates;
- Implement and track progress and costs;
- Change plans; and,
- Show progress of sidewalk repair to the City’s constituents.

Infrastructure asset management is the integrated, multidisciplinary set of strategies in sustaining assets. It is the ongoing process of maintaining, upgrading, and operating physical assets cost-effectively, based on a continuous physical inventory and condition assessment.
The following steps could be taken to create an asset management plan and system for sidewalks:

- Inventory;
- Assess condition;
- Determine needs (cost estimates);
- Assess available funding; and,
- Develop multi-year plan (budget).

One of the first steps in developing such a system could be creating an inventory of the locations of all the existing sidewalks and curb ramps in the City. However, this is not a prerequisite to beginning repair. Mapping and geographic information services (GIS) technology can be used to accomplish this. The City is currently in the process of executing an agreement with Los Angeles County (County) for products from the Los Angeles Region Imagery Acquisition Consortium Data Refresh (LAR-IAC4) Project. LAR-IAC is a consortium of many cities within the County, including the City of Los Angeles, which pools participant resources to obtain aerial photographic imagery, elevation contour lines, building footprints, and other data to benefit both the individual cities and the entire County. Several departments within the City currently use the digital terrain and aerial data. As part of this project last year, Sanborn, a photogrammetric mapping and geographic information system (GIS) company, gave a presentation to various City departments that covered optional services that could be added through LAR-IAC4. The following two items were offered related to sidewalks and curb ramps:

1) Capture of planimetric features in GIS format for curb ramps and sidewalks - Creation of an inventory that would create a citywide GIS dataset with the location of every sidewalk in the City, including sidewalk width.

2) Sidewalk Assessment - A team would walk the streets of the City with equipment to capture the condition of the sidewalk. The geographic location and the condition of the sidewalk would be captured, put in a table and related back to the GIS inventory of sidewalks that is described in Item Number One above.

The sidewalk and curb ramp inventory captured by Item Number One above could be used as the foundation for the development of a single sidewalk asset management system, that could also be used for complaint driven mapping. Additionally, the sidewalk inventory could also be a useful aid in identifying and evaluating projects and opportunities for the new Mobility Element, the People Street initiative, and the Great Streets initiative. The sidewalk assessment described in Item Number Two above could be used to prioritize repair, and group damaged sidewalks into projects, or schedule locations for further evaluation. Additionally, the data capture and subsequent data analysis over time could lead to a better understanding of deterioration rates of sidewalks, especially when paired with information on street trees.

The system that is developed should also take into consideration any reporting requirements that are required as part of the Settlement Agreement. To the extent possible the new system should
acilitate the reporting process, and use automation to minimize the amount of work required to gather the necessary data.
The Americans with Disabilities Act (ADA) has created design guidelines to ensure that transportation facilities are constructed to a set of standards that ensures accessibility for the disabled. Sidewalks are one of the most common pieces of transportation infrastructure, yet if not accessible, they can pose great challenges and danger to anyone in a wheelchair or with crutches. The ADA provides standards to help anyone constructing sidewalks do so in a safe, accessible manner.

The ADA specifies the width, slope, texture required for public sidewalks, as well as how curbs are designed and the proximity to obstructions.

**Sidewalk Legal Requirements**
Public entities such as city governments and transit agencies are required to construct facilities in accordance with ADA standards. These standards apply to all new construction; however, the ADA also requires that public entities retrofit any public facilities to these standards to ensure equal access. These requirements include sidewalks and curb ramps, which must be retrofitted to meet all current standards. Any non-compliant sidewalks or curb ramps must be upgraded to meet current standards whenever any alterations, such as road surfacing, are carried out.

**Sidewalk Width**
Sidewalk width requirements exist to make sure sidewalks are accessible for use by wheelchair-bound individuals. The minimum width for an ADA-compliant sidewalk is 36 inches (3 feet), though sidewalks can be constructed wider than this. If sidewalks are less than 60 inches (5 feet) across, passing spaces must be constructed at set intervals. These passing spaces must measure at least 60 inches on all sides, and must be located at least every 200 feet.

**Sidewalk Surface Texture**
Surface textures are important to ensure disabled individuals with mobility devices can safely traverse the sidewalk. The texture of a sidewalk must be firm, stable and slip-resistant. Care should be taken to ensure any concrete finishing meets these requirements. Additionally, any grates inset into the sidewalk must comply; to ensure that mobility devices do not get stuck, any openings in the grate can be no larger than \(\frac{1}{2}\) inch across.

**Sidewalk Slope**
Sidewalks also must meet slope requirements. A sidewalk must have a slope of less than 1:20; otherwise it will be considered a ramp, and will be subject to a different set of ADA standards. Further, any changes to elevation in the sidewalk must be considered. A increase in elevation of more than \(\frac{1}{2}\) inch exceeding the allowable slope will require the construction of a ramp, elevator or other compliant facility. ADA-compliant sidewalks must provide an alternative to stairs and escalators.
Curb Ramps
Curb ramps are required wherever a sidewalk crosses a curb. This is particularly important at street intersections, where individuals will interact with traffic. These ramps must have a slope of less than 1:12, must be at least 36 inches wide and must contain a detectable warning device with a raised dome surface and contrasting color. Ramps must not project into the street, and where there is a marked crosswalk, the ramp must be contained entirely in the width of the crosswalk.

Sidewalk Obstructions
Sidewalks may be located near obstructions, such as telephone poles, traffic signal cabinets or other utilities and infrastructure. Where such obstructions exist, the sidewalk must be constructed to allow the minimum width requirement of 36 inches between the edge of an obstruction and the edge of the sidewalk. In some cases, if a sidewalk cannot be constructed to comply with this guideline, the obstruction may need to be removed or relocated.
Public Works Code Section 706 states that it is the duty of the property owner(s) to maintain sidewalks in front of and adjacent to their properties in good repair and condition.

The property owner is responsible for the repair and condition of the sidewalk fronting his/her property except in the following instances:
- When the damage is caused by City maintained trees (i.e., tree root damage).
- When the damage is in the sidewalk corner (angular corner or corner return).
- When the damage is related to a utility facility.
- Special instances where City maintains sidewalks, e.g., Market Street Bricks or Mission Street Tiles.

When the Department of Public Works (DPW) inspects, or becomes aware of, sidewalk problems, it will inform the responsible party of sidewalk defects such as gaps, cracks, chips, displacement, holes, or other defects. The normal process to repair a sidewalk defect is the removal and replacement of the sidewalk as specified in the City’s Standard Specifications (Section 204). However, DPW Order 177,526 provides for alternative temporary repair methods (e.g., patching and grinding) that are available to property owners. Note that this Order contains general guidance. Some conditions may warrant immediate attention.

This Order establishes DPW’s guidelines to improve sidewalk accessibility within the area of the sidewalk most traveled by pedestrians and referred to in the Better Streets Plan (2009- page 98) as the “Throughway Zone”. Sidewalk defects that impair pedestrian accessibility shall be identified as a priority for repair and must be corrected by the responsible party in a timely manner.

The Throughway Zone shall be defined as the area of sidewalk most traveled by pedestrians. Judgment by the inspector will be paramount in determining the Throughway Zone, but it can be described as the area which is 12 inches beyond any physical obstruction from the property line to within 12 inches of the closest obstruction adjacent to the curb (e.g., tree basin, parking meter, street light etc.). In the case of a narrow sidewalk where the “Throughway Zone” would be less than 48 inches, the area most traveled by pedestrians is defined as 12 inches beyond any physical obstruction from the property line and extending towards the curb.

The following defects found within the Throughway Zone most traveled by pedestrians are priorities for repair:

1. Vertical Displacement — where the sidewalk pavement, or curb, is displaced by ½ inch or more from the abutting pavement or curb.
2. Voids, cracks, chips, holes, gaps — where sidewalk pavement, or curb, has eroded leaving a ½ inch or more void, in width and/or depth, from abutting pavement or curb.

These measurements should account for existing grades, slopes and existing sidewalk patterns.

Exceptions to the prioritized pedestrian area should include missing / damaged sewer / utility box covers and curbs with defects that exceed 1 inch. In the case of a specific Request for Action, or as directed by your supervisor, please utilize Sections 1 and 2 for the entire sidewalk area.

These guidelines allow inspections and subsequent repairs to be conducted expeditiously. These guidelines are not meant to defer or relieve a property owner’s responsibility to maintain defect-free sidewalks. In addition to areas identified by DPW that must be repaired, a property owner should also identify and repair any defect to the pavement in order to fully comply with Sec. 706 of the Public Works Code.

ctrl + click to view Sidewalk Width and Zones
Edward D. Reiskin, Director
SIDEWALK & STREET TREE MAINTENANCE HANDBOOK

Policy and Operating Guidelines

Updated July 20, 2016

City of Fairview, Public Works
City Hall, 2nd Floor—1300 NE Village Street
Fairview, OR 97024
503-665-9320
Sidewalks Make Good Neighbors

Sidewalks have a way of tying together a neighborhood. Realtors will attest that where sidewalks are good, the neighborhood becomes a more desirable place to live. Sidewalks serve so many purposes; recreation space for joggers, children with tricycles and pull toys; an informal meeting place for neighbors; and an encouragement for people to make more use of the most basic form of transportation – walking.

Be proud of your sidewalks. Take care of them and enjoy them.

CONTENTS

Program Goal 4
Handbook Outline 4

Sidewalk Maintenance Procedure 4

Procedure Overview 4
Detailed Procedure 5

Inspection Program 6

Inspection Criteria and Guidelines 7
Stub Toes (Step Separation- Elevated Guide) 7
Openings (Holes, Wide Cracks, Concrete Separations) 7
Spalled/Chipped Concrete 7
Raised Areas 7
Sunken Areas 8
Root Damage at Adjoining Properties 8
Corners 8
Curbs 8
Trees 8
Complaints 9
Notification 9
Sidewalk Repairs 9
Property Owner Repair 9
Contractor Repair 9
City Repair 10
Time Extensions 10
New Property Owner 10
Legal Questions 10
Plans for Construction/Remodeling 10
Permits 11
Inspection Requirements 11
Form Inspections 11
Final Inspection 11
City Repair 11
Repair Charges 12
Financing 12
Appeal Process 12
Sidewalk Repair Grant Assistance Program 12

Street Trees 14

Picking and Siting Your Street Tree 14
Planting Your tree 15
Caring For Your Tree 15

Approved Street Tree List for Areas Outside the South Fairview Lake Design Overlay and Village Areas. 17

All street trees must be at least 1 ½ inch diameter at breast height (dbh) at the time of planting. 17
2-3 Foot Planting Area 17
4-6 Foot Planting Area 17

Approved Street Tree List for the Village 18

Approved Street Tree List for South Fairview Lake Design Overlay 19
Program Goal

The objectives of the Sidewalk Maintenance Program are to:

- Protect the general public from injury by identifying defects and ensuring their timely repair.
- Protect the general taxpayer from the expense of liability claims due to personal injury.
- Protect individual property owners by notifying them that a hazardous condition exists and assisting with correction of that hazard.
- Protect the general public’s investment in the transportation system, which includes sidewalks, driveways, corners, and curbs.
- Manage the maintenance of sidewalks, driveways, and curbs in a way that protects street trees and other desirable vegetation whenever possible.

Handbook Outline

This handbook contains an overview of the sidewalk maintenance program, a detailed manual regarding sidewalk maintenance, the street tree planting guidelines, and the list of approved street trees. It should contain all the information you need to look after your sidewalks and street trees.

If you have questions about sidewalks, street trees or this handbook please call 503-665-9320. All inspection requests should go to 503-674-6244.

Sidewalk Maintenance Procedure

Procedure Overview

1. Sidewalk Defect Identified
2. Right of Way Permit Issued
3. Form Inspection
4. Final Inspection
Detailed Procedure

Complaint received by City

Inspection

Defects found

Trip occurred

Owner applies for right-of-way permit

Sidewalk and tree conflict issues

Tree to be removed and replaced (tree permit needed)

Conflict to be remediated (no tree permit needed)

Final Inspection

Complaint received by City

Inspection

Defects found

No defects noted

Trip occurred

Owner does not apply for right-of-way permit

Owner applies for right-of-way permit

Inspection

Tree not involved

City sends notice of intent to do work to owner

City repairs the sidewalk

Conflict to be remediated (no tree permit needed)

Form inspection

City bills owner (work, overhead, and fee)

Lien is placed on property

Active Transportation Committee Regular Meeting September 19, 2019

[06531214; 1]
July 20, 2016
Adopted by Resolution 32-2016
Inspection Program

The goal of the Sidewalk Maintenance Program is to identify sidewalk defects and assist the property owner with the repair process. Public Works representatives are primarily looking for things that cause people to trip and fall, such as "stub toes" where the sidewalk is raised. Other defects may include holes, spalled or chipped areas, wide cracks, deterioration, and areas that are damaged by tree roots. The graphics shown on the following page provide examples of these types of damage.

To assist the Public Works representatives in the identification of defects, guidelines have been established for consideration when inspecting sidewalks. The inspection guidelines apply to the city street right-of-way where there are sidewalks. The inspector will identify the hazard and the area needing to be replaced to ensure a good and substantial repair.
Inspection Criteria and Guidelines

Stub Toes (Step Separation - Elevated Guide)

All "Stub Toes" latitudinal as well as longitudinal in the City right-of-way that are hazardous shall be identified for repair. A guideline of 1/2 inch rise for all sidewalk and driveway areas will be used in determining if a stub toe is hazardous.

Openings (Holes, Wide Cracks, Concrete Separations)

All openings in the City right-of-way that are considered hazardous shall be identified for repair. A guideline of 1/2 inch width and 1/2 inch depth will be used in determining if an opening is hazardous.

Spalled/Chipped Concrete

Spalled sidewalks and driveways, where the concrete is chipped to the point of creating a trip hazard shall be identified for repair. A guideline of 1/2 inch width and 1/2 inch depth will be used in determining if a spalled area is hazardous.

Raised Areas

Raised sidewalk and driveways shall be identified when the raised area is hazardous. A guideline, that the uppermost point of the raised area being greater than 4 inches from grade, shall be used in determining when a raised area is considered hazardous.
Sunken Areas

Sunken sidewalk and driveways shall be identified when it causes a trip hazard or has sunken 4” below original grade.

Root Damage at Adjoining Properties

Where a tree root has lifted the sidewalk or driveway at the property line, both properties will be notified to maintain grade. Both properties are notified because repairing only one property would create a stub toe at the property line. Each notice would have a notation about the adjoining property. To maintain quality of work, the properties should be repaired together but could be repaired separately by installing a transition area.

Corners

Guidelines for identifying and replacement of corners shall be the same as the guidelines used for sidewalks and driveways. City corners installed by City crews will comply with ADA specifications.

Curb

Sidewalk inspections will identify curbs that need replacement during routine inspections. Curbs will be identified when they present a hazard, are generally in a deteriorated state, or no longer will facilitate or control drainage.

Curbs are the property owner’s responsibility to repair when they are in combination with the sidewalk and/or have been damaged by tree roots or willfully damaged (driven on, etc.)

Curbs that are separated from the sidewalk with a parking strip/planting area, and that have not been willfully damaged are the responsibility of the City.

Trees

Trees are another one of the City’s great assets. If the street tree needs to be removed and replaced prior to replacing the sidewalk it is important to be sure the replacement tree is the right size for the planter strip.

Only trees listed on the approved street tree list or part of a codified planting plan may be planted in the public right-of-way and shall follow the City of Fairview street tree planting guidelines. Approval to plant a tree that is not on the approved street tree list or on an approved planting plan must be obtained from the Public Works Director.
Complaints

Information received regarding hazardous sidewalk conditions in the City right-of-way at a specific location will be transferred to the Public Works Department. Hazardous sidewalk conditions may be reported to Public Works by calling 503-665-9320, or by reporting a concern on the City’s website, www.fairvieworegon.gov and filling out the report form.

A sidewalk inspection will be performed within 5 working days of the complaint, and the property owner(s) for the address(es) in which the hazard is at will be notified and given 60 days to repair the sidewalk. If the complaint is based upon someone having tripped and fallen, the property owner will be given 20 working days to begin repairs. In addition, a sidewalk inspection will be performed in the general area for defects and notification sent accordingly. A guideline for the “general area” is the block face involved with the initial complaint.

Following the inspection of a property, if defects are found, a Sidewalk Repair Notice will be created, stating the date of inspection, legal property description, and a photo from the inspection. Property owners will be given a minimum of 60 days, with a possible 30 day extension by property owner request, to make repairs. If the property owner does not make the repairs City contracted crews will perform the repair work.

Notification

Property owners will be provided with the original copy of the Sidewalk Repair Notice; a form letter outlining the Sidewalk Maintenance Program, and “The Sidewalk Handbook” brochure. This information will be mailed to registered owners of identified properties as shown on current county tax records.

Public Works representatives are available to schedule appointments and meet with property owners to identify and explain the specific reasons for the identified hazard(s). Using the established guidelines, the Public Works Representative can assist the property owner by outlining repair alternatives so that the hazard may be corrected in the most economical method.

Sidewalk Repairs

Property owners who have received a Sidewalk Repair Notice have the following options:

Property Owner Repair

As the property owner you can do the job yourself if you have experience working with concrete or similar home maintenance projects. The property owner may eliminate identified defects in the following manner:

1. Remove whole squares to full depth and replace with concrete. Skin patching is not an acceptable repair method, as it does not provide a good and substantial repair.

2. Grinding of stub toes raised 1 inch or less with the approval and guidance of the Public Works representative.

Contractor Repair

A contractor hired by the property owner may eliminate posted defects in the following manner:
(1) All contractors are required to have a current license and bond through the Oregon State Construction Contractors Board. In cases that involve liability, the owner has recourse through small claims court. Permits will not be issued to contractors with licenses that have an inactive status according to the Oregon State Construction Contractors Board computer records.

(2) A City Business License or Metro Business License is also required when performing work within Fairview.

(3) Remove whole squares to full depth and replace with concrete. Skin patching is not an acceptable repair method, as it does not provide a good and substantial repair.

(4) Grinding of stub toes raised 1 inch or less with the approval and guidance of the Public Works representative.

City Repair

Prior to scheduling repairs to be made by City contractor crews, all identified defects in the area to be repaired will be re-checked. If upon re-checking, it is found that the defects have been repaired satisfactorily, crews will not be scheduled for that area and the sidewalk database will be updated accordingly.

Properties where the hazard has not been satisfactorily repaired will be marked out and scheduled for repair by private companies working on contract with the City (city contractor). Additional defects found may be marked out for repair as well.

The City will repair identified defects of 1" or less by grinding, and if grinding will not repair the hazard or the hazard is in excess of 1" the City will repair by removing and replacing whole squares to the proper depth per City code.

Time Extensions

Requests for 30 day time extensions will be granted if reasonable cause exists. The following conditions may cause the Public Works Department to grant extended time, more than 30 days, to property owners to make sidewalk repairs:

New Property Owner

When the previous owner did not disclose the initial sidewalk inspection report stating there was a hazardous sidewalk to repair/replace to the new property owner who acquired the property. These extensions are usually 60 days in length, with an additional 30 day extension per property owner request, but no more than a total of 90 days.

Legal Questions

When there are legal questions/matters concerning ownership, responsibility, property lines, etc., extensions may be granted until legal questions have been answered.

Plans for Construction/Remodeling

When the city right-of-way area of posted properties will be affected by construction and/or remodeling plans. In some cases, temporary repairs may be required before the extension is granted.
Permits

A permit is required prior to performing any work. Permits are available at Fairview City Hall, 1300 NE Village Street, 2nd Floor (503-665-9320). The permit will be issued to whoever intends to make the repair, i.e., property owner or contractor.

Inspection Requirements

Form Inspections

A form inspection is required when hazardous sidewalk areas have been excavated to proper depth, forms have been set, barricades or saw horses are in place, and all debris has been removed from the city right-of-way. The inspection insures that necessary lines and grades are correct, and that repair work is prepared and formed to meet city specifications and plans. Inspections will be made the following day after the request was made by calling the inspection request line at 503-674-6244, excluding weekends and legal holidays.

Once an inspection has been completed, a copy of the inspection report will be left onsite, with either the contractor or the property owner stating if the forms have passed inspection and if it is okay to begin pouring concrete. If corrections are needed to be made, another form inspection will be required before concrete can be poured. The same inspection time requirements as described above apply.

Final Inspection

A final inspection is required when the repair work has been completed, all forms are removed, and voids are backfilled with dirt or like material and compacted to grade, and the job site has been cleaned up. A minimum of two days must elapse between the time the concrete is poured and the final inspection is requested. This prevents possible spalling of green/uncured concrete when forms are removed.

Final inspections will be made the day after the request has been made, excluding weekends and legal holidays. If repair work is found satisfactory, it will be noted on the inspection form and left with the property owner. If work is found unsatisfactory, it will be noted on the inspection report and left with the property owner. Another final inspection will have to be requested. The same inspection time requirements as described above apply.

City Repair

The goal of the Sidewalk Maintenance Program is to repair sidewalks, driveway approaches, corners, and curbs in the city right-of-way. The City is responsible for sidewalk repair and replacement of hazardous sidewalks abutting to property owned and or maintained by the City.

The City may also repair/replace hazardous sidewalks when a property owner has not taken the appropriate steps to remedy the hazard within the time limits set in this document, or when a property owner has requested the City to make the repairs and bill them.
When the original notices for sidewalk defects have been sent to the property owners, they have 60 days to repair/replace the hazardous sidewalks (unless someone has already tripped, when they shall have only 20 days). If the property owner neglects to repair/replace the sidewalk within those 60 days, unless a 30 day extension has been issued, the City will then begin the process of having the hazardous sidewalks repaired/replaced. A minimum of 2 weeks before the City contractor crew is to begin repairing the sidewalks, a letter will be sent to each property owner stating the City’s intent to repair, approximate repair date, and estimated cost for the sidewalk repairs. Properties to be repaired will receive a door hanger with the previously listed information a minimum of 3 days prior to crews beginning work.

**Repair Charges**

The repair amount is calculated to recover all direct costs, permit fees, and applicable overheads. When repairs have been completed, information will be sent to the City of Fairview Finance Department, who will prepare and mail an invoice to the registered property owner. The invoice will have information regarding the total cost of the repair work, plus the City’s assessment fee of 10% to cover costs of establishing and managing the account.

Property owners will have 30 days from the date of the invoice to pay or finance their bill. If the invoice is not paid or financed by the 30 day deadline, the City will add late interest, penalties and collection costs to the bill. To insure payment, a lien will be placed on the property.

**Financing**

The City’s Finance Department mails an installment payment contract with each final assessment notice. The contract describes the amount of the assessment, financing fees, the total loan amount, options for making loan payments, and the terms and conditions of the loan.

The City’s monthly installment plans are calculated like auto or home loans. Over time, the payment is made up of larger amounts of principle and smaller amounts of interest, based on the interest rate and term of the loan. A billing transaction fee will also be added to each installment.

**Appeal Process**

All disagreements and appeals for sidewalk notifications, which cannot be resolved by the Public Works representative, will be directed to the Public Works Director. The Director will investigate all such cases and attempt to reach an agreement with the concerned parties.

If the disputed sidewalk notification is clearly in error, the Director will call for a re-inspection, cancel, or adjust the notification according to the findings. The efforts to resolve the dispute will be fully documented and be used as evidence, should the dispute be appealed to the City Council.

**Sidewalk Repair Grant Assistance Program**

The City of Fairview Sidewalk Repair Grant Assistance Program utilizes limited funds collected in the Street Fund. The funds will be available on a first come/first serve basis and are limited to the budgeted amount as adopted by the Fairview City Council.

July 20, 2016

Adopted by Resolution 32-2016
Upon approval of a completed and approved Sidewalk Repair Grant Assistance application, the City may grant a property owner up to $6.00 per square foot of replaced sidewalk on local streets and up to $12.00 per square feet on Multnomah County streets for those properties that abut a sidewalk but have no direct connection to it. **The City may grant a property owner up to $100.00 for the purchase and installation of an 18” tree root barrier treatment.** Sidewalk Replacement Grant Applications must meet the following to be eligible for the grant program:

- Sidewalk work must be completed in accordance with City or County standards and requirements
- Sidewalk and street tree installation work must be inspected by and approved by the City or County
- Sidewalk must have been identified as a trip hazard or public safety issue by the City
- Receipts must be submitted for completed work

The program can provide assistance to repair concrete sidewalks that meet the defect criteria outlined in this handbook.

All other sidewalk repairs (i.e. spalling, openings, lift etc.) not meeting the criteria above are the responsibility of the abutting property owner and shall be repaired.

The City may grant up to $6.00 per square foot for the cost of a contractor to complete sidewalk replacements on local city streets and up to $12.00 per square feet on County streets for those properties that abut a sidewalk but have no direct connection to it. In no instance will the city grant funds in excess of the amount paid by the property owner for these services.

**Property Owner Repairs**

In the event a skilled property owner completes the sidewalk repairs and meets the criteria above, the following procedure is required to apply for the Sidewalk Repair Grant Assistance Program:

- Submit Completed Sidewalk Repair Grant Assistance Application
- Submit copies of all material expenses for repairs

In no instance will the city grant funds in excess of the amount paid by the property owner.
Street Trees

Picking and Siting Your Street Tree

PICKING YOUR TREE

Choose a tree from the approved street tree list for the size of the planting space you have. All street trees must be at least 1 1/2 inch diameter at breast height (dbh) at the time of planting. You will also need to consider if there are overhead power or other utility lines.

There are a number of other issues you should consider. Individuals have personal preferences and you will be living with these trees for many years. Try to pick a tree you love. These issues include:

- Height
- Spread
- Form (see illustration)
- Color (spring, summer, and fall)
- If the tree flowers or fruits
- Bark and leaf texture
- Attractiveness to birds or butterflies

It is also good to remember that tree roots usually spread about as far as their canopy. Picking a tree with a small canopy makes sense when you have smaller building setback or a smaller place to plant.

SITING YOUR TREE

Call Before You Dig. Utility lines may be buried in the desired tree planting area. For your safety and the safety of others, be sure to check for underground utilities. Call 503-246-6699 at least 48 hours in advance before digging.

Contact Portland General Electric for information about tree removal and trimming around power lines 503-736-5460

A larger diameter planting hole promotes better tree health by aerating the soil. The planting hole should be about two to three times the size of the root ball. When locating the planting site for your tree, use the following guidelines. Measurements should be taken from the center of the trunk.

- 20 feet from the curb line of an intersection street.
- 7 feet from alleys and driveways
- 5 feet from fire hydrants
- 10 feet from directional traffic signs
- 20 feet from stop or yield signs
- 2 feet from adjoining property lines
- 25 feet from street lights
- 20 feet from adjacent tree
Planting Your tree

When to Plant – While it is okay to plant a tree any time of the year, the best time to plant a tree is when the tree is dormant during the winter months.

Do Not Compact Soil – Be sure not to pack the soil too tight when planting the tree. Compact soil makes it difficult for roots to grow outward and downward, which can result in raised sidewalks and an unhealthy tree.

Mulch – To hold in moisture and discourage the growth of competing weeds, spread mulch around the base of the tree. The mulch should be about 4 inches deep and kept about 6 inches from the trunk of the tree. Mulch could include grass clippings, compost or bark dust.

Stakes – The tree should be staked for at least the first year after planting. The stakes should be tied loose enough that the tree can sway 2 inches from side to side.

Caring For Your Tree

Trees Need Water – Your new tree will need 5-10 gallons of water once or twice a week for the first three years after planting. Watering your tree slowly and evenly will promote deep root growth; over watering your tree will promote shallow root growth which can result in raised walkways. A 5 gallon bucket with small holes in the bottom is an excellent method for watering your plant slowly.

Weed Around Your Tree – Other plants around the tree are competing for water. Be sure to remove competing plants several feet around the base of the tree.

Bark Damage – Take care when mowing around the tree, bark damage can weaken the tree and make it susceptible to disease.

Remove Dead Branches and Suckers – Remove all dead branches in the tree canopy and suckers located at the base of the tree. This will allow the tree to focus its energy where it is needed and desired.
Planting in planter strips or behind the sidewalk

- Planting in tree wells

---

[Diagram of tree wrap from ground to first branch]

(2) 2x2 5/8 of 8" stakes do not penetrate root ball with stakes. Drive 3" min.

- Tree ties
- Remove burlap and twine from top 1/3 of ball afterstaking. Remove all twine around base of tree trunk to the first branch. Place root ball at top of mulch layer.

- Mulch circle water basin 2" approx. depth min. 34" dia. bark mulch (cir in turf areas).

- Soil mix backfill as specified.

- Scarefy walls and bottom of planting pit.

---

Planting in tree wells

- Install brick red interlocking concrete permeable pavers

---

[Diagram of tree well installation]

- H-Ground 4'x4'
- Junction box in back of walk (on commercial property only)
- Use same rock as used to fill voids in pavers 1/4"-1/2" top
- Filler color 1" of coarse sand
- 3/4" dia. caper tree headed @ 4'

- 3/4" dia caper headed @ 8" except 2" dia caper headed @ 8" shall be used when tree is in vision triangle. Tree shall be well branched, balled and burlapped.

- Tree wrap from ground to first branch
- 2x2 of 8" stakes do not penetrate root ball with stakes. Drive 3" min.

- Tree ties
- Remove burlap and twine from top 1/3 of ball after staking. Remove all twine around base of tree trunk to the first branch. Place root ball at top of mulch layer.

- Mulch circle water basin 2" approx. depth min. 34" dia. bark mulch (cir in turf areas).

- Soil mix backfill as specified.

- Scarefy walls and bottom of planting pit.

---

Adopted by Resolution 32-2016

July 20, 2016

Active Transportation Committee Regular Meeting September 19, 2019 47
Approved Street Tree List for Areas Outside the South Fairview Lake Design Overlay and Village Areas.

All street trees must be at least 1 ½ inch diameter at breast height (dbh) at the time of planting.

### 2-3 Foot Planting Area

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Botanical Name</th>
<th>Mature Height</th>
<th>Canopy Spread</th>
<th>Under Power Lines</th>
<th>Form</th>
<th>Fall Color</th>
<th>Fruit/Flower</th>
<th>Birds/Butterflies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japanese Tree Lilac</td>
<td>Syringa reticulata</td>
<td>20</td>
<td>15</td>
<td>X</td>
<td>Pyramidal</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paperbark Maple</td>
<td>Acer griceum</td>
<td>25</td>
<td>20</td>
<td>X</td>
<td>Oval</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chonosuki Crabapple</td>
<td>Malus schonoskii</td>
<td>30</td>
<td>15</td>
<td>X</td>
<td>Oval</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Adirondack Crabapple</td>
<td>Malus adirondack</td>
<td>18</td>
<td>10</td>
<td>X</td>
<td>Upright</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 4-6 Foot Planting Area

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Botanical Name</th>
<th>Mature Height</th>
<th>Canopy Spread</th>
<th>Under Power Lines</th>
<th>Form</th>
<th>Fall Color</th>
<th>Fruit/Flower</th>
<th>Birds/Butterflies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flowering Ash</td>
<td>Fraxinus ornus</td>
<td>30</td>
<td>15</td>
<td>X</td>
<td>Round</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>American Hornbeam</td>
<td>Ostrya virginiana</td>
<td>35</td>
<td>35</td>
<td>X</td>
<td>Oval</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black Tupelo</td>
<td>Nyssa sylvatica</td>
<td>45</td>
<td>20</td>
<td></td>
<td>Pyramidal</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Silver Linden</td>
<td>Tilia tomentosa</td>
<td>45</td>
<td>35</td>
<td></td>
<td>Pyramidal</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>European Beech</td>
<td>Fagus sylvatica 'purpurea tricolor'</td>
<td>35</td>
<td>25</td>
<td>X</td>
<td>Oval</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Paperbark Maple</td>
<td>Acer griceum</td>
<td>25</td>
<td>20</td>
<td>X</td>
<td>Oval</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Princeton Sentry Ginko*</td>
<td>Ginko Biloba Princeton Sentry*</td>
<td>40</td>
<td>15</td>
<td></td>
<td>Columnar</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kobus Magnolia</td>
<td>Magnolia kobus</td>
<td>40</td>
<td>30</td>
<td>X</td>
<td>Globe</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chonosuki Crabapple</td>
<td>Malus schonoskii</td>
<td>30</td>
<td>15</td>
<td>X</td>
<td>Oval</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

*Male tree only
Approved Street Tree List for the Village

Active Transportation Committee Regular Meeting September 19, 2019
Approved Street Tree List for South Fairview Lake Design Overlay

South Fairview Lake
Street Trees

- Red Sunset Maple
- Skyline Honeylocust
- Green Vase Zelkova
- Corinthian Linden
- Bowhall Maple
- Chanticleer Pear

Date: 08/27/2014

Adopted by Resolution 32-2016
15.44.130 Bicycle parking.
"For every commercial or industrial building of 2,000 or more feet of gross floor, a stationary object shall be provided to which two bicycles may be attached with a user-provided six-foot cable and lock. Additional structures may be added at the owner's option. The stationary object may be either a freestanding bicycle rack or a wall-mounted bracket, and, in the case of commercial buildings, shall be located out-of-doors, in or near the auto parking area."
Bicycle Parking Policy Statement

In an effort to encourage bicycle usage throughout the Mount Shasta City limits and surrounding areas the city will provide bike storage facilities as follows:

Administrative:
The city will provide a means for citizens to identify bicycle parking requirements throughout the city limits to include: request for a new parking facility, repair to an existing facility, removal of an existing facility, and registration of complaints regarding bike parking.

Types of Storage:
- Long Term: Longer than 2 hours - Not provided
- Short term: 2 hours or less - Commercial grade bike racks will be distributed on city property based on guidelines outlined below.

   Locations:
   - All new facilities constructed within the city limits must provide sufficient bike parking as designated by the city policy.
   - On street along major streets/thoroughfares - When sidewalk parking is deemed undesirable by the public works department one car parking space will be used as corral bike parking.
   - Sidewalk along major streets/thoroughfares - If a bike rack can be accommodated on the sidewalk without impeding pedestrian traffic an inverted U rack will be used.
   - Shopping centers - Since shopping centers are private property the city will work with owners to establish sufficient bike parking.
   - Churches - Since churches are private property the city will work with owners to establish sufficient bike parking.
   - Library - Since libraries are private property the city will work with owners to establish sufficient bike parking.
   - Schools - Since schools are private property the city will work with owners to establish sufficient bike parking.
   - Hospitals/medical complexes - Since hospitals and medical facilities are private property the city will work with owners to establish sufficient bike parking.
   - Parks - The city will place sufficient bike parking in all city owned parks. The city will address the need for sufficient bike parking with the property owners.
• Government facilities - All city owned government buildings will be provided sufficient bike parking. Bike parking needs on State, county, and federal property will be addressed by the city with the appropriate government officials to ensure adequate bike parking within the city limits.

• Events - All events held within the city limits will require the event holder to provide sufficient temporary bike parking for the duration of the event.

  o Types of storage facilities:
    - Shelters - Bike shelters are not being provided by the city on any city property.
    - Corral - Bike corrals will be used when parking is placed in the streets
    - Inverted U - The inverted U racks will be the rack of choice.
    - Lockers - Bike lockers are not being provided by the city.

  o Types of racks:
    - Inverted U rack - Most used for low volume short term bike storage
    - Vertical - Can be used to store bikes vertically against a structure’s wall.
    - Bike stall - used for high volume short term storage
    - Circle - Usage is similar to U rack

  o Number per location:
    - Based on square feet of area
    - Based on percentage of on-street car parking spaces
    - Based on volume of users
    - Based on number of contiguous businesses

  o Financial
    - City budget - Based on anticipated demand the city may request some or all of the project implementation to be allocated in the annual budget process. The city must also allocate sufficient funds to maintain installed facilities.
    - Grants - The city has the option to seek grants in support of this effort
    - Gifts - Businesses/individuals may wish to implement a non-standard type bike rack. It will be
up to the donor to install and maintain this item at their cost.

- Private property/businesses - The will encourage all private property/business owners to implement a bike parking program on their facility with support from the city in the form of review by the public works department.
As anyone who bikes regularly will tell you, not all bike racks are created equal. Some bike racks are stellar: they’re intuitive to use, well lit, protected from the elements, and close to where you’re trying to go. These are the type that tell bike commuters, “You’re welcome here!”
On the other hand, there are bike racks that might as well not exist. They’re confusing to use, awkwardly placed and inconvenient, and if it’s raining outside, you know you will be riding home on a soaking wet seat cushion. If you want to know how pleasurable that feels, grab a pillow, submerge it in a full bathtub, and sit on it as you read the rest of this article.

A pernicious assumption may be at play here: the idea that only bike rack is better than no bike rack and really any metal contraption that’s bolted to the ground will do. Not so. In the same way that an urban business would never clear out a muddy field around their building and declare that they’ve provided a parking lot for drivers, installing low-quality bike parking can often times be worse than installing nothing at all.

Thankfully, making bicyclists feel welcome is easy and inexpensive for any business owner or landlord. I’ll break down the qualities of a good bike rack into five criteria: location and proximity, protection from the elements, visibility, volume, and form.

1. Location and proximity

We’ve all seen it: the bike that’s uncomfortably locked up to a lamppost/fence/tree even though there’s a bike rack right around the corner. There’s nothing wrong with the sight of bicycles around town, but let’s be real: bikes locked up in random places are awkward and cumbersome to other street users. Plus their placement is often illegal.

So what’s the deal? Just like drivers, cyclists want the most convenient parking spot possible. In a mostly-rackless world, that lamppost/fence/tree counts as bike parking. With that in mind, head off this problem by installing racks next to or near the entrance bicycling customers and employees will be using. Besides keeping bicycles off your delicate trees, this also signals that your business is thinking about its cycling customers. As a happy side effect, more of your customers and employees may take up walking and bicycling, freeing up parking spots for customers who drive.

2. Protection from the Elements
As I mentioned in the introduction, a soaking wet seat isn’t pleasant. Neither are rusty chains, warped rear fenders, or scalding hot handlebars. Placing bike racks under some sort of cover can go a long way toward mitigating these problems and encouraging bicycling patrons to stay a little while longer.

If a location’s patrons will be parking for longer periods, whether three hours or overnight, making sure that bike racks are protected from the elements is especially important. I can be fairly sure whether it will rain in the next thirty minutes, but if I’m going into work at 9:00 AM and leaving at 5:00 PM on a cloudy day, it’s best to play it safe and find a sheltered rack. By providing sheltered or indoor parking, landlords and employers in particular can reduce the need for residents and employees to drag their bikes inside—a graceless and uncomfortable situation for all parties.

3. Visibility

If a bike rack is installed and no one is around to see it, does it really exist? Visibility might seem like an obvious consideration, but you would be surprised by how often bike racks seem to be deliberately hidden away. If your bike rack isn’t front and center, it’s a huge waste of money. By not having your bike racks front and center, you not only miss out on the positive reputation and extra parking a newly installed rack can create—you are also installing something bicyclists won’t want to use.

Even if bicyclists do find out where the racks are, low visibility may still disincentivize their use. Installing bike racks in dark, out-of-the-way locations creates a precarious situation both for bicyclists and their bikes. No bicyclist wants to leave his or her valuable means of transportation in an unwatched location. Then there’s the more serious concern of human safety: in the same way parking lots are well lit to scare off predators, cyclists shouldn’t have to fear for their lives when they are returning to their bicycle after the sun has set. Get the most out of bike racks in terms of use and safety, and put them in a well-lit, highly trafficked location.

4. Volume

A big part of getting the most out of bike parking involves installing enough racks to accommodate bicyclist demand. High quality bike racks are great, but only if there’s one available. A coffee shop that I used to frequent in Lexington has four decent bike racks, each installed by the city. They’re easy to use, near the businesses that bicyclists frequent, and highly visible. There’s just one problem: they
are always full. The result is that bicyclists fall back into suboptimal behavior, locking bikes on
everything from tables to signs to garbage cans.

Thankfully, we know how to resolve this problem: if you are running out of supply and there is still
demand, it’s time to increase supply. Whether you buy the racks yourself or contact your city
representative, this is a simple and easy fix in most cases. If your bike racks are totally empty,
focus on considerations one, two, three, and five, and wait on purchasing more racks. If your bike
racks are totally full, congratulations! You’re probably doing something right with those other racks,
so do more of that.

5. Form

Buy the type of bike racks cyclists actually want to use. If you take nothing else from this article,
know this: nobody likes grid bike racks, and very few people can correctly using them. You typically
find them looking something like this:

![Grid bike rack example](https://www.strongtowns.org/journal/2017/10/31/what-makes-for-great-bike-parking)

When it comes to bike parking, keep it simple. Bicyclists know and love the standard “inverted U”
and “post and loop” racks—they’re intuitive, inexpensive, and space-efficient. If you need to serve
a lot of bicyclists, my personal favorite is the increasingly common “coat hanger rack.” Plus, if you
have the budget, you can order customized designs for your city, neighborhood or business.
Now that you know the five criteria of great bike parking, go check out the bike racks you like to use. If you are not a bicyclist, go check out the racks that are always full. Think about how these considerations help keep those racks full, and how they could be improved. Finally, if you are ever in a position to make decisions about installing bike racks, please remember these considerations! With a little bit of thought, you can help build a livelier, more economically productive street for everyone.

Stay tuned for tomorrow’s follow-up article, "Making Space for Mobility: Three Policies to Expand Bicycle Parking."

READ MORE ABOUT BIKING

Related stories
A LOSing Proposition

By overemphasizing vehicle Level of Service (LOS) we justify expensive, overbuilt streets that are dangerously inhospitable to people—just so drivers won’t be inconvenienced during peak travel times.

Aug 14, 2018  •  Sarah Kobos

How Bike Lanes Benefit Businesses

...even when they get rid of a few parking spots in the process.

Jun 4, 2018  •  Rachel Quednau

Bike Breakthrough: Connecting neighborhoods with low-stress routes

Across the nation, cities are expanding stand-alone bike lanes into full networks everyday people actually like to use.

Nov 9, 2017  •  Jay Walljasper

ABOUT THE AUTHOR

Nolan Gray is a writer for Market Urbanism. You can follow him on Twitter at @mnolangray.

13 Comments  •  2 Likes  •  Share

Posted in Bikeability, Member Post, Top Story, Gray and tagged with bike parking, bike racks

Strong Towns Comment Policy

Please read our Comment Policy before commenting.

Cristiano Dalbem  •  2 years ago  •  edited

I absolutely LOVED this article! It's super well written and also lists exactly the same characteristics that makes for good bike rack that me and my team gathered when researching for an app we built. In our platform we let people map and review bike racks here in Brazil, and our mission is to spread the word about the features that
make bike parkings safe - which have been totally overlooked by our authorities and local stores. How would you feel if we translate your article to Portuguese to share it in our social networks, giving you guys full credit of course? :)

PS.: if you want to check out our webapp (sorry it's only in portuguese for now):
https://www.bikedeboa.com.br/

Mark • 2 years ago
Please update the header image for this article. It shows a poorly locked bike (top tube only) and will perpetuate further theft. Top-tube-only locking makes your bicycle an easier target.

Derek Hofmann • 2 years ago
A good bike rack supports the frame at two points, unlike the accurately named "wheelbender" style rack and the "wave" style rack.

Ruben Anderson • 2 years ago
Thank you for addressing form. Too many cities seem to think using bike racks as municipal or neighbourhood branding is a good idea.

Usually these designs just make it way harder to lock up your bike.

josephsinger • 2 years ago
Bike racks like that illustrated in #5 are pretty much useless if you want to secure your bike. Why people have racks like this I do not understand. I would never use it. I'd lock my bike to itself before I used one like in example 5.

Cobo ➔ josephsinger • 2 years ago
My guess is that the wheel bender racks are popular because they are cheap.

Augsburg • 2 years ago
Love your article - many landscape and building architects could benefit from an education in bike storage. I was exposed to many of these lessons 20+ years ago as a transportation engineer building multimodal facilities (bus, rail, ferry) and working with bike advocates. The "coat-hanger" style rack was a big favorite with bike advocates then and still works well today.

I'll just add that bike parking needs to consider larger, heavier cargo bikes and e-bikes too. My wife's dutch-style bike is a workhorse on shopping trips, but when
What Makes for Great Bike Parking? — Strong Towns

loaded down it is very heavy to bounce up and down curbs accessing bike racks captured in bike corrals without ramped access.

Not to mention that due to nerve problems in my hands, I recently had to switch to a recumbent trike (3-wheel trikes are legal as a "bike" in most states). More and more of us as we age will move to a variety of "bikes" that are becoming much more prevalent. Bike storage needs to recognize this trend. If we look to European cities, years ahead of us in many areas, you will see a great variety of "bikes" in use - both for personal transportation, but also commercial purposes.

**EdmontonBicycle** → Augsburg • 2 years ago

How do you like the coat-hanger racks? I can't fit any of my bicycles in them. The handlebars, basket, or rack always interfere with getting my wheel and frame close enough to lock securely.

**SDGreg** • 2 years ago

On the issue of visibility, I was curious as to whether MTS (San Diego transit) had bike storage at any of its transit centers. It said it did at the transit center closest to where I work, a center sandwiched between direct freeway access and city streets. The reason I'd never noticed it was because it was placed on the freeway access side, not on the side closer to city streets. And unsurprisingly, it was minimally used. Given its size, it could have been placed on the side closer to city streets where it would have easily noticed by transit riders, but wasn't for some inexplicable reason. Maybe if the people making these decisions actually used transit...

**Dan Allison** → SDGreg • 2 years ago

Actually, many bike racks are specified and placed by people who don't ride bikes. Any suburban shopping center is full of unusable bike racks. The designers heard bike racks were a good idea, but they don't know what a good bike racks is, so when a disreputable bike rack manufacturer or sales company says they have a great bike rack, in it goes, and never gets used. Often they are placed where they can't even be used. Incompetent designers, incompetent bike rack companies. Why doesn't anyone talk to bicyclists who know?

**keenplanner** • 2 years ago

The threat of bike theft is a big reason travelers choose other modes, so this is an important topic to explore! I would have had "security" as a main point, though. Any