
SALT LAKE CITY COUNCIL STAFF REPORT

DATE: July 9, 2010

SUBJECT: **Concrete Replacement/Sidewalk, Curb & Gutter**

- Comprehensive Overview of City Programs
- Proposed approach to replace defective concrete including public way concrete fee program

AFFECTED COUNCIL DISTRICTS: All

STAFF REPORT BY: Jan Aramaki

**ADMINISTRATIVE DEPT.
AND CONTACT PERSON:** Frank Gray, Rick Graham, Lynn Jarman

NOTICE REQUIREMENTS: Not applicable at this time

ADMINISTRATION'S REQUEST:

The Administration requests that the Council hold a policy discussion in response to the Administration's proposal to explore potential funding options to generate funds to meet ongoing concrete replacement needs in the City. In 2006, the City Council held a similar policy discussion regarding challenges in keeping up with defective concrete replacement needs.

According to the Administration, current defective concrete replacement funding allocations cannot keep pace with the existing rate of concrete deterioration and the rising cost of materials. A public way concrete management program is needed to address the current backlog of concrete replacement needs. To assist the City Council's policy discussion, the Administration has provided information on:

- 1) Proposed options to address defective concrete replacement including an option to establish a "public way concrete fee program"
- 2) Current City programs that address deteriorated public way concrete;
- 3) Evaluation of defective concrete that needs replacement;
- 4) Funding needs to replace defective public way concrete.

KEY ELEMENTS: (no ordinance or resolution involved at this time)

While City Code places responsibility for replacement of defective public way concrete on the adjacent property owner, the City is ultimately responsible from a liability standpoint¹.

Salt Lake City has approximately 2 million square feet of deteriorated sidewalk; 754,000 lineal feet of defective curb and gutter; and 3,400 sidewalk accessibility ramps that need to be constructed. City sidewalks, curbs and gutters are falling into the defective category at a rate of two (2) percent annually.

The Administration estimates the following time lines and budgets to complete defective concrete replacement needs given the current level of funding allocations for concrete replacement projects:

- 30 plus years: cost exceeding \$17 million before all defective sidewalk can be replaced in the City;
- 20 plus years: an estimated cost of \$12 million before accessibility ramps will be installed city-wide; and
- 90 plus years: an estimated cost of \$23 million to replace deteriorated curb and gutter *(Note: this number could potentially double funding when additional curb and gutter replacement projects are added to resolve drainage issues. In addition, the City does not have a program that specifically addresses curb and gutter. Projects of this nature are completed in conjunction with Streets Division 50/50 or CIP programs)*

The Administration has provided the Council with three potential options to assist in this complex policy discussion.

1. ADMINISTRATION'S PROPOSED DEFECTIVE CONCRETE REPLACEMENT OPTIONS

OPTION 1		
Increase SAA funding to meet the actual defective concrete replacement needs and maintain funding levels for Street Division's 50/50 program and CDBG sidewalk replacement programs.		
Funding Source	Advantages	Disadvantages
Increase SAA funding (City pays half of construction costs and full design costs) to address actual sidewalk replacement needs within an estimated 10 year period.	<ul style="list-style-type: none">▪ Property owners are generally accepting of SAA process.▪ Defines an area with the objective to eliminate all deteriorated sidewalk sections.▪ Property owners outside a defined SAA still have the option to make a request for defective	<ul style="list-style-type: none">▪ Potential liability issue for both Salt Lake City and individual property owner because property owners have the right to protest an SAA. This can result in some areas of the City not meeting concrete replacement needs.▪ CDBG areas receive sidewalk replacement at

	sidewalk replacement through the Streets Division 50/50 program.	<p>no cost to property owners; therefore SAA funding raises an equity issue.</p> <ul style="list-style-type: none"> ▪ Potential impact to other CIP projects not receiving funding if SAA funding is increased to accomplish replacement in ten years. ▪ During difficult economic times property owners may not have available resources to participate in the Streets Division's 50/50 program, which is voluntary. ▪ Administrative and bonding costs significantly increase the sidewalk replacement costs assessed to property owners through an SAA.
--	--	---

OPTION 2

Hold property owners responsible for 100 percent of costs associated with sidewalk and drive approach replacement, and City 100 percent responsible for curb and gutter replacement.

Funding Source	Advantages	Disadvantages
<ul style="list-style-type: none"> ▪ Property owners hire a private contractor to complete concrete replacement. ▪ Residential property owners cover 100 percent of costs rather than splitting 50/50 with the City. ▪ City funds currently allocated to sidewalk replacement could be applied to curb and gutter. ▪ Potential additional funding for curb & gutter replacement from SAAs or through an increase to Public Utilities drainage utility fee which would 	<ul style="list-style-type: none"> ▪ Property owners to pay for sidewalk and drive approach improvements adjacent to their property. Therefore, City funds presently used for sidewalk replacement become available for other public way improvements. ▪ A new fee for curb and gutter improvements could be generated through a coordinated program between Public Utilities and Engineering. 	<ul style="list-style-type: none"> ▪ An increased cost for the property owner could result in property owners being less inclined to replace concrete. This could result in increased tripping hazards and associated City liability. ▪ There may be additional costs associated with educating property owners that they are responsible for 100 percent of sidewalk and drive approach replacement. ▪ Conflict with State statute which places the responsibility of defective

require an ordinance and policy change		concrete replacement on the local municipality, not the adjacent property owner.
OPTION 3 Administration's Preferred Option Establish a deteriorated public way sidewalk concrete property owner fee		
Funding Source	Advantages	Disadvantages
<ul style="list-style-type: none"> Establish a minimum and maximum annual fee per parcel based upon a timeline identified to accomplish all concrete replacement needs. Fees for commercial properties could be higher than residential properties. Fee is to be determined by proportional benefit (lineal or square foot frontage of public way sidewalk adjacent or property). One scenario is \$30 per year fee assessment would generate an estimated \$1,920,000 per year based on an estimated 64,000 existing parcels in the City. (note: <i>this scenario would not necessarily fund all needs</i>) Amount generated from a higher annual fee program could fund an ongoing program for defective curb and gutter replacement. 	<ul style="list-style-type: none"> This program would accelerate the City's defective concrete replacement needs. This program would generate ongoing revenue for concrete replacement needs in the City. Property owners benefit by paying a minimal fee annually rather than paying a significant cost at the time of construction. The 50/50 program requires payment before construction starts. A five year pay off period associated with an SAA can still impose a financial burden on property owners. Program is supported by a dedicated revenue source. Responsibility for contracting the replacement of defective concrete is placed on the City rather than property owners. Property owners would still have the option of hiring a private contractor, at their own cost, to install the improvements prior to the scheduled replacement and subject to a public way permit being obtained. Fairness issue of CDBG residents receiving 	<ul style="list-style-type: none"> Establishment of a fee program would require public education and communication programs. A billing process would need to be established possibly through Public Utilities. Additional personnel in Engineering may be needed to handle the accounting workload. City ordinance amendment would be required. Property owner may be resistant to additional fees given the current economy Credit program would need to be established for property owners who have recently paid defective sidewalk replacement costs.

	sidewalk replacement without costs would be resolved. All property owners would share sidewalk replacement costs, including properties in CDBG areas	
<p style="text-align: center;">Option 4 Tax Increase</p> <p>A property tax increase involving a General Obligation bond would separate the money from the rest of the general fund sources for a specified period of time. If general property taxes were increased, there is the potential funding could be diverted to other projects. Because there are other General Obligation bonds recently approved by voters, another bond may be difficult for the public to support. In addition, the Council may wish to explore what other City core services and needed improvements could be included as part of this bond, for example, lighting.</p>		

The City Council may wish to discuss how a fee is different from a tax in terms of implementation and public perception.

OTHER POTENTIAL DEFECTIVE CONCRETE REPLACEMENT OPTIONS AS IDENTIFIED BY COUNCIL STAFF

Option 1)

Maintain the status quo: continue with the established concrete replacement program and funding levels (CIP, CDBG, SAA and 50/50 Program). Recognize that this will not address all current and future concrete replacement needs.

Option 2)

When a section of sidewalk slab is raised/lifted beyond the height of one and one-half inch (maximum height to warrant sawcutting), the City generally replaces the sidewalk section with new concrete. Council Member Martin is interested in exploring concrete lifting as a repair option rather than replacing an entire section of defective concrete. The Engineering Division reports they are evaluating this technique as another potential viable concrete repair option to ensure ADA compliance is met.

There are two general methods of lifting concrete: 1) a slurry mixture consisting of a combination of crushed limestone, fly ash, sand and cement mixed with water to a consistency of a thick mortar. As the material begins to flow beneath a slab, it exerts pressure beneath the concrete to raise the slab; and 2) an expandable polyurethane foam product is used which expands after injection and provides pressure needed to lift the slab. This method is relatively new and data regarding use and longevity as well as stability in varying weather conditions is not yet available.

Research of other municipal experience:

Council staff spoke with the Ada County Highway District staff who manage sidewalks and streets for Boise, Idaho. The district has utilized concrete lifting for the past four years with success, according to the staff. This fiscal year, Ada County spent approximately \$50,000 on concrete lifting from a total of \$500,000 allocation for concrete maintenance. Costs are approximately \$2 per square foot to have a section of sidewalk lifted – estimating the costs associated with concrete lifting is half the cost of replacing sections of sidewalk. The process works well on a section which has a crack parallel to the score marks between sidewalk sections, but not as well if a crack is perpendicular to the score mark. If there are numerous cracks in a section, they replace the entire sections of concrete. Ada County has conducted a few test sections using this technique on some sunken sections of curb and gutter, but over time this technique will indicate whether it has long term results.

- **The Council may wish to ask the Administration to further explore this option and to identify potential cost savings for the city associated with this technique versus replacing concrete slabs.**

Option 3)

In 2005, the Council retained a consultant to analyze options for city-wide lighting. This item is pending.

- **The Council may wish to ask about the status of this report to learn of the results.**

If the results prove beneficial for the public, then hiring a consultant to analyze a city-wide defective concrete replacement program with a designated funding source might also be beneficial.

Option 4)

Make it mandatory for Salt Lake City residents to pay 100 percent of costs associated with defective concrete replacement or repairs². The City of Denver uses this approach.

Option 5)

Create a utility fee such as Englewood, Colorado to help residents pay for costs associated with defective concrete replacement/repair. Property owners are charged an average fee of \$8 quarterly on their utility bills but also have the opportunity to “opt out” voluntarily³.

2. CURRENT CITY DEFECTIVE CONCRETE REPLACEMENT PROGRAMS

The following are City programs established and utilized in the installation, replacement and/or repair of defective public way concrete within the City. ⁴

- **50/50 Concrete Replacement Program**

Identified conflicts:

- a. Because program is voluntary some property owners can opt out. Generally not all property owners on a block face who have defective concrete may request sidewalk repair – therefore, not all potential tripping hazards and

barriers to accessibility are repaired.

- b. Annual funding allocations for the 50/50 concrete replacement program do not meet defective concrete replacement needs. Concrete replacement funds are quickly utilized in advance of the next fiscal year.
- c. In the past, several comments have been received in the Council Office regarding the high costs associated with the City's estimates even when the cost is only 50 percent to the property owner. Unit costs charged by the City are determined by evaluating previous competitive bids. Small business contractors that have minimal overhead can more than likely beat the price charged by the City; however a small business contractor is required to have appropriate bonding and insurance to work in the public way which add to costs associated to defective concrete replacement.

- **Street Improvement Projects/Rehabilitation and Reconstruction**

Identified conflict:

Property owners in the SAA and 50/50 Program pay 50 percent of cost. Property owners abutting a CIP street improvement receive the same type of improvement for free (since the City funds 100 percent of the CIP cost). This could be a disincentive for participation in the SAA and 50/50 Programs and creates a fairness issue.

- **Special Assessment Area (SAA)**

Identified conflicts:

- a. Districts are set up through a legal process and SAA work cannot be done outside of the district.
- b. Property owners have the right to protest the creation which could result in some areas of the City not benefiting from needed public way concrete replacement.
- c. The Council during the previous Administration suggested establishing either larger districts or more districts to allow more participation. This would require additional funding.
- d. Bonding and administrative costs are high.
- e. Funding inconsistency in recent years which accelerates the volume of defective concrete needs.

- **Sidewalk Horizontal Sawcutting**

- **ADA Accessibility Ramp construction**

Identified conflict:

Within 25 feet of an ADA ramp improvement, residents receive new sidewalk at no cost. This could be a disincentive for property owners to take responsibility for sidewalk repair.

- **Community Development Block Grant (CDBG)**

Identified conflict:

Equity issue – it has been the policy of the City that in areas that are eligible for CDBG funding, utilization of an SAA is generally not considered. 50/50 program is available to property owners in CDBG eligible areas but they also have the option of sidewalk replacement using CDBG funds without charge (although they may choose to use the 50/50 program for drive approaches). Therefore Residential property owners in CDBG eligible areas benefit from defective sidewalk replacement at no cost, while residential property owners outside of a CDBG eligible area would pay 50 percent of the replacement cost.

- **Streets Division's Repair/Replacement of Damaged Concrete**

Identified conflict:

Complaints concerning safety issues relating to sections of defective concrete are followed up by City officials to determine the level of impact of the defective concrete. Once a property owner is made aware that a complaint has been received regarding defective concrete adjacent to the property owner's property and if the property owner is aware that under certain circumstances the City will pay the cost of the repair as long as the property owner refuses to take responsibility for concrete replacement, this could set a precedence and could influence a property owner not to take responsibility.

3. EVALUATION OF DEFECTIVE CONCRETE STILL OUTSTANDING THAT NEEDS REPLACEMENT:

POLICY CONSIDERATIONS

1. **Defective Sidewalks:** A majority of concerns expressed by residents regarding defective public way sidewalk involve public safety and/or cost of replacement. The Administration reports that it is common occurrence to encounter property owners who are unaware that City ordinance places the responsibility of sidewalk repairs/replacement on them.

The Administration provides an inventory of public way construction sidewalk still needing to be completed as follows:

Inventory of Public Way Construction Sidewalk Still Needing to be Completed		
Category	Square Feet	Value
Existing Sidewalk	20,000,000	\$200,000,000
Defective Sidewalk		
Not tree root related	1,627,000	\$ 11,630,000
Tree root related	385,000	\$ 3,850,000
Sidewalk beautification areas	39,000	\$ 1,950,000
Total Defective Sidewalk	2,051,000	\$17,3430,000
Areas without sidewalks	1,475,000	\$16,230,000
Total Sidewalk Need	3,526,000	\$33,660,000 ⁵

The Administration reports that often times when property owners are informed of their responsibility to replace defective concrete sections of sidewalk adjacent to their properties, responses from property owners include the following concerns:

- i. Property owners question why they are responsible when the damage is a result of tree roots uplifting from a City tree in the park strip adjacent to their property.
- ii. Property owners question why they are responsible for defective concrete replacement when the City owns the public way sidewalk. Some property owners say taxes should cover the cost of sidewalk and curb and gutter repair.
- iii. There is a question of fairness: for example, a resident in CDBG area or capital improvement (CIP) area receives concrete replacement adjacent to their property at no cost, while another resident pays 50 percent of construction to replace sidewalk.

B. Accessibility Ramps: Residents recognize that the City installs accessibility ramps at street intersections, but is sometimes of the opinion that the City is not fully addressing all ADA needs. For example, uneven sections of sidewalk create safety challenges for individuals in wheelchairs. Salt Lake City is the responsible maintaining accessible public way sidewalk.

There is no specific time frame required for the City to complete accessibility ramps. However, the City must demonstrate there is an existing viable program for the installation of accessibility ramps and the elimination of barriers in meeting ADA requirements.

Due to the City's strong commitment to meeting federal ADA requirements, the Administration says the City's main focus regarding concrete maintenance "relates to defective sidewalk repair and accessibility ramp construction "to provide a safe and barrier free environment for the public. Seventy-eight (78) percent of the City's total ADA ramp construction need has been completed.

Generally, public way accessibility ramps are installed at all street corners in conjunction with a sidewalk replacement SAA project. The City absorbs all costs associated with the construction of sidewalk access ramps. Some ramps previously installed are now non-compliant due to federal requirements regarding ramp design changes in recent

years and ramps continue to show signs of deterioration through the natural aging process. The current sidewalk replacement program creates a challenge for the City because the lack of City resources makes it difficult to complete ADA requests in a timely manner. Funding was not allocated in 2008 and 2009 for the sidewalk Special Assessment Area (SAA) program. However, based upon the funding level prior to 2008, the City was able to replace approximately 100,000 to 112,000 square feet of defective sidewalk each year.

Public Way Accessibility Ramp Construction Need		
Category	Ramps	Value
Existing accessibility ramps	11,825	\$44,935,000
Locations needing ramps	3,351	\$12,734,000 ⁶

3. **Defective curb and gutter replacement** is an extensive citywide challenge with limited City funding. The City does not have an effective program that specifically addresses curb and gutter, resulting in significant water and drainage challenges. An estimated \$22 million is needed to address all defective curb and gutter problems. Annually, the City accomplishes the replacement of 8,000 to 9,000 lineal feet of defective curb and gutter. Funding for drainage problems and funding for defective curb and gutter do not appear to be in line with each other to establish a fully-completed functioning project. For example, when a new storm drain is installed with allocated funds from the Drainage Utility Fee, funds cannot be used to replace defective curb and gutter. Not properly addressing drainage issues during curb and gutter replacement can result in ponding problems such as occurred in the Rose Park and Glendale areas. In these cases, extensive street and storm drain reconstruction was needed at significantly higher costs rather than simply replacing isolated sections of curb and gutter.

Additionally, the Public Utilities Department is responsible for replacement, repair, and payment for the curb & gutter ten feet on either side of a catch basin. For repairs located outside the ten feet, they review plans to make sure they are properly engineered.

- **The Council may wish to ask for an analysis from the Administration to determine the linear feet of curb and gutter that would fall under the responsibility of Public Utilities. (Even though streets are a major source of water runoff, streets are exempt from a storm water fee because the streets are maintained by the City.)**

Defective Curb and Gutter Replacement Construction Need		
Category	Lineal Feet	Value
Existing curb and gutter	4,750,000	\$199,500,000
Defective curb and gutter	754,000	\$ 22,620,000
“no curb & gutter” location	1,109,000	\$ 38,815,000
Total curb and gutter need	1,863,000	\$ 61,435,000 ⁷

4. **Public Way Drive Approach Adjacent to Private Property:** Property owners are provided the option of replacing defective drive approaches in conjunction with a sidewalk replacement SAA and the Street Division’s 50/50 concrete replacement

program, but are responsible for paying the full costs for the drive approach. However, driveways adjacent to street reconstruction projects are replaced without charge to the property owner, thus creating another equity issue.

Public Way Drive Approach Construction Need		
Category	Square Feet	Value
Existing drive approaches	7,680,000	\$ 99,840,000
Defective drive approaches	500,000	\$ 6,500,000 ⁸

4. FUNDING NEEDS TO COMPLETE DEFECTIVE PUBLIC WAY CONCRETE

According to the Administration, the average square foot cost for sidewalk replacement has increased 80 percent within the last five years even though present economic conditions have resulted in favorable bid prices. Today's construction costs compared to 2004 prices show a significant increase in cost for the same volume of work.

Funding Source	2004 construction costs	Today's construction costs
Sidewalk Replacement SAA	\$400,000	\$720,000 ⁹
CDBG funding	\$200,000	\$360,000

- **Council Members may wish to ask despite the current economic conditions why have costs significantly increased since 2004.**

DEFECTIVE CONCRETE REPLACEMENT PROGRAMS USED BY OTHER CITIES

The Administration reports defective concrete in the public way is a concern for all cities especially in meeting the requirements of the American with Disabilities Act. Council staff's research of other cities support this statement. Many of the cities researched have similar established concrete replacement programs such as the City's CIP, SAA and 50/50 concrete replacement programs.

In addition, the Administration's findings indicate that cities that cover the costs of defective concrete replacement through taxation or fees. For example, Denver has established a program that assesses property owners an annual sidewalk replacement fee based on the square feet of public way concrete adjacent to their property. The Administration reports that this fee based program has proven to provide a dedicated revenue source thereby decreasing their liability and providing Denver a viable concrete replacement program.

Council staff conducted further research on Denver. According to Denver officials, it is the only municipal city in the area that requires property owners to replace and/or repair defective concrete at their cost upon notice from the city. Denver has performed minimal concrete lifting, but reported that on occasion when core plugs are replaced a safety hazard is created. Their findings indicate that the cost associated with concrete lifting exceeded the costs

to replace concrete slabs.

As noted, Denver property owners pay the full cost associated with defective concrete replacement through the City's annual assessment. If the city receives a complaint or notices sidewalk areas that meet the tripping hazard standard (3/4 inch raised concrete), then the property is notified to repair the concrete within 45 days notice to hire a private contractor to either utilize sawcutting to address tripping hazards or to make necessary concrete replacement repairs. A permit must be obtained and repair/replacement work is inspected by the city. If property owners are experiencing financial hardship and meet the threshold to qualify for city assistance, the City takes on the responsibility of replacing the defective concrete. The site is placed on a pending list and Denver City generally takes about three years to complete the replacement with current funding allocations.

Denver reports that although some property owners complain about having the responsibility for concrete replacement in the public way, property owners generally comply because the costs associated with non-compliance exceeds the costs associated with sidewalk replacement. *Denver City Code* states that failure to comply may result in criminal prosecution and the needed repair work may be done by the city at the expense of the property owner. If this occurs, the city bills the property owner for the expense of the repairs and/or replacement costs. If property owner fails to pay within 30 days, a lien is placed on the property. Property owners are required to use concrete from a plant, mixing own concrete is not permitted.

Council staff researched other cities to find out general types of programs/methods used to replace defective concrete; funding methods other cities use to fund defective concrete projects; and percentage of costs paid by property owner and city.

Bluffdale, UT	For approximately five years, Bluffdale has utilized concrete lifting for sidewalk, driveway approaches and curb and gutter sections that are displaced. They utilize an outsourced sawcutting contractor when concrete lift is minimal. Funding for defective concrete is allocated out of the general fund or through capital projects. Concrete repairs are paid by the City, except contractors are required to provide a one year warranty on new developments. Additionally, if the property owner is found to have caused the damage through their actions, they are required to pay for the repair or replacement.
Englewood, CO	<p>Englewood City created a concrete utility and concrete utility enterprise fund in 1997 to address concrete maintenance. On an average, city residents are charged a user fee of approximately .087 cents per square foot of concrete located within the public way, "between the back of sidewalk on one side of the street and the back of sidewalk on the other side of the street." Concrete utility fee is reviewed annually and set from time to time by resolution of the City Council. An average charge of a quarterly \$8 fee is charged to property owners' utility bill. The City is a full participant in the concrete utility paying the same fee as other participants based on the area of infrastructure concrete and concrete adjacent to city facilities. For corner properties, the city contributes 70 percent of the fee for secondary frontages.</p> <p>If a property owner's sidewalk area is identified by the City as needing replacement/repair, property owners who participate in the utility user fee program will have replacement/repair performed by the city. However, when a</p>

	<p>property owner participating in the program has concrete replacement work performed, the property owner is required to remain in the program for at least another seven years.</p> <p>Property owners are given the opportunity to voluntarily opt out at any time if they have yet to have concrete replacement. Once a property owner opts out of the program, they become responsible for full costs associated with concrete replacement/repair by hiring a private contractor. If a property owner does not comply with required concrete replacement, the city performs the work at the expense of the owner and places a lien on the owner's property.</p> <p>According to the City of Englewood, the percentage of residents who opt out is less than 10 percent. If a resident claims financial hardship, there is a process to allow the property owner exemption from cost obligations. The utility fee program includes the costs associated with sidewalk, curb and gutter, and driveway apron replacement. The city claims this program has been successful in providing an affordable method for concrete replacement.</p>
Reno, NV	<p>If a section of sidewalk is damaged by a tree or some other cause on city property, the city will pay for replacement. If, however, concrete damage is from the property owner's side, they are responsible for paying to replace the concrete. CDBG funds pay for pedestrian ramps and road projects funding pay for curb and gutter and sidewalks. If an SAA is created, city pays for curb and gutter and the property owners pay for sidewalks with an assessment payable over a maximum of 10 years added to property taxes.</p> <p>Funding allocation covers a minimal percentage of the concrete that needs attention.</p>
Spokane, WA	<p>Does not have a defective concrete replacement fund. For the more disadvantaged neighborhoods, CDBG monies are allocated for neighborhood groups to determine defective concrete that gets replaced. As in Salt Lake City, demand far outpaces the funding allocations.</p> <p>When a tree, physical activity like construction or heavy truck delivery, or frost causes a hazardous situation, a complaint can be initiated. The complainant reports the problem area. The property owner is given a notice of the problem and a reasonable time to deal with defective concrete. If compliance is not met, property owners are issued a citation; and, they still have to complete repair/replacement and a possible fine.</p> <p>City relies upon the good will of the residents to replace/repair defective concrete.</p>

CC: David Everitt, Cindy Gust-Jenson, , Frank Gray, Rick Graham, Mary DeLaMare-Schaefer, Jeff Niermeyer, Lynn Jarman, Jim Lewis, John Naser, Luann Clark, Dan Noziska, Joyce Valdez, Shawn McDonough, Michael Stott, Lehua Weaver, Karen Halladay, Jennifer Bruno, Sylvia Richards, Nick Tabet, Cindy Lou Trishman, Quin Card, Brian Fuller

¹ Administration Transmittal Memorandum, Appendix 1

² City Council staff report page 11.

³ City Council staff report, page 12.

⁴ Administration Transmittal Memorandum, Appendix 2.

⁵ *Note from Administration: "values are based on \$10 per SF for tree root and not tree root related, \$50 per SF for beautification areas (exist in Central Business District locations mainly in downtown – from previous discussions, after the City Creek project is completed would be an appropriate time to address downtown sidewalk beautification needs), and \$11 per SF for "no sidewalk" locations. Existing sidewalk is a GIS approximation"*

⁶ *Note from Administration: accessibility ramp values are based on \$3,800 per ramp*

⁷ Note: The Administration states the Street Pavement Management Program currently identifies the locations of defective curb and gutter needs, inventorying one-seventh of the total street network annually. The inventory focuses on collecting street pavement distress information. Therefore a true condition and cost analysis of defective curb and gutter will require a city wide curb and gutter inventory to identify replacement costs

⁸ *Note from Administration: "drive approach values are based on \$13 per SF*

⁹ Council staff report, Attachment 1.

**ATTACHMENT 1 OF
COUNCIL STAFF REPORT**

	CDBG Funding	American Recovery & Reinvestment Act (ARRA)	CIP Funding Horizontal sawcutting/funds also used for sidewalk issues on streets programmed for rehabilitation/reconstruction.	SAA funds	50/50 and City Work (*note)	Total City & Federal Funding for Sidewalk Replacement	Project Completion (**Note)	Percent of Total Need
2008-09								
Sidewalk Replacement	\$309,000	\$0	\$175,000	\$0	\$335,831	\$819,831	Estimated 25,000 SF	1.20%
ADA Ramps	\$400,000	\$0	\$225,000	\$0	\$681,839	\$1,306,839	140 Ramps	4.00%
Total	\$709,000	\$0	\$400,000	\$0	\$1,017,670	\$2,126,670		
2009-10								
Sidewalk Replacement	\$47,700	\$243,281	\$200,000	\$0	\$308,178	\$799,159	Estimated 23,000 SF	1.10%
ADA Ramps	\$32,435	\$252,000	\$300,000	\$0	\$625,694	\$1,210,129	130 Ramps	4.00%
Total	\$80,135	\$495,281	\$500,000	\$0	\$933,872	\$2,009,288		

*Note: Numbers are for expense allocations, doesn't include overhead or equipment usage or reflect the costs paid by property owners.

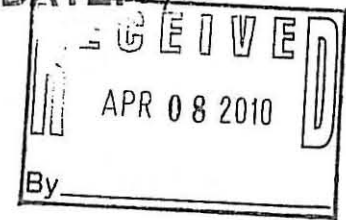
**Note: CIP Funding for horizontal sawcutting is not measured in square feet since it is not a replacement of concrete but rather elimination of tripping hazards -- \$200,000 eliminates approx. 10,000 tripping hazards

RECEIVED APR 21 2010

RICHARD GRAHAM
PUBLIC SERVICES DIRECTOR

SALT LAKE CITY CORPORATION
DEPARTMENT OF PUBLIC SERVICES
DIRECTORS OFFICE

SCANNED TO: *maye*
SCANNED BY: *maye*
RALPH BECKER
DATE: *4/8/2010 - 9:20am*



CITY COUNCIL TRANSMITTAL

David Everitt, Chief of Staff

Date Received: *04/08/2010*
Date Sent to Council: *04/21/2010*

TO: JT Martin, Chair
Salt Lake City Council

DATE: April 6, 2010

FROM: Rick Graham, Director *ry*
Public Services Department

SUBJECT: Public Way Asset Management Funding Program: Sidewalks, Curb and Gutter, Accessibility Ramps, and Drive Approaches

STAFF CONTACT: Lynn Jarman, Capital Projects Planning, Budgeting, and Programming Manager (Phone: 801-535-6016, Email: lynn.jarman@slcgov.com)

DOCUMENT TYPE: Discussion Paper (Briefing for Council Regarding Infrastructure Condition and Proposed Public Way Concrete Funding Program)

RECOMMENDATIONS: Develop policy regarding public way concrete condition expectations and corresponding funding levels, and evaluate proposed new funding program options regarding the reconstruction and maintenance of public way concrete.

BUDGET IMPACT: Budget impact will depend on policy decisions regarding infrastructure condition expectations and possible implementation of a new funding program for public way concrete maintenance.

BACKGROUND/DISCUSSION: Funding presently allocated to the City's public way asset management program is inadequate to meet the overall maintenance need. Salt Lake City has approximately 2,000,000 square feet of deteriorated sidewalk, 754,000 lineal feet of defective curb and gutter, and 3,400 accessibility ramps that still need to be constructed. At the present funding level, over 30 years will pass before all the deteriorated sidewalk in the City can be

LOCATION: 451 SOUTH STATE STREET, ROOM 138 SALT LAKE CITY, UTAH 84111-3104

MAILING ADDRESS: PO BOX 145469, SALT LAKE CITY, UTAH 84114-5469

TELEPHONE: 801-535-7775 FAX: 801-535-7963

WWW.SLCGOV.COM

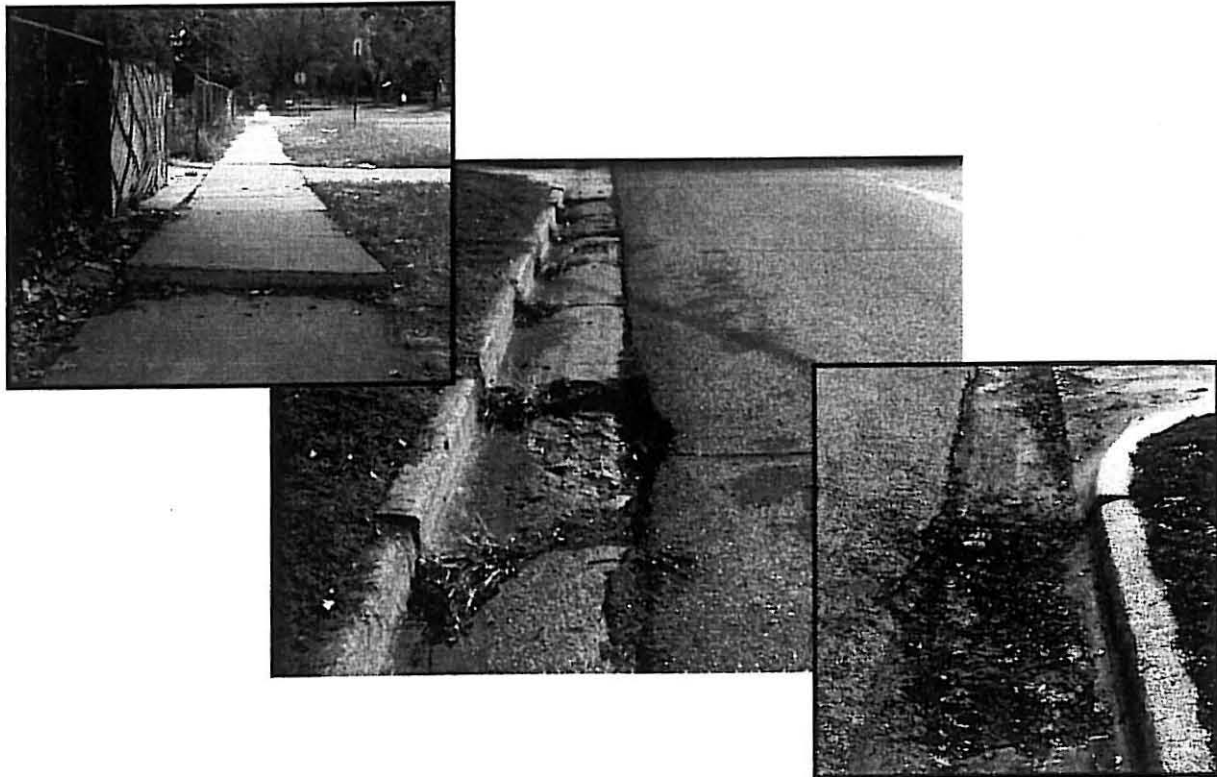
 REPRODUCED BY PERMIT

addressed at a cost exceeding \$17,000,000. Over 20 years will pass before accessibility ramps will be installed citywide at an approximate cost of \$12,000,000. The City does not have a consistent program dedicated to the replacement of deteriorated curb and gutter; therefore, deterioration of this public way asset is ongoing and growing in volume. Approximately \$23,000,000 is presently needed to replace deteriorated curb and gutter; however, this number could easily double to cover additional curb and gutter replacement needed to address drainage issues. The ongoing deterioration of public way concrete is a significant issue in Salt Lake City. This discussion paper presents an option for generating funds through a public way concrete fee program.

PUBLIC PROCESS: N/A

Salt Lake City Public Services

**Public Way Asset Management:
*Sidewalks, Curb and Gutter,
and Drive Approaches***



Discussion Paper

March 2010

Salt Lake City Public Services

Public Way Asset Management Briefing Paper: *Sidewalks, Curb and Gutter, Street Pavements and Bridges*

The purpose of this document is to provide information regarding the current condition of Salt Lake City's public way concrete, discuss funding issues, and present funding options regarding the management of these critical public way assets. This discussion paper is presented in 4 major sections: 1) Public Way Concrete Condition Statement and Funding Issues, 2) Deteriorated Public Way Concrete Funding Options, 3) Summary and Recommendations, and 4) Appendices. Funding for the replacement of deteriorated public way sidewalk is the main focus of this paper, since decisions regarding this program will impact all other public way concrete program decisions.

PUBLIC WAY CONCRETE

Condition Statement:

In 1989, the City Council adopted the present ordinance regarding the replacement of defective public way concrete. The definition of defective concrete is provided in this ordinance (see Appendix No.1). Although the ordinance places responsibility for replacement of defective public way concrete on the adjacent private property owner, the ultimate responsibility falls on the City; therefore, the following programs have been established and utilized to facilitate the installation, replacement or repair of defective public way concrete (see Appendix No.2 for detailed discussion):

- 1) Permit to Work in the Public Way – Adjacent Private Property Owner Hires a Contractor
- 2) Street Maintenance Division's 50/50 Public Way Concrete Replacement Program
- 3) Capital Improvement Program (CIP) Projects:
 - Street Rehabilitation/Reconstruction
 - Defective Sidewalk Special Assessment Areas (SAA)
 - Sidewalk Horizontal Sawcutting
 - ADA Accessibility Ramp Installation and Repair
- 4) Community Development Block Grant Projects (CDBG):
 - Street Rehabilitation/Reconstruction
 - Defective Sidewalk Replacement
 - ADA Accessibility Ramp Installation and Repair
- 5) Street Maintenance Division's Repair and Replacement of Damaged Concrete (Not 50/50 Eligible)
- 6) Public Way Improvements Required in Conjunction with Private Development

Most citizen concerns regarding defective concrete fall into two main categories: public safety and cost of replacement. Property owners are very concerned about the deterioration of public way concrete in their neighborhoods; however, they are generally unaware of the fact that City ordinance places the responsibility for repair on the adjacent private property owner.

Asset management data indicates Salt Lake City has approximately 20,000,000 square feet of sidewalk; 4,750,000 lineal feet of curb and gutter; 7,680,000 square feet of concrete drive approaches; and over 11,800 public way accessibility ramps. Over 2,000,000 square feet of defective sidewalk exists and approximately 3,350 accessibility ramps still need to be constructed. Approximately 754,000 lineal feet of defective curb and gutter exists and approximately 500,000 square feet of defective concrete exists in drive approaches. Appendix 3 provides a summary of the City's public way concrete assets and construction needs.

The City's major focus regarding public way concrete maintenance relates to defective sidewalk repair and accessibility ramp construction to ensure a safe and barrier free environment for pedestrians. The driving force behind this focus on accessibility comes from the City's strong commitment to meeting federal ADA requirements. At the funding level that existed prior to the recent decisions not to fund the 2008 and 2009 sidewalk special assessment area (SAA) projects, approximately 100,000 to 112,000 square feet of defective sidewalk was replaced each year. A comparison of previous and recent defective concrete survey statistics indicates the volume of sidewalk falling into the defective category increases by 3% to 4% per year. Based on this deterioration rate and the existence of approximately 2,051,000 square feet of defective sidewalk, the actual annual reduction in deteriorated public way

sidewalk is 2% at best. At this replacement rate and at the funding level that existed prior to the recent sidewalk SAA cancellations, more than 30 years will pass before all defective sidewalk can be addressed. This timeline estimate does not take into consideration the general rule that deterioration rates tend to accelerate over time.

The City has implemented a horizontal sawcutting program that addresses sidewalk displacements less than one and one-half inches. This maintenance strategy extends the functional life of individual sidewalk sections; however, in most cases, specifically regarding tree root uplifting, displacement re-occurs within 2 to 5 years. Continued uplifting eventually requires replacement of the defective sidewalk section. Approximately 10,000 sidewalk tripping hazards can be mitigated each year through horizontal sawcutting projects.

Over 11,800 accessibility ramps have been installed in the public way, representing 78% of the City's total ramp construction need. Approximately 3,350 ramps still need to be constructed, which will require a financial commitment of approximately \$12,700,000. At the present rate of expenditure, over 20 years will pass before all of the remaining ramps can be constructed. Since federal requirements regarding ramp design have changed in recent years, long range planning will also need to include replacement of non-compliant ramps, and replacement or repair of ramps exhibiting deterioration through the natural aging process.

Curb and gutter deterioration is a citywide problem. Very little funding has been allocated for the replacement of defective curb and gutter, which has resulted in considerable citizen concern, especially at locations where conveyance of runoff is impeded by defective concrete. Deteriorated curb and gutter results in ponding problems that range in severity from nuisance to extreme. Approximately 754,000 lineal feet of curb and gutter is defective; however, this figure does not address the additional curb and gutter replacement needed to alleviate drainage issues. Resolving drainage issues in conjunction with defective curb and gutter replacement could possibly double the stated figure. At this time, replacing the existing 754,000 lineal feet of defective curb and gutter would cost well over \$23,000,000. The City does not have a program that specifically addresses defective curb and gutter; repair and replacement of this public way asset occurs mainly in conjunction with CIP street improvement projects and through the Streets Division's 50/50 program. 8,000 to 9,000 lineal feet of defective curb and gutter are currently being replaced each year. The majority of this work does not address the overall drainage issues on an entire block face. In many cases, resolution of a drainage problem at one location results in an aggravated problem for a neighboring property. At the present level of replacement, over 90 years will pass before all defective curb and gutter could be replaced, not including additional replacement needed to resolve drainage issues. Addressing drainage issues will extend this time frame significantly.

Replacement of defective drive approaches is accomplished for the most part in conjunction with sidewalk replacement special assessment areas (SAA's) and through the Streets Division's 50/50 concrete replacement program. Although sidewalk replacement SAA's are primarily established to eliminate pedestrian accessibility barriers and tripping hazards, the City has included funding in these projects to provide property owners the option of replacing defective drive approaches. Due to limited funding, defective curb and gutter replacement and resolution of associated drainage problems cannot be accomplished through SAA sidewalk replacement projects.

Funding Issues:

Replacement of Defective Sidewalk and Installation of Accessibility Ramps

In the last five years the average square foot cost for sidewalk replacement has increased 80%, despite the fact that present economic conditions resulted in favorable bid prices at the end of the five year evaluation period. In 2004, the City general fund budget for the Sidewalk Replacement SID was \$400,000. \$720,000 would be needed to accomplish the same volume of work at today's construction costs. The budget approval for the 2007/2008 Sidewalk Replacement Special Assessment Area (SAA), formerly referred to as a Special Improvement District (SID), was \$550,000 from the general fund and \$550,000 from property owners. Funding for sidewalk replacement SAA's was not approved in the 2008/2009 and 2009/2010 fiscal years. CDBG funding for sidewalk replacement in 2004 was \$200,000. Replacement of an equivalent amount of defective sidewalk today would require CDBG funding approval of \$360,000. Approved CDBG funding in 2008/2009 grant was approximately \$309,000, and \$47,700 was approved in 2009/2010. Sidewalk replacement funding in 2009/2010 also included \$243,281 in American Recovery and Reinvestment Act (ARRA) funding.

Assuming a 100 year life for public way sidewalk, which far exceeds industry standards, a viable sidewalk replacement program would require replacement of 1/100 of the total sidewalk network per year. A 100-year program would involve replacement of approximately 200,000 square feet of defective sidewalk per year, representing approximately 10% of the existing defective sidewalk. Presently, the City replaces approximately 108,000 square feet of defective sidewalk per year. Based on a 3% annual defective concrete increase and the present average sidewalk

replacement rate of 100,000 square feet per year, over 30 years will pass before all defective sidewalk will be replaced.

The average cost for constructing an access ramp has increased approximately 60% over the last five years. Approximately \$12,700,000 is needed to complete the installation of approximately 3,350 accessibility ramps. The City's public way accessibility ramp transition plan defines all locations needing ramp construction, including a prioritization rating. The 3,350 ramp figure does not include replacement of older, non-compliant ramps as determined by the most recent federal guidelines. Eventually, the City's non-compliant ramps will need to be replaced to meet current standards. In the 2008/2009 fiscal year, CDBG funding of \$400,000 was approved and \$225,000 was approved through the CIP general fund for ramp construction. In 2009/2010, \$300,000 was approved through the CIP general fund, \$32,435 was approved through CDBG, and ARRA provided an additional \$252,000 for ramp construction. Based on recent funding levels for ramp construction, over 20 years will pass before the remaining ramps can be installed. The City's public way accessibility program will require funding on an ongoing basis to complete new ramp installations, replace ramps that no longer meet federal guidelines, and repair ramps as the network ages.

Replacement of Defective Curb and Gutter

Replacement of approximately 754,000 lineal feet of defective curb and gutter could cost the City over \$23,000,000. This figure could easily double to cover additional curb and gutter replacement needed to resolve drainage problems. The City does not have an effective deteriorated curb and gutter replacement program, nor has a formal inventory been made to define drainage issues that may be related to the existing defective curb and gutter. At this time, defective curb and gutter locations are being identified through the Street Pavement Management program. This program inventories 1/7 of the total street network per year. The primary focus of the inventory is to collect street pavement distress information; therefore, the curb and gutter inventory data is not at the level needed to perform a true condition and cost analysis of this public way asset. A citywide curb and gutter inventory is needed to better define replacement costs.

DETERIORATED PUBLIC WAY CONCRETE FUNDING OPTIONS

A significant long-range financial commitment is needed to address the City's public way concrete asset management needs. Options discussed in this section are focused on *defective sidewalk* replacement, since decisions regarding funding for this program will impact funding decisions for all other public way concrete. The installation of curb and gutter, sidewalk, and accessibility ramps where such public way improvements have not previously existed is not addressed in this document. This issue warrants a separate evaluation. At the present time, sidewalk replacement occurs mainly through Sidewalk Replacement Special Assessment Areas (SAA), CDBG funded sidewalk replacement projects (restricted to CDBG eligible areas), and the Streets Division's 50/50 Concrete Replacement Program. The Streets Division's program is voluntary and non-contiguous regarding replacement locations, which means only one property owner on a block face containing several defective sidewalk locations could request sidewalk repair, leaving several potential tripping hazards and barriers to accessibility. CDBG funding is limited and inadequate to address all the defective concrete in CDBG eligible areas of the City. SAA's can be protested by property owners, bonding and administrative costs are high, and SAA funding has not been consistent in recent years. The present sidewalk replacement program makes expeditious response to ADA requests difficult, creating a liability issue for the City. Also, fairness concerns are often expressed by property owners who pay for sidewalk improvements in contrast to property owners living in CDBG eligible areas that receive the same public way improvements for free.

Significant concerns exist regarding the present funding mechanism for deteriorated sidewalk replacement. The following discussion presents possible funding options regarding revision or replacement of the existing sidewalk replacement program. Three basic approaches are presented: 1) City and property owners share the replacement costs (SAA's, Streets Division's 50/50 program), 2) Property owners pay 100% of replacement cost, 3) Property owners pay a public way concrete replacement fee or tax to cover replacement costs. Various combinations of these basic funding concepts could occur to address overall defective concrete funding needs. Funding options are presented as a decision-making tool, not as exact program recommendations, in the evaluation of this complex issue.

Deteriorated Sidewalk Replacement Options

Sidewalk Program Option No. 1:

**Increase Special Assessment Area (SAA) Funding to Meet Actual Need
(Streets Division's 50/50 Program and CDBG Sidewalk Replacement Continue without
Revision):**

Funding:

Increase SAA funding to address actual sidewalk replacement need (consider addressing all deteriorated sidewalk within a 10 year period)

Advantages:

- The Special Assessment Area process is well established and generally well accepted by property owners.
- SAA's focus on specific areas with the objective of eliminating all deteriorated sidewalk within a defined area.
- Streets Division's 50/50 Program would allow property owners outside defined SAA's to request replacement of defective sidewalk.

Disadvantages:

- The formal SAA approval process provides property owners with the right of protest, which could prevent some areas in the City from ever receiving needed concrete repairs, creating a liability for both the property owner and the City.
- Fairness concerns regarding improvement costs would exist with this option, since CDBG sidewalk installation would be accomplished without property owner cost participation.
- Increased funding for the City portion of the SAA would be significant, which could impact other CIP program needs.
- The Streets Division's 50/50 program is voluntary, which makes it subject to the general economic conditions of the time.
- Administrative and bonding costs significantly increase the sidewalk replacement assessment to property owners.

Sidewalk Program Option No. 2:

**100% Property Owner Responsibility for Sidewalk and Drive Approach Replacement Costs,
and 100% City Responsibility for Curb and Gutter Replacement Costs**

Funding:

Property owners could meet their civic responsibility by hiring a contractor to replace the defective concrete or request the City's concrete crews perform the work. The Streets Division's concrete crews would continue their voluntary concrete replacement program only at 100% residential property owner cost instead of a 50/50 split (business property owners already pay 100% of the replacement cost). City funds presently allocated to sidewalk replacement could be applied to curb and gutter work. Additional funding for curb and gutter replacement could come from SAA's or through an increase to Public Utilities drainage utility fee. Obtaining curb and gutter funds through the drainage utility fee would require an ordinance and policy change.

Advantages:

- Property owners would pay for public way sidewalk and drive approach replacement adjacent to their property, allowing City funds presently used for this work to be reallocated to other public way improvement needs. In general, property owners are more receptive to paying for sidewalk and drive approach improvements than curb and gutter.
- A coordinated program, including a new fee for curb and gutter improvements, could be established with Public Utilities to generate additional funding.

Disadvantages:

- 50/50 concrete replacement cost sharing has been available to residential property owners for many years. The increased cost to property owners could result in less deteriorated concrete replacement, increasing tripping hazards and associated City liability.
- Property owner notification regarding their responsibility to replace defective public way sidewalk and drive approaches would be a significant cost.
- State statute places the responsibility for defective public way concrete replacement on the local municipality, not the adjacent private property owner. This option could require a revision to State statute.

Sidewalk Program Option No. 3:

Deteriorated Public Way Sidewalk Property Owner Fee

Funding:

A fee assessment of approximately \$30 per year per property would generate approximately \$1,920,000 per year based on an estimated 64,000 parcels that presently exist within the City limits. A set fee per parcel could be established or fees could be determined by proportional benefit, according to either lineal or square front footage of public way sidewalk adjacent to the property. A set minimum and maximum fee per parcel could also be established. The set fee would be based on the desired annual allocation for sidewalk replacement, such as a ten-year program to replace all deteriorated concrete. The maximum and minimum fees for commercial properties could be at a higher level than residential properties. Appendix 4 provides examples of possible fees based on square foot, lineal foot, and per parcel options.

Advantages:

- Property owners would pay a small amount annually instead of paying what could possibly be a significant cost at the time of construction.
- The Streets Division's 50/50 program requires payment before construction starts, which can prohibit participation by those on fixed incomes. SAA's have a five-year pay off period at very reasonable interest rates; however this can still place a financial burden on some property owners.
- The City would be responsible for contracting the replacement of defective concrete; property owner involvement would be minimized.
- Property owners would have the option of hiring a contractor at their own cost to install the improvements prior to the scheduled replacement (public way permit required).
- CDBG funding would still facilitate sidewalk replacement in qualifying areas; however, the fairness issue would no longer exist regarding some property owners paying for improvements and others receiving the improvements without charge, since all property owners would pay the public way sidewalk assessment.

Disadvantages:

- Establishment of a fee program would require significant effort, including a public education and communication program.
- A billing process would need to be established. This could possibly be handled through Public Utilities; however, accounting transactions handled by this department would increase significantly, possibly requiring personnel and budgeting adjustments.
- City ordinance revisions would need to be developed, reviewed, and passed.
- Property owner resistance may be encountered regarding increased costs for City services.
- Property owners that have recently replaced defective sidewalk would not want to pay a fee without some adjustment. A credit program regarding recently replaced sidewalk would need to be established. Appendix 4 provides an example of a possible 5 Year Exemption Plan.

Deteriorated Curb and Gutter and Drive Approaches

The City does not have a viable funding program to address defective curb and gutter and drive approaches. Replacement presently occurs in conjunction with CIP street projects and through the Streets Division's 50/50 program. Over \$23,000,000 is presently needed to replace the existing defective curb and gutter. This figure could easily double if additional curb and gutter replacement is required to resolve drainage problems. The city could fund a new curb and gutter program with funding that was previously budgeted for sidewalk replacement, if a fee or tax is established to address defective sidewalk replacement. All costs of the new curb and gutter program could be absorbed by the City or shared with property owners through a 50/50 type program. Deteriorated curb and gutter replacement could also be included in a fee program with sidewalk. The increased fee could cover all public way concrete. For example, a residential property that has a 50 foot frontage would pay a sidewalk fee of approximately \$40 per year at \$0.20 a square foot, and a viable program that would also include curb and gutter would double this amount to \$80 per year. This would not totally fund a curb and gutter program due to the extensive costs associated with resolving drainage problems; however, this amount would fund a viable ongoing program.

The replacement of deteriorated drive approaches could also be included in the above stated sidewalk replacement options or the combined program involving sidewalk and curb and gutter. Drive approaches could also be viewed as convenience providing access to private property with all costs related to the approach being the responsibility of the property owner.

SUMMARY AND RECOMMENDATIONS

The replacement of defective public way concrete is a major concern in cities all across the United States, especially in light of the recent Supreme Court decision that states city sidewalks are subject to Title II of the Americans with Disabilities Act. Concrete replacement is being addressed in a variety of ways. Some cities have accepted complete responsibility for replacement of defective public way concrete; whereas, other cities place the entire burden on the adjacent private property owner. In general, those cities accepting responsibility for concrete replacement generate funding through taxation or fees, and cities placing the responsibility on the adjacent private property owner have established programs similar to our CIP special assessment area (SAA) or the Streets Division's 50/50 concrete replacement program. Concrete replacement through an SAA is restricted to the legally defined district, making it difficult to expeditiously respond to ADA sidewalk repair requests outside of the district. Also, property owners have the right to protest the creation of an SAA, which means some areas of the City may never receive needed public way concrete replacement. Since the Streets Division's 50/50 program is voluntary, property owners can simply ignore their civic responsibility to replace defective public way concrete adjacent to their private property. In light of liability issues that may exist regarding defective concrete in the public way, programs that generate ongoing revenue should be of most interest in our effort to determine the best option for Salt Lake City. Denver has established a program that assesses property owners an annual sidewalk replacement fee based on the square feet of public way concrete adjacent to their property. This approach has provided a viable program, supported by a dedicated revenue source that has decreased city liability regarding defective concrete in the public way.

Of the various defective public way concrete replacement options presented in this document, the most beneficial to the City from the viewpoint of establishing a fiscally sound, ongoing program is the establishment of a FEE to facilitate the replacement of deteriorated public way concrete. This option provides greater assurance than any of the other options that all deteriorated public way concrete will eventually be addressed. The established funding source would provide a high degree of confidence regarding the planning, programming, and scheduling of projects. An alternate approach to establishing a property owner fee would be a tax increase. Implementation of the property owner concrete replacement fee or tax would also provide an opportunity to more effectively coordinate Public Utilities' storm drain projects with curb and gutter replacements.

Defective public way concrete in Salt Lake City is a significant concern, requiring further evaluation to determine a prudent and effective course of action. The present rate of expenditure is not adequate to keep up with the rate of public way concrete deterioration. A public way concrete management program should be established to address the current backlog and facilitate ongoing maintenance of this valuable City asset. The development and maintenance of a functional, safe and accessible public way will provide a great benefit to residents, businesses, and visitors to Salt Lake City.

APPENDIX NO. 1

Salt Lake City Ordinance Section 14.32.015 - Defective Public Way Concrete

Defective Public Way Concrete

- 1) The displacement of sidewalk, curb, gutter, and drive approach sections or appurtenances either horizontally or vertically to a point that one section or any part of a section is separated by at least one-half inch (1/2") from the other; or
- 2) The presence of a minimum of three (3) cracks of any length or width between score marks and/or expansion joints in any sidewalk, curb, gutter, and drive approach sections or appurtenances; or
- 3) The presence of spalling over more than twenty five percent (25%) of the surface area of any sidewalk, curb, gutter, and drive approach sections or appurtenances; or
- 4) The existence of settling, spalling or depressions in a sidewalk, curb, gutter, and drive approaches or appurtenances, which allows water to become entrapped or cause ice pockets; or
- 5) The existence of similar signs of deterioration in sections of sidewalk, curb, gutter, and drive approaches or appurtenances contiguous to sections which are in a condition as defined in subsections A through D of this definition to such an extent that they can reasonably be considered as part of the overall defective areas, or which must be replaced to effect a proper correction of the defective areas, or which must be replaced to effect a proper correction of the defective sections.

APPENDIX NO. 2

Although City ordinance places the responsibility for replacement of defective public way concrete on the adjacent private property owner, the ultimate responsibility falls on the City; therefore, the following options have been established to facilitate the installation, replacement or repair of public way concrete:

Permit to Work in the Public Way

Property owners can hire a contractor to accomplish desired sidewalk, curb & gutter, and drive approach repairs abutting their property. This option requires a permit to work in the public way, which can be obtained through Salt Lake City Engineering. All construction costs are the responsibility of the adjacent private property owner. A "no fee" permit is issued for the replacement of defective concrete. Prior to issuing a permit, the engineering staff will check the location for any upcoming street construction projects, street overlays and sidewalk replacement projects to determine any potential conflicts. A permit is not issued if the subject location falls within the boundary of a proposed street construction or asphalt overlay project scheduled to occur within the next two years, unless approval from the City Engineer or designee is first obtained and the permittee is informed of the proposed upcoming project.

Streets Division 50/50 Concrete Replacement Program

The Public Services/Streets Division offers this cost-sharing program to assist property owners in the replacement of deteriorated sidewalk, curb & gutter, and drive approaches. The cost of repair is shared on a 50/50 basis between the residential property owner and the City. Business property owners including schools, churches, hospitals, non-profits and government property owners pay 100% of the replacement cost. Property owners must pay for the work prior to the start of construction. Cost estimates are provided without charge and work is scheduled on a "first come first served" basis. Property owners are given the option of having sidewalk tripping hazards repaired by horizontal sawcutting at no cost, if the defective sidewalk meets the established horizontal sawcutting criteria. The Streets Division coordinates with the Engineering Division to determine proposed locations of City street construction and asphalt overlay projects scheduled within the next two years, and 50/50 concrete replacement work is discouraged at all such locations. If a property owner still requests repair of defective sidewalk, following notification of a proposed future city project, approval from the City Engineer or designee must be obtained prior to repair of the defective concrete.

Special Assessment Areas (SAA)

The primary focus of special assessment areas (SAA's) is the replacement of defective sidewalk. SAA's are created to resolve all of the deteriorated sidewalk problems within a defined area. The City and the adjacent residential private property owners share the replacement costs on a 50/50 basis. Business property owners including schools, churches, hospitals, non-profits, and government property owners pay 100% of the cost. Property owners have the option of paying off the concrete replacement assessment over a five-year period.

Sidewalk horizontal sawcutting is used to remove vertical displacements less than one and one-quarter inches in conjunction with the SAA work. This is accomplished at no charge to the adjacent private property owner. If a property owner requests replacement of the defective concrete instead of addressing the displacement by horizontal sawcutting, the property owner must agree to pay for the sidewalk replacement at the established SAA assessment rates.

As part of the sidewalk replacement SAA, property owners are given the option of replacing defective drive approaches and curb and gutter abutting their property. Generally, the replacement of defective curb and gutter is not recommended due to such existing street conditions as high crown, flat grades, and old high back style curb and gutter. These conditions can only be corrected through a street reconstruction or rehabilitation project, which would occur at no additional cost to the property owner.

Where technically feasible, ADA sidewalk access ramps are installed at all street corners in an SAA, during the same construction time frame as the SAA. In most cases, the installation of the sidewalk access ramps is accomplished by Streets Division concrete crews or a City ADA ramp contractor. The City absorbs all costs related to the construction of sidewalk access ramps.

Community Development Block Grant (CDBG) Sidewalk Replacement

Federally funded CDBG defective sidewalk replacement projects are accomplished at no cost to the adjacent private property owners. CDBG funding is limited and work can only be accomplished in defined "target areas" based on restrictive federal guidelines.

Sidewalk Horizontal Sawcutting

Sidewalk sections with no defects other than a vertical displacement less than one and one-quarter inches are repaired through horizontal sawcutting. Sidewalk sawcutting is accomplished at no cost to the adjacent private property owner. Horizontal sawcutting to remove tripping hazards and ADA accessibility barriers is accomplished in conjunction with SAA and CDBG funded sidewalk replacements, street reconstruction, and asphalt overlay projects. Prioritization for horizontal sawcutting involves maintaining accessibility within the bounds of previous capital improvement projects. Requests regarding actual ADA sidewalk accessibility needs are always given a high priority and accomplished as soon as possible.

Capital Improvement Program (CIP) Street Improvement Projects

All street improvement projects, ranging from asphalt overlays to total street reconstruction, address sidewalk and accessibility ramp needs as an ADA compliance issue. In accordance with ADA, the pedestrian access route must be firm, stable, slip resistant, and without changes in level that exceed one-quarter inch, and openings (cracks, grates, etc.) that exceed one-half inch. Sidewalk repair is first accomplished through horizontal sawcutting of vertical displacements less than one and one-quarter inches. Extensive deterioration may require replacement of some sidewalk sections to provide an acceptable pedestrian access route. Street improvement project funds are used to pay for ADA compliance repairs that occur in conjunction with CIP projects. Horizontal sawcutting projects may be used to eliminate tripping hazards within the established limits of another CIP street improvement project. Existing street drainage and curb and gutter conditions may warrant replacement of curb and gutter sections and drive approaches as part of a street rehabilitation project.

Streets Division's Repair / Replacement of Damaged Concrete

The Public Services/Streets Division may make repairs to public way sidewalk, curb and gutter, and drive approaches that are deemed to be a critical needed repair, concrete replacement related to an actual ADA identified need, and damage from the annual clean-up program or snow plowing. The City absorbs all costs related to such repairs. Critically needed repairs would be those beyond replacement typically accomplished through the 50/50 program or other concrete replacement programs. An example of critically needed work would be extensive curb and gutter or sidewalk settlement due to an unknown source of undermining, when existing conditions present a hazardous situation for either vehicular or pedestrian traffic, or to remove an ADA sidewalk barrier when an actual need exists for an individual with a disability. The Public Services Director or assigned designee must approve the removal of a sidewalk barrier before the Streets Division concrete crew can replace the defective concrete.

Private Development and Related Public Way Improvements

Public way concrete (sidewalk, curb and gutter, and drive approach) repairs or improvements are accomplished as part of the development of private property, subdivisions, and permitted new building and facility rehabilitation projects. Costs related to these public way improvements are the responsibility of the private property owner or developer.

ADA Accessibility Ramp Construction

Salt Lake City's ADA public way accessibility ramps Transition Plan identifies all public way locations in need of accessibility ramps. The plan has been created to meet federal rulemaking requirements regarding the installation of public rights-of-way accessibility ramps. Legal precedence has been established requiring the installation of public way ramps in conjunction with all capital improvements street projects. This includes all projects with scopes of work at the level of an asphalt overlay or more extensive. The City requires ramp installation in accordance with this precedence, and requires all subdivision and other private development to appropriately comply. City funds are budgeted each year for accessibility ramp installation projects to ensure compliance with federal requirements to remove all public way accessibility barriers.

All locations in need of ramp construction have been given a high, medium, or low priority rating based on criteria established by the federal government. The rating criterion includes proximity to government facilities, public buildings, schools, commercial outlets, public transportation routes, high pedestrian volume areas, scheduled CIP street improvement projects, and citizen requests. Many of the ADA accessibility ramp installations are scheduled and programmed in response to citizen requests. Actual need citizen requests are always given a high priority rating and construction is scheduled as soon as possible, pending the availability of ramp construction funding and consideration of previous priority commitments.

Sidewalk access ramps are not built on one corner of an intersection only. Ramp users cannot be directed into an intersection and not be provided a ramp on the other side of the street. Any defective sidewalk within 25 feet of a new sidewalk access ramp is repaired or replaced in conjunction with new ramp construction.

APPENDIX NO. 3

Defective Public Way Concrete Construction Needs

Table 1: Public Way Sidewalk Construction Need

CATEGORY	SQUARE FEET	VALUE
EXISTING SIDEWALK	20,000,000	\$200,000,000
DEFECTIVE SIDEWALK		
Not Tree Root Related	1,627,000	\$11,630,000
Tree Root Related	385,000	\$ 3,850,000
Sidewalk Beautification Areas	39,000	\$ 1,950,000
TOTAL DEFECTIVE SIDEWALK	2,051,000	\$17,430,000
"NO SIDEWALK" LOCATIONS	1,475,000	\$ 16,230,000
TOTAL SIDEWALK NEED	3,526,000	\$ 33,660,000

NOTE: Values are based on \$10.00 / SF for Tree Root and Not Tree Root related, \$50.00 / SF for Beautification Areas, and \$11.00 / SF for "No Sidewalk" Locations. Existing Sidewalk is a GIS approximation.

Table 2: Public Way Curb and Gutter Construction Need

CATEGORY	LINEAL FEET	VALUE
EXISTING CURB & GUTTER	4,750,000	\$199,500,000
DEFECTIVE CURB & GUTTER	754,000	\$22,620,000
"NO CURB & GUTTER" LOCATION	1,109,000	\$ 38,815,000
TOTAL CURB & GUTTER NEED	1,863,000	\$ 61,435,000

NOTE: Defective curb and gutter figures do not include additional concrete replacement that may be necessary to resolve drainage issues. Curb and gutter values are based on \$30.00 / LF for existing and replacement, and \$35 for "No Curb and Gutter".

Table 3: Public Way Drive Approach Construction Need

CATEGORY	SQUARE FEET	VALUE
EXISTING DRIVE APPROACHES	7,680,000	\$ 99,840,000
DEFECTIVE DRIVE APPROACHES	500,000	\$6,500,000

NOTE: Drive approach values are based on \$13.00 / SF.

Table 4: Public Way Accessibility Ramp Construction Need

CATEGORY	RAMPS	VALUE
EXISTING ACCESSIBILITY RAMPS	11,825	\$44,935,000
LOCATIONS NEEDING RAMPS	3,351	\$12,734,000

NOTE: Accessibility ramp values are based on \$3800 / ramp.

APPENDIX NO. 4

Sidewalk Replacement Fee Examples

The following examples are illustrative only; actual program fees and exemptions will need to be evaluated and established prior to implementation of a fee program.

EXAMPLE 1: \$0.20 PER SQUARE FOOT UNIT COST WITH SET MAXIMUM FEE

- Unit Cost: \$0.20 per Square Foot
- New Construction Exemption: 5 Year Fee Exemption from Year of Construction for Sidewalks Constructed Prior to Instigation of Fee Program
- Maximum Annual Fee: \$100

Example of property with sidewalk constructed in May 2008 that qualifies for 5 year exemption:

Square Feet	Unit Cost	Credit for New Construction	Total Annual Fee	Fee Start Date
200	\$0.20	May 2008 to May 2013	\$40.00	June 2013

EXAMPLE 2: \$0.80 PER LINEAL FOOT UNIT COST WITH SET MAXIMUM FEE

- Unit Cost: \$0.80 per Lineal Foot
- New Construction Exemption: 5 Year Fee Exemption from Year of Construction for Sidewalks Constructed Prior to Instigation of Fee Program
- Maximum Annual Fee: \$100

Example of property with sidewalk constructed in May 2008 that qualifies for 5 year exemption:

Lineal Feet	Unit Cost	Credit for New Construction	Total Annual Fee	Fee Start Date
80	\$.80	May 2008 to May 2013	\$64.00	June 2013

EXAMPLE 3: \$30 PER PARCEL

- Unit Cost: \$30.00 per Parcel (No Square Footage or Lineal Footage measurement is needed)
- New Construction Exemption: 5 Year Fee Exemption from Year of Construction for Sidewalks Constructed Prior to Instigation of Fee Program

Example of property with sidewalk constructed in May 2008 that qualifies for 5 year exemption:

Lineal Feet	Unit Cost	Credit for New Construction	Total Annual Fee	Fee Start Date
N/A	\$30 per Parcel	May 2008 to May 2013	\$30.00	June 2013