CITY OF AUSTIN

Sidewalk Master Plan / ADA Transition Plan Update

Prepared by
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City of Austin Transportation Department
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ADOPTION DRAFT

TABLE OF CONTENTS

APPENDICES

LIST OF TABLES AND EXHIBITS

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Mayor’s Fitness Council

Pedestrian Advisory Council

Urban Transportation Commission

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Section 1

EXECUTIVE SUMMARY

The City of Austin 2016 Sidewalk Master Plan / ADA Transition Plan Update establishes asset management policies for sidewalks within City of Austin right-of-way. As of November 2015, the citywide sidewalk network includes 2,580 miles of absent (missing) and 2,400 miles of existing sidewalk.

GOALS

- Encourage walking as a viable mode of transportation, improve pedestrian safety, and enable people to walk to and from transit stops.
- Update the sidewalk portion of the City's Americans with Disabilities Act (ADA) Transition Plan and set forth policies that will improve mobility for people with disabilities.
- Help control air pollution and traffic congestion, and improve the quality of life in Austin, by including sidewalks and other pedestrian facilities as necessary and integral components of the transportation system.
- Provide an objective mechanism for the City's use in prioritizing new sidewalk construction and existing sidewalk repair and rehabilitation projects.
- Incorporate goals and policies from the Imagine Austin Comprehensive Plan and updated Complete Streets policy.

KEY RECOMMENDATIONS FOR NEW SIDEWALKS

The recommendations for the new sidewalk program in Austin are based on the guidance provided in the Imagine Austin Comprehensive Plan, adopted by City Council in June 2012 and the Complete Streets Policy adopted in June 2014. Below are the the new sidewalk program targets recommended in Section 4 of the 2016 Sidewalk Master Plan Update.

Table 1-1: New Sidewalk Program

Target	Fiscal Years 2018 - 2027	
	Implementation Schedule	Estimated Annual Budget
Address all very high and high priority sidewalks within ¼ mile of all identified schools, bus stops, and parks, including both sides of arterial and collector streets and one side of residential streets. (Approximately 390 miles)	39 miles/year	$25 million per year

Below are other key recommendations for new sidewalks that are included in Section 4 of this update:

- **Develop a transparent system for working with Council District Representatives** to utilize their local knowledge and resources as one of the refining filters in selecting potential construction projects from the list of high priority sidewalk needs identified by the GIS prioritization process.
- **Ensure development adequately addresses sidewalks** and does not create new gaps by enacting key land development code updates recommended in Appendix I.

KEY RECOMMENDATIONS FOR NEW SIDEWALKS (CONT'D)

- **Implement a sidewalk mitigation fee for new development** to address absent pedestrian infrastructure. In order to equitably address needs, the fee could be based on a combination of increased intensity of use and outstanding pedestrian infrastructure need in the area. Fees collected would be dedicated to improvements in the area consistent with current fee-in-lieu practice.
- **Implement Neighborhood Shared Streets pilot program** to evaluate alternative strategies for safe and cost effective pedestrian access.
- **Incorporate green infrastructure and pedestrian safety priorities** into sidewalk projects by removing unnecessary pavement and introducing rain gardens and shade trees wherever feasible and cost effective.
- **Identify partnering opportunities to implement projects** that support shared goals or overlapping priorities through collaboration and shared resources.

KEY RECOMMENDATIONS FOR EXISTING SIDEWALKS

The existing sidewalk program in Austin is based on the requirements of the Americans with Disabilities Act, signed into law in 1990. Below are the existing sidewalk program targets recommended in Section 5 of the 2016 Sidewalk Master Plan Update.

Table 1-2: Existing Sidewalk Program

Target	Implementation Schedule	Estimated Annual Budget
Achieve 95% functionality for very high and high priority sidewalks and Achieve 55% functionality for citywide sidewalk network	10 years	$15 million per year

Below are other key recommendations for existing sidewalks that are included in Section 5 of this update.

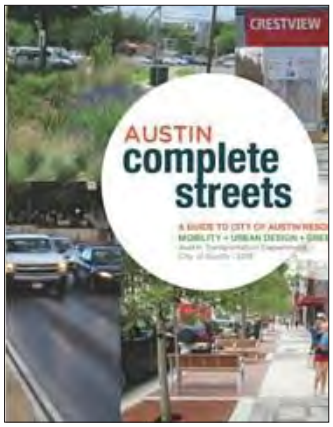
- **Develop and implement public awareness and enforcement program** to address vegetative obstruction removal.
- **Provide stable and sufficient funding** for sustainable repair and rehabilitation of existing sidewalks.
- **Implement ongoing sidewalk condition assessment program** that assesses at least 10% of the existing network annually.
- **Revise City Code** to clarify the responsibility of property owners for maintenance of driveway approaches. (See Appendix I for suggested code revisions.)

Section 2

INTRODUCTION

BACKGROUND

In June 2012, the City Council adopted the Imagine Austin Comprehensive Plan, which includes a strong emphasis on enhancing Austin as a walkable city. In June 2014, the City Council adopted a Complete Streets Policy, designed to help realize the Imagine Austin Comprehensive Plan vision for a healthy, green, vibrant, compact, and connected community.



In November 2014, the City of Austin Department of Public Works contracted with MWM DesignGroup (MWM) to provide an update to the 2009 Sidewalk Master Plan, including preparation of a Peer Cities Report. Updating the 2009 Sidewalk Master Plan provides an opportunity to incorporate the ideals strongly emphasized in the Imagine Austin Comprehensive Plan, namely to make Austin a walkable, livable, and pedestrian friendly city through the "Compact and Connected" policies and priorities, while providing overdue technical updates using current data and methodologies.

Several key aspects of the 2016 Update include the following:

- **Peer Cities Report** – analysis of data collected from seven Peer Cities regarding current sidewalk program policies and practices, provided as a separate document
- **Sidewalk Prioritization Update** – simplification of the GIS-based prioritization tool and updating of the Pedestrian Attractor and Pedestrian Safety datasets
- **Condition Assessment** – development of a methodology for assessing and scoring the condition of existing sidewalks using a GIS-based application
- **Funding Update** – development of updated funding goals and funding alternatives, based on the prioritization updates, the condition assessments, and the Peer Cities Report

The 2009 Sidewalk Master Plan included an extensive stakeholder outreach process to develop the sidewalk prioritization criteria and scoring system. The 2016 Sidewalk Master Plan Update process has reengaged those stakeholder groups through public outreach and meetings, building on the previous work, rather than making substantive changes to the prioritization matrix.

This Update is intended as a sidewalk infrastructure asset management document and ADA Transition Plan for City of Austin sidewalks within public right-of-way. It is not intended to serve as a master plan for pedestrian mobility or connectivity, and does not address mobility infrastructure such as bike lanes, crosswalks, trails, etc. The analysis and recommendations in this Update are inclusive of the existing city limits and do not include information for areas within Austin's extra-territorial jurisdiction. Maps and data contained in this report are based on a snapshot of the best available sidewalk data as of November 2015.

The funding discussions and recommendations in this Update are program budgets, unless otherwise stated, and are intended to include all costs associated with the new and existing sidewalk programs, including construction, consulting, and full-time City staff. The funding targets developed in this Update are based on historical and current conditions and costs, and do not attempt to forecast future variables that could impact program implementation, such as annexation, inflation, development, construction costs, etc. The targets should be reassessed during the next Master Plan Update.

BACKGROUND (CONT'D)

When used in this report, the term "existing sidewalk" refers to any existing constructed sidewalk within public right-of-way, regardless of physical condition or accessibility compliance. The term "absent sidewalk" refers to any location within existing public right-of-way that does not currently contain a constructed sidewalk on both sides of the street, regardless of street type.

As of November 2015, the citywide network includes approximately 2,400 miles of existing sidewalk and driveways and 2,580 miles of absent sidewalks. The majority of absent sidewalk has been introduced through annexation over the past 70 years. Existing and absent sidewalk inventories by Council District are included in Appendix A.

SIDEWALK MASTER PLAN HISTORY

In November 2000, the Austin City Council adopted a Pedestrian Master Plan in response to concerns related to a 1997 Austin Transportation Study (ATS) survey that found only 3% of Austin residents walked from home to work or school. The 1995 Nationwide Personal Transportation Survey reported that 50% of all trips made by respondents were less than 3 miles, which could reasonably be replaced with walking. The City of Austin recognized the need for a plan to provide a structured approach for improving pedestrian facilities.

The City's original goal for its Pedestrian Master Plan was to "set forth policies that will encourage walking as a viable mode of transportation, improve pedestrian safety and enable people to walk to and from transit stops." Additionally, the plan identified that "inclusion of sidewalks and other pedestrian facilities in the transportation system are necessary to help control air pollution and traffic congestion, and increase the quality of life in Austin." The document covered justification for the adoption of such a plan, policies that outline criteria for proper pedestrian infrastructure, recommendations for facilities that need improvement, and a design guide to effectively follow through on the previously identified policies with compliance to standards set by the Americans with Disabilities Act.

In 2003, the City contracted with Lockwood, Andrews & Newnam, Inc. (LAN) of Austin to complete two phases of a Pedestrian Information Management System (PIMS) to meet Austin's needs for assessing and prioritizing sidewalk infrastructure, both absent and existing. LAN provided updates to the existing 2000 Pedestrian Master Plan, as well as the City's ADA Transition Plan from the early 1990s. Phase II of the Pedestrian Master Plan Update was complete in 2009 and was titled the 2009 Sidewalk Master Plan.

Table 2-1: Pedestrian Master Plan Update Timeline	
2000	Resolution No. 001130-12 adopts the Pedestrian/Sidewalk Master Plan Timeline
2003	Transportation, Planning and Sustainability Department initiates updates to 2000 Plan
2005	Phase I of updated 2000 plan is completed
2009	Phase II of 2000 plan completed
2015	Sidewalk Peer Cities Report completed
2016	Sidewalk Master Plan Update completed

2009 SIDEWALK MASTER PLAN SUCCESSES & LESSONS LEARNED

The 2009 Sidewalk Master Plan significantly progressed sidewalk infrastructure management in the City of Austin. Below is a summary of the successes and lessons learned that have been realized from implementing the plan over the past 5 years.

Successes

- The data-driven prioritization process developed by stakeholders provided a functional and objective starting point for project selection.
- The absent sidewalk prioritization map provided an excellent framework for both internal and external communications about sidewalk gaps.
- The citywide gap and rehabilitation cost estimates provided important context for funding and prioritization decision making.
- The ADA Transition Plan funding targets provided clear performance measures for compliance with ADA requirements.

Lessons Learned

- The point-based sidewalk condition assessment provided too much granular data, making it ineffective in repair and rehabilitation assessment and prioritization.
- The Pedestrian Infrastructure Management System (PIMS) programming and interface were overly complex, making it difficult for non-specialized staff to maintain and use effectively.
- The ongoing need for a stable funding source for repair and rehabilitation of sidewalks, similar to road maintenance, was not adequately identified.

COMPLEMENTARY PLANNING GUIDANCE

While the Sidewalk Master Plan/ADA Transition Plan Update is principally an asset management tool for sidewalks, the plan functions in tandem with other planning guidance for continuing to provide for the safe movement of people walking in the City of Austin:

- The Austin Transportation Department is working to finalize a Pedestrian Safety Action Plan that will provide guidance on engineering, education, enforcement, and encouragement strategies that will complement the Sidewalk Master Plan.
- The forthcoming Vision Zero Action Plan identifies several actions that support the goals of the Sidewalk Master Plan focused on reducing speeds, improving crossings, coordinating with transit stops and school sites, and implementing targeted education initiatives.
- The Bicycle Master Plan, Urban Trails Master Plan, and the Community Health Improvement Plan contain complementary strategies that support the goals of the Sidewalk Master Plan.
- The upcoming Austin Strategic Mobility Plan will recognize and further plan for the pedestrian transportation system within the context of the the overall integrated transportation network and its multiple modes.

ADA AND SIDEWALKS

The Americans with Disabilities Act (ADA), signed in 1990, mandates in Title II, Subpart A, that public entities establish and maintain a Transition Plan to achieve full accessibility of existing public infrastructure, including existing sidewalk within public right-of-way. Key requirements for the sidewalk component of the ADA Transition Plan are listed in Table 2-2, with a summary of how the requirements are satisfied in this Update. Section 5 describes each of these in further detail.

Table 2-2: Key Requirements for ADA Transition Plan

ADA Transition Plan Requirement	2016 City of Austin Sidewalk Master Plan Update
Inventory of physical barriers and proposed methods to remove them	Physical barriers in the right-of-way are inventoried through the City's GIS database. This Update includes an estimate of the barrier inventory based on a pilot condition assessment of a select sample of sidewalk segments and curb ramps, and recommends completion of the barrier inventory by October 2018. Proposed methods for barrier removal include vegetative obstruction removal, sidewalk and curb ramp repair and rehabilitation, and coordination with public and private entities and other City Departments for obstruction removal.
Schedule for barrier removal	A 10-year target for barrier removal is described in Section 5.
Public official responsible for plan implementation	The Transition Plan will be implemented by the COA Director of Public Works in consultation with the COA ADA/504 Coordinator.
Proposed funding source for improvements	Proposed funding sources are included in Section 5.
Opportunity for the disabled community input	The Update process included an extensive public outreach and meetings process to engage stakeholders from the disabled community.

Courts have established legal precedents for accessibility compliance. For example, the 1993 Kinney v. Yeruselim United States Court of Appeals case concluded that street alterations require the installation of curb ramps and that the public entity must retrofit curb ramp installations on a pre-determined schedule. The 2004 Barden v. City of Sacramento United States Court of Appeals case concluded that sidewalks are considered a "program or service" and as such, public entities must make them accessible. As a result of this case, the City of Sacramento was mandated, over the next 30 years, to spend 20% of its annual Transportation Fund towards right-of-way accessibility.

In July 2013, the Department of Justice (DOJ) and Department of Transportation (DOT) issued technical assistance, defining street resurfacing as an alteration requiring the installation of curb ramps.

The ADA Transition Plan requirements apply to existing sidewalk repair and rehabilitation only. New sidewalk construction in Austin is guided by the policies adopted in the Imagine Austin Comprehensive Plan. Therefore, this Update addresses the needs and recommendations for new and existing sidewalks in separate sections.

Section 3

SIDEWALK PRIORITIZATION

BACKGROUND

A primary focus of the 2009 Sidewalk Master Plan was the development of an objective sidewalk prioritization method with diverse stakeholder input to produce prioritization maps for the citywide network. MWM and HDR have updated the methodology and the datasets for the 2016 Update while retaining the prioritization criteria matrix previously developed. The method uses Geographic Information System (GIS) software to analyze hundreds of thousands of absent and existing sidewalk segments using dozens of geographic datasets to provide an objective score for each sidewalk segment. (A sidewalk segment is defined as between any driveway or intersection.) The scored segments can be reviewed within the GIS software or displayed on a map. As part of the 2016 Master Plan Update, HDR developed a simplified GIS analysis tool using ESRI ArcGIS (v10.3) Model Builder. The tool produces absent and existing sidewalk prioritization layers using the methodology and scoring system developed in the 2009 Sidewalk Master Plan. The 2016 version is intended to be easier to use and update, with minimal customization, allowing the City to update the data and run the tool as frequently as needed.

GEOGRAPHIC INFORMATION SYSTEM (GIS) DATABASE

Data Source

The GIS datasets used in the prioritization analysis are from a variety of sources, but can be generally categorized in four ways:

- datasets actively maintained by COA Public Works, such as sidewalks and ramps
- datasets created specifically for the prioritization tool, such as grocery stores
- datasets maintained by other City departments, such as government offices and parks
- datasets maintained by others, such as census blocks and transit stops

The GIS data for sidewalks, ramps, and driveways were originally developed from aerial imagery flown in 2003 and 2006, and updated in 2009. In addition to existing sidewalks, driveways, and ramps, the data include absent sidewalks. These data are actively maintained by the City, as new sidewalks are constructed in place of absent sidewalks or with new development.

Table 3-1 lists the datasets used by the prioritization matrix and the source of each.

GEOGRAPHIC INFORMATION SYSTEM (GIS) DATABASE (CONT'D)

2016 Dataset Updates

City staff, MWM, and HDR performed updates to the datasets for the 2016 Master Plan Update. These updates are described in detail in the Sidewalk Prioritization Tool User Manual.

Ongoing Maintenance

The GIS tool will not require frequent maintenance, except for system or software updates. However, the GIS datasets will require ongoing maintenance so that the prioritization scoring is based on current data. The City of Austin Sidewalk Program will be responsible for maintaining updates to the GIS datasets. The dataset maintenance procedures vary based on the source and condition of the datasets. Some datasets are used by the tool with little or no preprocessing, while other datasets require significant manual edits prior to use. The User Manual contains detailed instructions for maintaining each dataset and a suggested update frequency.

Table 3-1: Sidewalk Prioritization Tool Datasets

Dataset Name	Source
Curb Ramps	COA Public Works
Network (sidewalks and driveways)	COA Public Works
Government Offices	COA GIS
Major Employers	COA GIS
Parks	COA PARD GIS
Public Accommodations	COA GIS
Public Facilities	COA GIS
Bicycle Lanes	COA GIS
Rail Stops	CapMetro
Transit Stops	CapMetro
Income Restricted Affordable House Secured though City and Federal Programs	Affordable Housing Inventory
Accident Reports	COA Police Department
Religious Institutions	TCAD and Address Listings
Grocery Stores	Address Listings
Neighborhood Plan Requests	COA GIS
Parking	TCAD
311 Request (table)	COA Public Works
Census Blocks	U.S. Census Bureau
Median Household Income	U.S. Census Bureau
Streets	COA GIS
Pedestrian Health and Safety Status	COA DSD GIS
Core Transit Corridors	COA GIS
ADA Task Force Requests	COA Public Works

SCORING MATRIX

The sidewalk prioritization methodology was developed to provide consistent, unbiased prioritization results in an analytical, objective manner to the City of Austin for over 300,000 sidewalk segments.

The sidewalk base score is divided into two parts: the Pedestrian Attractor Score (PAS) and the Pedestrian Safety Score (PSS). Points are awarded to each sidewalk segment based on its proximity to PAS and PSS elements. Proximity is measured by two buffers around the sidewalk segment, at 1/8 mile and 1/4 mile.

The Pedestrian Attractor Score accounts for 56% of the base score. Points are awarded based on the elements shown in Table 3-2.

SCORING MATRIX (CONT'D)

Table 3-2: Absent Sidewalk Prioritization Matrix Pedestrian Attractors Score (PAS) 0 - 100 Base Score Weight 56%			
Element	**Criteria**	**Points**	
Proximity to Attractors Weight 45% (max 100 pts)	Multiply Possible Points by number of attractors within specific radius of: State or Local Government Offices Commuter Rail Stations Transit Stop (Max of 50 pts) Major Grocery Stores Places of Public Accommodation (Includes parks, fire stations, police stations, hospitals, convention centers, health centers, libraries, museums, post offices, and recreation centers.) Public or Private Schools Employers with > 500 Employees Income Restricted Affordable House Secured though City and Federal Programs: a) with 25-49 units b) with 50-74 units c) with 75-99 units d) with 100-124 units e) with 125-149 units f) with 150-174 units g) with more than 175 units Public Parking Facilities Religious Institutions	1/8 Mile 10x 10x 9x 9x 8x 8x 8x 1x 2x 3x 4x 5x 6x 7x 5x 5x	1/4 Mile 5x 5x 4.5x 4.5x 4x 4x 4x 0.5x 1x 1.5x 2x 2.5x 3x 3.5x 2.5x 2.5x
Residential Population Weight 25% (2010 Census Blocks)	Total population residing within 1/2-mile radius of proposed project? a) Population >/= 8,000 b) Population >/= 4,000 and < 8,000 c) Population >/= 1,000 and < 4,000 d) Population >/= 500 and <1,000 e) Population < 500	100 75 50 25 0	
Element	**Criteria**	**Yes**	**No**
Median Household Income Weight 5% (2010 U.S. Census data)	Within a census tract at or below Median Household Income	100	0
Existing Facilities on Street Weight 10%	For arterials and collector streets, are there complete sidewalks on both sides of the street? For local / residential streets, is there an existing complete sidewalk on either side of the street?	0 0	100 100
Requests Weight 10%	Was the project requested by ADA Task Force? Was the project requested by a citizen through 311?	75 25	0 0
Core Transit Corridors Weight 2.5%	Is the sidewalk within a 1/4 mile of a Core Transit Corridor?	100	0
Bicycle Lanes Weight 2.5%	Are there bike lanes on both sides of the street?	100	0

SCORING MATRIX (CONT'D)

The Pedestrian Safety Score accounts for 44% of the base score. Points are awarded based on the elements shown in Table 3-3 below.

Table 3-3: Absent Sidewalk Prioritization Matrix Pedestrian Safety Score (PSS) 0 - 100 Base Score Weight 44%		
Element	**Criteria**	**Points**
Street Classification Weight 45%	a) Arterial b) Collector c) Residential	100 75 50
Pedestrian Health and Safety Status Weight 35% (health needs per zip code, based on factors such as crime statistics, obesity, diabetes, heart disease, and respiratory disease)	a) Very High Needs b) High Needs c) Moderate Needs d) Low Needs e) Very Low Needs	100 75 50 25 0
Pedestrian/Automobile Incidents Weight 20%	Number of incidents reported to APD involving pedestrians and motorized vehicles in previous 36 months multiplied by 10 (only applied to sidewalk on the street where the incident took place)	10x *(max 100 pts)*

In addition to the PAS and PSS, the Neighborhood Plan Score can be added to the base score for sidewalk segments requested in an adopted neighborhood plan. This is an additional score used only for prioritization of sidewalks within neighborhoods with an adopted plan, since not all neighborhoods have adopted a plan.

Table 3-4: Absent Sidewalk Prioritization Matrix Neighborhood Plan Score (NPS) 0 - 100 Addition to Base Score (max 10 points)		
Element	**Criteria**	**Points**
Neighborhood Request Weight 100%	Projects requested in an adopted Neighborhood Plan are assigned one point per year from the date of the plan adoption, up to a maximum of 10 points (prioritizing older adopted plans).	1 per year from plan adoption date *(max 10 points)*

The 2016 sidewalk prioritization tool is based on the scoring matrix developed for the 2009 PIMS, with the following exceptions:

- The Fiscal Availability Score (FAS) has been eliminated because the City has replaced the fiscal posting process with sidewalk fee in lieu, which is not specific to sidewalk segments.
- The PAS Income Restricted Affordable House Secured though City and Federal Programs score has been weighted for facilities with more units.
- The Special Consideration Score has been eliminated, and special program considerations are implemented outside of the prioritization tool.

SCORING CATEGORIES

The premise of the sidewalk prioritization is that when all sidewalks have been scored, it will be possible to prioritize sidewalks by assigning them a general classification relative to all other scored sidewalks of their type. The sidewalk scoring range (0-100) is subdivided into five categories “very high”, “high”, “medium”, “low”, and “very low”. The 2016 Update uses the scoring and categorical ranges established in the 2009 Sidewalk Master Plan and these are listed on the prioritization maps. All absent and existing sidewalk segments within the City of Austin full purpose jurisdiction are scored. It should be noted that the prioritization rankings are intended as a tool to allocate limited resources; just because a particular section of sidewalk is ranked as a lower priority does not mean it is not a necessary component of a complete pedestrian network.

A summary of the scoring results for existing and absent sidewalks are included in Sections 4 and 5, respectively. The prioritization maps are included at full size (22”x34”) in Appendix B.

Section 4

NEW SIDEWALKS

BACKGROUND

New sidewalk construction in Austin typically occurs by one of three methods: by subdivision or site development, as part of a Capital Improvement Program (CIP) street or utility project, or by a City Sidewalk Program CIP project. New sidewalks constructed by private development are primarily in new subdivisions and were historically not required by code for subdivisions and site developments. CIP street and utility projects are limited in scope and do not always address adjacent sidewalk needs. The primary method for addressing existing sidewalk gaps is through the City Sidewalk Program CIP projects.

The term “absent sidewalk” refers to any location within existing public right-of-way that does not currently contain a constructed sidewalk on both sides of the street, regardless of street type. The current citywide network consists of approximately 4,980 miles of absent and existing sidewalks on both sides of all streets, and approximately 2,580 miles of this network is absent.

More than 75% of the City's absent sidewalk have been annexed over the last 70 years, at an average rate of almost 30 miles of absent sidewalk per year. Over the past 10 years, the rate of annexed absent sidewalks has reduced to approximately 13 miles per year. The improvement may be attributable to revised land use regulations requiring sidewalks for subdivisions (1969) and site developments (1988) in the City's ETJ.

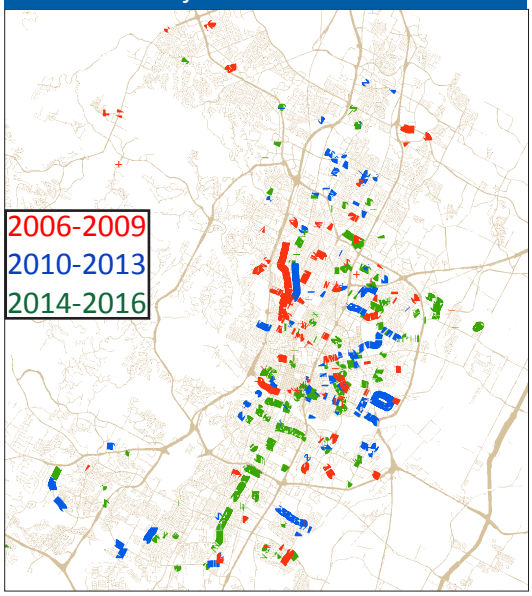
New sidewalk construction in Austin is guided by the policies described in the Imagine Austin Comprehensive Plan. Unlike repair and rehabilitation of existing sidewalks, new sidewalk construction is not mandated by the Americans with Disabilities Act (ADA), except within the limits of other infrastructure improvements. The Public Works Department Sidewalk Program has historically constructed ADA Transition Plan projects in conjunction with new sidewalk construction projects to bring existing sidewalks into compliance with the ADA and create a complete accessible route. The recommended funding for new sidewalk construction assumes that future ADA transition plan projects will be constructed with existing sidewalk repair and rehabilitation projects as outlined in Section 5.

CURRENT PROGRAM AND POLICIES

New sidewalk construction in Austin has primarily been funded by City bonds. The most recent bond supporting new sidewalk construction was the 2012 Transportation and Mobility Bond, which included $25M for sidewalk construction. Since 2006, the Sidewalk Program has constructed over 120 miles of new or rehabilitated sidewalks and 3,500 curb ramps, and has improved access to over 1,300 transit stops and 150 schools.

The 2009 Sidewalk Master Plan included minimum funding targets of $5M/year for 2009 – 2014 and $9M/year for 2015 – 2023. The City of Austin has generally met or exceeded these funding targets, but the current bond funds are anticipated to be exhausted by spring of 2017. A map of major projects is shown in Exhibit 4-1.

Exhibit 4-1: Major Sidewalk Program Projects Since 2006



PROJECT SELECTION

The sidewalk prioritization tool described in Section 3 produces a map that prioritizes all absent sidewalks in the City of Austin based on pedestrian attractors and pedestrian safety. The absent sidewalk prioritization map is shown as Exhibit 4-2, and the miles of sidewalk by priority per Council District are shown in Appendix C.

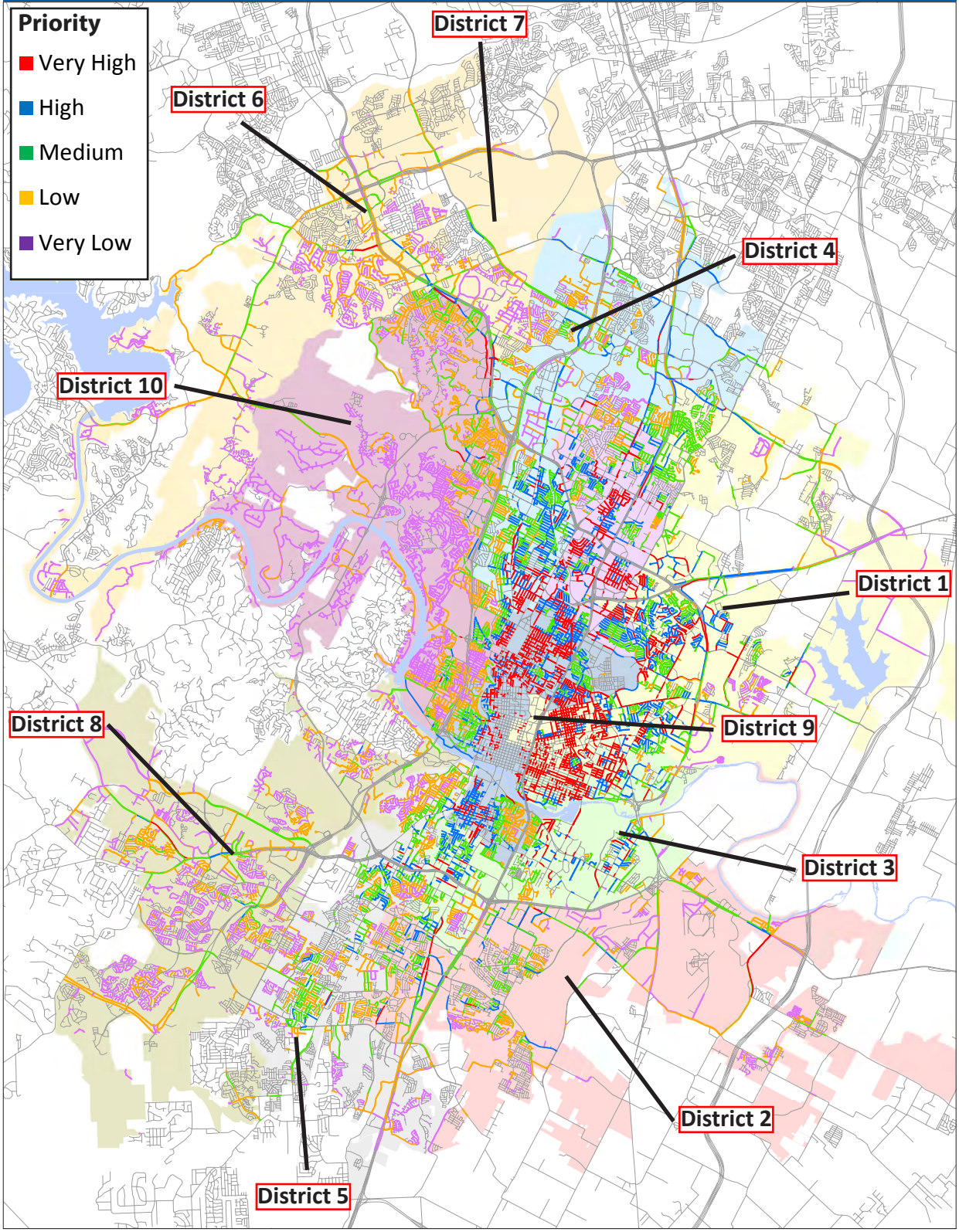
Each year the CIP budget provides funding for a relatively small fraction of the very high and high priority absent sidewalks identified on the prioritization map. In order to select the small subset of projects that can be constructed in any given year, the "needs" identified by the prioritization map are overlaid with "opportunities" that would allow a single sidewalk project to address multiple City priorities. The additional priorities and coordination opportunities that are used to refine the list of sidewalk projects for construction include, but are not limited to:

- **Imagine Austin Centers and Corridors**
- Other City projects, such as street maintenance, utility improvements, and facility access improvements
- 311 and ADA access requests
- Connectivity and ADA compliance near new Pedestrian Hybrid Beacons (PHBs) and other pedestrian signal improvements
- Bicycle program projects, particularly in constrained locations where reallocation of existing ROW may be required
- Transit projects, such as improvements with new or relocated CapMetro stops, with particular priority for high volume transit locations, special use routes, or CapMetro Para transit priority locations
- Network connectivity, such as urban trails
- Safe Routes to School Program
- Neighborhood Planning and Neighborhood Partnering Program
- Development, including private and affordable housing
- ADA access to Parks and Recreation Department facilities
- Agency coordination with TXDOT and CTRMA
- Opportunities to leverage funding
- Records of automobile / pedestrian incidents
- Coordination with City departments such as Community Tree Division (DSD) and their Urban Forest Grant Program, Office of Sustainability Climate protection, Food System, Green Business Leadership and Eco-district programs and associated grants, and Art in Public Places Program
- Recommendations of the Joint Task Force (county, city, AISD)
- Recommendations on Family and Children and Educational Impact Process

Potential projects are also reviewed for constructibility and constraints prior to being selected for construction. The final selection of work included in the Annual Work Plan is the sole approval of the Public Works Director, after consideration of all other stakeholders.

PROJECT SELECTION (CONT'D)

Exhibit 4-2: Absent Sidewalk Prioritization Map



COMPLETING THE NETWORK

Construction of new sidewalk for all 2,580 miles of absent sidewalk in the network would cost approximately $1.64 billion (based on historical new sidewalk construction costs). The 2016 budget for new sidewalk construction is $8,600,000, and at this funding level, full build-out would require 192 years. A full build-out of this duration is beyond the scope of typical planning documents. Therefore, a more achievable target is necessary for near-term funding recommendations.

During the preliminary rounds of public review for the update, a goal of completing all very high and high priority sidewalks, on both sides of all streets, within ¼ mile of all identified schools, bus stops, and parks within the next 6 years was considered.

Based on feedback from the City of Austin Mobility Committee, the New Sidewalk Program Target was scaled back by extending the implementation timeframe to 10 years and only including sidewalks on one side of residential streets in retrofit projects. (Sidewalks on both sides of collector and arterial streets are necessary in order to provide safe access to transit and civil, retail, or commercial uses that may front such streets.) The revised target will address approximately 390 miles of new sidewalk over 10 years, at a total estimated cost of $250 million, or an annual program budget of $25 million.

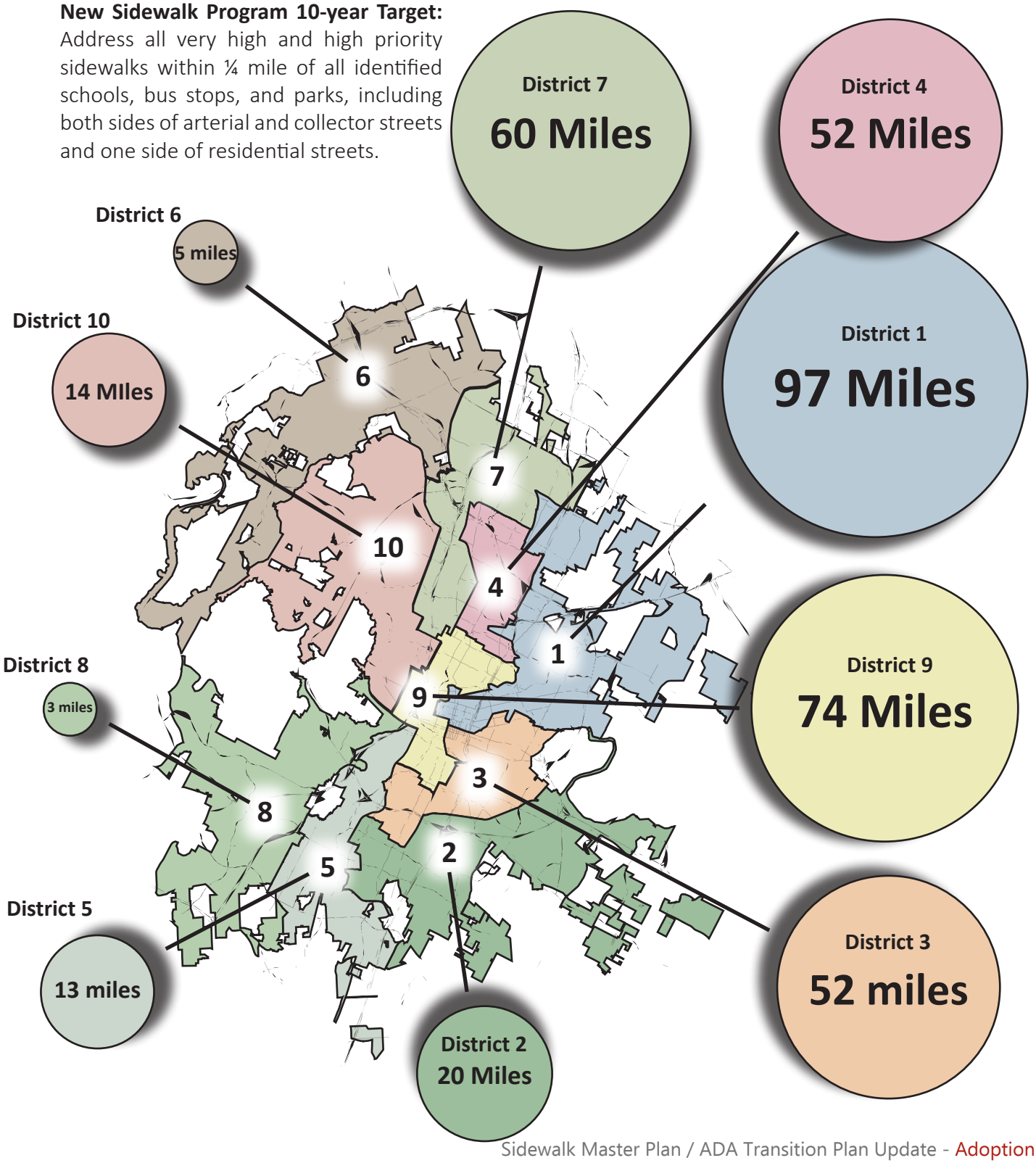
The new sidewalk construction for this 10-year target, in miles per Council District, are shown in Exhibit 4-3.

Although this Master Plan Update is primarily a sidewalk asset management document, it recognizes that sidewalks are one component of an overall pedestrian environment, and therefore includes alternative and complementary strategies that may accelerate the realization of targeted walkability goals.

COMPLETING THE NETWORK (CONT'D)

Exhibit 4-3: New Sidewalk Construction Miles 10-year Target

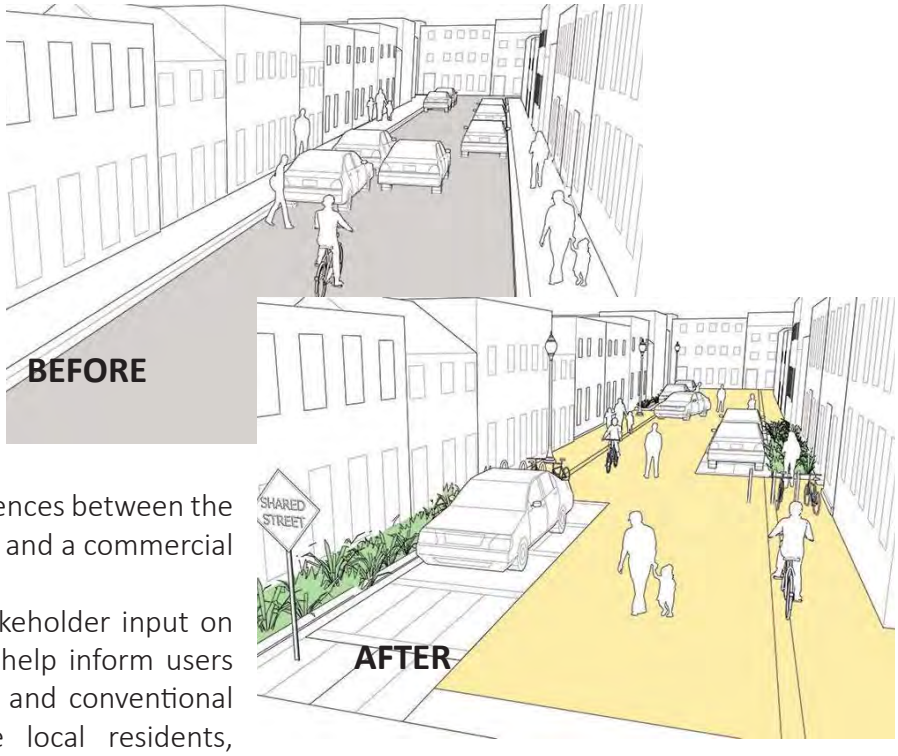
New Sidewalk Program 10-year Target: Address all very high and high priority sidewalks within ¼ mile of all identified schools, bus stops, and parks, including both sides of arterial and collector streets and one side of residential streets.



COMPLETING THE NETWORK (CONT'D)

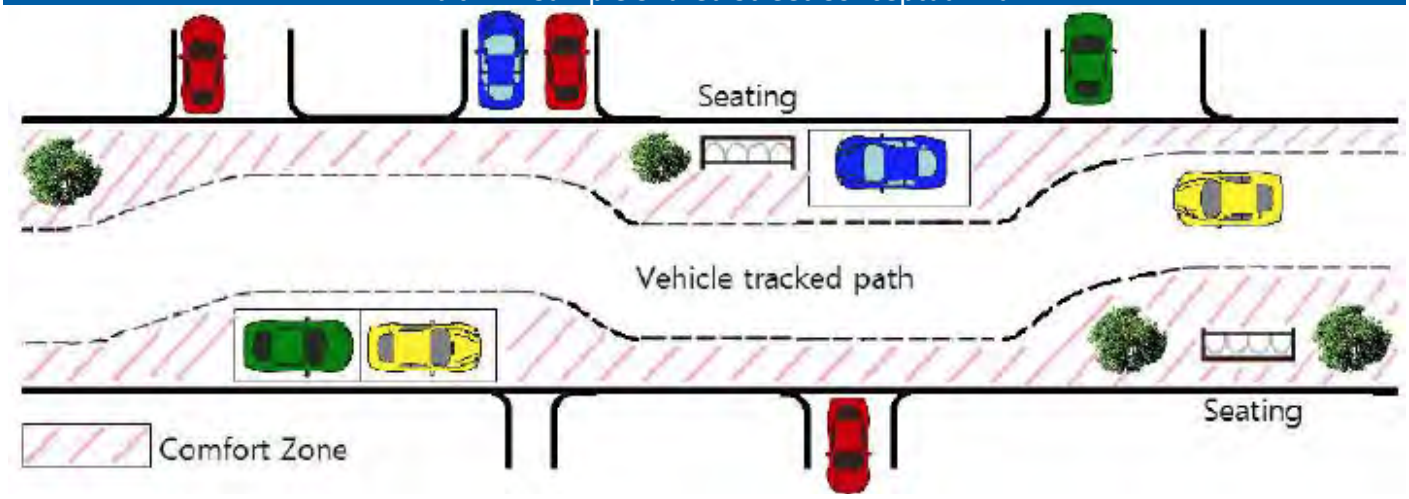
Shared Streets

The term "Shared Streets" refers to an environment where people walking, bicycling, and driving share the same space in a way that prioritizes the safety and comfort of pedestrians while allowing for movement of bicycles and motor vehicles. Successful shared street design is achieved by adhering to several key principles:



- **Establishing Gateways:** Implement clear demarcations to indicate a road narrowing transition from a conventional streetscape to a shared street, such as curb extensions, reduced pavement or lane width, and signage.
- **Designing for Slow Speeds:** Use traffic calming devices to slow traffic, such as speed humps, speed cushions, traffic circles, curb extensions, signs, and markings.
- **Considering the Context:** Establish expectations for the aesthetic differences between the spaces in a residential shared street and a commercial shared street.
- **Involving Stakeholders:** Obtain stakeholder input on the proposed design elements, to help inform users of the differences between shared and conventional streets. Stakeholders will include local residents, transit operators, business owners, law enforcement, emergency responders, public health professionals, and people with visual or mobility disabilities.

Exhibit 4-4: Sample Shared Street Conceptual Plan

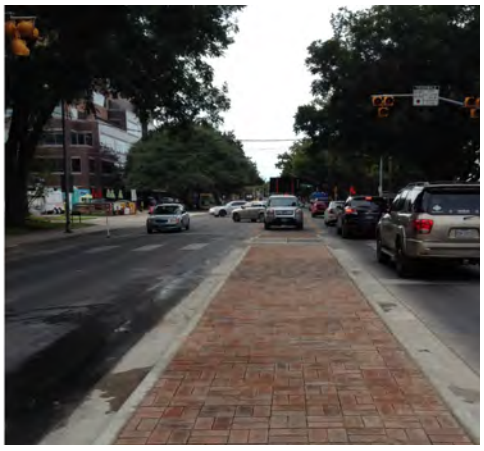


COMPLETING THE NETWORK (CONT'D)

- **Working with Existing Guidance:** Use guidelines to ensure universal accessibility and to establish key design elements, such as Public Rights-of-Way Accessibility Guidelines (PROWAG), the NACTO Urban Street Design Guide, and the ITE/CNU Context Sensitive Solutions in Designing Major Urban Thoroughfares.
- **Evaluating Effectiveness:** Collect "before" and "after" data on speed, volume, crashes, rates of walking and bicycling and social impacts to help determine the effectiveness of shared streets, and implement changes to continue to improve mobility, safety, and connectivity.

Pedestrian Crossing Improvements

Pedestrian crossing improvements are an important complement to sidewalks because they help to improve safety for pedestrians where different modes of travel intersect and a higher likelihood of vehicle / pedestrian conflict exists. Together, sidewalks and crossing improvements such as signals, crosswalks, bulb outs or median refuge islands provide a more complete pedestrian network. The Transportation Department is developing a crossing improvement program as a way to improve the pedestrian network in coordination with sidewalk improvements.



Great Streets

The City's Great Streets Program intends to enhance walkability through additional elements such as expanded sidewalk width, street trees, benches, and landscaping. These enhancements are required for developers under the City Land Development Code Subchapter E. However, due to funding and right-of-way constraints, the Sidewalk Program typically installs only basic 5- to 6-foot wide sidewalks, even in commercial corridors. The Sidewalk Program should make additional efforts to partner with development in commercial corridors to achieve an attractive and safe pedestrian environment that enhances walkability beyond minimum ADA requirements.

Active Shared Streets

The term “Active Shared Streets” refers to a mixed-use environment with “active” ground floor retail or other uses that produce high volume pedestrian trip generation. In active mixed-use areas, shared streets may improve access to ground floor businesses while improving the pedestrian safety and experience.

Residential Shared Streets

The term “Residential Shared Streets” refers to a shared environment in a residential context, typically a low volume neighborhood street. In established residential neighborhoods with significant constructability constraints, shared streets may be a cost effective option for providing safe pedestrian access, and may be more acceptable to the local residents. Appendix F describes a residential shared street pilot program in Austin.

FUNDING ALTERNATIVES

Construction of new sidewalks is a Capital Improvement Program (CIP) activity. The primary source of funding for City of Austin CIP projects is voter approved bonds, with occasional supplemental funding from grants, development related fees, or other non-general fund sources.

Based on information from the Sidewalks Peer Cities Report and other research, a matrix of possible funding sources was developed. Table 4-1 provides a short list of the recommended funding strategies based on input from the consultant team, city staff, and the public outreach program. Refer to Appendix H for more detail regarding these recommendations.

Table 4-1: Recommended Funding Sources – New Sidewalks

Funding Source	Description	Notes
Bonds	Voter approved debt paid back through property taxes.	Allows citizens to determine appropriate level of funding to meet new sidewalk construction goals.
Grants	Continue to pursue grant opportunities to address priority sidewalk projects.	Typically requires local matching funds.
Enforcement Fees	Fee surcharge added to pedestrian or sidewalk related violations.	• City of Austin Safe Routes is a possible model; $25/speeding ticket and $5/ parking ticket in a school zone goes to fund crossing guards.
New Development Sidewalk Impact Fee	Fee assessed to address offsite pedestrian infrastructure required to serve new development.	• Impact Fees subject to requirements and limitations of Chapter 395 of Texas Local Government Code (Prohibits use of impact fees for repair or maintenance of existing infrastructure). • A sidewalk impact fee or similar process may be addressed through the current Street Impact Fee processes initiated by ATD and other current and longer term Land Development Code amendments, including CodeNEXT.
Commercial Driveway Assessment	Assess commercial property owners to pay for driveway repairs required to provide ADA compliant routes, with options for the landowner on payment terms and construction delivery methods.	• Approximately 20% of the cost of sidewalk projects is associated with driveways; this percentage can be higher on commercial corridors. • City policy (currently not codified) makes landowner responsible for construction and maintenance of driveway(s) accessing property including the sidewalk section. • Assessment would provide incentive to reduce driveway widths thereby reducing pedestrian/auto conflicts areas.
Parking Benefit District (PBD)	Ordinance allows neighborhoods to request installation of parking meters with 51% of net revenues dedicated to local pedestrian and streetscape improvements.	Relatively new program; has potential to provide infill sidewalks in targeted areas.

RECOMMENDATIONS

Below is the new sidewalk program target and key recommendations for new sidewalks in Austin:

Table 4-2: New Sidewalk Program		
Target	**Fiscal Years 2018 - 2027**	
	Implementation Schedule	**Estimated Annual Budget**
Address all very high and high priority sidewalk within ¼ mile of all identified schools, bus stops, and parks , including both sides of arterial and collector streets and one side of residential streets. (Approximately 390 miles)	39 miles/year	$25 million per year

- **Develop a transparent system for working with Council District Representatives** to utilize their local knowledge and resources as one of the refining filters in selecting near-term potential construction projects from the list of high priority sidewalk needs identified by the GIS prioritization process.
- **Ensure development adequately addresses sidewalks** and does not create new gaps by enacting key land development code updates recommended in Appendix I.
- **Implement a sidewalk mitigation fee for new development** to address absent pedestrian infrastructure. In order to equitably address needs, the fee could be based on a combination of increased intensity of use and outstanding pedestrian infrastructure need in the area. Fees collected would be dedicated to improvements in the area consistent with current fee-in-lieu practice.
- **Implement Neighborhood Shared Streets pilot program** to evaluate alternative strategies for safe and cost effective pedestrian access.
- **Incorporate green infrastructure and pedestrian safety priorities** into sidewalk projects by removing unnecessary pavement and introducing rain gardens and shade trees wherever it is feasible and cost effective.
- **Identify partnering opportunities to implement projects** that support shared goals or overlapping priorities through collaboration and shared resources.

Additional recommendations for new sidewalks in Austin:

- Explore opportunities for pre-construction outreach on commercial corridors by Transportation, Planning, Watershed, Economic Development and other departments to use sidewalk improvements as catalyst for encouraging coordinated public and private investments in streetscape improvements, green infrastructure and other improvements.
- Continue the ongoing focus on innovation and cost effective delivery of new sidewalk infrastructure. Improve data collection on new sidewalk construction ancillary to non- Sidewalk Program CIP projects, to help ensure implementation of City of Austin Complete Streets policies.
- Consider the cost benefits of removal of parking spaces and/or other use reallocation in locations with right-of-way constraints, in order to improve pedestrian safety and accessibility.
- Ensure that all work in the Right of Way adheres to City of Austin Complete Streets policies including repair and rehabilitation of existing sidewalks for ADA compliance as part of any Capital Improvement Project, private development/redevelopment, or major utility project.

Section 5

EXISTING SIDEWALKS

BACKGROUND

Maintenance of existing sidewalks within public right-of-way has historically been considered the responsibility of the adjacent property owner. The City of Austin Code included this responsibility requirement until 1999. Subsequently, the City implemented a repair and rehabilitation program for its sidewalk network, but funded at levels that do not sustain a serviceable sidewalk network at life-cycle costs nor address previous years of deferred maintenance. The Public Works Department is currently responsible for maintaining approximately 2,400 miles of existing sidewalk network.

Unlike new sidewalk construction, which in Austin is guided by the policies described in the Imagine Austin Comprehensive Plan, existing sidewalk repair and rehabilitation is also mandated by the Americans with Disabilities Act (ADA).

CURRENT PROGRAM AND POLICIES

Prior to the late 1990s, little or no City funding was devoted to sidewalk repair and rehabilitation. Starting in 1998 and again in 2000, transportation bonds were approved that included sidewalk funding. From 2006 to 2014, the City spent roughly $1M of bond-funding annually on sidewalk repair and rehabilitation. Since 2015, roughly $200,000 has been spent annually for operational sidewalk repair and rehabilitation.

In addition to this spending, the Public Works Department Sidewalk Program has historically performed repair and rehabilitation as “ADA transition” projects, which are completed under Austin’s new sidewalk program, combining installation of new sidewalks with rehabilitation of existing sidewalks to complete ADA compliant routes between destinations. However, because these ADA transition projects are focused on installation of sidewalk gaps, they do not always address the most critical repair and rehabilitation need. A stable and sufficient funding source for ADA transition projects and sidewalk repair and rehabilitation is needed moving forward to ensure a functional pedestrian environment.

CURRENT PROGRAM AND POLICIES (CONT'D)

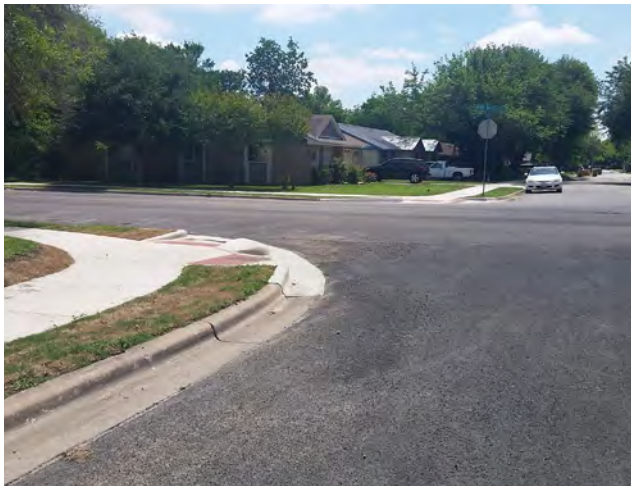
Lifting and Grinding/Cutting

Street maintenance programs have developed cost-effective, preventive maintenance methods to extend the useful service life of streets, such as crack sealing, sealcoating, and asphalt overlays. However, there are no cost-effective, preventive maintenance methods to completely address ADA noncompliance along a pedestrian route. As a result, removal and replacement is the typical remedy. There are however a few types of defects that can be repaired through alternative methods.

The City has recently incorporated the use of concrete lifting and concrete grinding or cutting to increase the functionality of a sidewalk for a fraction of the cost of replacement. These methods do not generally bring a sidewalk into full ADA compliance; however, they increase functionality by removing trip hazards and cross-slope faults. Because of the economy of these alternative methods, they are currently used to address faults within areas where there have been a significant number of citizen repair requests. If needed, these alternative maintenance methods are sometimes followed by spot replacement of remaining problem areas.

Curb Ramps and Street Alterations

In 2013, the Department of Justice and Federal Highway Administration provided guidance regarding the installation of missing curb ramps in conjunction with asphalt overlays and other street "alterations." While implementing this guidance on street maintenance resurfacing projects, the City also seeks to ensure that new curb ramps connect to a functional ADA route. To the extent that resources are available, new curb ramp installations are coordinated with sidewalk rehabilitation and applicable street alterations. In addition to street maintenance resurfacing projects performed by Public Works, many other City Departments resurface the streets, which also requires coordinated curb ramp installations.



CURRENT PROGRAM AND POLICIES (CONT'D)

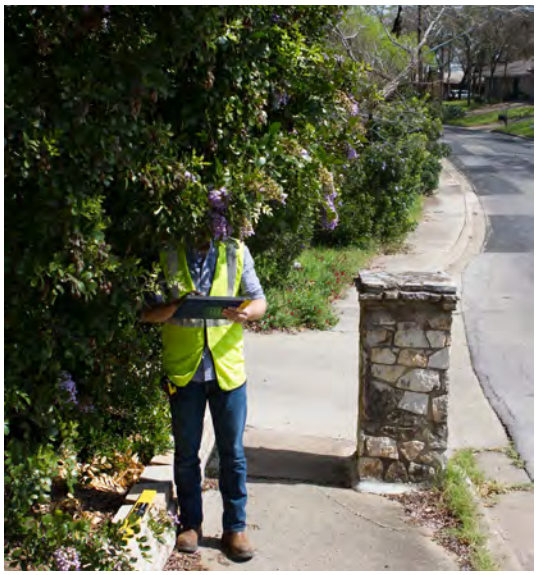
Driveways

When the requirement for sidewalk repair and rehabilitation responsibility by the adjacent property owner was removed from the City of Austin Code in 1999, Public Works adopted a policy that driveways would still be the responsibility of the property owner because they provide direct vehicular access from private property to the right-of-way.

Because the driveway crosses the pedestrian route, any newly constructed driveway is required to include an ADA compliant sidewalk section. Despite property owners' responsibility for driveways, where driveways are replaced in areas where the City is repairing existing sidewalks or installing new sidewalks, the City installs new ADA compliant driveway aprons at no cost to the property owner. Driveway replacement accounts for approximately 20% of sidewalk repair and rehabilitation project costs.

Vegetation Obstructions

Vegetation impacts the ADA compliance and functionality of sidewalks by creating hanging protrusions and ground obstructions. City Code currently requires property owners to maintain trees and vegetation above or adjacent to sidewalk within the right-of-way. However, the code requirements lack clarity and are infrequently enforced. Currently, the Public Works Department Forestry Program addresses vegetative sidewalk obstructions in response to citizen complaints through the 3-1-1 system.



PROJECT SELECTION

Historically, sidewalk repair and rehabilitation resources were distributed geographically by zip code. Repair locations were selected based on citizen requests through the "3-1-1 system," prioritized by damage severity to the extent that resources were available. The benefit of this approach is that sidewalk issues raised by citizens are addressed directly. The downside is that a patchwork of repairs do not provide a consistent, functional pedestrian route.

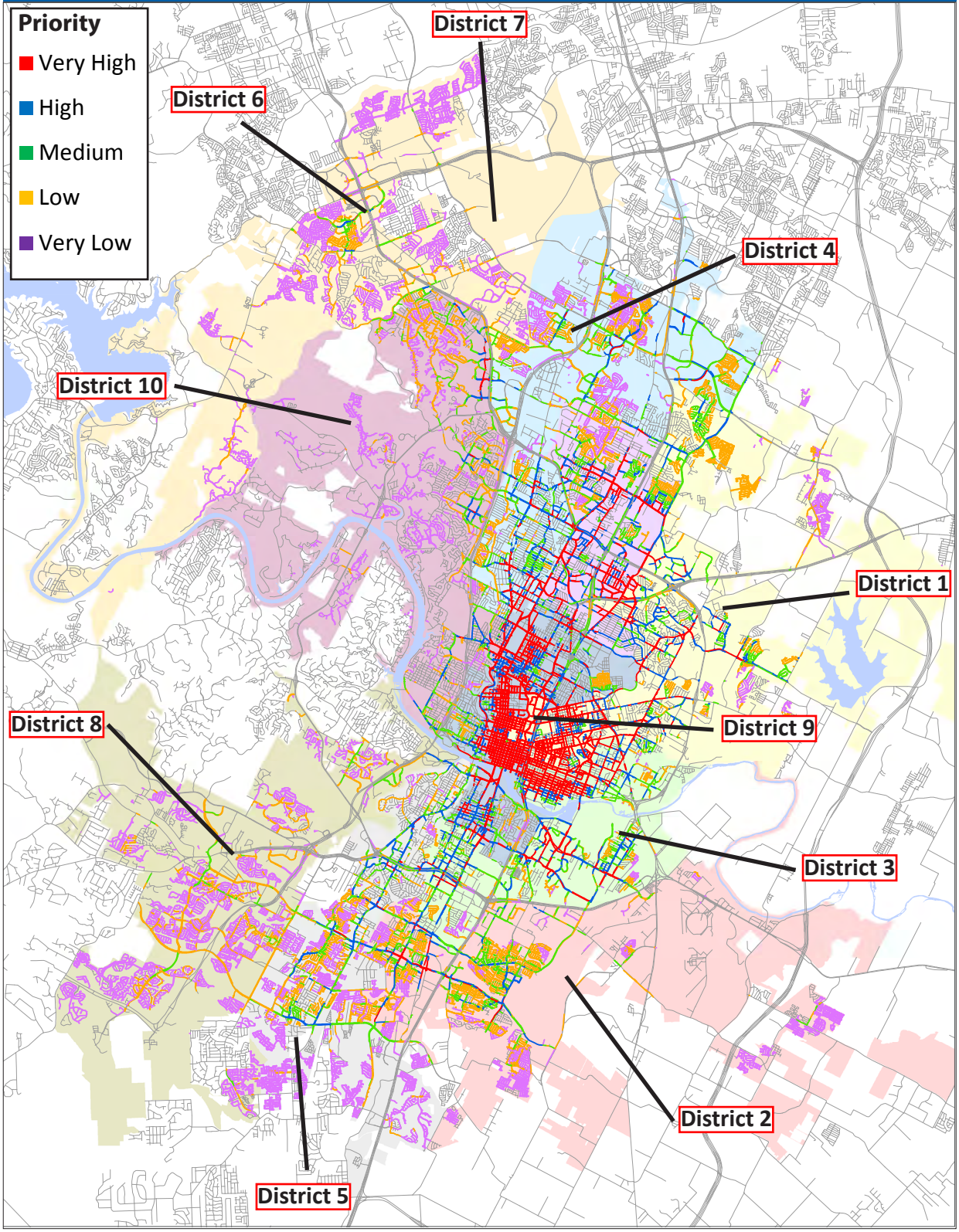
More recently, repairs have been organized to provide a more functional pedestrian route along an entire block or series of blocks with the repair locations selected based on 3-1-1 repair requests and coordination of other work. However, there is not always a positive correlation between the level of 3-1-1 requests and the actual repair needs in an area. Therefore, the approach proposed in the 2016 Sidewalk Master Plan Update includes both a systematic sidewalk condition assessment program and objective prioritization of existing sidewalks. The prioritization method is described in Section 3, and produces a map as shown in Exhibit 5-1.

In addition to condition assessment and prioritization, selection of sidewalk repair and rehabilitation projects will include additional priorities and coordination opportunities similar to those outlined in Section 4 to maximize effectiveness of available funding.

The final selection of work included in the Annual Work Plan is the sole approval of the Public Works Director, after consideration of all other stakeholders.

PROJECT SELECTION (CONT'D)

Exhibit 5-1: Existing Sidewalk Prioritization Map



CONDITION ASSESSMENT

Methodology Overview

To provide a more systematic approach to project prioritization and selection, the Public Works Department Sidewalk Program has developed a Condition Assessment Methodology for evaluating and rating existing sidewalks. The methodology incorporates the use of a handheld tablet to associate condition data with the City's GIS sidewalk and curb ramp layers using ESRI's Collector App.

The methodology assigns a rating of A through F to each sidewalk segment, curb ramp, and driveway, based on the worst severity condition, such as cross-slope, cracking, etc. Sidewalk segments are defined between intersections and driveways. Table 5-1 describes the rating system and Table 5-2 provides an example of the conditions that are evaluated for each sidewalk segment and how the condition impacts the rating. The methodology is described in detail in a document produced by City staff and is included in Appendix G.

Table 5-1: Condition Rating System

Letter Rating	Descriptive Rating	Description
A	Excellent condition	Fully ADA Compliant
B	Good condition	Minor level of ADA Noncompliance - Functional for almost all users
C	Fair condition	Intermediate level of ADA Noncompliance - May not be functional for some users
D	Poor condition	Severe level of ADA Noncompliance - Not functional for many / May present hazards for all users
F	Failed condition	Extreme level of ADA Noncompliance - Essentially nonexistent as a developed pedestrian route

Table 5-2: Sidewalk Rating Matrix

	FUNCTIONALLY ACCEPTABLE		FUNCTIONALLY DEFICIENT		
Sidewalk Condition	**A**	**B**	**C**	**D**	**F**
Width	> 48 in.	36 in. - 48 in.			< 36 in.
Cross-slope	0 - 2%	3 - 5%	6 - 8%	9 - 12%	> 12%
Faults	< 0.25 in.	0.25 - 0.5 in.	0.5 - 2 in.	2 - 4 in.	> 4 in.
Faults (count)	None	1 - 2	3 - 10	11 - 20	> 20
Cracks	None / Minor	Moderate	Severe		
Vertical Clearance	> 80 in.			< 80 in.	
Obstruction	None				Obstruction

CONDITION ASSESSMENT (CONT'D)

Pilot Data Collection

A pilot sample of approximately 150 miles of sidewalk was selected to test and refine the methodology and to provide initial data for projecting repair and rehabilitation needs. The pilot sample represents approximately 6.4% of the 2,400 miles of existing citywide sidewalk network, and is shown in Exhibit 5-2.

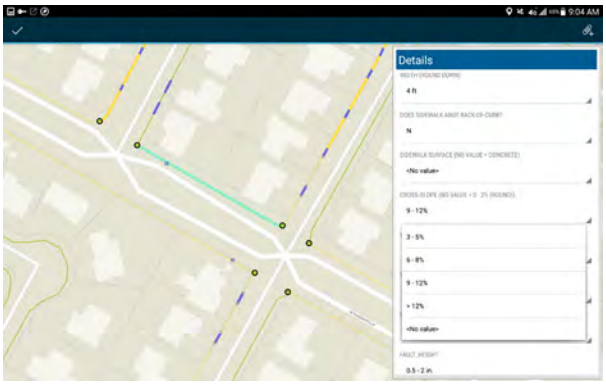
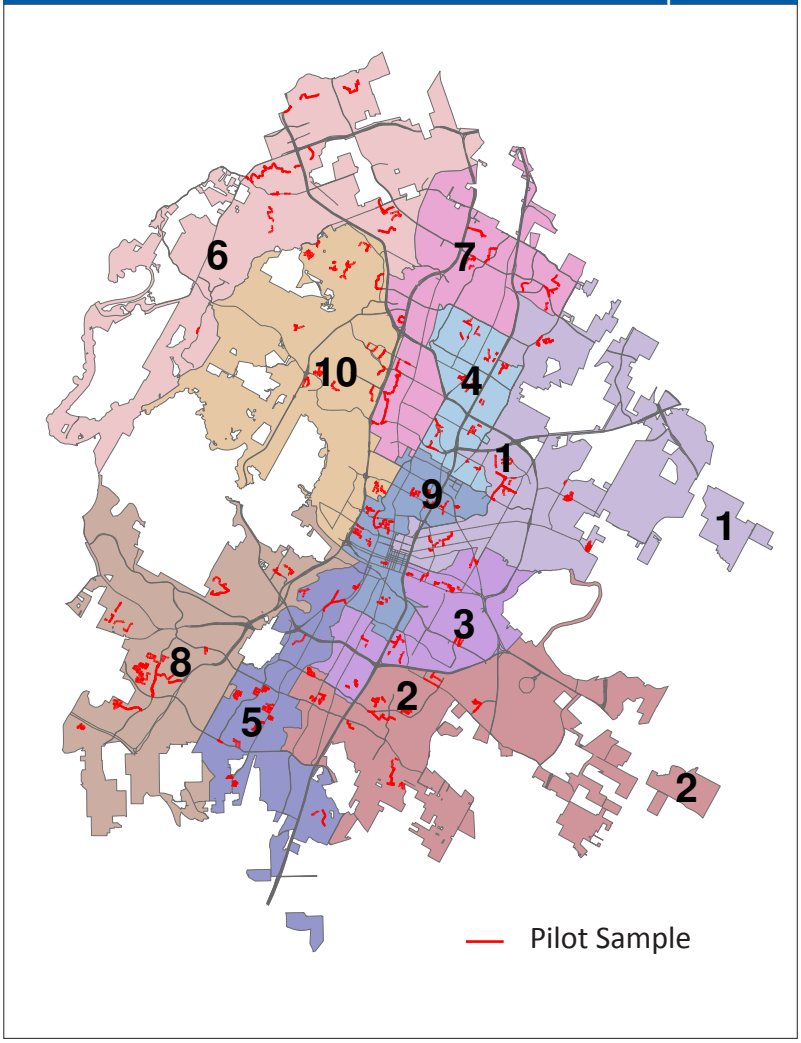


Exhibit 5-2: Condition Assessment Pilot Sample



To provide a linear extrapolation from the pilot sample to the citywide network, the pilot sample was selected based on a distribution of the 10 council districts and 4 roadway classifications: major arterial, minor arterial, collector, and local. The distribution is proportional to the percent of total sidewalk adjacent to each roadway type within each district and proportional to the percent of the citywide total quantity of sidewalk contained within each district. The results of the existing sidewalk condition assessment pilot data collection are included in Appendix E.

ADA TRANSITION PLAN

Responsible Public Official

The City's ADA Transition Plan for sidewalks in public right-of-way is implemented by the Director of Public Works in consultation with the COA ADA/504 Coordinator.

Inventory of Barriers

The results of the Pilot Condition Assessment have been extrapolated for the existing citywide network. Exhibit 5-3 shows the proportion of existing citywide sidewalk in each of the five conditions.

Based on this extrapolation, the estimated cost to achieve either a fully compliant (A-rating) or a functionally acceptable (B-rating) condition for all existing sidewalks, ramps, and driveways within the citywide network are shown in Table 5-3. This estimate assumes that 75% of each existing non-compliant sidewalk segment requires repair or rehabilitation, which was the average non-compliant percentage per segment recorded in the pilot condition assessment. This estimate does not account for vegetative obstruction removal, which may be accomplished at a significantly lower cost than sidewalk repair and rehabilitation (see sidebar).

Table 5-3: Estimate Repair and Rehabilitation Need		
Goal	**Rating**	**Total Need**
Fully Compliant	A	$580 M
Functionally Acceptable	A or B	$330 M

ADA Barrier Removal Methods

Methods to remove accessibility barriers include the following:

- Ongoing vegetation maintenance program
- Sidewalk removal and replacement
- Concrete lifting and grinding/ cutting
- Curb ramp retrofits coordinated with street alteration projects
- Complete Streets implementation

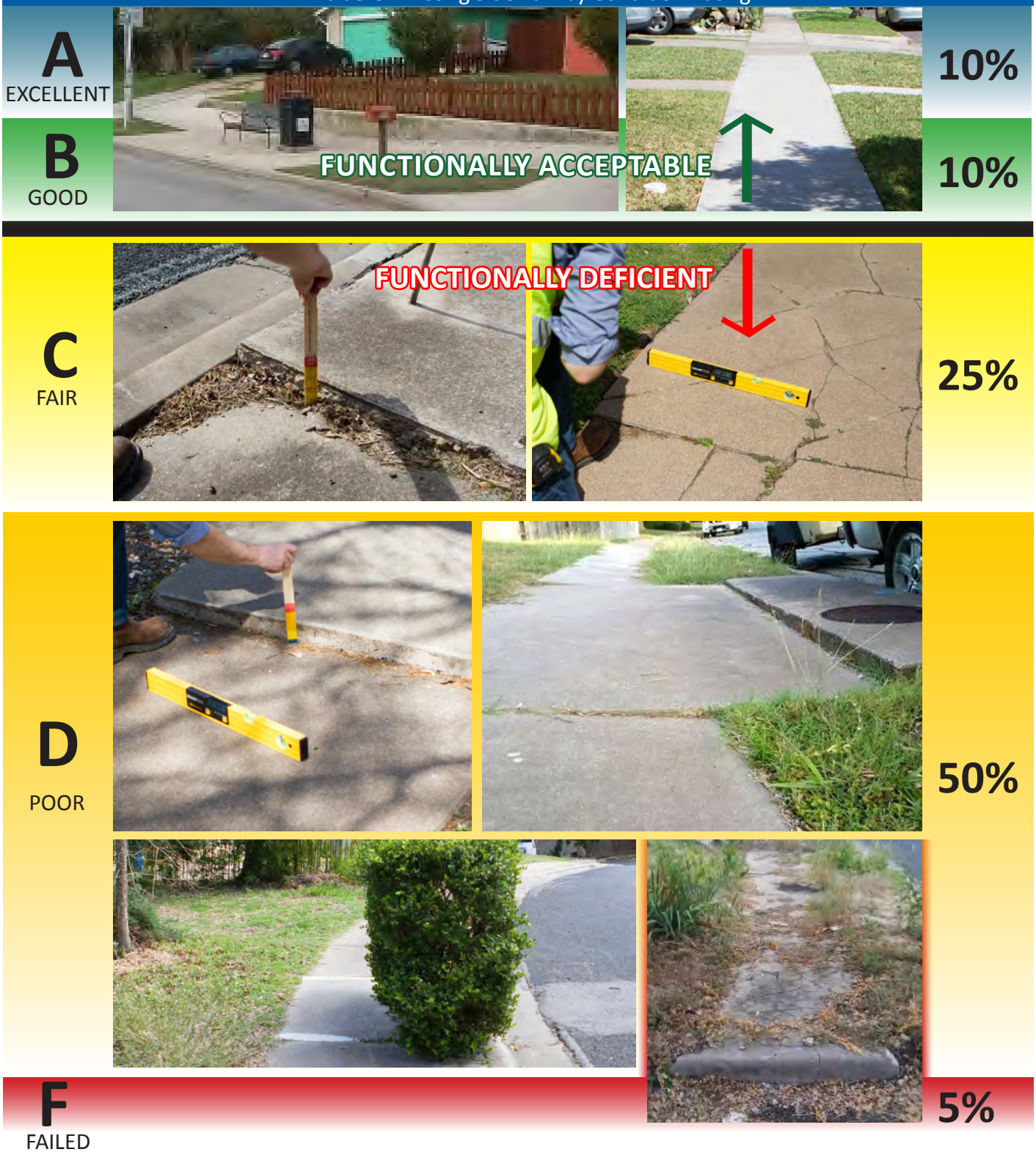
Vegetative Obstruction Removal

Based on the Pilot Condition Assessment, 20% of the existing sidewalk network is currently impacted by some type of vegetative obstruction. As shown in Table 5-4, removal of vegetative obstructions could effectively increase functionally acceptable sidewalk by approximately 100%. Vegetative obstruction removal costs are significantly lower than sidewalk repair and rehabilitation costs; so a vegetative obstruction removal program (consisting of promoting property owner vegetation maintenance, enforcement of violations, and pro-actively addressing obstructions.

Table 5-4: Impact of Vegetative Obstruction Removal on Sidewalk Network Ratings	
Rating	Functionally Acceptable (A or B)
Current	20%
With Vegetative Obstruction Removed	40%

ADA TRANSITION PLAN (CONT'D)

Exhibit 5-3: Existing Sidewalk by Condition Rating



ADA TRANSITION PLAN (CONT'D)

Prioritization of Improvements

The sidewalk prioritization tool described in Section 3 produces a map, shown in Exhibit 5-1, that prioritizes all existing sidewalks in the City of Austin by location based on pedestrian attractors and pedestrian safety. A breakdown of the miles of sidewalk by priority per Council District are shown in Appendix D.

Prioritization of ADA barrier removal for existing sidewalks will include a combination of this locational priority and the condition rating. For example, repair priority will be given to areas that have a large majority of D- and F-rated sidewalks within very high and high priority areas to address the most significant ADA barriers in the most critical areas. Final repair scopes will likely also address C-rated sidewalks within the general repair area to create functionally acceptable pedestrian routes. Where street level pedestrian walkways cross curbs, curb ramps will be provided ancillary to priority sidewalk rehabilitation projects. In addition, provision of curb ramps will also be coordinated with street alterations where the functionality of the pedestrian route is moderately improved. The quantity of ADA-complaint curb ramps provided annually will not be less than the total required for street alterations each year.

Schedule of Improvements

The anticipated average service life for sidewalks is approximately 75 years. As a result, replacement of the current 2,400-mile sidewalk network on a 75-year cycle (1/75 of the sidewalk network annually) would cost approximately $15M annually, as shown in Table 5-5. This simplified service life model identifies the order of magnitude necessary to achieve a more functional sidewalk network, and does not attempt to identify a specific repair and rehabilitation budget.

Table 5-5: Annual Asset Management Need

Existing Sidewalks	2,400 miles 63 million square feet
Replacement Costs	$18 / square feet
Service Life	75 years
Annual Repair and Rehabilitation Costs	32 miles, $15 M

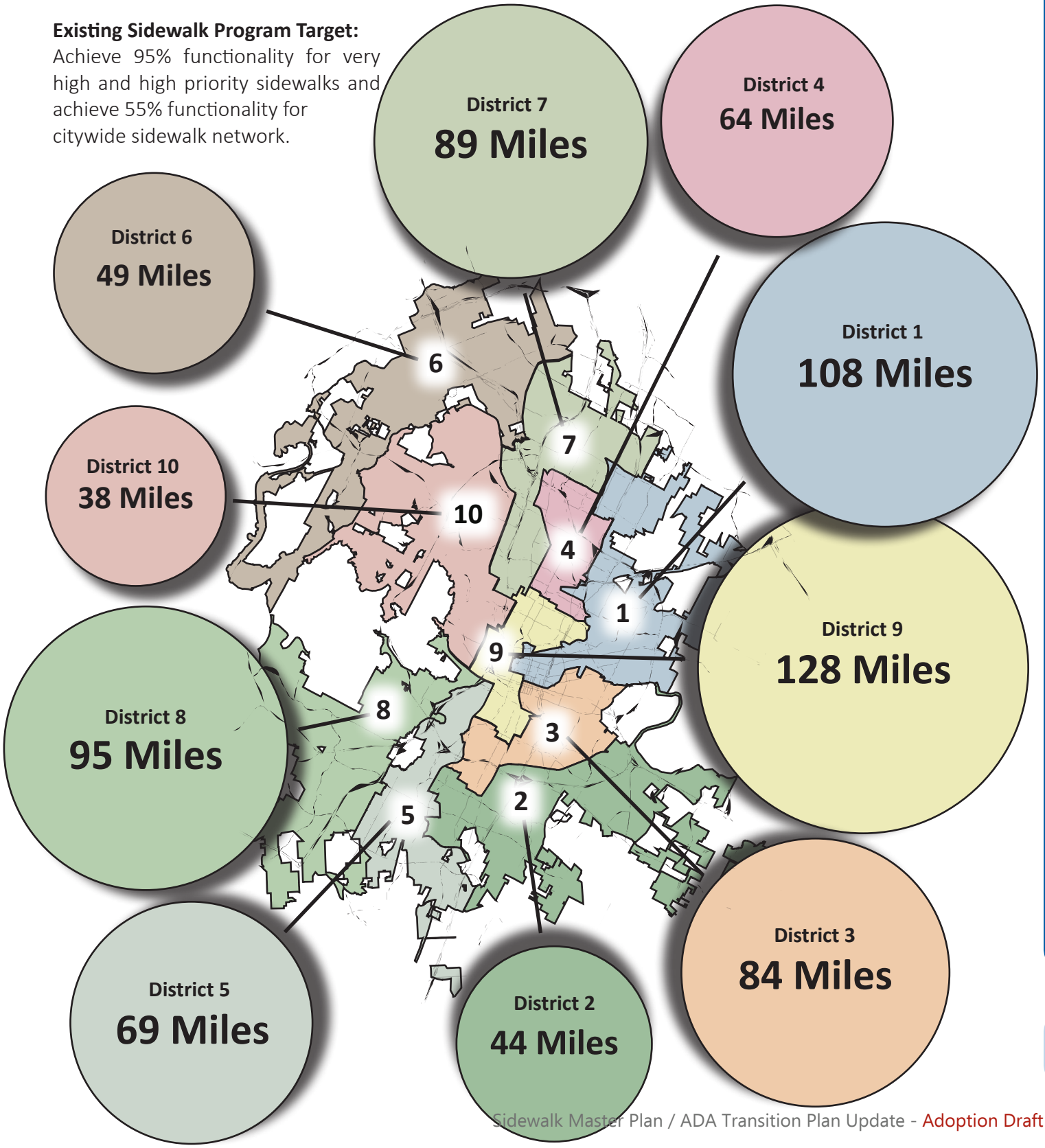
Historically deferred maintenance or future expansion of the sidewalk network is not included in the 75-year life cycle cost calculation. The estimated duration to repair or rehabilitate all functionally deficient existing sidewalk in the network at a $15M annual budget exceeds 20 years. Therefore, this Update proposes a 10-year target to achieve acceptable functionality for 95% of all very high and high priority sidewalks and 55% of all non-priority sidewalks. Exhibit 5-4 identifies the estimated sidewalk improvement miles (i.e. additional mileage of functionally acceptable sidewalk after 10 years), which are based on conditions extrapolated from the pilot condition assessment and include removal of estimated vegetative obstructions on all sidewalks and repair and rehabilitation of estimated very high and high priority, functionally deficient sidewalk.

Recent repair and rehabilitation annual spending has ranged from $0.25M to $1.5M, and this significant change in level of service will require time to develop, regardless of whether repairs are made in-house or contracted. Therefore, the recommended funding targets for sidewalk repair and rehabilitation and ADA Transition Projects include a one-year transition budget of $7.5M for 2017.

ADA TRANSITION PLAN (CONT'D)

Exhibit 5-4: Existing Sidewalk Improvement Miles 10-year Target

Existing Sidewalk Program Target:
Achieve 95% functionality for very high and high priority sidewalks and achieve 55% functionality for citywide sidewalk network.



ADA TRANSITION PLAN (CONT'D)

Funding Alternatives

Based on information from the Sidewalks Peer Cities Report and feedback from the consultant team, city staff, and the public outreach program, a matrix of possible funding sources was developed and is included in the Appendix H. Table 5-6 provides a summary of the recommended funding strategies.

Table 5-6: Recommended Funding Sources – Existing Sidewalks

Funding Source	Description	Notes
Transportation User Fee (TUF)	Assessed to residents and businesses on a monthly basis, based on the traffic levels generated by each dwelling unit or business. Funds street maintenance and repair, annual street overlay and striping, and other activities necessary for keeping Austin's roadways in good condition.	• Adding sidewalk repair and rehabilitation would be consistent with its intended use. • Funding $15M annual repair and rehabilitation program would require approximately 30% increase in TUF.
Commercial driveway assessment	Assess commercial property owners to pay for driveway repairs required to provide ADA compliant routes. Landowners would have the option to construct a new driveway apron or pay a fee to cover the cost. Option to pay the fee over 5 or 10 years depending on the total cost of the improvements would be provided.	• Approximately 20% of the cost of sidewalk projects is associated with driveways; percentage can be higher on commercial corridors. • City policy (currently not codified) makes landowner responsible for construction and the maintenance of driveway(s) accessing property including the sidewalk section. • Damage from overweight vehicles and/or poorly constructed driveways can make an otherwise functional sidewalk inaccessible for some users. No enforcement mechanism is currently in place to require repairs. • Fee would provide incentive to reduce driveway widths thereby reducing pedestrian/auto conflict areas. • Small businesses (revenues under $1M) may be eligible for tax credit for portion of cost of ADA related improvements.
Enforcement Fees	Fee surcharge added to pedestrian or sidewalk related violations: failure to yield to pedestrians in a crosswalk, blocking a crosswalk, blocking a sidewalk, etc.	• City of Austin Safe Routes is a possible model; $25/ speeding ticket and $5/ parking ticket in a school zone goes to fund crossing guards. • Education and Enforcement campaigns would improve pedestrian safety and comfort while also providing supplemental program funding

There is a potential small business tax credit for removing access barriers by upgrading the sidewalk in front of the business. In addition, a possible tax deduction is available to businesses, regardless of their size. Refer to IRS Form 8826 for the details.

RECOMMENDATIONS

Below are funding targets for existing sidewalk and key recommendations for existing sidewalks in Austin:

Table 5-7: Existing Sidewalk and ADA Transition Plan Program		
Target	**Implementation Schedule**	**Estimated Annual Budget**
Achieve 95% functionality for very high and high priority sidewalks and Achieve 55% functionality for citywide sidewalk network	10 years	$15 million per year [1]

1- Begins in 2018 after a transition budget of $7.5M for 2017.

- **Develop and implement public awareness and enforcement program** to address vegetative obstruction removal.
- **Provide stable and sufficient funding** for sustainable repair and rehabilitation of existing sidewalks.
- **Implement ongoing sidewalk condition assessment program** that assesses at least 10% of the existing network annually.
- **Revise City Code** to clarify the responsibility of property owners for maintenance of driveway approaches. (See Appendix I for suggested code revisions.)

Additional recommendations for existing sidewalks in Austin:

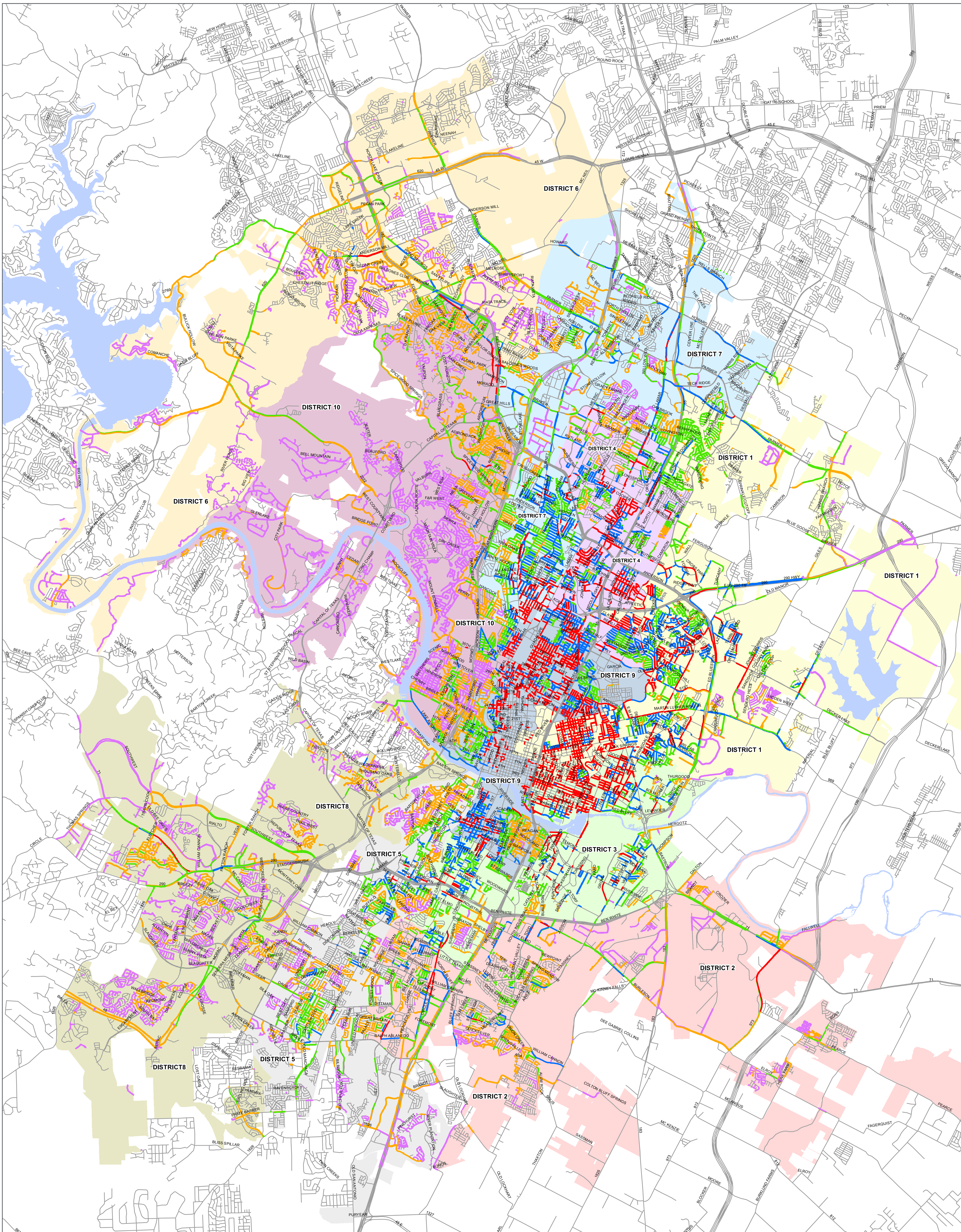
- Enact key land development code updates that clarify responsibilities and ensure developers upgrade existing noncompliant sidewalks during property development. (See Appendix I for suggested code revisions.)
- Revise City Code to clarify the responsibility of property owners for maintenance of trees and vegetation above or adjacent to sidewalks, to eliminate vegetative obstructions. (See Appendix I for suggested code revisions.)
- Create a staff position for a forester to issue notifications and subsequent violation fines. Program may also require litigation/administration support and/or a simplified utility bill fine assessment.
- Encourage other City Departments to develop policies regarding the responsibility to remove accessibility barriers within the scope of their projects.
- Continue ongoing focus on innovation and cost effective delivery to repair and rehabilitate existing sidewalk infrastructure.
- Ensure that all work in the Right of Way adheres to City Complete Streets policies including repair and rehabilitation of existing sidewalks for ADA compliance as part of any Capital Improvement Project, private development/redevelopment, or major utility project.

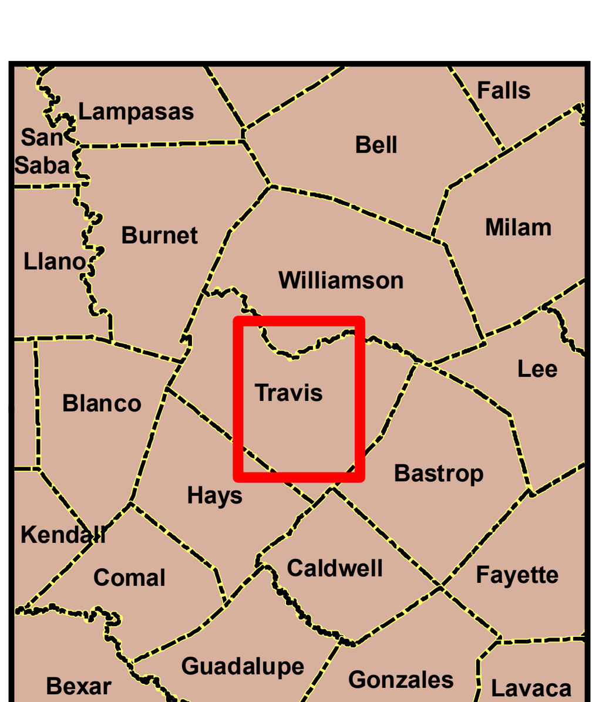
APPENDIX A:
ABSENT AND EXISTING SIDEWALK INVENTORY, BY COUNCIL DISTRICT

Absent and Existing Sidewalk Inventory, by Council District				
Council District	**Absent Sidewalk Miles**	**Absent Sidewalk Percent**	**Existing Sidewalk Miles**	**Existing Sidewalk Percent**
District 1	345	13%	252	11%
District 2	196	8%	262	11%
District 3	154	6%	177	7%
District 4	146	6%	159	7%
District 5	222	9%	277	12%
District 6	271	11%	298	12%
District 7	292	11%	261	11%
District 8	279	11%	315	13%
District 9	197	8%	197	8%
District 10	476	18%	200	8%
Subtotal	**2,578**	**100%**	**2,398**	**100%**

APPENDIX B:
ABSENT AND EXISTING SIDEWALK PRIORITIZATION MAPS

City of Austin Pedestrian Plan
Absent Sidewalk Scoring Results





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HDR makes no representations or warranties regarding accuracy or completeness of the information depicted on this map or data from which it was produced. This map is NOT suitable for survey purposes and does not purport to depict or establish boundaries between land owners or locations of utility infrastructure where survey data is available and field locations have been established

1:70,000

0 0.5 1 2 Miles

0 3,000 6,000 12,000 18,000 24,000 Feet

COUNCIL DISTRICT

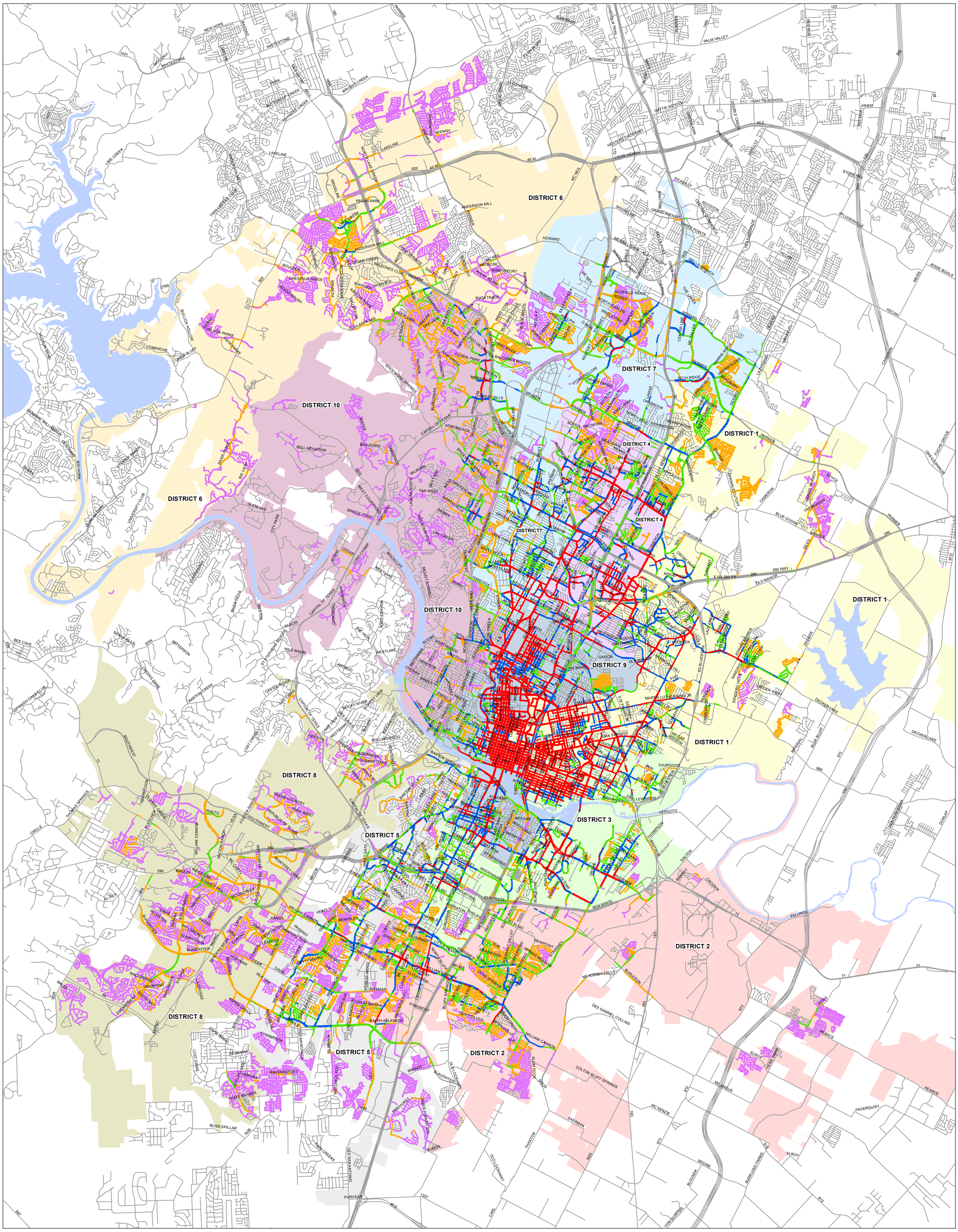
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, Lakes, Roads

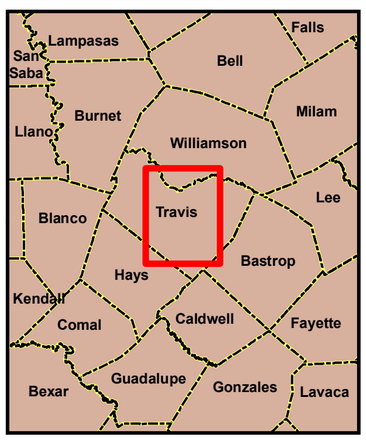
PIMS ABSENT SIDEWALK SCORE	ABSENT SIDEWALK SEGMENT COUNT
<= 30.00 (Very Low)	7,985
30.01 - 40.00 (Low)	6,779
40.01 - 50.00 (Medium)	5,632
50.01 - 59.00 (High)	3,785
> 59 (Very High)	3,237

SCORING DISTRIBUTION

Minimum: 0.00
Maximum:88.40
Mean: 40.03
Median: 38.25

City of Austin Pedestrian Plan
Existing Sidewalk Scoring Results





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1:70,000

0 0.5 1 2 Miles

0 3,000 6,000 12,000 18,000 24,000 Feet

COUNCIL DISTRICT

1	6
2	7
3	8
4	9
5	10
Lakes	Roads

PIMS EXISTING SIDEWALK SCORE*	PIMS EXISTING SIDEWALK COUNT*
<= 30.00 (Very Low)	65,983
30.01 - 40.00 (Low)	31,957
40.01 - 50.00 (Medium)	13,814
50.01 - 59.00 (High)	9,761
> 59.00 (Very High)	14,105

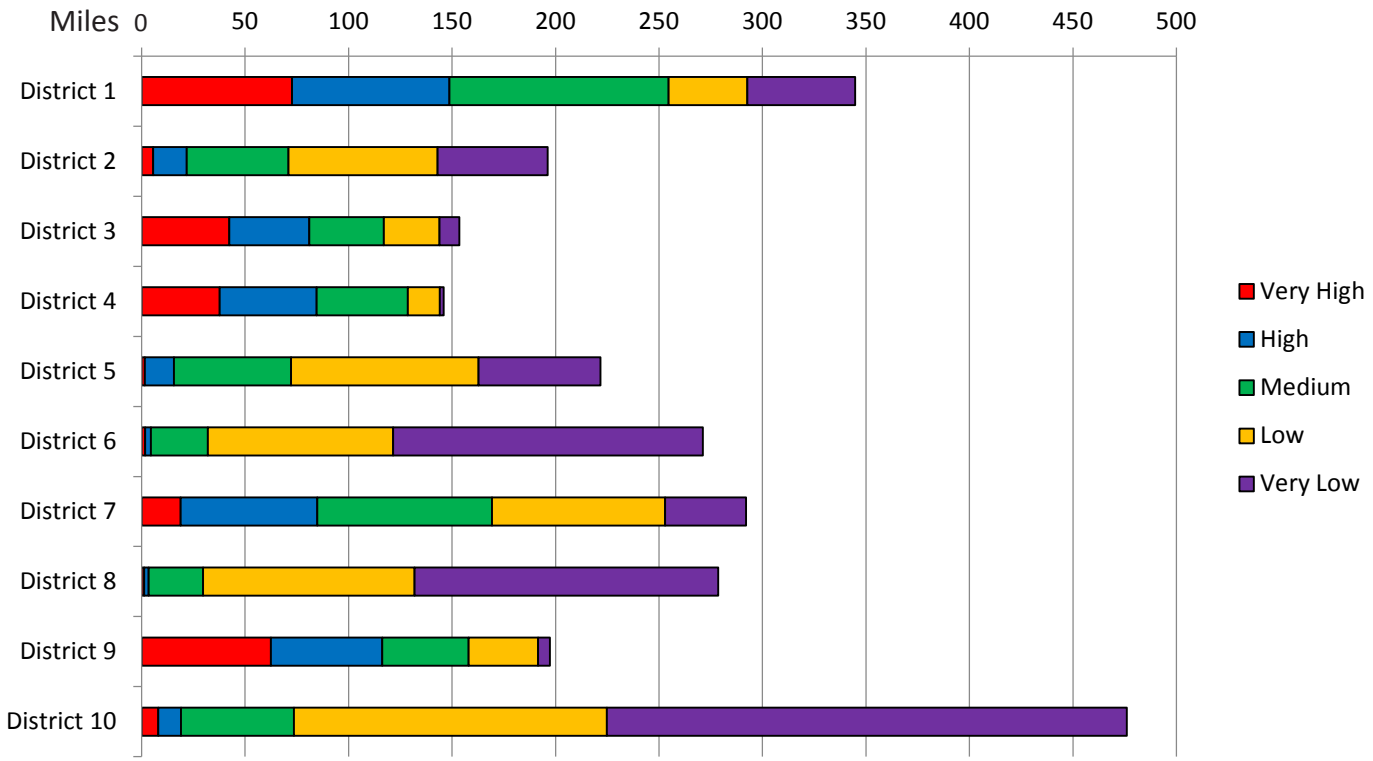
SCORING DISTRIBUTION

Minimum: 0.00
Maximum: 86.3
Mean: 34.88
Median: 30.51

* Driveways are not included in the Scoring or Count shown on this map.

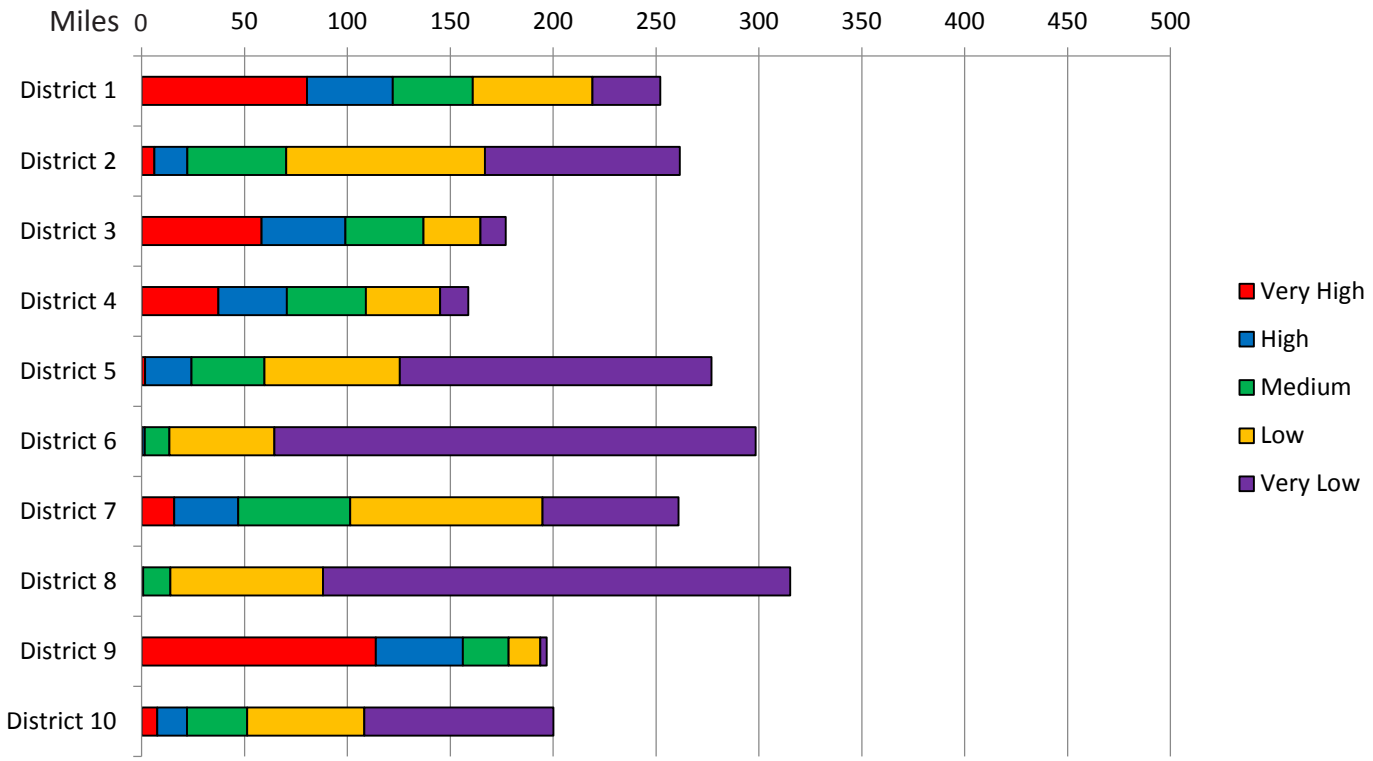
APPENDIX C:
ABSENT SIDEWALK INVENTORY, BY COUNCIL DISTRICT AND PRIORITY

Miles of Absent Sidewalk, by Council District and Priority (Prioritization Score > 25)							
	Very High	**High**	**Medium**	**Low**	**Very Low**	**District Subtotal**	**District Percent**
District 1	73	76	106	38	24	**317**	**14%**
District 2	6	16	49	72	32	**176**	**8%**
District 3	42	39	36	27	9	**153**	**7%**
District 4	38	47	44	15	1	**146**	**7%**
District 5	1	14	56	91	44	**207**	**9%**
District 6	2	3	27	90	77	**198**	**9%**
District 7	19	66	84	84	19	**272**	**12%**
District 8	1	2	26	102	79	**211**	**10%**
District 9	62	54	42	33	5	**197**	**9%**
District 10	8	11	55	151	107	**332**	**15%**
Priority Subtotal	**252**	**328**	**526**	**703**	**398**	**2,207**	**100%**
Priority Percent	**11%**	**15%**	**24%**	**32%**	**18%**	**100%**	



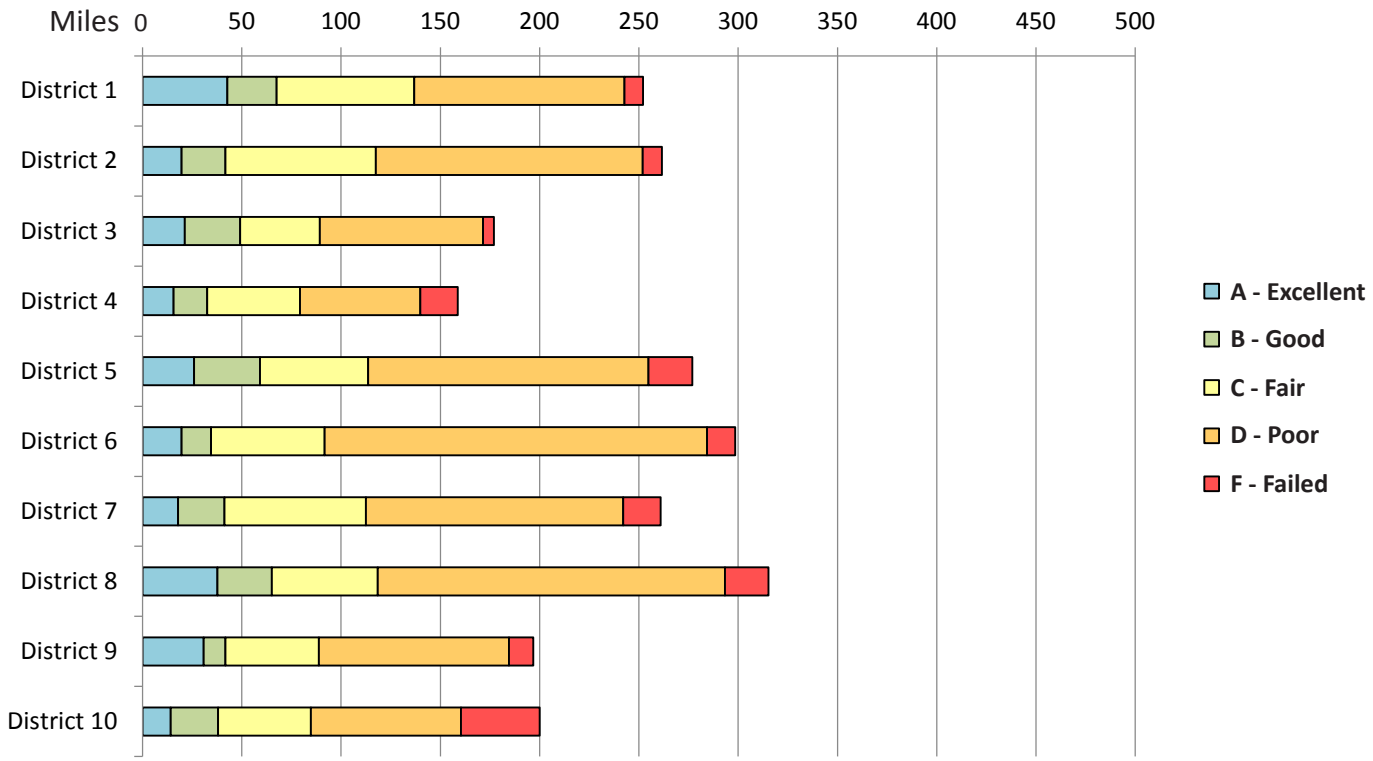
APPENDIX D:
EXISTING SIDEWALK INVENTORY, BY COUNCIL DISTRICT AND PRIORITY

Miles of Existing Sidewalk and Driveway, by Council District and Priority							
	Very High	**High**	**Medium**	**Low**	**Very Low**	**District Subtotal**	**District Percent**
District 1	80	42	39	58	33	**252**	**11%**
District 2	6	16	48	97	95	**262**	**11%**
District 3	58	41	38	28	12	**177**	**7%**
District 4	37	33	38	36	14	**159**	**7%**
District 5	2	23	35	66	151	**277**	**12%**
District 6	0	1	12	51	235	**298**	**12%**
District 7	16	31	54	93	66	**261**	**11%**
District 8	-	1	13	74	227	**315**	**13%**
District 9	114	42	22	16	3	**197**	**8%**
District 10	8	14	29	57	92	**200**	**8%**
Priority Subtotal	**321**	**244**	**330**	**575**	**927**	**2,398**	**100%**
Priority Percent	**13%**	**10%**	**14%**	**24%**	**39%**	**100%**	



APPENDIX E:
EXISTING SIDEWALK CONDITION ASSESSMENT RESULTS, BY COUNCIL DISTRICT

Percentage of existing sidewalk, by Council District and Condition						
	A-Excellent	**B-Good**	**C-Fair**	**D-Poor**	**F-Failed**	**District Percent**
District 1	17%	10%	27%	42%	4%	**11%**
District 2	8%	8%	29%	51%	4%	**11%**
District 3	12%	16%	23%	46%	3%	**7%**
District 4	10%	11%	29%	38%	12%	**7%**
District 5	9%	12%	20%	51%	8%	**12%**
District 6	7%	5%	19%	65%	5%	**12%**
District 7	7%	9%	27%	50%	7%	**11%**
District 8	12%	9%	17%	55%	7%	**13%**
District 9	16%	6%	24%	49%	6%	**8%**
District 10	7%	12%	23%	38%	20%	**8%**
Priority Percent	**10%**	**9%**	**23%**	**50%**	**7%**	



APPENDIX F:
SHARED STREETS PILOT PROGRAM

Residential Shared Street

Residential Shared Streets are places where, through the application of intentional redesign, people may walk, socialize and recreate in a street that is also shared by motor vehicles and bicycles. The purpose of the Residential Shared Space Pilot Program is to evaluate the use of residential shared space to improve the safety, connectivity and quality of the pedestrian network in the City of Austin. The Residential Shared Street pilot program will follow guidance provided by the National Association of City Transportation Officials (NACTO) Urban Street Design Guide which provides special recommendations for shared street elements such as parking, landscaping, street furniture, signage and tactile warnings. If successful, the pilot program may be expanded to serve other parts of the City.

The program will be evaluated based on several performance measures as listed below.

Residential Shared Street Performance Measures

1. Resident satisfaction and feedback as received by email, phone and other means from people living on the routes as well as those queried through intercept surveys on the street.
2. Twenty-four hour speed and volume studies before and after installation.
3. Walking and bicycling volumes before and after installation during weekdays, weeknights and weekends.

Other performance measures may be developed as part of the pilot program. A series of qualitative questions will be developed in order to solicit residential and street user satisfaction and feedback.

Criteria and Selection Process for Residential Shared Street Pilot Program Locations

The City of Austin Department of Public Works and the Austin Transportation Department will evaluate several Austin neighborhoods that meet the following criteria:

Selection Criteria

1. A primarily single-family residential neighborhood.
2. Prevalence of very high or high priority absent sidewalks
3. Motor vehicle volume is less than 1,000 cars per day.
4. Ability to create a gateway indicating one is entering a different environment.
5. On-street parking allowed.
6. Low to no prior crashes of any severity.
7. Constructibility barriers to building sidewalks.
8. Mature trees or other natural elements in the streetscape.
9. Likelihood to improve pedestrian access to schools, transit, parks or other pedestrian attractors.
10. Opportunities to address multiple city priorities including but not limited to: reducing impervious cover, access to parks/open space, and improving Austin's urban forest.

APPENDIX F:
SHARED STREETS PILOT PROGRAM

PWD and ATD will develop an application process for neighborhood groups to request consideration for the program on a semiannual or annual basis. This application process will be based upon similar programs such as PWD's Neighborhood Partnering Program and ATD's PHB Program and LATM Program. Matching funding requirements have not yet been determined.

A public process will be used to share information about the program and to invite applicants. Upon receiving all applications by the advertised deadline, PWD and ATD will evaluate the applications against the criteria listed above and rank each neighborhood for feasibility. A proposed design will be prepared for the most feasible location(s) based on the selection criteria and for which funding is available. This proposal will be brought back to the community for feedback. This feedback will be solicited through a mailed notification to all residents along the proposed street or route. An open house will be hosted in the community. Neighborhood associations and other key stakeholder groups such as ADAPT, and the Pedestrian Advisory Council will be encouraged to provide feedback.

Based on the outcome of this public process, PWD and ATD will determine if the proposed design will be implemented. This process will continue until one or more feasible location(s) and proposed design(s) is/are selected for implementation and funding becomes available.

APPENDIX G:
CONDITION ASSESSMENT METHODOLOGY

Sidewalk Master Plan Update:
Sidewalk Condition Evaluation Methodology Guidelines

These guidelines will serve as a baseline reference for evaluating sidewalks and curb ramps to maintain consistent evaluations between various groups (e.g., City staff, contracted labor, etc.). The following sections will identify each evaluated condition and the associated regulatory basis.

Throughout these guidelines, the following acronyms will be used:

NC – noncompliance or noncompliant

ADA – 2010 Americans with Disabilities Act Standards for Accessible Design

TAS – 2012 Texas Accessibility Standards

TDLR ABA – 2012 Texas Department of Licensing and Regulation Architectural Barriers Administrative Rules

PROWAG – US Access Board Proposed Guidelines for Pedestrian Facilities in the Public Right-of-Way

Table of Contents

SIDEWALKS

Sidewalk Conditions

Width

Width ratings are based on the following:

1. A ≥ 48 in. (PROWAG R302.3, COA TCM Table 4-1)
    a. Compliant: ADA, TAS, PROWAG, COA TCM;
    b. Noncompliant: N/A
2. B ≥ 36 in. (ADA 403.5.1, TAS 403.5.1)
    a. Compliant: ADA, TAS;
    b. Noncompliant: PROWAG, COA TCM;
        i. PROWAG states that the continuous sidewalk width must be no less than 48 in.
3. F < 36 in.
    a. Width is less than all standard continuous minimum widths.

Cross-slope

Cross-slope ratings are based on the following:

1. A ≤ 2% (ADA 403.3, TAS 403.3, PROWAG R302.3)
    a. Compliant: ADA, TAS, PROWAG;

   b. Noncompliant: N/A
2. B ≤ 5%
   a. Compliant: N/A
   b. Noncompliant: ADA, TAS, PROWAG;
   c. Cross-slope up to 5% is allowed on pedestrian street crossings without yield or stop control (i.e., no stop sign, no yield sign). Traffic signals do not qualify as yield or stop control because a green light does not provide yield or stop control.
   d. In addition, PROWAG R302.6.2 allows the cross slope of midblock pedestrian crossings to equal the street or highway grade.
3. C ≤ 8%
   a. Compliant: N/A
   b. Noncompliant: ADA, TAS, PROWAG;
   c. Value that provides a reasonable limit for level of serviceability.
4. D ≤ 12%
   a. Compliant: N/A
   b. Noncompliant: ADA, TAS, PROWAG;
   c. Value that provides a reasonable limit for level of serviceability.
5. F > 12%

Faults

Fault ratings are based on the following list.

EVALUATION NOTES

Faults at interfaces between the sidewalk and driveways or curb ramp landings should be reported on the sidewalk segment unless the fault cannot be addressed by reconstructing the sidewalk.

1. A ≤ 0.25 in. (ADA 303.2, TAS 303.2, PROWAG R302.7.2)
   a. Compliant: ADA, TAS, PROWAG;
   b. Noncompliant: N/A
   c. Can have fault (vertical surface discontinuity) as high as 0.5 in. as long as the discontinuity is beveled with no more than 1:2 slope.
2. B ≤ 0.5 in. (noted exception in ADA 303.3, TAS 303.3, PROWAG R302.7.2)
   a. Compliant: N/A
   b. Noncompliant: ADA, TAS, PROWAG;
   c. Fault (Vertical surface discontinuity) is not beveled and between 0.25 in. and 0.5 in.
3. C ≤ 2 in.
   a. Compliant: N/A
   b. Noncompliant: ADA, TAS, PROWAG;
   c. Value that provides a reasonable limit for level of serviceability.
4. D ≤ 4 in.
   a. Value that provides a reasonable limit for level of serviceability.
5. F > 4 in.

Fault Count

Fault count ratings are based on the following list. Reference for compliance of faults is based on the Faults section. Actual count ranges of faults will be collected in the field. Densities will be automatically calculated based on the length of the segment. Fault density can only result in a maximum rating of 'C.'

1. A = no NC faults
    a. Noncompliant fault is defined as a vertical surface discontinuity greater than 0.25 in. or greater than 0.5 in. if beveled with a maximum 1:2 slope.
2. B ≤ 20 NC faults / 100 ft
    a. Value that provides a reasonable limit for level of serviceability.
3. C > 20 NC faults / 100 ft
    a. Value that provides a reasonable limit for level of serviceability.

Fault Cause

This field identifies one cause (apparent cause) of sidewalk faults per segment. If the cause is not obvious, no selection is required. If one of the four causes exists, select cause based on order of the list (1. Utility Trench, 2. Utility Box / Cover / Manhole, 3. Overgrown Grass, 4. Tree Roots). That is, select "1. Utility Trench" if a utility trench issue exists (e.g., failed water utility trench). If no utility trench issues exist, select "2. Utility Box / Cover / Manhole" if a noncompliant fault is caused at the interface of any one of those items. If no utility vault faults exist, select "3. Overgrown Grass" if overgrown grass causes a noncompliant fault. If no faults due to overgrown grass exist, select "4. Tree Roots" if trees are the apparent cause of heaving.

Cracking

Crack ratings are based on the following list. Evaluation of cracks provides a measure of maintenance serviceability rather than compliance with regulatory documents. A fault at an expansion joint is not considered a crack; rather, cracks occur between expansion joints. Examples of the varying levels of cracking are shown in Figure 1 through Figure 3.

1. A = no cracking or only minor cracking evident
    a. Minor cracking is defined as cracks having widths less than 0.125 in. (1/8 in.) and having no NC faults (as defined in Fault Count above).
2. B = moderate cracking evident
    a. Moderate cracking is defined as cracks extending at least 1 ft across sidewalk panel and (1) having widths greater than 0.125 in. (1/8 in.), (2) network of hairline cracks, or (3) having NC faults (as defined in Fault Count above) less than 0.5 in.
3. C = severe cracking evident
    a. Severe cracking is defined as cracks having faults greater than 0.5 in., network of open or moderate cracks, or having at least 3 moderate cracks per 5 ft of sidewalk length (i.e., typical length of a panel).

EVALUATION NOTES

A crack width gauge is recommended for crack measurement. As a quick guide, 1/8 in. is roughly equal to the thickness of two (2) quarters.

Figure 1. Cracking Ex. 1: Severe

Figure 2. Cracking Ex. 2: Moderate

Figure 3. Cracking Ex. 3: Moderate

Vertical Obstruction

All pedestrian guidelines (ADA 403.5.3, TAS 403.5.3, PROWAG R302.4) require vertical clearance of at least 80 in. Vertical obstructions include vegetation (see next field), utility pole guy wires, railroad crossing arms, and other various assets (e.g., signs, etc.). Typically, vertical obstructions can be removed without repairing the sidewalk (e.g., trim vegetation, add horizontal strut for guy wires extending over the sidewalk). This methodology requires identification of the type of obstruction that reduces the vertical clearance to less than 80 in. Regardless of type, a vertical obstruction (< 80 in.) results in a D-rating.

Ground Obstruction

Ground obstructions reduce the clear width of the accessible route to less than 36 in. Typical ground obstructions include hydrants, utility poles, mailboxes, and other various assets (e.g., signs).

Vegetation Obstruction (Vertical & Ground)

Identifies if vertical obstruction is due to vegetation (e.g., low hanging tree branch, overgrown plant not detectable with cane). It is anticipated that many segments may have multiple obstructions (e.g., utility pole, guy wire, and low hanging tree). Therefore, vegetation was separated from the other obstructions so that both could be identified.

Ground Vegetation Obstructions typically include plants (e.g., cactus, bushes). It is important to note that these types of plants could also qualify as Vertical Vegetation Obstructions if not detectable with a cane. Ground vegetation obstructions that are “pointy” (e.g., agave plants) and overhang the edge of the sidewalk should be marked regardless of the clear width available on the sidewalk.

If both vertical and ground vegetation obstructions exist, note "both."

Vegetation obstruction was moved up the list because it was often overlooked by evaluators ducking underneath without realizing. Since using the rollator evaluation device and umbrella, vegetation obstructions have been less avoidable.

Driveways

Driveway condition evaluation consists of identifying faults and cross-slope deficiencies as well as determining the availability of a Driveway Reroute, as described in the next section. It is important to note that faults that exist at the joint between the sidewalk and driveway are attributed to the sidewalk condition, regardless of whether the top of sidewalk is above or below the top of driveway (See Figure 4). Faults that occur beyond and between these joints, including returned curbs (See Figure 5), are attributed to the driveway because the driveway must be repaired to address the fault. When a returned curb fault exists, the interface between the sidewalk and driveway is typically level at the back side of the sidewalk and increases toward the front side of the sidewalk nearer the interface between the driveway and the curb gutter (See Figure 5).

Figure 4. Sidewalk Faults at Driveway Interfaces

EVALUATION NOTES

If accessible, compliant path is less than 36 in. wide, measure the height of the curb at 36 in. from the back of sidewalk. If an accessible, compliant path exists that is greater than 36 in. wide, leave value Null.

Figure 5. Returned Curb Fault (curb/fault height measured 36 in. from back edge of sidewalk)

Driveway Reroute

If the driveway at the back side of the sidewalk (within the apparent ROW) is compliant (i.e., level or < 3% cross-slope and no faults), the sidewalk can be rerouted further back to the compliant portion of the driveway. See Figure 6.

EVALUATION NOTES

The ROW line is often approximately 10 ft behind the curb line and is typically characterized by an expansion joint that is consistent for each driveway.

Figure 6. Driveway Reroute & Typical ROW (typically consistent expansion joint alignment)

Sidewalks – Other Fields

Date Evaluated

This field indicates when the segment was evaluated and can be populated with the current date by pressing the "Use current" button under the field heading (on an Android device).

Sidewalk Surface

This field indicates the surface material of the sidewalk (e.g., Concrete, Exposed Aggregate Finish, Various Pavers, etc.). Concrete is the most prevalent material type. If sidewalk or driveway is concrete, evaluator can leave value Null.

Condition Percentage

This field indicates the approximate percentage of the total length of the segment where damage or noncompliance conditions are noted. For example, consider a 100 ft sidewalk segment; 35 ft of this segment has a cross-slope of 2 – 5%; a separate 25 ft portion of this segment has faults greater than 0.5 in. The total length of sidewalk that has some condition is 60 ft. Therefore, the approximate condition percentage would be 50%. As another example, consider a 100 ft sidewalk segment; half of the segment had a cross-slope of 3 – 5%, the remaining half of the segment had a cross-slope of 6 – 8%; 3 faults also existed on the segment. Some cross-slope condition existed along the entire length; therefore, the total length of sidewalk that has some condition is 100 ft. The resulting condition percentage would be 100%.

Length measurement of the noncompliance as provided in the example is not expected; rather, the percentage can be estimated.

EVALUATION NOTES

Length measurement of the noncompliance as provided in the example is not expected; rather, the percentage can be estimated.

When evaluating condition percentage at the end of a segment, it is often helpful to reassess cross-slope first. Because cross-slope is measured periodically along a sidewalk segment and is typically the most prevalent condition, if each cross-slope measurement was at least 3%, the condition percentage is automatically 100%, regardless of other conditions present.

Sidewalks – Lifting Candidacy

This section is for information purposes only and is not part of the field evaluation process. Lifting candidacy is determined automatically based on the conditions noted. It is expected that the following conditions will result in a considerable amount of possible lifting areas.

1. Back of Curb – if the sidewalk abuts the back of curb (a constraint), will not be noted as a possible lifting candidate
2. Faults – must be greater than 0.5 in. (do not plan to mobilize lifting for limited enhancement to functionality)
3. Cracking – must not have severe cracking within the segment
4. Cause – must not have tree roots as a cause of condition
5. Cross-slope – must be less than 8% as lifting is primarily used to address faults (although faults may be addressed, if severe cross-slopes exist, lifting may result in only limited enhancement to functionality)

Sidewalks – Grinding/Cutting Candidacy

This section is for information purposes only and is not part of the field evaluation process. Grinding/Cutting candidacy is determined automatically based on the conditions noted. It is expected that the following conditions will still result in a considerable amount of possible grinding/cutting areas.

1. Faults – must be less than 2 in. (half typical sidewalk depth of 4 in.)
2. Cross-slope – must not be greater than 8% (grinding will not provide a significant increase in functionality if cross-slopes exceed 8% and result in a D-rating)

Sidewalks – Notes Field

The notes field is used to identify other types of issues not provided in the evaluation form. In general, if the notes field is used, it is helpful to attach a photo to the sidewalk segment to help identify the issue and further refine the evaluation methodology.

CURB RAMPS

Curb ramps have three components: ramp, flares, and landing. If any of these components have a condition that is remediated, the entire curb ramp must be made compliant. None of these components are considered part of the sidewalk segment, including the landing.

Curb Ramp Conditions

Detectable Warning

Although the 2010 ADA Standards do not require detectable warnings on curb ramps, other pedestrian guidelines (TDLR ABA 68.102, PROWAG R305) require detectable warnings on curb ramps. The lack of a detectable warning or detectable warning noncompliance results in a B-classification.

This field identifies one cause of detectable warning noncompliance. If one of the three noncompliant conditions exist, select noncompliant condition based on order of the list (1. No Detectable Warning, 2. No Truncated Domes, 3. No Color Contrast). That is, select "1. None" if no detectable warning exists. If a detectable warning exists, select "2. No truncated Domes" if no truncated domes exist (e.g., scored concrete). If truncated domes exist, select "3. No Color Contrast" if there is not distinguishable color contrast between the detectable warning and the concrete (typically, detectable warnings are red and concrete is white or gray, resulting in a distinguishable color contrast). If these three noncompliant conditions are not present, no selection is required.

Running-slope (Grade)

Running-slope ratings are based on the following list. The 5% ramp slope distinction identifies ramps that may be defined as blended transitions (i.e., running-slope < 5%).

EVALUATION NOTES

Measure the maximum slope of the curb ramp. In the case of a parallel ramp, there are two ramp runs and three landings (bottom landing is within sidewalk width).

*Provide note in the notes field if the ramp slopes **down** more than 5%.*

1. A ≤ 8% (ADA 405.2, TAS 405.2, PROWAG R304.2.2, COA TCM 4.3.0.B)
    a. Compliant: ADA, TAS, PROWAG, COA TCM;
    b. Noncompliant: N/A
    c. Based on allowable ramp slope (1:12).
2. B ≤ 10%
    a. Compliant: N/A
    b. Noncompliant: ADA, TAS, PROWAG, COA TCM;
    c. Based on allowable ramp slope exception (1:10) for rises up to 6 in. where space limitations exist.
3. C ≤ 12%
    a. Compliant: N/A
    b. Noncompliant: ADA, TAS, PROWAG, COA TCM;
    c. Based on maximum allowable ramp slope exception (1:8) for rises up to 3 in.
4. D > 12%

Cross-slope

Cross-slope ratings are based on criteria identified in the Sidewalk Cross-slope Section in these guidelines.

EVALUATION NOTES

Measure the maximum cross-slope of the curb ramp. If there is no landing and the accessible route must access the ramp from flared sides, the cross-slope is equal to the running slope.

Width

Width ratings are based on the following list:

EVALUATION NOTES

The width of the curb ramp should be measured in between the flares. Note that older curb ramps often do not have well defined grade breaks between the side of the ramp and steeply sloped flares.

1. A ≥ 4 ft (PROWAG R304.5.1, COA TCM 4.3.0.E)
    a. Compliant: ADA, TAS, PROWAG, COA TCM;
    b. Noncompliant: N/A
2. B ≥ 3 ft (ADA 405.5, TAS 405.5)
    a. Compliant: ADA, TAS;
    b. Noncompliant: PROWAG, COA TCM;
3. C ≥ 2.7 ft (exception noted for sidewalks in ADA 403.5.1, TAS 403.5.1)
    a. Compliant: N/A
    b. Noncompliant: ADA, TAS, PROWAG, COA TCM;
    c. Width is greater than approximate exception widths noted for sidewalks. Actual exception width is 32 in. (2.7 ft).
4. F < 2.7 ft
    a. Width is less than noted exceptions for sidewalks; unusable.

Landing

Landing slope ratings are based on criteria identified in the Sidewalk Cross-slope Section in these guidelines. In addition, landing depth less than 3 ft or no landing results in a C-classification.

1. A ≥ 3 ft (ADA 406.4, TAS 406.4)
    a. Compliant: ADA, TAS
    b. Compliance for PROWAG R304.2.1, COA TCM 4.3.0.B require 4 ft
2. C < 3 ft; no landing

EVALUATION NOTES

Measure the maximum slope of the curb ramp landing in either direction.

Faults

For small magnitude faults, fault ratings are based on criteria identified in the Sidewalk Faults Section in these guidelines. Classifications and references associated with curb ramp faults are similar to those of sidewalk faults except that worse ratings result from less severe faults (i.e., Fault > 1 in. = “D”; Fault > 2 in. = “F”). For curb ramps, this is due to the inherent running slope that typically exists, which exacerbates the difficulty in traversing the fault.

EVALUATION NOTES

Faults at interfaces between the sidewalk and curb ramp landings should be reported on the sidewalk segment.

Curb Lip Fault

For the evaluation methodology, the curb lip is defined as the interface between the base of the curb ramp and the gutter pan. A curb lip is generally intended to direct drainage from the curb ramp and is not typically considered in the review of curb ramp compliance by those constructing the curb ramp. Although directing drainage past the curb ramp is a good intention, it can often result in a barrier (shortened curb, i.e., "fault"). Curb lip faults are often created when an existing curb is removed by sawing (See Figure 7). Curb lip faults can also be constructed (See Figure 8). If a fault exists at the curb lip, select "Y," i.e., yes. The maximum fault height would be recorded in the FAULT_HEIGHT field. If a 0.75 in. curb lip fault exists, then FAULT_HEIGHT would be "0.5 – 1 in." and "Y" would be selected for CURB_LIP_FAULT. If a 0.75 in. curb lip fault and another 1.5 in. fault exists elsewhere in the ramp, then FAULT_HEIGHT would be "1 – 2 in." and "Y" would be selected for CURB_LIP_FAULT.

EVALUATION NOTES

As with all faults, to be noncompliant, a curb lip fault must be (1) greater than 0.25 in. vertical change in level or (2) greater than 0.5 in. vertical change in level if the slope of the change in level is no greater than 1:2. The 0.5 in. exception of sloping faults occurs more frequently at curb lips.

Figure 7. Curb Lip Fault (Sawed)

Figure 8. Curb Lip Fault (Formed/Constructed)

Curb Ramps – Other Fields

Date Evaluated

This field indicates when the segment was evaluated and can be populated with the current date by pressing the "Use current" button under the field heading (on an Android device).

Curb Ramp Type

This field indicates the curb ramp type:

1. ABSENT: **I**dentifies nonexistent curb ramps that should be added consistent with the City's ADA Transition Plan.
2. ALLEY: Curb ramp accessing crossing at an alley.
3. DIAGONAL: Corner curb ramp aligned to the approximate center of the street intersection.
4. DIRECTIONAL: Curb ramp aligned in the direction of the pedestrian accessible route (sidewalks).
5. DRIVEWAY: Curb ramp crossing at a driveway (particularly commercial drives). See note below.
6. MIDBLOCK: Curb ramp crossing a street that is not located at an intersection.

EVALUATION NOTES

Curb ramps at driveways should only be designated and evaluated as a curb ramp where the running slope of the accessible path exceeds 5% directly adjacent to the driveway or the accessible path clearly crosses through a curb (curb ramps are often referred as "curb cuts").

New or Construction

If a curb ramp is under construction (attribute: Ramp Under Construction), it is unable to be evaluated. If the site adjacent to the curb ramp is under construction, the curb ramp will often be made compliant by the construction project (likely at the end of the project). In these cases, this field will highlight the curb ramp so the City can re-evaluate the curb ramp at a later date.

If a curb ramp condition exists and the curb ramp is clearly "newer" (e.g., clean, white concrete, etc.), mark the curb ramp (attribute: Newer Ramp) so the City can identify curb ramps that are constructed with noncompliance.

Curb Ramps – Grinding Criteria

Grinding criteria for curb ramps is consistent with criteria for sidewalks. The evaluation methodology does not require the evaluator to note if the curb ramp is a grinding candidate, but rather will rely on objective fault information collected for the curb ramp.

Curb Ramps – Notes Field

Similarly to sidewalks, the curb ramp notes field is used to identify other types of issues not provided in the evaluation form. In general, if the notes field is used, it is helpful to attach a photo to the curb ramp to help identify the issue and further refine the evaluation methodology.

APPENDIX H:
MATRIX OF POSSIBLE FUNDING SOURCES FOR NEW AND EXISTING SIDEWALKS

	Funding Source	Description	Notes	Funding Potential	Suitability: New Sidewalks	Suitability: Repair and Rehabilitation
EXISTING FUNDING SOURCES	**Bonds**	Voter approved debt paid back through property taxes	• 2012 Transportation bond provided $25M dedicated to implementation of Sidewalk Master Plan. Substantial completion in late 2016/early 2017. • Unreliable for funding ongoing programs as external economic factors can impact approval	**Significant** • Requires voter support	High	Low
	Transportation User Fee (TUF)	Assessed to residents and businesses on a monthly basis, based on the traffic levels generated by each dwelling unit or business. Funds street maintenance and repair, annual street overlay and striping, and other activities necessary for keeping Austin's roadways in good condition.	• Funding source for street maintenance • Fiscal Year (FY) 2015 was first allocation ($250K) of TUF funds for repair and rehabilitation of sidewalks • $500K in planned spending in FY 2016 for sidewalk repair and rehabilitation • Consider elimination of current exemptions for users 65 years or older and for users who do not own or regularly use a private motor vehicle for transportation.	**Significant** • Funding $15M annual repair and rehabilitation program would require approximately 30% increase in TUF	Low	High
	Grants	Funding from Federal and State agencies and/or non-profits.	• Typically require local matching funds • Primarily available for new sidewalks • Adequate staffing required to pursue all reasonable grant opportunities	**Limited** • approximately $200k/year average over last 5 years	High	Low
	Parking Benefit District (PBD)	Ordinance allows neighborhoods to request installation of parking meters with 51% of net revenues dedicated to local pedestrian and streetscape improvements.	Relatively new program; improvements have been made to the West Campus area under a newly formed PBD. Dedicating a portion of parking fees to local improvements helps alleviate concerns about implementing new paid parking. • Dedicating a portion of parking fees to local improvements helps alleviate concerns about implementing new paid parking. • Typically used to fund new infrastructure improvements but could also be used to fund rehabilitation and repair	**Moderate** • West campus PBD generates over $100k/year • Increased potential if City works proactively with neighborhoods to establish new PBD's.	High	Medium
	Sidewalk Fee in Lieu	Optional fee paid by new development in lieu of installing sidewalks. Revenues used to install new sidewalks in the same general area fees were generated	• Useful in residential retrofit areas where constraints may limit sidewalk construction to one side of the street. • Current code allows landowner /developer to pay fee in lieu even where sidewalk construction would be preferable.	**Moderate**: • Approximately $1M collected in FY 2015	High	Not Applicable
	Neighborhood Partnering Program (NPP)	Assists neighborhood groups in developing small- to medium-sized improvement projects in the City's right of way or on City-owned property.	• Several NPP sponsored sidewalk projects have been completed. Required neighborhood contribution is typically through in-kind contributions or sweat equity	**Limited** • NPP has funded approximately $250k in new sidewalk projects annually since 2015.	High	Low
	Capital Improvement Project (CIP) coordination	Installation of sidewalks during street reconstruction, water or sewer line replacement, drainage or other CIP Projects	• Street reconstruction projects typically include sidewalks • Utility project sponsors are often reluctant to fund sidewalk construction as sidewalks are perceived as outside the scope of their funding. • Complete Streets program is working on initiatives to ensure sidewalk improvements are included with utility and street reconstruction projects.	**Moderate**	Medium	Medium

APPENDIX H:
MATRIX OF POSSIBLE FUNDING SOURCES FOR NEW AND EXISTING SIDEWALKS

	Funding Source	Description	Notes	Funding Potential	Suitability: New Sidewalks	Suitability: Repair and Rehabilitation
POTENTIAL NEW FUNDING SOURCES	**TXDOT**	*Work with TXDOT to prioritize funding for ADA accessible pedestrian retrofit projects on TXDOT controlled corridors*		**Limited**	Medium	Medium
	Property Assessment	*Assess adjacent landowners for up to 100% of the cost of sidewalk improvement projects*. Assessments would be based on the length of property frontage. Option to pay the fee over 5 or 10 years depending on the total cost of the improvements would be provided.	• Chapter 313 of the Texas Transportation Code allows municipalities to assess adjacent property owner 100% of the cost of sidewalk improvements; an ordinance and formal hearing process is required. • Implementing property assessments for sidewalks without a corresponding assessment for streets could create equity issues.	**Significant** • Property assessments could cover all or part of sidewalk costs	Low	Low
	Commercial driveway assessment	*Assess commercial property owners to pay for driveway repairs required to provide ADA compliant routes*. Landowners would have the option to construct a new driveway apron or pay a fee to cover the cost. Option to pay the fee over 5 or 10 years depending on the total cost of the improvements would be provided.	• City policy (currently not codified) makes landowner responsible for construction and maintenance of driveway(s) accessing property including the sidewalk section. • Damage from overweight vehicles and/or poorly constructed driveways can make an otherwise functional sidewalk inaccessible for some users. No enforcement mechanism currently in place to require repairs. • Fee would provide incentive to reduce driveway widths thereby reducing pedestrian/auto conflicts areas. • Small businesses (revenues under $1M) may be eligible for tax credit for portion of cost of ADA related improvements.	**Moderate** • Approximately 20% of the cost of sidewalk projects is associated with driveways; percentage can be higher on commercial corridors.	High	High
	Residential driveway assessment	Same as commercial driveway assessments except applied to residential properties	• Residential driveways are generally less expensive than commercial driveways • Higher volume of driveways could result in higher administrative costs than commercial assessments.	**Moderate**	Medium	Medium
	Enforcement Fees	Fee surcharge added to pedestrian or sidewalk related violations: failure to yield to pedestrians in a crosswalk, blocking a crosswalk, blocking a sidewalk, etc.	• City of Austin Safe Routes is a possible model; $25/speeding ticket and $5/ parking ticket in a school zone goes to fund crossing guards. • Education and Enforcement campaigns would improve pedestrian safety and comfort while also providing supplemental program funding	**Limited** • Even with active enforcement program it is unlikely to generate significant revenue	High	High
	New Development Sidewalk Impact Fee	Fee assessed to address offsite pedestrian infrastructure required to serve new development.	• Impact Fees subject to requirements and limitations of Chapter 395 of Texas Local Government Code (Prohibits use of impact fees for repair or maintenance of existing infrastructure). • A sidewalk impact fee or similar process may be addressed through the current Street Impact Fee processes initiated by ATD and other current and longer term Land Development Code amendments, including CodeNEXT	**Moderate** • Implementation subject to limitations in Texas Local Government Code	High	Not Applicable
	Complete Streets	Ensure that all work in the Right of Way adheres to City of Austin Complete Streets policies including repair and rehabilitation of existing sidewalks for ADA compliance as part of any Capital Improvement Project, private development/redevelopment, or major utility project.	• **Complete Streets Principle #6: "*Complete Streets are the work of all City departments.*** *The City shall approach every public or private project, program, and practice that affects the transportation network or occurs in the right-of-way as an opportunity to improve street conditions and travel routes for everyone. City departments, inclusive of utilities, shall work in coordination and collaborate with other entities to maximize current and future opportunities for Complete Streets, enhancement of the public realm, and street connectivity.*"	**Moderate** • Complete Streets Program is developing implementation strategies	High	High

APPENDIX I:
SUGGESTED CITY CODE REVISIONS

Tree and Vegetation Maintenance

Property owner maintenance is a critical component in maintaining functional sidewalk infrastructure. The City of Austin Code of Ordinances addresses the requirement for property owners to maintain trees and vegetation; however, these sections lack clarity and mechanisms to enforce compliance. For instance, § 6-3-23- PLANTING RESTRICTED BY SIDEWALKS, restricts vegetation around a sidewalk, but the specific clearances address minimum clearances over streets. Although the minimum 14 foot clearance is higher than the recommended 8 feet over sidewalks, the lack of specificity results in disputes with the property owner. As another example, the Code provides a mechanism to recover costs associated with abatement of nuisance plants; however, the City is not able to assess a fine, which in many cases, could result in the City acting as the "preferred tree contractor." This appendix includes recommendations for revising the City Code with the intent to clarify the vegetation maintenance responsibilities of the property owner and provide authority to enforce violations.

Development

Private sector investments are a critical component in building and maintaining sidewalk infrastructure. The City of Austin land Development Code (LDC) and Transportation Criteria Manual (TCM) are the primary tools used by the city to ensure that development/redevelopment projects include installation of sidewalks and ramps consistent with the goals of the Imagine Austin Plan and the requirements of the Americans with Disabilities Act (ADA) and Texas Accessibility Standards (TAS).

The LDC and TCM currently require sidewalk and curb ramp construction under certain circumstances (e.g. subdivision of lots, construction of site plans, construction of a new building or addition to an existing building that increases the building's gross floor area by 50 percent or more, or relocation of a building from one site to another), except for certain cases when installation of a new sidewalk can be waived (e.g. sidewalk fee-in-lieu). For subdivisions and site plans, there are "controls," such as final walkthrough inspections, to ensure compliant sidewalk is provided. However, many times the developer is unaware that providing compliant sidewalks also requires rehabilitating existing, noncompliant sidewalk and is "blind-sided" at the final walkthrough. For building permits, the developer only has to show existing sidewalk on a plot plan or site plan and is not required to document or verify compliance. As a result, noncompliant sidewalks are often not rehabilitated because there are no "controls" to verify compliance. The City is then left with the responsibility of addressing accessibility barriers despite the original responsibility of the developer. The appendix includes recommendations for revising the LDC and TCM to clarify the responsibilities of the developer and provide "controls" to ensure compliant sidewalks and curb ramps are constructed and rehabilitated under the aforementioned conditions. In addition, these suggested code revisions include codifying responsibility for driveway maintenance by the adjacent property owner.

THE CODE OF THE CITY OF AUSTIN, TEXAS

TITLE 6. – ENVIRONMENTAL CONTROL AND CONSERVATION

CHAPTER 6-3. – TREES AND VEGETATION

ARTICLE 1. – GENERAL PROVISIONS

§ 6-3-1 - DEFINITIONS.

In this chapter:

(1) BOARD means the Environmental Commission.

(2) CURBLINE means the boundary of a street or alley used for vehicular traffic.

(3) DAMAGE means injury to a tree including: uprooting; severance of the root system or main trunk; storage of material or compaction of surrounding soil; a substantial change in the natural grade above a root system or around a trunk; pruning or removal of more than 25 percent of the living tissue; or surrounding with impervious paving materials.

(4) OWNER means the record owner of real property or the occupant or a person with the right to exercise control over the property.

(5) PLAN means the Comprehensive Urban Forest Plan.

(6) PUBLIC PROPERTY means real property owned or controlled by the city with unrestricted public access, excluding a utility or drainage easement on private property.

(7) PUBLIC TREE means a tree with at least two-thirds of its trunk diameter on public property.

(8) TREE means a self-supporting woody perennial plant, excluding a bush or shrub, with a trunk diameter measured at four and one-half feet above grade of:

(a) not less than three inches; or

(b) not less than two inches if planted by or on behalf of the city.

(9) TREE VALUE means the appraised value of a tree based on the latest edition of the Guide for Plant Appraisal by the Council of Tree and Landscape Appraisers.

(10) URBAN FORESTER means a city employee qualified as a forester.

(11) URBAN TRAIL means a non-motorized, multi-use pathway that is used by bicyclists, walkers, and runners for both transportation and recreation purposes.

Source: 1992 Code Sections 10-6-4, 15-10-3, and 16-7-1; Ord. 031023-10; Ord. 031211-11; Ord. No. 20141211-204, Pt. 24, 7-1-15.

THE CODE OF THE CITY OF AUSTIN, TEXAS

TITLE 6. – ENVIRONMENTAL CONTROL AND CONSERVATION

CHAPTER 6-3. – TREES AND VEGETATION

ARTICLE 2. – RESTRICTIONS ON TREE OR PLANT MAINTENANCE

§ 6-3-20 - DUTY TO MAINTAIN TREES OR PLANTS ON PROPERTY.

(A) An owner, occupant, or other person in control of real property shall maintain non-public trees or other vegetation, including grass, bushes, shrubs, and other plants, on the property or in the area from the property line to the adjacent curbline in a safe, sanitary condition.

§ 6-3-21 - PLANTING RESTRICTED AT STREET CORNER.

(A) This section only applies to property located at a street corner intersection within a ten-foot setback from the curbline and 40 feet along the curbline from the intersection.

(B) A person may not place, maintain, or permit a plant:

(1) more than two feet taller than the level of the ground surrounding the plant; or

(2) on property more than one foot above the level of an adjacent street.

Source: 1992 Code Section 16-7-40 ; Ord. 031023-10; Ord. 031211-11.

§ 6-3-22 - PLANTING RESTRICTED BY FIRE HYDRANT.

A person may not place, maintain, or permit any portion of a tree or plant to grow within five feet of a fire hydrant.

Source: 1992 Code Section 16-7-42 ; Ord. 031023-10; Ord. 031211-11.

§ 6-3-23 - PLANTING RESTRICTED BY SIDEWALKS, STREETS, OR URBAN TRAILS.

(A) A person may not place, maintain, or permit a tree or plant to overgrow or obstruct a sidewalk, street, or urban trail to hinder or prevent public use of the area.

(B) A person shall trim tree limbs or other vegetation growing over a sidewalk at a minimum clearance of 80 inches ~~14 feet~~ above the sidewalk ~~street level measured at the nearest curbline~~.

(C) A person shall trim tree limbs or other vegetation growing over a street at a minimum clearance of 14 feet above the street level measured at the nearest curbline.

(D) A person shall trim tree limbs or other vegetation growing over an urban trail at a minimum clearance of 8 feet above the urban trail.

Source: 1992 Code Sections 16-7-41 and 16-7-43; Ord. 031023-10; Ord. 031211-11.

§ 6-3-24 - STANDARD OF MAINTENANCE.

A person shall maintain a tree or plant under this article to be compatible with the aesthetic character of the public right-of-way.

Source: 1992 Code Section 16-7-44 ; Ord. 031023-10; Ord. 031211-11.

§ 6-3-25 - NOTICE OF OBSTRUCTION OF PUBLIC RIGHT-OF-WAY.

(A) The urban forester may issue written notice of obstruction of public right-of-way by a tree or plant to an owner. Notice under this section must include:

(1) a description of the corrective action required; and

(2) a statement that the corrective action must be complete not later than the 10th day after receipt of the notice.

(B) An owner shall remove an obstruction to the public right-of-way not later than the 10th day after receipt of a notice of obstruction.

Source: 1992 Code Section 15-10-6(A); Ord. 031023-10; Ord. 031211-11.

§ 6-3-26 - AUTHORITY TO MAINTAIN PUBLIC RIGHT-OF-WAY.

(A) If an owner fails to comply with a notice issued under Section 6-3-25 (Notice of Obstruction of Public Right-of-Way), the urban forester may trim or remove a tree or plant over a street or an adjacent sidewalk, urban trail, or public easement to:

(1) provide a minimum clearance of 14 feet above the street or alley level;

(2) provide a minimum clearance of 80 inches above sidewalks;

(3) provide a minimum clearance of 8 feet above urban trails;

(4) provide an unobstructed view for traffic; or

(5) remove overgrowth or obstructions to public use.

(B) The city manager may determine when a tree or plant requires trimming or removal under this section.

Source: 1992 Code Sections 15-10-6(A) and (C), 16-7-41, and 16-7-45; Ord. 031023-10; Ord. 031211-11.

§ 6-3-27 – PENALTY.

A person who violates this article commits a Class C misdemeanor and is subject to the penalty prescribed by Section 1-1-99 (*Offenses; General Penalty*). Each occurrence of a violation of this article is a separate offense.

THE CODE OF THE CITY OF AUSTIN, TEXAS

TITLE 6. – ENVIRONMENTAL CONTROL AND CONSERVATION

CHAPTER 6-3. – TREES AND VEGETATION

ARTICLE 3. – NUISANCE TREE OR PLANT

§ 6-3-40 – TREE OR PLANT OBSTRUCTING PUBLIC FACILITIES.

A tree or plant overgrowing or obstructing a public facility, including but not limited to sidewalks, streets, alleys, and urban trails, that hinders or prevents public use of the area is a public nuisance.

§ 6-3-51 - OWNER'S DUTY TO REIMBURSE COST OF PUBLIC ABATEMENT.

(A) The owner shall reimburse the City for the cost of abatement of a nuisance under this article.

(B) Not later than the 30th day after the date a statement of expense is mailed under Section 6-3-50 (Notice of Cost of Public Abatement), an owner must:

(1) pay the full amount of the statement to the land managing department ~~Parks and Recreation Department~~; or

(2) execute a written agreement with the land managing department ~~Parks and Recreation Department~~ to pay the full amount of the statement of expense not later than the expiration of six months after the date the statement was mailed.

Source: 1992 Code Section 10-6-6; Ord. 031023-10; Ord. 031211-11.

THE CODE OF THE CITY OF AUSTIN, TEXAS

TITLE 25. – LAND DEVELOPMENT

CHAPTER 25-4. – SUBDIVISION

ARTICLE 2. – SUBDIVISION PROCEDURE

Division 1. - Procedure Generally

§ 25-4-37 - INFRASTRUCTURE CONSTRUCTION OR FISCAL SECURITY FOR PLAT APPROVAL.

(A) Before the Land Use Commission or council may approve a plat, the subdivider shall:

(1) construct the streets, sidewalks, urban trails, utilities, and drainage facilities in compliance with the requirements of this title; or

(2) provide fiscal security under Section 25-1-112 (Fiscal Security) for subdivision improvements that serve the public interest as determined under Subsection (B) or (C).

(B) After receiving the recommendation of the director, the Land Use Commission shall determine the subdivision improvements that serve the public interest, except as provided in Subsection (C).

(C) If the council may approve a plat, after receiving the recommendation of the director, the council shall determine the subdivision improvements that serve the public interest.

(D) Fiscal security provided under this section may be used by the City to construct the subdivision improvements that serve the public interest.

Source: Section 13-2-406; Ord. 990225-70; Ord. 010607-8; Ord. 031211-11.

THE CODE OF THE CITY OF AUSTIN, TEXAS

TITLE 25. – LAND DEVELOPMENT

CHAPTER 25-6. – TRANSPORTATION

ARTICLE 5. – DRIVEWAY, SIDEWALK, AND RIGHT-OF-WAY CONSTRUCTION

Division 2. – Construction Permit

§ 25-6-269 - DRIVEWAY MAINTENANCE.

The person owning any property abutting a driveway approach shall be responsible for repair and maintenance of the driveway approach consistent with appropriate and applicable standards for construction in the public right of way and shall keep such driveway approach in a good and safe condition free from any defects and hazards of any kind or character.

§ 25-6-270 - DEFECTIVE CONDITIONS OR SPECIAL USES.

It shall be the duty of any person making special use of any sidewalk, pedestrian way, curb, gutter, or driveway approach for the purpose of ingress/egress, downspout drains, or any other special use of any character, to keep such sidewalk, pedestrian way, curb, gutter, or driveway approach abutting such property in a good and safe condition and free from any defects and hazards of any kind and character.

THE CODE OF THE CITY OF AUSTIN, TEXAS

TITLE 25. – LAND DEVELOPMENT

CHAPTER 25-6. – TRANSPORTATION

ARTICLE 5. – DRIVEWAY, SIDEWALK, AND RIGHT-OF-WAY CONSTRUCTION

Division 5. - Sidewalks

§ 25-6-351 - SIDEWALK AND/OR URBAN TRAIL INSTALLATION IN SUBDIVISIONS.

(A) A person who subdivides property shall install sidewalks curb ramps and any applicable urban trails or reconstruct existing, noncompliant sidewalks and curb ramps in a subdivision in accordance with the appropriate and applicable standards for construction in the public right of way ~~Transportation Criteria Manual~~. A preliminary subdivision plan and a final plat must indicate the location of a proposed or existing sidewalk and urban trail.

(B) The director may waive the requirement to install a sidewalk and/or urban trail based on criteria in the appropriate and applicable standards for construction in the public right of way and with the concurrence of the Public Works Director ~~Transportation Criteria Manual~~.

(C) A sidewalk and/or urban trail that is indicated on a recorded plat or approved site plan shall be installed in conjunction with other infrastructure construction ~~the installation of a type 1 or type 2 driveway approach~~.

(D) Except as provided in Section 25-6-354 (Payment Instead Of Sidewalk Installation), the accountable official may not issue a certificate of occupancy or certificate of compliance until a sidewalk and/or urban trail required under this division is installed.

(E) The construction of a sidewalk, urban trail, or driveway approach is not complete until all utility connections are complete and a cut required by the utility installation is restored.

(F) Fiscal security is not required for the construction of a sidewalk in a subdivision within the corporate limits of the City if the location of the sidewalk is noted on a recorded final plat or approved site plan.

Source: Section 13-5-91; Ord. 990225-70; Ord. 010607-8; Ord. 030306-48A; Ord. 031211-11; Ord. 20080214-096.

§ 25-6-352 - SIDEWALK AND/OR URBAN TRAIL INSTALLATION WITH SITE PLANS.

(A) The director or Land Use Commission may not approve a site plan unless sidewalks and/or urban trails are shown on the site plan, if required by the Transportation Criteria Manual. Existing, noncompliant sidewalks and curb ramps shall be reconstructed to comply with the requirements of the Transportation Criteria Manual, the City of Austin Standards and the City of Austin Standard Specifications, and applicable provisions of the Americans With Disabilities Act. Documentation of compliance for all required pedestrian facilities by a Registered Accessibility Specialist may be required prior to Certificate of Occupancy.

(B) The director may waive the requirement to install a sidewalk and/or urban trail based on criteria in the Transportation Criteria Manual with the concurrence of the Public Works Director.

(C) Except as provided in Section 25-6-354 (Payment Instead Of Sidewalk Installation), the accountable official may not issue a certificate of occupancy or certificate of compliance until a sidewalk and/or urban trail required under this division is installed.

Source: Section 13-5-92; Ord. 990225-70; Ord. 010607-8; Ord. 031211-11; Ord. 20080214-096.

§ 25-6-353 - SIDEWALK AND/OR URBAN TRAIL INSTALLATION WITH BUILDING OR RELOCATION PERMIT.

(A) This section applies to:

(1) a building permit for construction of:

(a) a new building; or

(b) an addition to an existing building that increases the building's gross floor area by 50 percent or more; or

(2) a relocation permit to move a building from one site to another.

(B) Except as provided in Section 25-6-354 (Payment Instead Of Sidewalk Installation) and Subsections (C) and (D):

(1) the building official may not approve a building or relocation permit unless sidewalks, curb ramps, and/or urban trails are shown on the plot plan or site plan, as applicable, if required by the Transportation Criteria Manual. Existing, noncompliant sidewalks and curb ramps shall be reconstructed to comply with the requirements of the Transportation Criteria Manual, the City of Austin Standards and the City of Austin Standard Specifications, and applicable provisions of the Americans With Disabilities Act. Documentation of compliance for all required pedestrian facilities by a Registered Accessibility Specialist may be required prior to Certificate of Occupancy; and

(2) the building official may not issue a certificate of occupancy until a sidewalk and/or urban trails required under this division is installed.

(C) The director may waive the requirement to install a sidewalk and/or urban trail:

(1) based on criteria in the appropriate and applicable standards; and ~~Transportation Criteria Manual; or~~

(2) with the concurrence of the Public Works Director; or

(3) if the director determines that the development does not generate pedestrian traffic for the sidewalk.

~~(D) Unless otherwise required by Section 25-6-351 (Sidewalk Installation In Subdivisions) or Section 25-6-352 (Sidewalk Installation With Site Plans), a sidewalk for a corner lot is required only along the street with the shortest lot frontage.~~

Source: Ord. 20080214-096.

§ 25-6-354 - PAYMENT INSTEAD OF SIDEWALK INSTALLATION.

(A) An applicant may request to pay a fee instead of installing a sidewalk and/or urban trail by filing a written request at the time the person submits a permit application in the manner prescribed by the director. An applicant who has not filed a request at the time of application, may later amend the application to request to pay fee instead of installing a sidewalk and/or urban trail.

(B) For a sidewalk and/or urban trail required under Section 25-6-353 (Sidewalk Installation with Building or Relocation Permit), the director shall approve payment of a fee instead of installation of a sidewalk if the director determines that:

(1) the property is used only for a residential use and has not more than two dwelling units;

(2) on the date the property was subdivided, the land development regulations did not include a sidewalk and/or urban trail requirement; and

(3) the Public Works Director determines that buildout of the sidewalks and/or urban trails on ~~less than 50 percent of~~ the block face on which the property is located is not anticipated within a reasonable timeframe and that payment of a fee instead of installation of a sidewalk would be consistent with the implementation of the City of Austin Sidewalk Master Plan ~~has a sidewalk~~.

(C) For a sidewalk and/or urban trails required under Section 25-6-351 (Sidewalk Installation in Subdivisions), the director may ~~shall~~ approve payment of a fee instead of installation of a sidewalk and/or urban trail if the subdivision:

(1) consists of five or fewer lots;

(2) only includes residential lots, each of which contains no more than two dwelling units;

(3) is a resubdivision of land that was originally subdivided on a date when applicable regulations did not include a sidewalk and/or urban trails requirement; and

(4) The Public Works Director determines that buildout of the sidewalks on ~~less than 50 percent of~~ the block face on which the property is located ~~has a sidewalk~~ is not anticipated within a reasonable timeframe and that payment of a fee instead of installation of a sidewalk would be consistent with the implementation of the City of Austin Sidewalk Master Plan.

(D) The Public Works Director ~~director~~ may approve payment of a fee instead of installation of a sidewalk and/or urban trail if the Public Works Director ~~director~~ determines that installation is impractical because:

(1) there are no sidewalks and/or urban trails in the vicinity, and it is unlikely that there will be development nearby that would require the installation of sidewalks;

(2) installation of the sidewalk and/or urban trail would require the removal of a protected tree or other major obstruction within the right-of-way;

(3) a stormwater drainage ditch or similar public utility facility prevents the installation of the sidewalk and/or urban trail, and neither the sidewalk and/or urban trail nor the facility can be reasonably relocated to accommodate both the sidewalk and/or urban trail and the facility;

(4) the topography would require the construction of a retaining wall more than two feet high to accommodate the sidewalk and/or urban trail; or

(5) other unusual circumstances make the sidewalk and/or urban trail installation requirement unreasonable or inappropriate.

(E) In making a determination under Subsection (D), the Public Works Director ~~director~~ shall give primary consideration to the following:

(1) the approved City Urban Trail and Sidewalk Master plans.

(2) the adopted neighborhood plan;

(3) information provided by the neighborhood planning team; and

(4) information provided by a registered neighborhood association.~~; and~~

~~(4) the approved City sidewalk plan.~~

(F) The amount of the fee is the current sidewalk and/or urban trail installation cost, as determined in accordance with the Transportation Criteria Manual.

(G) A fee paid under this section must be used to install a sidewalk and/or urban trail facility or curb ramp in the same service area, as established by the Transportation Criteria Manual.

(H) The City may refund the fee to the applicant if it is not spent within 10 years of the date of its collection.

Source: Ord. 20080214-096.

THE CODE OF THE CITY OF AUSTIN, TEXAS

TRANSPORTATION CRITERIA MANUAL

SECTION 4 – SIDEWALKS AND CURB RAMPS

4.2.1 - General Requirements

Sidewalks must be constructed between the curb line and the property line. The standard alignment is two (2) feet off the property line. In the central area of Austin, bounded by First St., Interstate 35, Martin Luther King, Jr. Blvd., and Lamar St., sidewalks may be constructed for the entire width from the property line to the curb line.

Should the available right of way between the curb and adjacent property line be of insufficient size to accommodate the requirements of this section, alternative designs of the sidewalk may be constructed only with the approval of the Director of the Public Works Department. The sidewalk shall be sloped ¼ inch in (1) one foot and the area between the sidewalk and the curb shall be sloped a minimum ¼ inch in one (1) foot above the curb and shall drain toward the roadway.

Sidewalks shall be constructed in accordance with the City of Austin Standards and the City of Austin Standard Specifications and in accordance with applicable provisions of the Americans With Disabilities Act. Existing sidewalks and curb ramps within the public right-of-way adjoining property of subdivision plans, site plans, and certain building or relocation permits (LDC § 25-6-353(A)) shall be evaluated in accordance with the City of Austin Standards and the City of Austin Standard Specifications and in accordance with applicable provisions of the Americans With Disabilities Act. If they are not in accordance with these requirements, existing, noncompliant sidewalks and curb ramps shall be reconstructed in accordance with the requirements. Sidewalks on cul-de-sacs shall be located on both sides of the throat and around the bubble, except on Industrial Collectors, where they are required only on one side of the throat. Tables 1-7 and 1-12 indicate sidewalk requirements. If these requirements create an accessible route having less than 60 inches clear width, then passing spaces at least 60 inches by 60 inches shall be located at reasonable intervals not to exceed 200 lineal feet of distance. A T-shaped intersection of 2 sidewalks having a clear area of 60 inches square is an acceptable passing space.

APPENDIX J:
PUBLIC COMMENTS SUMMARY