

City of Renton
Washington

**Americans with Disabilities Act
Transition Plan**



Mayor Denis Law

Gregg Zimmerman
Public Works Director

Adopted: May 18, 2015
Resolution: 4254

RENTON. AHEAD OF THE CURVE.

City of
Renton
Public Works Department



CITY OF RENTON, WASHINGTON

RESOLUTION NO. 4254

A RESOLUTION OF THE CITY OF RENTON, WASHINGTON, ADOPTING AN AMERICANS WITH DISABILITIES ACT (ADA) TRANSITION PLAN.

WHEREAS, the federal government enacted the Americans with Disabilities Act of 1990 (ADA), and its amendments, to prevent discrimination, to extend the protections of the Rehabilitation Act of 1973, and to ensure equal opportunities for the physically and mentally disabled to employment, public accommodations, commercial facilities, transportation, and services, programs or activities of all state and local governments; and

WHEREAS, Title II of the ADA requires that municipalities develop and adopt transition plans which document physical barriers to accessibility, propose modifications to remove those barriers, and a schedule to complete the modifications; and

WHEREAS, the United States Department of Justice recently modified the ADA Standards for Accessible Design and the Guidelines for Pedestrian Facilities in the Public Right-of-Way; and

WHEREAS, Renton has been and remains committed to meeting or exceeding ADA requirements and to eliminating barriers to public services, activities, programs and facilities; and

WHEREAS, a transition plan for facilities in the public right-of-way has been prepared that reflects the City's current infrastructure and ADA design standards;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF RENTON, WASHINGTON, DOES RESOLVE AS FOLLOWS:

SECTION I. The above recitals are found to be true and correct in all respects.

RESOLUTION NO. 4254

SECTION II. The City Council of the City of Renton, Washington, adopts by reference the City of Renton Washington Americans with Disabilities Act Transition Plan.

PASSED BY THE CITY COUNCIL this 18th day of May, 2015.



Jason A. Seth, City Clerk

APPROVED BY THE MAYOR this 18th day of May, 2015.



Denis Law, Mayor

Approved as to form:



Lawrence J. Warren, City Attorney



RES.1670:4/22/15:scr

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City of Renton Americans with Disabilities Act Transition Plan

Overview

The Americans with Disabilities Act (ADA) of 1990 is a civil rights statute that prohibits discrimination against people who have disabilities. Title II of the ADA specifically addresses the subject of making public services and public transportation accessible to those with disabilities. With the advent of ADA, design and construction of facilities for public use, such as sidewalks and traffic signal crossings that are not accessible by people with disabilities constitutes discrimination.

The purpose of the Transition Plan is to remove barriers to mobility for people with disabilities. The ADA requires that all governmental agencies complete a Transition Plan for the construction of curb ramps at all locations where walkways cross curbs in streets or municipally owned parking lots and at mid-block crossings. The contents and requirements of ADA Transition Plans are described in the ADA Title II Technical Assistance Manual, Section II-8.300. <http://www.ada.gov/taman2.html>

The City of Renton Transition Plan contains the following:

- A list of physical barriers in the City that limit the accessibility of sidewalks and signalized crossings to individuals with disabilities
- A detailed outline of the process to be implemented for removing these barriers
- A schedule to achieve compliance with Title II including the interim steps that will be taken each year for the transition period
- The name of the official responsible for the Plan's implementation

Policies and Procedures

A barrier free transportation system requires policies and procedures that ensure that all departments and programs are striving to meet the goal of a transportation system that is free of barriers. Planning documents must provide clear policy direction for new development. Inspection practices must assure that sidewalk facilities have been properly constructed and meet applicable standards.

The City has an interest in exercising particular diligence in regard to pedestrian facility development, regardless of whether pedestrian facilities have been constructed as part of a private development project or as part of a public works project. The cost associated with remediation of work that has been done incorrectly often far exceeds the original cost of the initial project.

The City of Renton has the following policies and procedures in place for creating a barrier free transportation system:

- Updates to the City’s Comprehensive Plan will include goals and policies that result in the development of an accessible transportation system
- Updates to the Renton’s Municipal Code will include specific requirements to upgrade sidewalks and signal crossing to meet current ADA standards
- Concurrent with full depth street overlay work, every place where sidewalks intersect the project, the crossings will be brought up to contemporary ADA standards, including compliant curb ramps (see appendix B)
- Concurrent with all major capital improvement projects sidewalk will be brought up to contemporary ADA standards and accessible pedestrian signals (APS) shall be installed at all traffic signals with pedestrian indications (see appendix E)
- Traffic signals without pedestrian indications shall be designed for future installation of APS
- Roadway designs will meet ADA standards to assure that new ramps are properly located, designed and constructed
- Inspection practices will assure that sidewalk facilities have been constructed according to plan and meet applicable standards
- Citizen requests will be documented and follow through will be tracked
- The Public Works Administrator or their designee will serve as the Sidewalk Transition Plan Manager for the Public Works Department
- The Community and Economic Development Administrator or their designee will serve as the Sidewalk Transition Plan Manager for the Community and Economic Development Department

Upgrading the entire network is an immense undertaking and must be done in phases that are dependent on available funding.

Sidewalk, Curb Ramp and Accessible Pedestrian Signal Inventory

Preparing a complete and useful inventory is costly because of the huge amount of labor required to collect, input and manage the data. Over the years the City of Renton has been working toward having a complete and accurate inventory of all public right of way infrastructures.

The City of Renton’s current sidewalk and curb ramp inventory was completed in 2008 as part of a comprehensive citywide walkway study and the City has also completed an inventory of all the city traffic signals that may need accessible pedestrian signal (APS) improvements.

The 2008 inventory identified 2,974 existing curb ramps with 2,196 of those judged to offer substantial compliance when inventoried. See attached Figure 12 from 2008 Comprehensive Walkway Study Final Report.

There are currently 129 traffic signals in the City of Renton, of those eight that are equipped with APS push buttons. Five are located on Rainier Ave South plus three additional located at NE 4th & Whitman, Garden Avenue North & North Park Drive and NE Sunset Blvd & NE Union Avenue.

In 2014 the City began to update to the Citywide Sidewalk and Curb Ramp inventory using the following two stage process:

Stage One is a preliminary evaluation designed to give the City of Renton a reasonably accurate sense for what the existing conditions are. Stage One will inventory and document 1) existence of sidewalk 2) existence of curb ramps at all locations in which the sidewalk intersects roadway intersections or makes a major transition 3) analysis will be done using the City's aerial photography and Google Earth to determine if the existing curb ramps are:

- a. Not compliant with contemporary ADA standards and do not offer "substantial" compliance i.e. do not offer safe and usable access to the majority of the population needing curb ramps for mobility
- b. Not compliant with contemporary ADA standards but do offer "substantial" compliance i.e. they do offer safe and usable access to the majority of the population needing curb ramps for mobility (in the raters opinion the ramp was built in the past under a vastly different standard and was compliant when built, but falls short of what is required by today's Standard) or
- c. Geometry is close to the contemporary Standard
- d. Does not have ADA detectable warning surface
- e. Does not have what appears to be a level landing that is close to or exceeds four feet by four feet in area

Stage Two is a detailed field audit that will fully satisfy the federal requirement covering Self Evaluation 1) Width of any existing sidewalk 2) obstructions to access to sidewalk such as grossly excessive cross sloping caused by root or frost heaving, or at existing driveway locations 3) Geometry and slope of all existing curb ramps

This data will be entered into a database in the City GIS and when complete will include all public rights of way. The Public Works Transportation Division will maintain the database as necessary to reflect new information such as annexations, capital improvement projects and/or physical condition changes. This Database will be analyzed and used to schedule and program corrective measures.

Project Prioritization

The following criteria will be considered to select and prioritize projects from the inventories and those identified by citizen requests:

- 1) Government Buildings - Title II requires city governments to ensure that all of their programs, services, and activities are accessible to people with disabilities. Any feature that serves as a barrier to access to a government building or facility is assumed to have the highest priority.
- 2) Primary Walk Route to School - a location that is a barrier along a primary walking route to a school will have a higher priority than other walkways near schools

- 3) Churches – church properties frequently host Senior and disabled groups/activities
- 4) Senior Citizen Center and Housing/Assisted Living/Social Service Agency/Disabled – a location that is a barrier to these locations will have higher priority
- 5) Transit Center or bus stop – a location blocking access to fixed route bus service will have higher priority
- 6) Park - a location blocking pedestrian access to parks will have higher priority
- 7) Pedestrian Attractions – a walkway that serves more pedestrians than one with a lower number of pedestrians. The following facilities are identified as ones that tend to attract pedestrians. Additional consideration will accrue to locations that are in close proximity to more than one of the following pedestrian attractors
 - a. Schools (within the designated radius from school)
 - b. Hospital
 - c. Arterial Street
 - d. High Density Residential Neighborhood
 - e. Designated Urban Center
 - f. Commercial/Mixed Use Areas
 - g. Commercial Neighborhood Business Areas
- 8) Availability of a convenient alternative route.
- 9) Location has standing curb or “unusable” ramp vs. location has substandard, but usable ramp
- 10) Is the project already within a larger capital improvement project that is reasonably expected to be funding in the next 6 years

Citywide, not all non-compliant ramps and traffic signals can be immediately upgraded or replaced, or even replaced or upgraded in the short term. The City does not have the financial resources to do so. Locations that are not up to current standards, but offer relatively safe usability and do not obviously block access to more than a small percentage of disabled pedestrians have a lower priority than locations that cannot accommodate a large percentage of the affected population.

All requests for pedestrian accessibility improvements will continue to be given careful consideration. The City of Renton will continue to assign evaluation of citizen requests a high priority and if it is practical when there is an immediate need the City will address barriers in those locations as soon as resources are available. In some instances barriers are beyond the City’s ability to correct immediately. In those cases, the City will attempt to identify an interim alternative accessible route and will identify and prioritize these locations.

Funding

The City of Renton has included funding for a Barrier Free Transition Program in its Six-Year Transportation Improvement Plan (TIP). In addition all of the City’s Capital Improvement projects and private development projects with the City’s right of way will be constructed to current accessibility standards.

Schedule

It will take the City of Renton many years of dedicated work to upgrade all the sidewalks, traffic signals and other pedestrian improvements to meet current ADA standards. This is further complicated by updates to the current standards that make previously compliant improvements non-compliant. This plan provides a foundation for this work but will require updating in the future. The City will take interim steps on an annual basis to implement the plan. For further information regarding past and future projects, see the schedule in appendix A.

Appendix A: Recently Completed & Future Planned ADA Upgrades

Recently Completed and Planned Future Improvements

Completed Projects

Upgrades done as part of Capital Improvement Projects:

2014	NE Park Dr	Pedestrian walkway added to Houser Way N overpass, 1580 feet of new ADA compliant sidewalk, 4 Ramp locations improved, Crosswalks at I-405 ramps improved
2014	Park Ave N	100 feet new ADA compliant sidewalk, 5 ramp locations improved Crosswalks at Park Ave N x Garden Ave N improved
2014	NE 4 th St & Whitman Ct NE	5 ramp locations improved
2014	Rainier Ave S from Grady Way to S 3 rd Street	Approximately 7,000 linear feet of new ADA compliant sidewalk. 21 pedestrian crossing locations of City streets upgraded to full ADA compliance including APS and 37 new ramps.

Upgrades done as part of the City Overlay Program:

2014	161 st Ave SE & SE 156 th St	4 ramp upgrades
2014	160 th Ct & SE 156 th St	2 ramp upgrades
2014	159 th Ave SE & SE 156 th St	4 ramp upgrades
2014	158 th Ave SE & SE 156 th St	2 ramp upgrades
2014	157 th Ave SE & SE 156 th St	4 ramp upgrades
2014	156 th Ct SE & SE 156 th St	2 ramp upgrades
2014	SE 156 th Pl & SE 157 th St	2 ramp upgrades
2014	SE 156 th Ct & 158 th Ave SE	2 ramp upgrades
2014	161 st Ave SE & Maple Valley Rd	2 ramp upgrades
2014	SE 156 th St mid-block	2 ramp upgrades
2014	156 th Pl SE mid-block	1 ramp upgrade
2014	158 th Ave SE mid-block	1 ramp upgrade

Future Scheduled Projects

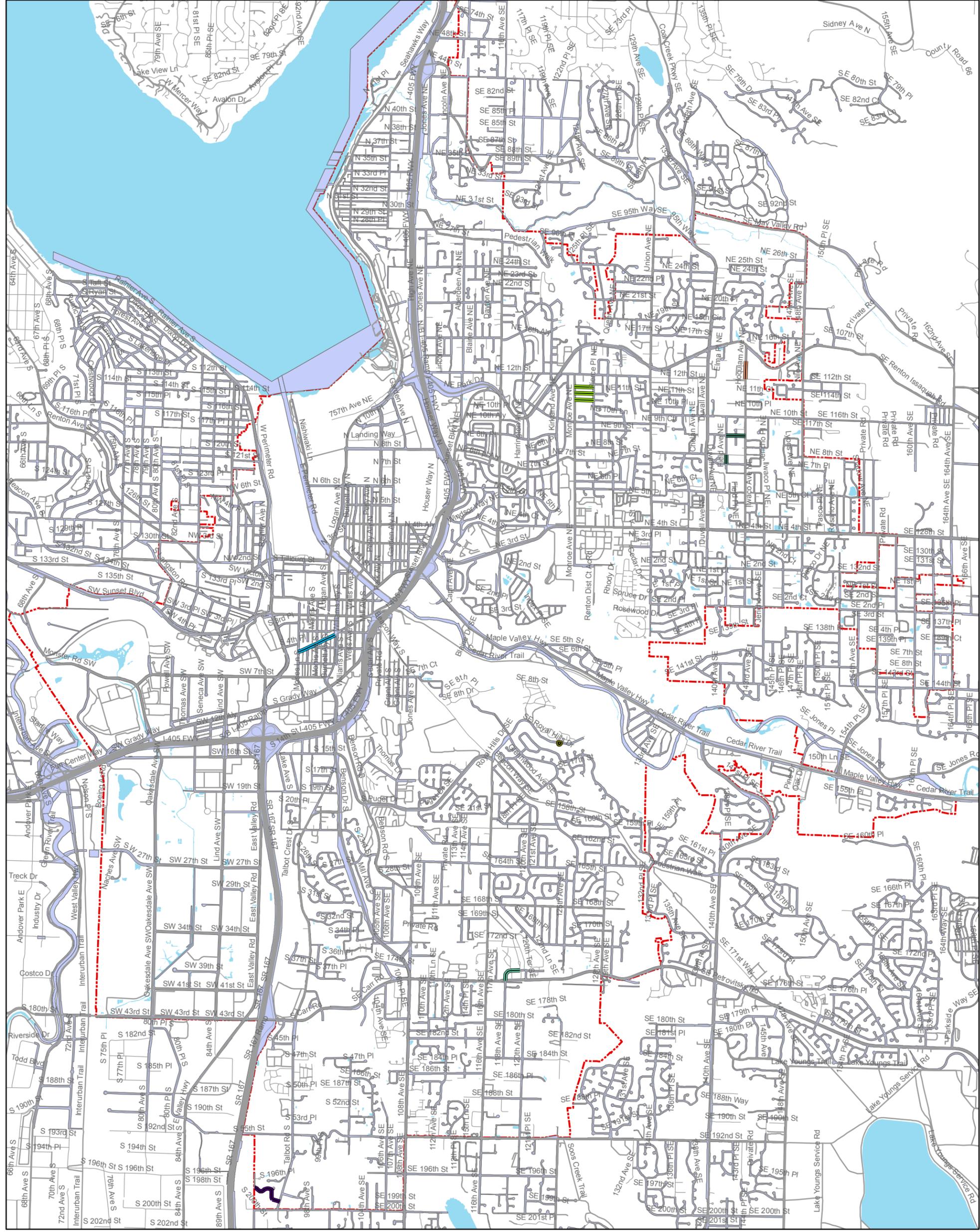
Upgrades done as part of Capital Improvement Projects:

2015	Logan Ave N from Cedar River Bridge to N 6 th St. East side	Project includes new curb, gutter, sidewalks, landscaped buffer all of which will be designed and constructed to contemporary ADA standards. The intersection at N 3 rd will be reconfigured and will include upgraded pedestrian crossings that include APS.
2015	NW 4 th & Taylor	The existing pedestrian amenities at the intersection will be upgraded to ADA compliance or MEF
2015	S 7 th St & S Shattuck Ave	The intersection will be reconfigured. Pedestrian crossings will be upgraded to contemporary standards and will feature APS
2015	S Main St & S 2 nd Street	The intersection will be raised. All pedestrian crossings will be upgraded to full ADA compliance and there will be APS on at all pedestrian crossings.
2015	Lake Washington Loop Trail from Logan Ave to Rainier Ave	The project will provide a shared use regional trail from the Cedar River Trail eventually extending to the north city limits along Airport Way and Rainier Ave N. All elements of the project will be designed and constructed in full compliance with contemporary ADA standards.
2015	Benson Rd & Carr Rd	All pedestrian crossings will be upgraded to full ADA compliance and there will be APS on at all pedestrian crossings.

Upgrades done as part of the City Overlay Program:

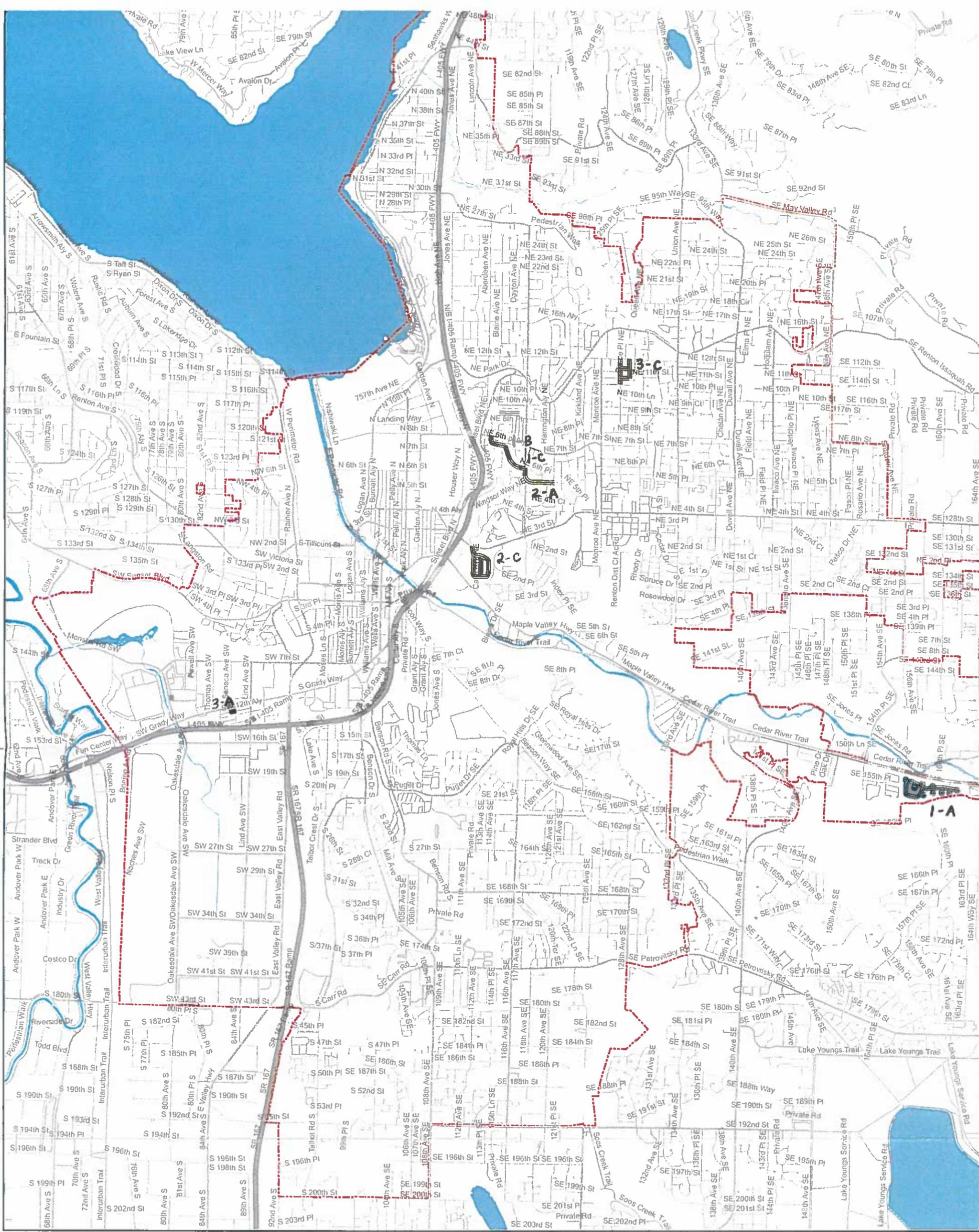
2015	Oakesdale Av SW	All pedestrian crossing locations between SW 3 rd PI & SW Langston Rd will be upgraded to contemporary standard or MEF
2015	Houser Way S	All pedestrian crossing locations between Shattuck Ave S & Burnette Ave S will be upgraded to contemporary standard or MEF
2015	Burnette PI S	All pedestrian crossing locations between S 2 nd St & S Tobin St will be upgraded to contemporary standard or MEF
2015	118 th Ave SE	All pedestrian crossing locations between SE Petrovitsky Rd & SE 175 th St will be upgraded to contemporary standard or MEF

See the following maps for additional locations that the City has done recent overlay work. Where existing sidewalk intersects the street being overlaid the pedestrian crossings will have been upgraded to ADA Compliance as part of the annual overlay program.

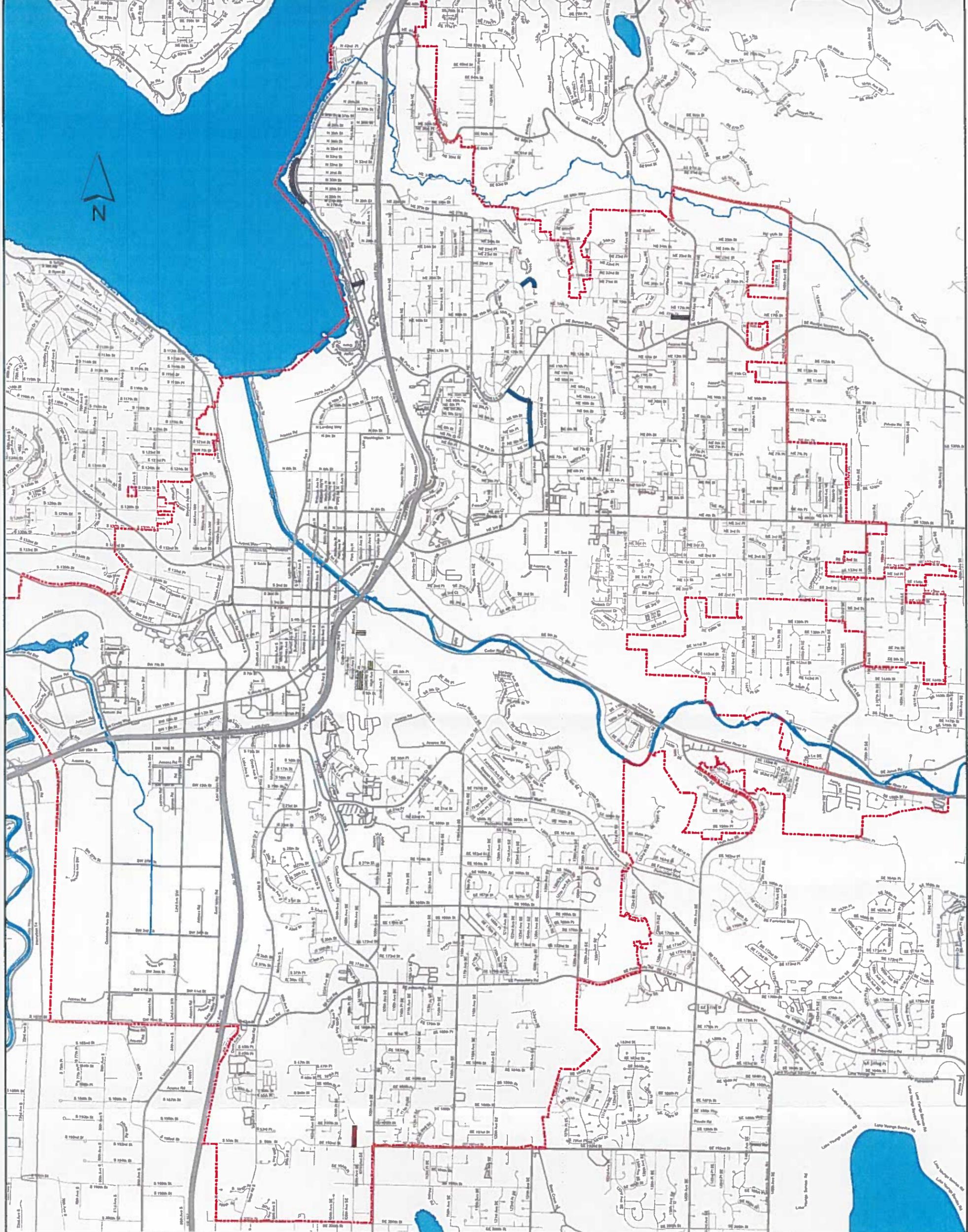


2015 Street Patch & Overlay with Curb Ramps

- 2015 Street Overlay** — 5
- Map Number**
- 1 —
 - 2 —
 - 3 —
 - 4 —
 - 6 —
 - 7 —
 - 8 —
 - 9 —



2014 Street Patch & Overlay with Curb Ramps

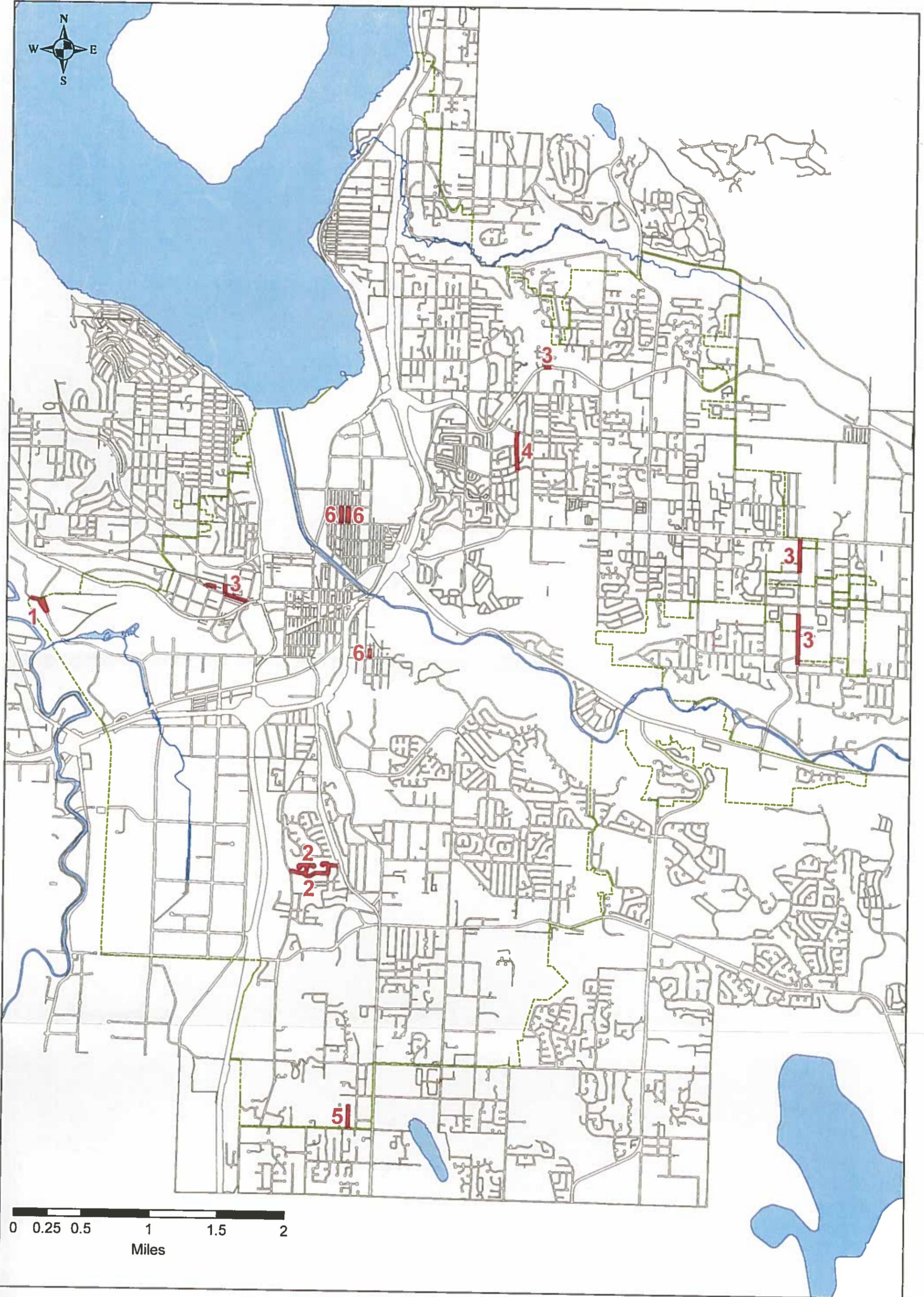


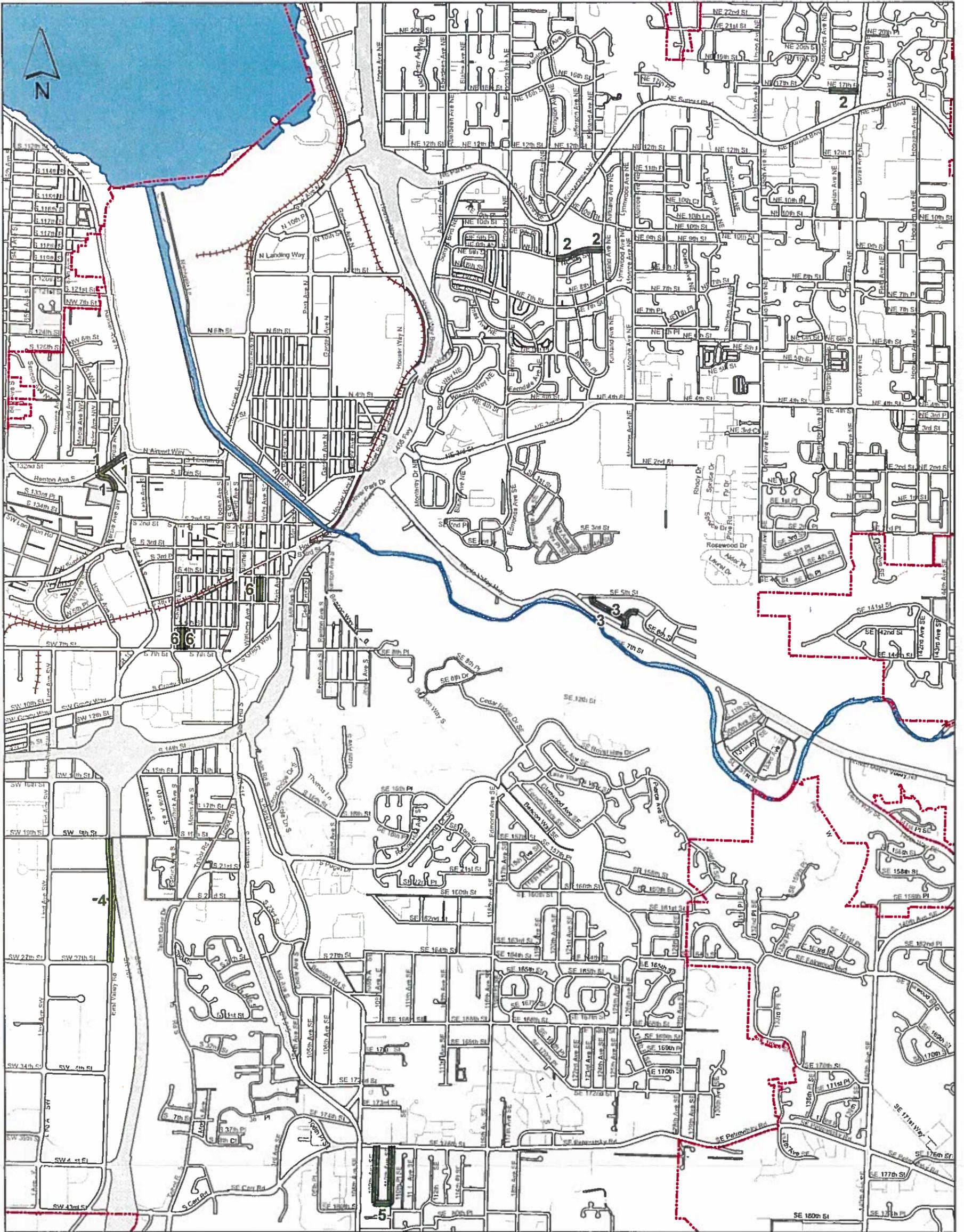
Street Patch
and Overlay
with Curb Ramps

11-018
Printed on 04/17/2013



Street Overlay	
Year, Map_Number	
	2013, 1
	2013, 2
	2013, 3
	2013, 4





2011 Street Patch and Overlay with Curb Ramps

Map_Number	Street_Name	Street_From	To_Street
1	Renton Ave Ext	650' W of Hardie	Hardie Ave N
1	Renton Ave Ext	Hardie Ave NW	Rainier Ave N
1	Hardie Ave SW	SW Victoria St	Renton Ave EXT
2	NE 17th St	Duvall Ave NE	430' East of Duvall
2	NE 9th St	Harrington Ave N	Jefferson Ave NE
2	NE 9th St	Jefferson Ave N	Kirkland Ave NE
3	Monroe Ave SE	Maple Valley Rd	3316 SE 6th St
3	SE 6th St	SE 5th St	Monroe Ave SE
4	East Valley Rd	SW 27th St	SW 19th St
5	110th Ave SE	SE 179th Pl	SE 176th St
5	109th Ave SE	SE 179th Pl	SE 176th St
5	SE 179th Pl	109 Ave SE	110th Ave SE
6	Whitworth Lane S (Alley)	S 7th St	S 6th St
6	Moses Lane (Alley)	S 7th St	S 6th St
6	Williams S/Wells S (Alley)	S 5th St	S 4th St

IT-GIS
Printed on 06/13/2011



Appendix B: Pavement Patching at Crosswalks Memo

M E M O R A N D U M

DATE: November 24, 2014
TO: Gregg Zimmerman
FROM: Bob Hanson
SUBJECT: **Pavement Patching at Crosswalks**

A question has arisen as to the impact ADA regulations have on our trench restoration requirements through intersections. Is it necessary to provide PROWAG compliant ramps at the ends of crosswalks that are crossed by trench restoration pavement patches?

The responsibility for correcting PROWAG substandard intersections belongs to the City, and the City has a Transition Plan that provides for correction of all ADA deficient intersections including a schedule and budget.

The City's pavement patching standards for trench restoration require grinding and overlay of at least one full lane width for the length of trench affected when that trench runs with the centerline of the street.

Below, I have excerpts from two Department of Justice documents relative to the subject. Both documents address conditions that occur when a local authority performs pavement work on a street. They do not address what is required when a third party does utility work in a city street:

From the **Department of Justice/Department of Transportation Joint Technical Assistance¹ on the Title II of the Americans with Disabilities Act Requirements to Provide Curb Ramps when Streets, Roads, or Highways are Altered through Resurfacing:**

An alteration is a change that affects or could affect the usability of all or part of a building or facility.³ Alterations of streets, roads, or highways include activities such as reconstruction, rehabilitation, *resurfacing*, widening, and projects of similar scale and effect.⁴ Maintenance activities on streets, roads, or highways, such as filling potholes, are not alterations.

When is resurfacing considered to be an alteration?

Resurfacing is an alteration that triggers the requirement to add curb ramps if it involves work on a street or roadway spanning from one intersection to another, and includes overlays of additional material to the road surface, with or without milling. Examples include, but are not limited to the following treatments or their equivalents: addition of a new layer of asphalt, reconstruction, concrete pavement rehabilitation and reconstruction, open-graded surface course, micro-surfacing and thin lift overlays, cape seals, and in-place asphalt recycling.

What kinds of treatments constitute maintenance rather than an alteration?

Treatments that serve solely to seal and protect the road surface, improve friction, and control splash and spray are considered to be maintenance because they do not significantly affect the public's access to or usability of the road. Some examples of the types of treatments that would normally be considered maintenance are: painting or striping lanes, crack filling and sealing, surface sealing, chip seals, slurry seals, fog seals, scrub sealing, joint crack seals, joint repairs, dowel bar retrofit, spot high-friction treatments, diamond grinding, and pavement patching. In some cases, the combination of several maintenance treatments occurring at or near the same time may qualify as an alteration and would trigger the obligation to provide curb ramps.

From the Glossary of Terms for DOJ/DOT Joint Technical Assistance on the ADA Title II Requirements to Provide Curb Ramps When Streets Roads or Highways are Altered Through Resurfacing:

Pavement patching – Pavement patching involves selectively repairing portions of the pavement where the slabs are generally in good condition, but corners or joints are broken. The depth of the patch could be full depth or partial depth.

The Department of Justice documents address pavement projects, and the various treatments that might be used, and which are alterations and which maintenance. Projects that are exclusively utility work that includes pavement patching, only as a required part of trench restoration, are not discussed in those documents.

Trench restoration that includes pavement patching will be performed in accordance with the City's trench restoration policy. Such trench restoration does not affect the usability of the pavement and will be considered "pavement patching" and thus maintenance, not triggering PROWAG curb ramp requirements.

Appendix C: Sidewalk & Curb Ramp ADA Compliance Request Process

City of Renton WA Public Works
Sidewalk and Curb Ramp ADA Compliance Request Process

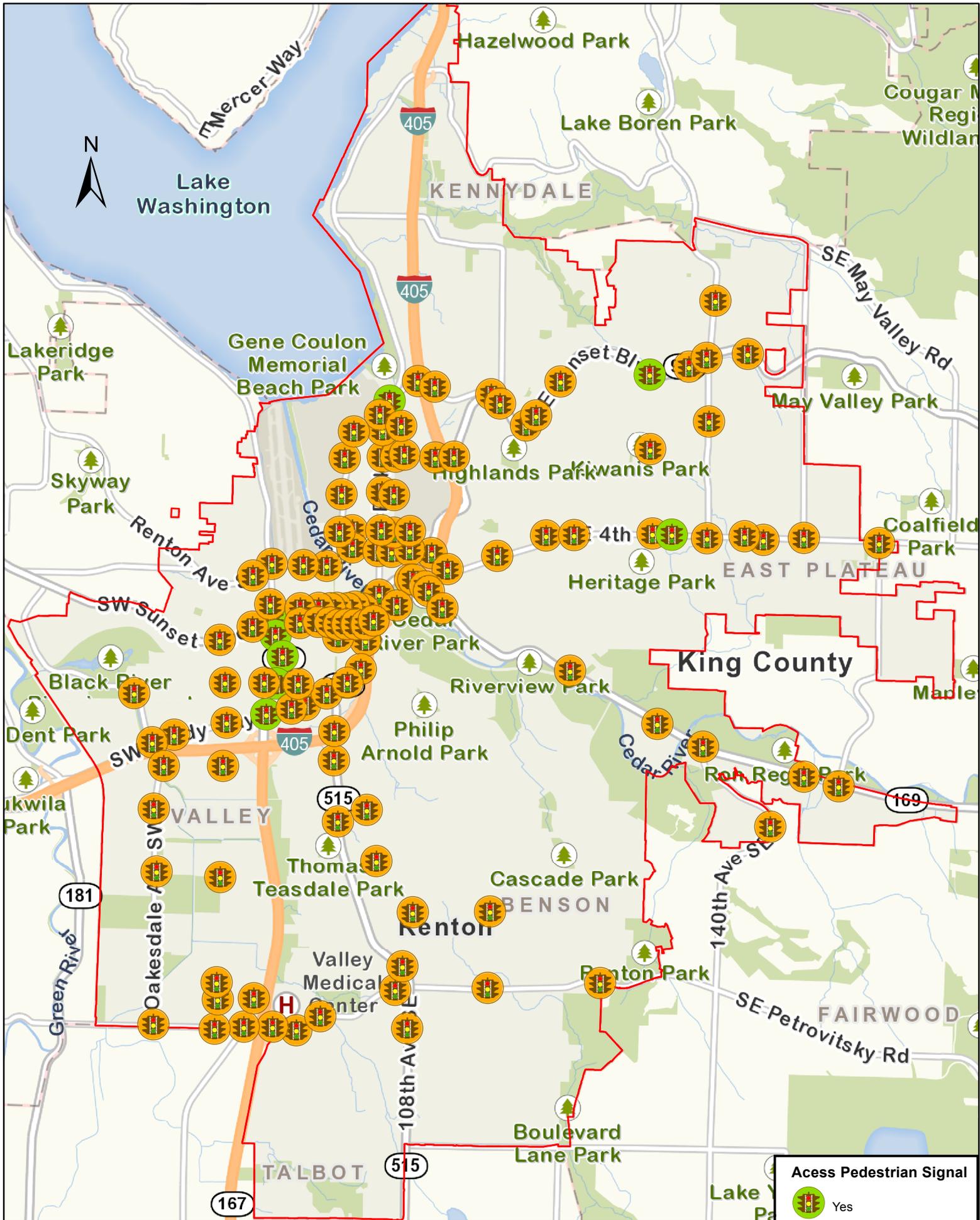
Americans with Disability Act
Provisions for requesting sidewalk and curb upgrades or filing
grievances related to compliance with ADA.

The City of Renton has adopted an internal procedure for providing prompt and equitable resolution to requests for sidewalk and curb ramp upgrades to meet the standard set by Public Rights of Way Access Board (PROWAC) standards and complaints alleging any action prohibited by the US Department of Justice regulation implementing Title II of the Americans with Disabilities Act.

Requests or complaints should be addressed to: City of Renton, Public Works Department, 1055 S Grady Way, Renton, WA 98057 and should include the information set forth below and will be processed in accordance with the following procedure:

1. Notice of request or complaint should be filed within 14 days of when the requestor or complainant becomes aware of alleged non-compliance;
2. A request or complaint can be made at any time;
3. The request or complaint shall be made in writing;
4. A request or complaint should include the name, address, and telephone number of the person making the request or complaint;
5. The request or complaint must identify the location and nature of the requested improvement;
6. A request or complaint should include a detailed description of the perceived barrier and any explanation by the requestor or complainant as to any claimed violation of the ADA .
7. An investigation shall follow the filing of a complaint or request. The investigation shall be conducted by the Public Works ADA Transition Plan Manager or designee appointed by the Public Works Administrator. These rules contemplate informal, investigations, affording all interested persons and their representatives, if any, an opportunity to submit evidence relevant to a request or complaint.
8. A written determination of the request or complaint and a description of the resolution, if any, shall be issued by the Public Works ADA Transition Plan Manager and a copy shall be forwarded to the requestor or complainant no later than 14 business days after the request or complaint was received by the City. In the event of complex issues arising from the request or complaint, and that may require additional time to thoroughly review and investigate; the Public Works Department's response may extend beyond 14 days upon notice to the requestor or complainant.
9. The Public Works ADA Transition Plan Manager shall maintain files and records of the City of Renton Public Works Department that pertain to requests or complaints filed regarding accessibility within the Public Right of Way.
10. The requestor or complainant may request reconsideration of any administrative determination made by the Public Works Department Administrator, or his/her designee, as provided in RMC 4-8-110, in instances where he or she is dissatisfied with the resolution. Any final decision of the Public Works Department Administrator, or his/her designee, may be appealed to the Hearing Examiner as provided in RMC 4-8-110.

Appendix D: Accessible Pedestrian Signal Locations Map



Existing Traffic Signal Locations

Access Pedestrian Signal

- Yes
- No

Appendix E: Policy for Minor Modifications to Signal Systems at Pedestrian Street Crossings

POLICY FOR MINOR MODIFICATIONS TO SIGNAL SYSTEMS AT PEDESTRIAN STREET CROSSINGS

Purpose:

The purpose of this policy is to establish guidelines defining minor modifications to signal systems and their application to projects at signalized intersections that include pedestrian street crossings.

Definition:

Minor Modifications. Traffic signal work such as routine maintenance, cabinet upgrades, loop/video detection installation and repairs, pedestrian and traffic signal head upgrades, and relocation of pedestrian pushbuttons that do not involve sidewalk construction that touches ramps or landings are defined as minor modifications that do not require additional improvements to meet full accessibility requirements.

Application:

The City will make minor modifications to signalized intersections in accordance with this policy without the necessity of making those additional modifications necessary to meet full accessibility requirements, including APS improvements.

The City will construct other signal upgrades including APS improvements, and ramp and landing improvements at signalized intersections in compliance with The 2005 Draft Public Rights of Way Accessibility Guidelines as may be amended or replaced and adopted by the Department of Justice (PROWAG) in accordance with its Transition Plan.

The City of Renton Transition Plan provides for:

1. A fund to install pedestrian improvements in response to requests.
2. Inclusion of pedestrian improvements in accordance with PROWAG standards in street and pedestrian capital improvement projects.
3. Systematic citywide funding and upgrading of crosswalks, ramps, landings and pedestrian signals in accordance with an inventory analysis and schedule.



PUBLIC WORKS
DEPARTMENT

**POLICY FOR MINOR MODIFICATIONS TO
SIGNAL SYSTEMS AT PEDESTRIAN
STREET CROSSINGS**

STD. PLAN - 130

APPROVED: *Darcy G. Zimmerman* 5/22/18
DATE

YOUR TURN

Pushbutton Installation

City of Bellevue's Kam Szabo asked...

Q

I've got a few questions about APS pushbutton installations.

1. If you modify a curb ramp, but the existing pushbutton is located in an accessible location (meets all the various criteria for height and offsets), do you have to change the button to an APS button?
2. What if you are just adding truncated domes to the ramp?
3. Do you always have to separate out buttons if you have modified the ramp?

Since PROWAG is not formally adopted yet, I just want to get a better handle on what the triggers are from WSDOT and the Federal perspective.

Thanks in advance for any help you can offer.

Jodi Petersen, FHWA Washington Division Office, provided this response to Kam's question.

A

Hi Kam –

FHWA's position is that in the absence of a "standard" for public right-of-way facilities, entities should refer to PROWAG – which is considered to be a "reasonable and consistent policy" for PROW facilities.

At the very least, the City must develop a “reasonable and consistent policy” for how it plans to address APS. Our expectation is that anytime you “touch” the pedestrian signals/pushbuttons, that you will replace with APS. If the scope of your project is only to modify the curb ramp (adding truncated domes, et al), and not “altering” the pedestrian signals/pushbuttons – then you don’t have to install APS at that time. However, at some point you will need to change out the pedestrian signals/pushbuttons to meet the PROWAG requirements (once PROWAG is adopted as a standard).

The bottom line is: the City either uses the PROWAG now as it’s (the City’s) reasonable & consistent policy, or it develops its own “reasonable and consistent policy” for how the City will address APS (until PROWAG is adopted as the standard). The City’s policy will need to specify when it will install APS (i.e., when pedestrian signals are altered, upon request/at a time specified in a specific schedule – such as in a transition plan).

I hope that this is helpful. I’ve cc’d Aaron Butters (WSDOT H&LP) on this response so as to ensure a consistent message (from FHWA) to all local agencies who may have the same/similar questions.

Please let me know if you have further questions or need clarification of the above.

One quick follow up – When do you need to separate the buttons? Is that the same standard of “when you touch the buttons”, or does it have anything to do with the ramps being modified?

Kam

Kam –
Yes, at any time you “alter” the pedestrian signals/pushbuttons.

Jodi

Appendix F: Locations of Wheelchair Ramps & ADA Compliance Map

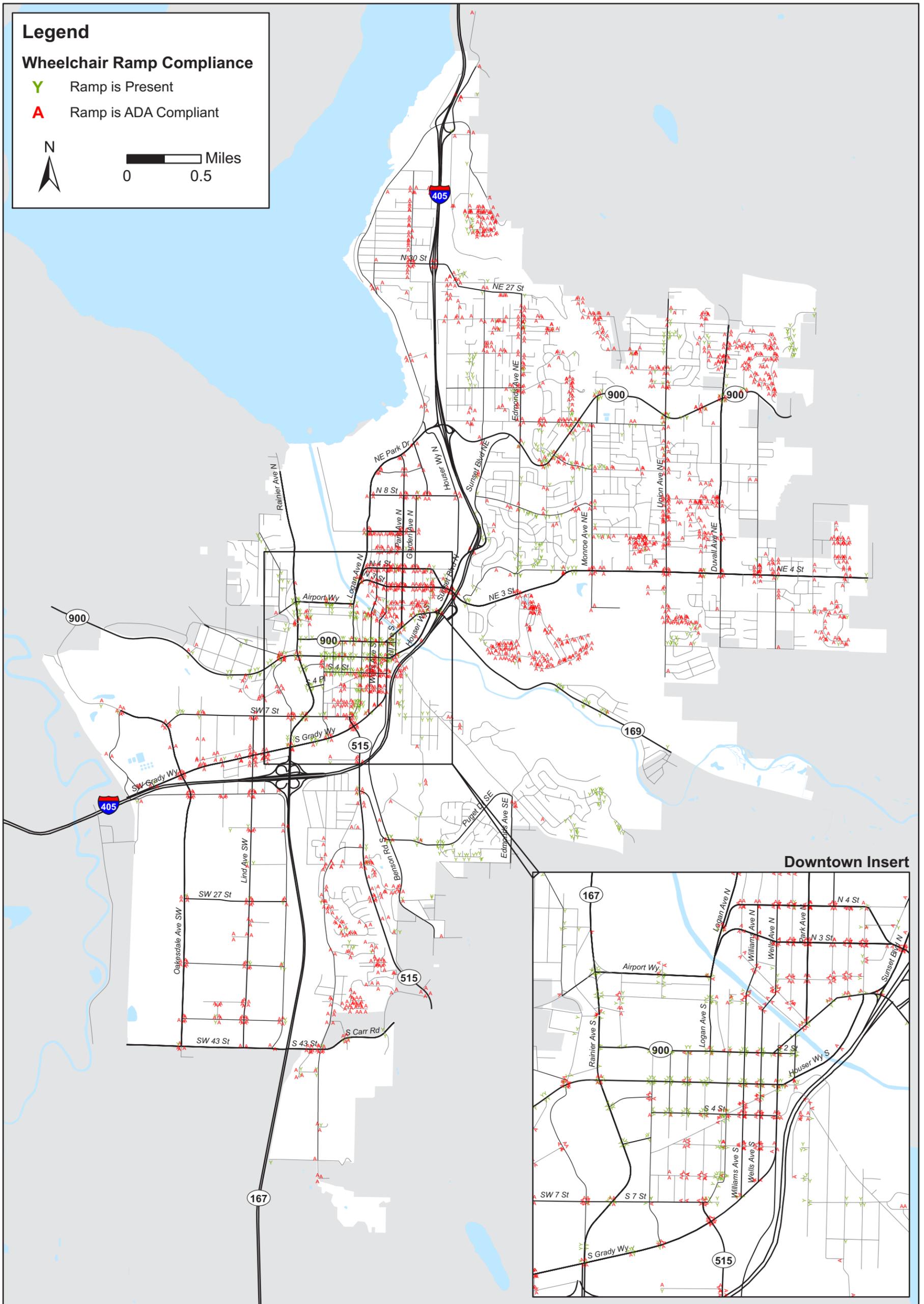
Legend

Wheelchair Ramp Compliance

- Y Ramp is Present
- A Ramp is ADA Compliant



0 0.5 Miles



Downtown Insert



**Location of Wheelchair Ramps & ADA Compliance
Comprehensive Walkway Study - 2008
City of Renton**

**Figure
12**

Appendix G: MACOG Intersection Inventory Tool

ADA Intersection Data Collection

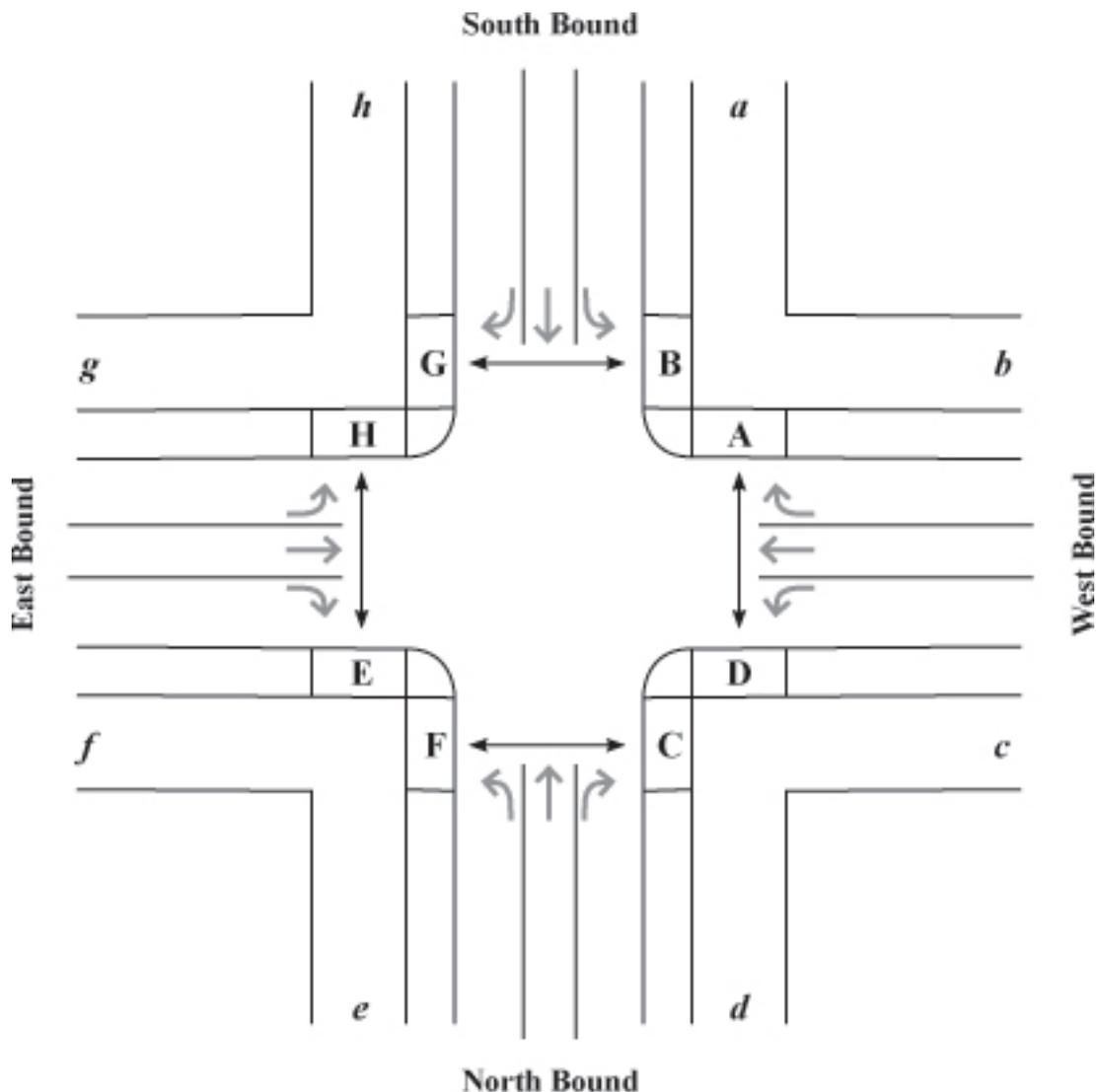
Definitions and Instructions

ADA Intersection Data Collection

Intersection Diagram

In order to consistently collect data for each intersection the diagram below shows the naming convention used for intersection legs, curb ramps, and sidewalks.

- Intersection leg is named after the direction of travel into the intersection. [South Bound, West Bound, North Bound, East Bound]
- Sidewalks are identified with a lowercase letter starting in the Northeast corner moving clockwise around. [a, b, c, d, e, f, g, h]
- Curb ramps are identified with an uppercase letter and correspond to the matching sidewalk. [A, B, C, D, E, F, G, H]



ADA Intersection Data Collection

Data Collection Form

LPA: _____ N/S: _____ E/W: _____ Ins: _____ Date: _____ ID: _____

<i>g</i>		<i>h</i>	
Cross	%	Cross	%
Grade OK?	Y - N	Grade OK?	Y - N
Surface OK?	Y - N	Surface OK?	Y - N
Gap	"	Gap	"
Grate OK?	Y - N	Grate OK?	Y - N
Protrusion	Y - N	Protrusion	Y - N
Protr. Height	"	Protr. Height	"
Protr. Length	"	Protr. Length	"
Protr. Barrier	Y - N	Protr. Barrier	Y - N

Width: " *g*
Passing: Y - N

Approach	
# of Lanes	
Control	N - ST - SG
Median?	Y - N
Median Width	"
Median Warn? Y - N	
Crosswalk	
Marked?	Y - N
Width	"
Length	ft
Cross	%
Run	%
Ped Signal?	Y - N
Ped Time	sec

<i>a</i>		<i>b</i>	
Cross	%	Cross	%
Grade OK?	Y - N	Grade OK?	Y - N
Surface OK?	Y - N	Surface OK?	Y - N
Gap	"	Gap	"
Grate OK?	Y - N	Grate OK?	Y - N
Protrusion	Y - N	Protrusion	Y - N
Protr. Height	"	Protr. Height	"
Protr. Length	"	Protr. Length	"
Protr. Barrier	Y - N	Protr. Barrier	Y - N

Width: " *a*
Passing: Y - N

Approach		Crosswalk	
# of Lanes		Marked?	Y - N
Control	N - ST - SG	Width	"
Median?	Y - N	Length	ft
Median Width	"	Cross	%
Median Warn? Y - N		Run	%
		Ped Signal?	Y - N
		Ped Time	sec

South Bound	
-------------	--

Approach		Crosswalk	
# of Lanes		Marked?	Y - N
Control	N - ST - SG	Width	"
Median?	Y - N	Length	ft
Median Width	"	Cross	%
Median Warn? Y - N		Run	%
		Ped Signal?	Y - N
		Ped Time	sec

<i>e</i>		<i>f</i>	
Cross	%	Cross	%
Grade OK?	Y - N	Grade OK?	Y - N
Surface OK?	Y - N	Surface OK?	Y - N
Gap	"	Gap	"
Grate OK?	Y - N	Grate OK?	Y - N
Protrusion	Y - N	Protrusion	Y - N
Protr. Height	"	Protr. Height	"
Protr. Length	"	Protr. Length	"
Protr. Barrier	Y - N	Protr. Barrier	Y - N

Width: " *e*
Passing: Y - N

North Bound	
# of Lanes	
Control	N - ST - SG
Median?	Y - N
Median Width	"
Median Warn? Y - N	
Crosswalk	
Marked?	Y - N
Width	"
Length	ft
Cross	%
Run	%
Ped Signal?	Y - N
Ped Time	sec

<i>c</i>		<i>d</i>	
Cross	%	Cross	%
Grade OK?	Y - N	Grade OK?	Y - N
Surface OK?	Y - N	Surface OK?	Y - N
Gap	"	Gap	"
Grate OK?	Y - N	Grate OK?	Y - N
Protrusion	Y - N	Protrusion	Y - N
Protr. Height	"	Protr. Height	"
Protr. Length	"	Protr. Length	"
Protr. Barrier	Y - N	Protr. Barrier	Y - N

Width: " *c*
Passing: Y - N

Curb Ramps												
	Type	Width	Landing	Clear Space	Run %	Cross %	Gutter %	Edge Type	Flare %	Surface OK?	Warning OK?	Grd Brk OK?
A	PE - PA - BT - N	"	"	"	%	%	%	N - F - R	%	Y - N	Y - N	Y - N
B	PE - PA - BT - N	"	"	"	%	%	%	N - F - R	%	Y - N	Y - N	Y - N
C	PE - PA - BT - N	"	"	"	%	%	%	N - F - R	%	Y - N	Y - N	Y - N
D	PE - PA - BT - N	"	"	"	%	%	%	N - F - R	%	Y - N	Y - N	Y - N
E	PE - PA - BT - N	"	"	"	%	%	%	N - F - R	%	Y - N	Y - N	Y - N
F	PE - PA - BT - N	"	"	"	%	%	%	N - F - R	%	Y - N	Y - N	Y - N
G	PE - PA - BT - N	"	"	"	%	%	%	N - F - R	%	Y - N	Y - N	Y - N
H	PE - PA - BT - N	"	"	"	%	%	%	N - F - R	%	Y - N	Y - N	Y - N

General Intersection

Approach/Crosswalk

Curb Ramp

Sidewalk

ADA Intersection Data Collection

General Intersection

This is general information about location of the intersection and any comments that needed to describe the intersection. This is collected during the Preliminary Evaluation and carried over into the Detailed Evaluation.

Local Public Agency (LPA): Location of intersection, whether it is in the city or town limits or in the county.

N/S: Street name for the north/south running street comprising the intersection.

E/W: Street name for the east/west running street comprising the intersection.

Ins: Initials of the person completing the evaluation.

Date: The date the evaluation is being completed.

ID: A unique, pre-determined number based on MACOG's GIS. 7-digit number, first two numbers is the county number (20 – Elkhart, 43 – Kosciusko, 50 – Marshall, 71 – St. Joseph), the remaining 5 are random and unique.

Comment: There is not a designated spot for comments. You can put them either in the middle of the intersection or on the back of the form.

Approach/Crosswalk

The approach/crosswalk data is identified by direction of travel on each intersection leg: South Bound, West Bound, North Bound, and East Bound. (refer to the diagram above).

Approach

of Lanes: The number of lanes on this leg of the intersection. (e.g. If there are two lanes going one direction and two lanes going the other direction, number of lanes would be four.)

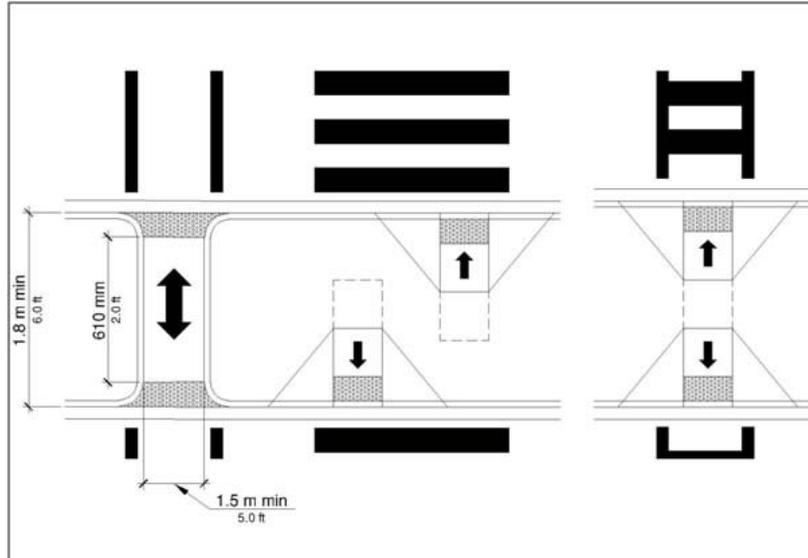
Control: The stop control device at the leg of the intersection, either "None" (N), "Stop Sign" (ST), or "Signal" (SG).

ADA Intersection Data Collection

Median?: Curbed area outside of the vehicular path that acts as a refuge island for pedestrians crossing the intersection leg.

Median Width: If there is a median, the width of the median (in inches) from curb line to curb line.

Median Warn: A detectable warning is a surface feature built in or applied to a walking surface to warn of hazards on a pedestrian path. It must have truncated domes and must be color contrasted from the surface around it.



Crosswalk

Marked?: Marked crosswalk is the portion of the intersection leg that is distinctly indicated for pedestrian crossing by lines or other markings.

Width: The width (in inches) of the crosswalk if it is marked.

Length: The length (in feet) of the pedestrian crossing measured from curb to curb across the intersection leg.

Cross: The cross slope (in percent) is perpendicular to the direction of travel where pedestrians would cross the roadway.

Run: The run slope (in percent) is in the direction of travel where pedestrians would cross the roadway.

Ped Signal: Whether a visual and/or audible pedestrian signal is present on the roadway.

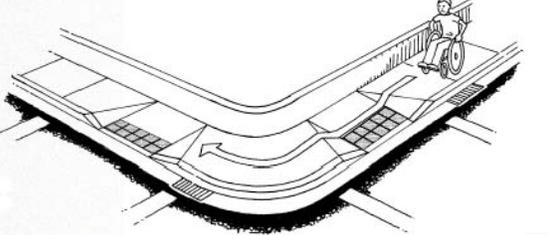
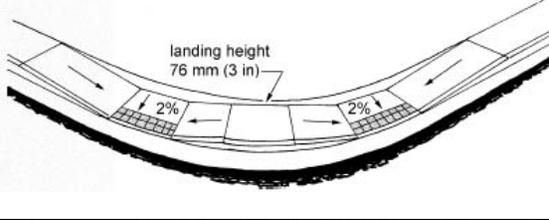
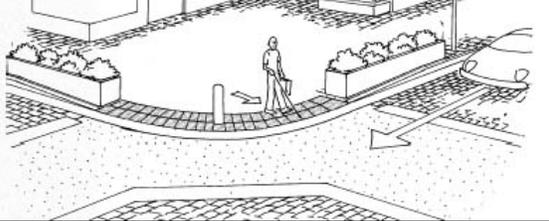
Ped Time: The number of seconds the pedestrian signal, if there is a signal, allows for a pedestrian to cross the roadway.

ADA Intersection Data Collection

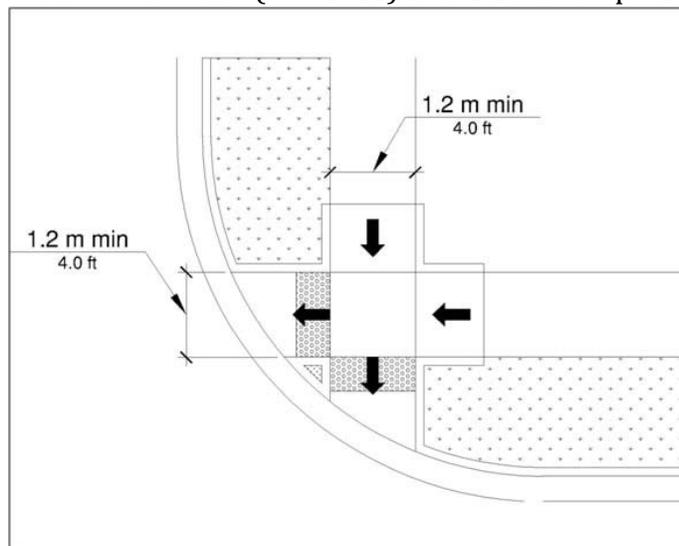
Curb Ramp

The curb ramp data is identified by the letters A-H (refer to the diagram above).

Type: Curb ramps can be several different types, choose one of the following:

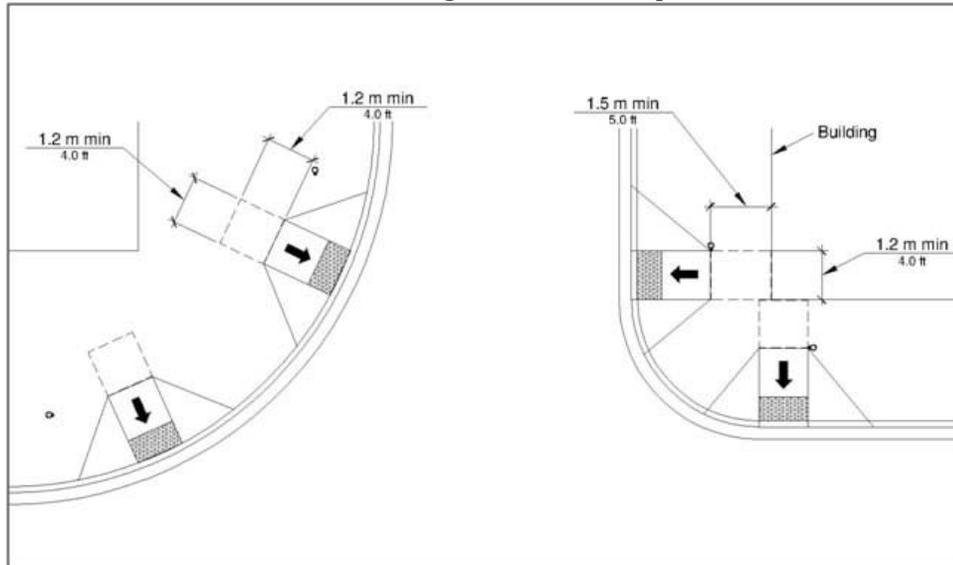
Option	Description	Example
Perpendicular (PE)	A curb ramp with a main slope running perpendicular to the curb line, and with either a flared or curb edge.	
Parallel (PA)	A system of two sloped ramps that run parallel to the curb line from a common lower landing that is approximately level with the street.	
Blended Transition (BT)	A curb ramp where the sidewalk is blended into or flush with the street.	
None (N)	There is no curb ramp, but a curb on the street.	

Width: The width (in inches) of the curb ramp not including the flared edges.

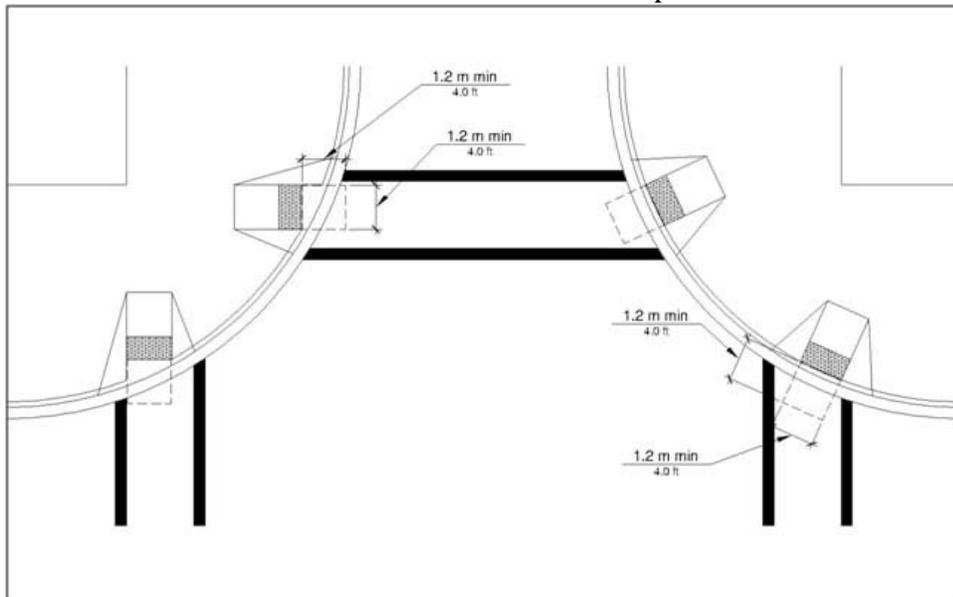


ADA Intersection Data Collection

Landing: The length (in inches) of the level clear space at the top of the curb ramp. It may be shared by another curb ramp. This space is meant for a wheelchair to rest without rolling down the ramp.

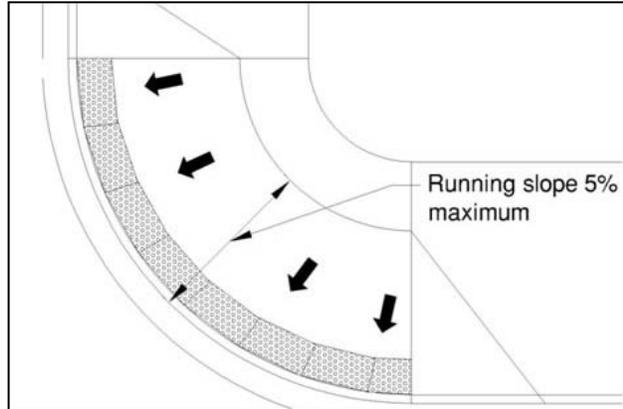


Clear Space: The length (in inches) of the level clear space at the bottom of the curb ramp. It must be outside of the lane of travel. This space is meant for a wheelchair to rest at the bottom of the ramp.

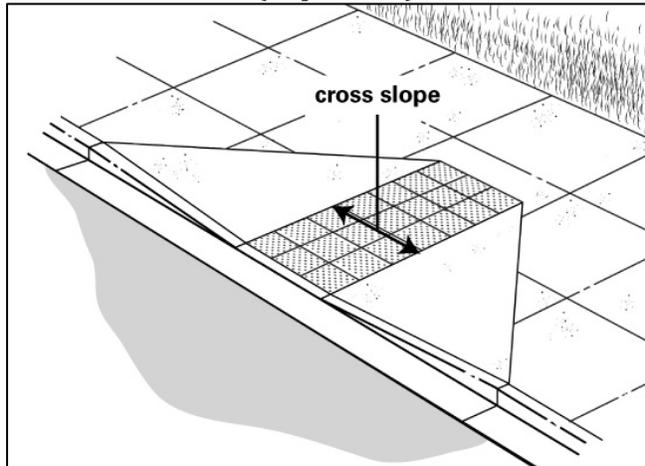


ADA Intersection Data Collection

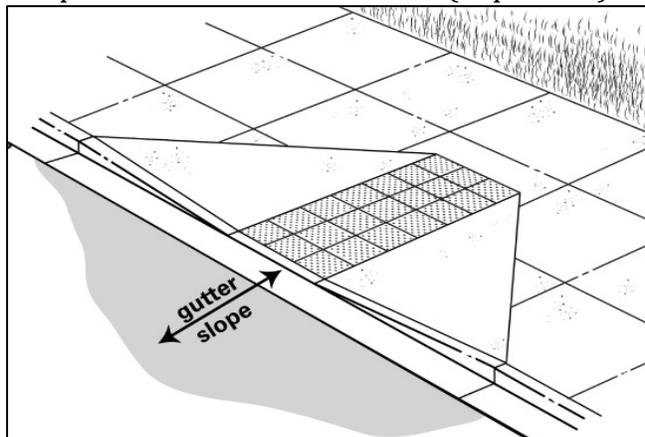
Run %: The running slope is the slope of the curb ramp in the direction of travel (in percent)



Cross %: The cross slope is the slope of the curb ramp perpendicular to the direction of travel (in percent).



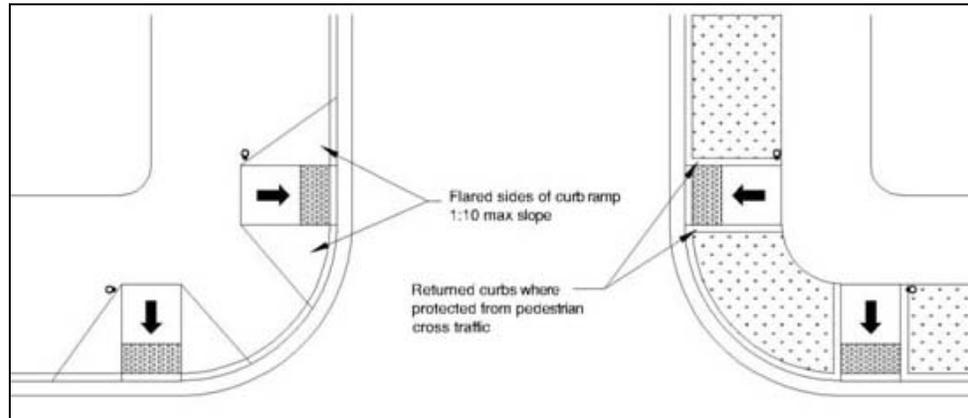
Gutter %: The counter slope of the gutter or street at the bottom of the curb ramp into the direction of travel (in percent).



ADA Intersection Data Collection

Edge Type: If the curb ramp is perpendicular, are the sides of the ramp:

- N (None) – If it is neither flared nor returned or it is not a perpendicular ramp
- F (Flared) – Flared or sloped edge
- R (Returned) – Returned and protected from cross travel by an obstruction such as grass landing (steep flare may count as returned)

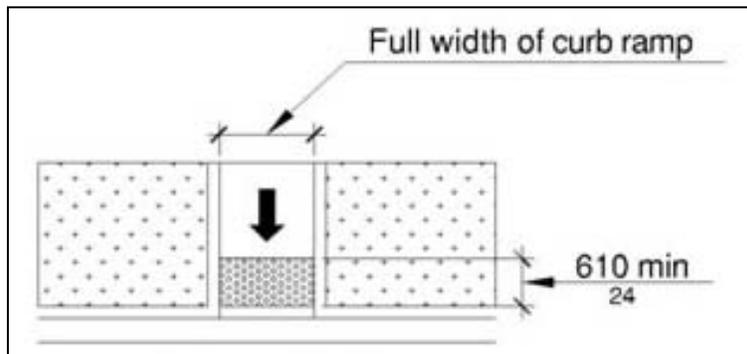


Flare %: The slope of the flared edge on a perpendicular curb ramp. Measure the steepest incline (if it is returned or none, leave blank)

Surface OK?: The surface of the curb ramp must be firm, stable and slip resistant and clear of gratings, access covers and other appurtenances.

Warning OK?: A detectable warning is a surface feature built in or applied to a walking surface to warn of hazards on a pedestrian path. Circle 'Y' if there is a warning surface that meets all the following conditions:

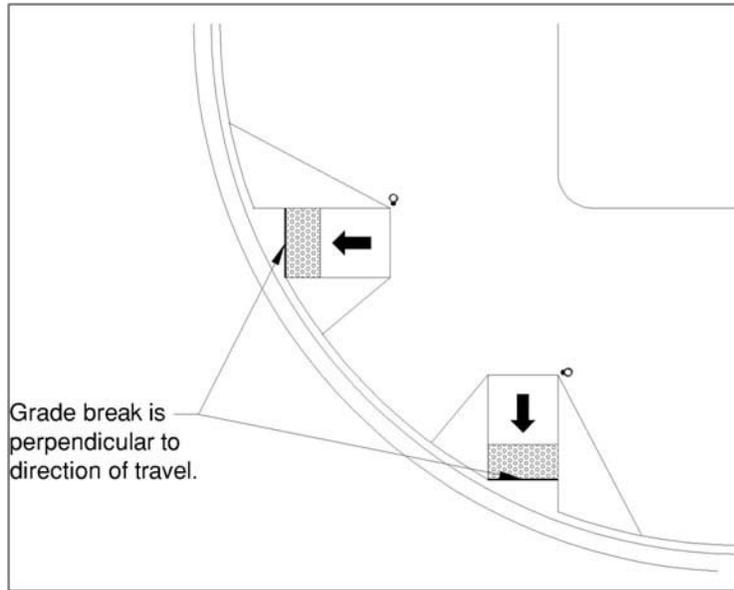
- The pad is a contrasting color to the surrounding surface; and
- The pad has 'truncated domes'
- The pad is at least 2' wide in the direction of pedestrian travel and be the full width of the curb ramp



ADA Intersection Data Collection

Grd Brk OK?: The grade break between the sidewalk and the street is located at the top and bottom of the ramp and not on the surface of the curb ramp, landing or gutter areas. Circle 'Y' if both breaks meet the following conditions:

- The surface on each side of the breaks are flush (so a wheelchair will roll easily); and
- The break is perpendicular to the direction of travel; and
- If the gap is 0.25" or less and round, then okay.

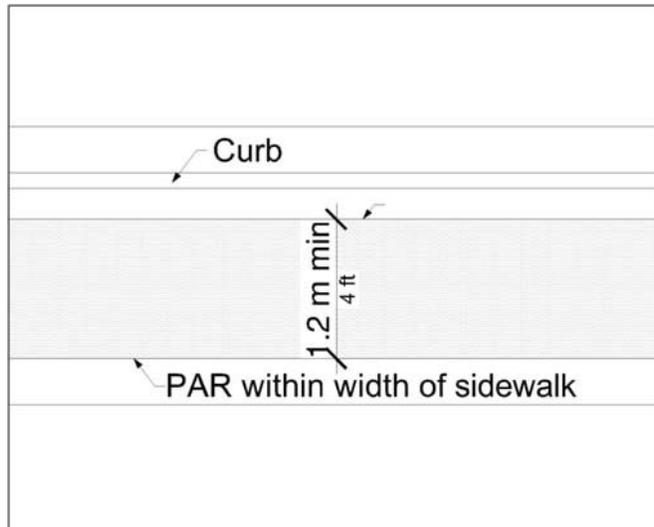


ADA Intersection Data Collection

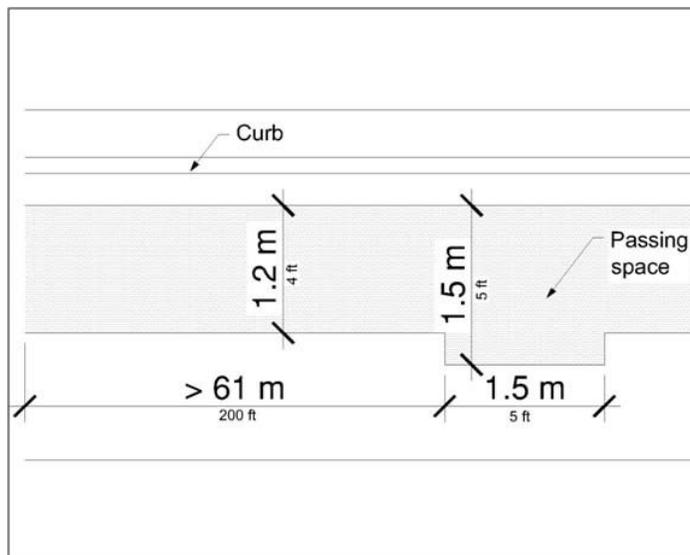
Sidewalks

The sidewalk data is identified by the letters a-h (refer to the diagram). The sidewalk should be evaluated half way up the block. Measurements should be the most narrow or sloped section of the sidewalk.

Width: The width (in inches) of the sidewalk or Pedestrian Access Route, which is walk or path that is intended for pedestrian movement must have a continuous clear space that is wide enough for a wheelchair to travel across.



Passing: There should be a passing zone at least every 200 feet that is at least 5 feet wide. This could be wider sidewalks, level driveways or alleys, or crosswalks.



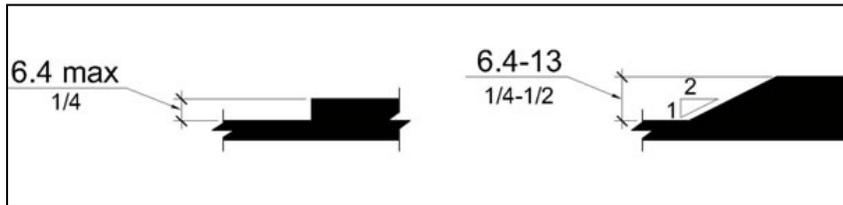
ADA Intersection Data Collection

Cross %: The cross slope is the slope perpendicular to the direction of travel (in percent).

Grade OK?: The running grade, or slope, should be approximately the same as the adjacent street.

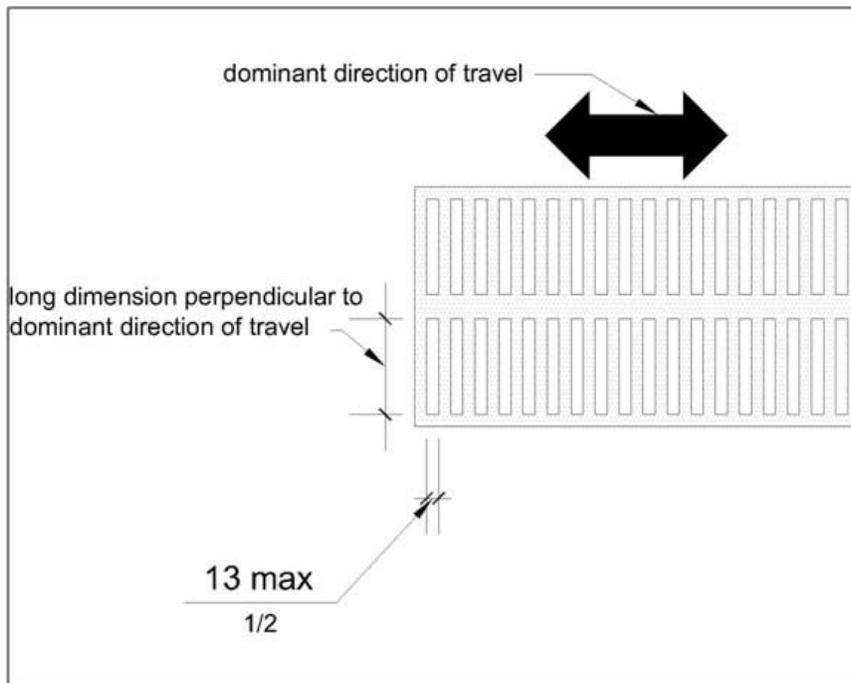
Surface OK?: The surface of the sidewalk must be firm, stable and slip resistant.

Gap: The width or height (in inches) of the largest gap either horizontally or vertically on the sidewalk.



Grate OK?: Circle 'Y' if there is no drainage grate or if it meets the following conditions:

- The opening is less than 0.5" wide; and
- The elongated openings are perpendicular to the direction of travel.



ADA Intersection Data Collection

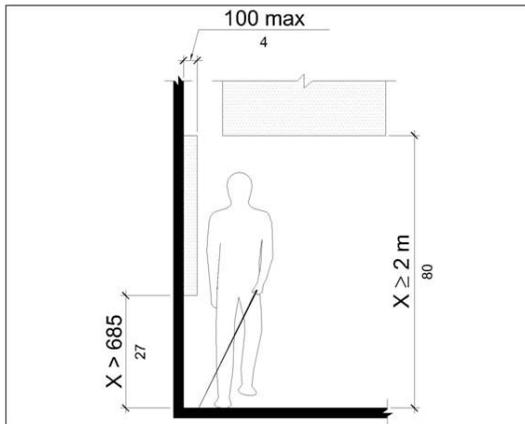
Protrusion: A protruding object is anything that extends horizontally into the clear width of the sidewalk. Circle 'Y' if there is any protrusion into the sidewalk.

Protr. Height: The height (in inches) from the ground to the bottom edge of the protrusion.

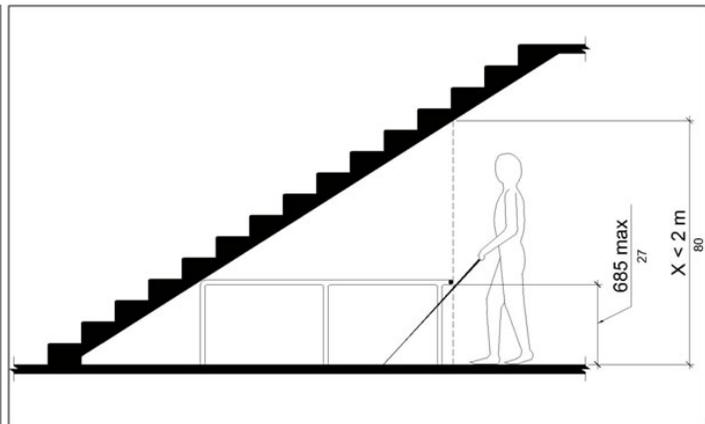
Protr. Length: The length (in inches) measured horizontally from the base to the furthest edge into the sidewalk clear space.

Protr. Barrier: A barrier should be provided when a protrusion reduces the vertical clearance of the sidewalk less than 80". A barrier is something that provides an early detection of a protrusion so it can be avoided. It must be no more than 27" from the ground.

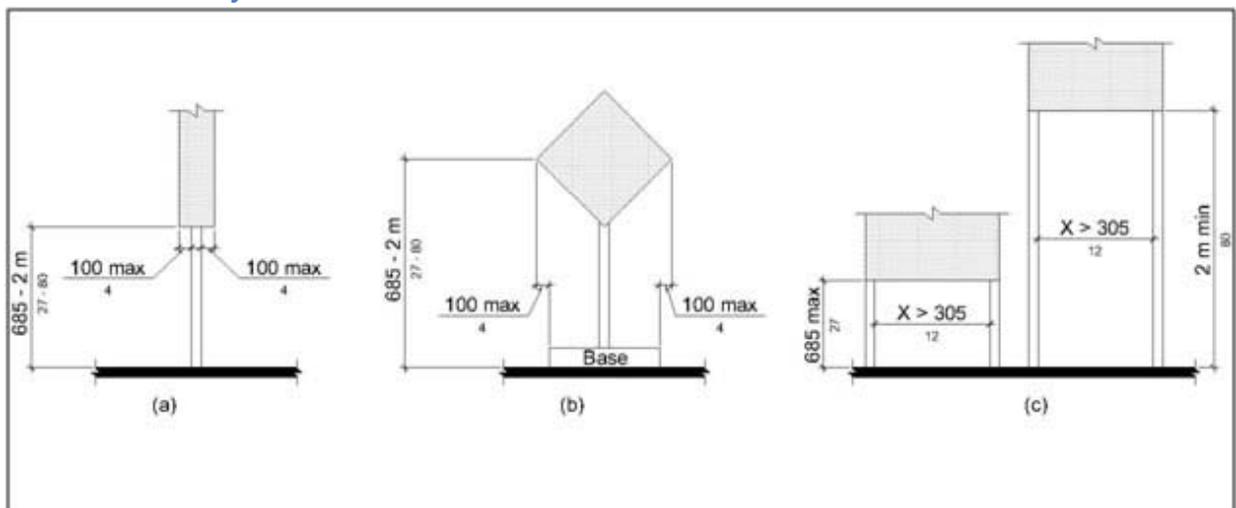
Protrusion Limits



Reduced Vertical Clearance & Barrier



Post-Mounted Objects



<i>g</i>		<i>h</i>	
Cross	%	Cross	%
Grade OK?	Y - N	Grade OK?	Y - N
Surface OK?	Y - N	Surface OK?	Y - N
Gap	"	Gap	"
Grate OK?	Y - N	Grate OK?	Y - N
Protrusion	Y - N	Protrusion	Y - N
Protr. Height	"	Protr. Height	"
Protr. Length	"	Protr. Length	"
Protr. Barrier	Y - N	Protr. Barrier	Y - N

h
Width: " *h*
Passing: Y - N

Approach	
# of Lanes	
Control	N - ST - SG
Median?	Y - N
Median Width	"
Median Warn?	Y - N
Crosswalk	
Marked?	Y - N
Width	"
Length	ft
Cross	%
Run	%
Ped Signal?	Y - N
Ped Time	sec

<i>a</i>		<i>b</i>	
Cross	%	Cross	%
Grade OK?	Y - N	Grade OK?	Y - N
Surface OK?	Y - N	Surface OK?	Y - N
Gap	"	Gap	"
Grate OK?	Y - N	Grate OK?	Y - N
Protrusion	Y - N	Protrusion	Y - N
Protr. Height	"	Protr. Height	"
Protr. Length	"	Protr. Length	"
Protr. Barrier	Y - N	Protr. Barrier	Y - N

a
Width: " *a*
Passing: Y - N

g Width: " *g*
Passing: Y - N

G

B

Width: " *b*
Passing: Y - N

H

A

South Bound

Approach	Crosswalk	
# of Lanes	Marked?	Y - N
Control	N - ST - SG	Width
Median?	Y - N	Length
Median Width	"	Cross
Median Warn?	Y - N	Run
	Ped Signal?	Y - N
	Ped Time	sec

East Bound

Approach	Crosswalk	
# of Lanes	Marked?	Y - N
Control	N - ST - SG	Width
Median?	Y - N	Length
Median Width	"	Cross
Median Warn?	Y - N	Run
	Ped Signal?	Y - N
	Ped Time	sec

West Bound

North Bound

E

D

f Width: " *f*
Passing: Y - N

F

C

Width: " *c*
Passing: Y - N

<i>e</i>		<i>f</i>	
Cross	%	Cross	%
Grade OK?	Y - N	Grade OK?	Y - N
Surface OK?	Y - N	Surface OK?	Y - N
Gap	"	Gap	"
Grate OK?	Y - N	Grate OK?	Y - N
Protrusion	Y - N	Protrusion	Y - N
Protr. Height	"	Protr. Height	"
Protr. Length	"	Protr. Length	"
Protr. Barrier	Y - N	Protr. Barrier	Y - N

e
Width: " *e*
Passing: Y - N

Approach	
# of Lanes	
Control	N - ST - SG
Median?	Y - N
Median Width	"
Median Warn?	Y - N
Crosswalk	
Marked?	Y - N
Width	"
Length	ft
Cross	%
Run	%
Ped Signal?	Y - N
Ped Time	sec

d
Width: " *d*
Passing: Y - N

<i>c</i>		<i>d</i>	
Cross	%	Cross	%
Grade OK?	Y - N	Grade OK?	Y - N
Surface OK?	Y - N	Surface OK?	Y - N
Gap	"	Gap	"
Grate OK?	Y - N	Grate OK?	Y - N
Protrusion	Y - N	Protrusion	Y - N
Protr. Height	"	Protr. Height	"
Protr. Length	"	Protr. Length	"
Protr. Barrier	Y - N	Protr. Barrier	Y - N

Curb Ramps

	Type	Width	Landing	Clear Space	Run %	Cross %	Gutter %	Edge Type	Flare %	Surface OK?	Warning OK?	Grd Brk OK?
A	PE - PA - BT - N	"	"	"	%	%	%	N - F - R	%	Y - N	Y - N	Y - N
B	PE - PA - BT - N	"	"	"	%	%	%	N - F - R	%	Y - N	Y - N	Y - N
C	PE - PA - BT - N	"	"	"	%	%	%	N - F - R	%	Y - N	Y - N	Y - N
D	PE - PA - BT - N	"	"	"	%	%	%	N - F - R	%	Y - N	Y - N	Y - N
E	PE - PA - BT - N	"	"	"	%	%	%	N - F - R	%	Y - N	Y - N	Y - N
F	PE - PA - BT - N	"	"	"	%	%	%	N - F - R	%	Y - N	Y - N	Y - N
G	PE - PA - BT - N	"	"	"	%	%	%	N - F - R	%	Y - N	Y - N	Y - N
H	PE - PA - BT - N	"	"	"	%	%	%	N - F - R	%	Y - N	Y - N	Y - N

g		h	
Cross	0.7 %	Cross	0.3 %
Grade OK?	<input checked="" type="radio"/> Y <input type="radio"/> N	Grade OK?	<input checked="" type="radio"/> Y <input type="radio"/> N
Surface OK?	<input checked="" type="radio"/> Y <input type="radio"/> N	Surface OK?	<input checked="" type="radio"/> Y <input type="radio"/> N
Gap	3/4 "	Gap	1/4 "
Grate OK?	<input checked="" type="radio"/> Y <input type="radio"/> N	Grate OK?	<input checked="" type="radio"/> Y <input type="radio"/> N
Protrusion	Y <input checked="" type="radio"/> N	Protrusion	Y <input checked="" type="radio"/> N
Protr. Height	-	Protr. Height	-
Protr. Length	-	Protr. Length	-
Protr. Barrier	Y <input checked="" type="radio"/> N	Protr. Barrier	Y <input checked="" type="radio"/> N

h
Width: 6-0"
Passing: Y N

Approach	
# of Lanes	2
Control	N <input checked="" type="radio"/> SG
Median?	Y <input checked="" type="radio"/> N
Median Width	-
Median Warn?	Y <input checked="" type="radio"/> N
Crosswalk	
Marked?	<input checked="" type="radio"/> Y <input type="radio"/> N
Width	4-6 "
Length	35-6 ft
Cross	0.8 %
Run	4.7 %
Ped Signal?	Y <input checked="" type="radio"/> N
Ped Time	-

a		b	
Cross	0.6 %	Cross	0.4 %
Grade OK?	Y <input checked="" type="radio"/> N	Grade OK?	Y <input checked="" type="radio"/> N
Surface OK?	<input checked="" type="radio"/> Y <input type="radio"/> N	Surface OK?	<input checked="" type="radio"/> Y <input type="radio"/> N
Gap	1/4 "	Gap	3/4 "
Grate OK?	<input checked="" type="radio"/> Y <input type="radio"/> N	Grate OK?	<input checked="" type="radio"/> Y <input type="radio"/> N
Protrusion	Y <input checked="" type="radio"/> N	Protrusion	Y <input checked="" type="radio"/> N
Protr. Height	-	Protr. Height	-
Protr. Length	-	Protr. Length	-
Protr. Barrier	Y <input checked="" type="radio"/> N	Protr. Barrier	Y <input checked="" type="radio"/> N

a
Width: 6-0"
Passing: Y N

g
Width: 5"
Passing: Y N

b
Width: 4-1"
Passing: Y N

Approach		Crosswalk	
# of Lanes	2	Marked?	<input checked="" type="radio"/> Y <input type="radio"/> N
Control	N <input checked="" type="radio"/> SG	Width	6-3 "
Median?	Y <input checked="" type="radio"/> N	Length	36-1 ft
Median Width	-	Cross	0.5 %
Median Warn?	Y <input checked="" type="radio"/> N	Run	3.4 %
		Ped Signal?	Y <input checked="" type="radio"/> N
		Ped Time	-

East Bound

- 1) 'E' & 'F': no C.R. just rolled curb
- 2) No warnings on any C.R.
- 3) 'b' ~~crosses~~ crosses RB

Approach		Crosswalk	
# of Lanes	2	Marked?	<input checked="" type="radio"/> Y <input type="radio"/> N
Control	N <input checked="" type="radio"/> SG	Width	6-3 "
Median?	Y <input checked="" type="radio"/> N	Length	34-11 ft
Median Width	-	Cross	1.1 %
Median Warn?	Y <input checked="" type="radio"/> N	Run	3.0 %
		Ped Signal?	Y <input checked="" type="radio"/> N
		Ped Time	-

West Bound

North Bound

landscaping

e		f	
Cross	4.0 %	Cross	1.2 %
Grade OK?	<input checked="" type="radio"/> Y <input type="radio"/> N	Grade OK?	<input checked="" type="radio"/> Y <input type="radio"/> N
Surface OK?	<input checked="" type="radio"/> Y <input type="radio"/> N	Surface OK?	<input checked="" type="radio"/> Y <input type="radio"/> N
Gap	1/4 "	Gap	1/2 "
Grate OK?	<input checked="" type="radio"/> Y <input type="radio"/> N	Grate OK?	<input checked="" type="radio"/> Y <input type="radio"/> N
Protrusion	<input checked="" type="radio"/> Y <input type="radio"/> N	Protrusion	Y <input checked="" type="radio"/> N
Protr. Height	6.5 "	Protr. Height	-
Protr. Length	12 "	Protr. Length	-
Protr. Barrier	Y <input checked="" type="radio"/> N	Protr. Barrier	Y <input checked="" type="radio"/> N

e
Width: 5-0"
Passing: Y N

Approach	
# of Lanes	2
Control	N <input checked="" type="radio"/> SG
Median?	Y <input checked="" type="radio"/> N
Median Width	-
Median Warn?	Y <input checked="" type="radio"/> N
Crosswalk	
Marked?	<input checked="" type="radio"/> Y <input type="radio"/> N
Width	4-11 "
Length	58-2 ft
Cross	0.8 %
Run	4.6 %
Ped Signal?	Y <input checked="" type="radio"/> N
Ped Time	-

d
Width: 5-5"
Passing: Y N

c		d	
Cross	-	Cross	3.5 %
Grade OK?	Y <input checked="" type="radio"/> N	Grade OK?	<input checked="" type="radio"/> Y <input type="radio"/> N
Surface OK?	Y <input checked="" type="radio"/> N	Surface OK?	<input checked="" type="radio"/> Y <input type="radio"/> N
Gap	-	Gap	1/4 "
Grate OK?	Y <input checked="" type="radio"/> N	Grate OK?	<input checked="" type="radio"/> Y <input type="radio"/> N
Protrusion	Y <input checked="" type="radio"/> N	Protrusion	Y <input checked="" type="radio"/> N
Protr. Height	-	Protr. Height	-
Protr. Length	-	Protr. Length	-
Protr. Barrier	Y <input checked="" type="radio"/> N	Protr. Barrier	Y <input checked="" type="radio"/> N

Curb Ramps

	Type	Width	Landing	Clear Space	Run %	Cross %	Gutter %	Edge Type	Flare %	Surface OK?	Warning OK?	Grd Brk OK?
A	PE-PA-BT-N	6-0"	6-0"	3-0"	2.4 %	1.2 %	5.3 %	N-F-R	5.9 %	<input checked="" type="radio"/> Y <input type="radio"/> N	Y <input checked="" type="radio"/> N	<input checked="" type="radio"/> Y <input type="radio"/> N
B	PE-PA-BT-N	4-1"	6-0"	4-0"	0.3 %	1.1 %	2.8 %	N-F-R	13.1 %	<input checked="" type="radio"/> Y <input type="radio"/> N	Y <input checked="" type="radio"/> N	<input checked="" type="radio"/> Y <input type="radio"/> N
C	PE-PA-BT-N	4-11"	5-5"	7-0"	5.0 %	0.8 %	8.1 %	N-F-R	- %	<input checked="" type="radio"/> Y <input type="radio"/> N	Y <input checked="" type="radio"/> N	Y <input checked="" type="radio"/> N
D	PE-PA-BT-N	6-5"	5-5"	4-0"	1.2 %	3.5 %	5.0 %	N-F-R	- %	<input checked="" type="radio"/> Y <input type="radio"/> N	Y <input checked="" type="radio"/> N	<input checked="" type="radio"/> Y <input type="radio"/> N
E	PE-PA-BT-N	-	-	-	- %	- %	- %	N-F-R	- %	Y <input checked="" type="radio"/> N	Y <input checked="" type="radio"/> N	Y <input checked="" type="radio"/> N
F	PE-PA-BT-N	-	-	-	- %	- %	- %	N-F-R	- %	Y <input checked="" type="radio"/> N	Y <input checked="" type="radio"/> N	Y <input checked="" type="radio"/> N
G	PE-PA-BT-N	5-0"	5-0"	3-0"	7.3 %	0.6 %	2.6 %	N-F-R	- %	<input checked="" type="radio"/> Y <input type="radio"/> N	Y <input checked="" type="radio"/> N	<input checked="" type="radio"/> Y <input type="radio"/> N
H	PE-PA-BT-N	5-11"	6-0"	7-0"	7.3 %	0.7 %	3.4 %	N-F-R	- %	<input checked="" type="radio"/> Y <input type="radio"/> N	Y <input checked="" type="radio"/> N	<input checked="" type="radio"/> Y <input type="radio"/> N

Entered 4/8/2013 J.M.

Appendix H: Crosswalk Closing Law

Closing Crosswalks (See Clause (6))

RCW 46.61.240

Crossing at other than crosswalks.

(1) Every pedestrian crossing a roadway at any point other than within a marked crosswalk or within an unmarked crosswalk at an intersection shall yield the right of way to all vehicles upon the roadway.

(2) Where curb ramps exist at or adjacent to intersections or at marked crosswalks in other locations, disabled persons may enter the roadway from the curb ramps and cross the roadway within or as closely as practicable to the crosswalk. All other pedestrian rights and duties as defined elsewhere in this chapter remain applicable.

(3) Any pedestrian crossing a roadway at a point where a pedestrian tunnel or overhead pedestrian crossing has been provided shall yield the right of way to all vehicles upon the roadway.

(4) Between adjacent intersections at which traffic-control signals are in operation pedestrians shall not cross at any place except in a marked crosswalk.

(5) No pedestrian shall cross a roadway intersection diagonally unless authorized by official traffic-control devices; and, when authorized to cross diagonally, pedestrians shall cross only in accordance with the official traffic-control devices pertaining to such crossing movements.

(6) No pedestrian shall cross a roadway at an unmarked crosswalk where an official sign prohibits such crossing.

Appendix I: Washington State Laws

Washington State Laws on ADA

[RCWs > Title 35 > Chapter 35.68 > Section 35.68.075](#)

RCW 35.68.075

Curb ramps for persons with disabilities — Required — Standards and requirements.

(1) The standard for construction on any county road, or city or town street, for which curbs in combination with sidewalks, paths, or other pedestrian access ways are to be constructed, shall be not less than two ramps per lineal block on or near the crosswalks at intersections. Such ramps shall be at least thirty-six inches wide and so constructed as to allow reasonable access to the crosswalk for physically handicapped persons, without uniquely endangering blind persons.

(2) Standards set for curb ramping under subsection (1) of this section shall not apply to any curb existing upon enactment of this section but shall apply to all new curb construction and to all replacement curbs constructed at any point in a block which gives reasonable access to a crosswalk.

(3) Upon September 21, 1977, every ramp thereafter constructed under subsection (1) of this section, which serves one end of a crosswalk, shall be matched by another ramp at the other end of the crosswalk. However, no ramp shall be required at the other end of the crosswalk if there is no curb nor sidewalk at the other end of the crosswalk. Nor shall any matching ramp constructed pursuant to this subsection require a subsequent matching ramp.

[1989 c 173 § 1; 1977 ex.s. c 137 § 1; 1973 c 83 § 1.]

[WACs > Title 236 > Chapter 236-60](#)

Chapter 236-60 WAC

Last Update: 1/24/78

Suggested design and construction standards of sidewalk and curb ramps for the physically handicapped person without uniquely endangering the blind

[Chapter Listing](#)

WAC Sections

[236-60-001](#) Purpose.

[236-60-005](#) Scope.

[236-60-010](#) Definition.

[236-60-020](#) Design standards.

[236-60-030](#) Advance warning system for the blind.

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[236-60-070](#) Curb ramp -- Type "A."

[236-60-080](#) Curb ramp -- Type "B."

[236-60-090](#) Curb ramp -- Type "C."

[236-60-100](#) Factors to be considered.

236-60-001

Purpose.

The purpose of this chapter is to provide several suggested model design, construction, and location standards to aid counties, cities, and towns in constructing curb ramps to allow reasonable access to the crosswalk for physically handicapped persons without uniquely endangering blind persons in accordance with chapter 137, Laws of 1977 ex. sess. (chapter [35.68](#) RCW).

[Statutory Authority: RCW [35.68.076](#). 78-02-066 (Order 77-5), § 236-60-001, filed 1/24/78.]

236-60-005

Scope.

The design construction and location standards set forth in chapter [236-60](#) WAC are suggestions only, and must be read in conjunction with the requirements of RCW [35.68.075](#) and any applicable code.

If these suggested standards are followed they should be used as a guide and not as a substitute for engineering

judgment based on the conditions existing at any particular location.

[Statutory Authority: RCW [35.68.076](#). 78-02-066 (Order 77-5), § 236-60-005, filed 1/24/78.]

236-60-010

Definition.

As used in this chapter, the following words shall have the following meanings:

(1) Handicapped pedestrian - a pedestrian, or person in a wheelchair, who has limited mobility, stamina, agility, reaction time, impaired vision or hearing, or who may have difficulty walking, with or without assistive devices.

(2) Curb ramp - an interruption in a curb with a ramp from roadway to walk which forms a part of the accessible route of travel, no part of which projects into the roadway. It includes a center ramp and two shoulder slopes.

(3) Center ramp - the sloped surface providing pedestrian access to the roadway.

(4) Shoulder slope - the sloped flared sides on each side of the center ramp, providing a gradual incline from the edge of the center ramp to the sidewalk.

(5) Landing - a level area at least as wide as and, as long as, the width (except as otherwise provided), and within or at a terminus of, a stair or ramp, but not less than 5'["]0" in width.

(6) Main pedestrian path - the walkway used by the pedestrian traffic clear of utility poles, signs, and parking meters.

[Statutory Authority: RCW [35.68.076](#). 78-02-066 (Order 77-5), § 236-60-010, filed 1/24/78.]

236-60-020

Design standards.

The following construction standards are applicable to all curb-ramps set forth in this chapter.

(1) The width of the center ramps shall be at least thirty-six inches.

(2) Shoulder slopes shall not exceed one inch in 6.

(3) The center ramp slope shall not exceed 1 in 12 and the cross slope shall not exceed 1 in 50.

(4) Curb ramps should contain a slip-resistant surface.

(5) The site of the curb ramp should be graded and drained to eliminate pooling of water or the accumulation of ice or water on the ramp, the ramp landing, or at the toe of the ramp.

(6) Handrails shall not be used at any point of access along the curb ramp.

(7) Curb ramps should be outside of the main pedestrian path.

(8) Whenever curb ramps are placed in the main flow of pedestrian traffic, the following standards prevail:

(a) Align with the direction of pedestrian traffic.

(b) Advance warning system.

(9) The curb ramp should be distinguished from surrounding surfaces either by color or texture.

(10) There should be no abrupt change in elevation to exceed 1/2 inch.

(11) A landing 5 feet x 5 feet should be located at top and bottom of every curb ramp.

[Statutory Authority: RCW [35.68.076](#). 78-02-066 (Order 77-5), § 236-60-020, filed 1/24/78.]

236-60-030

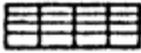
Advance warning system for the blind.

Whenever curb ramps are placed in the main flow of pedestrian traffic, an advance warning system is necessary in order to aid the blind. Warning materials should be adapted to local conditions. This texture should be in advance of a ramp curb. (See WAC [236-60-060](#).)

[Statutory Authority: RCW [35.68.076](#). 78-02-066 (Order 77-5), § 236-60-030, filed 1/24/78.]

236-60-040

Types of suggested textures.

WAC 236-60-040 TYPES OF SUGGESTED TEXTURES		
1		Tactile surface, such as using metal insert in concrete with recessed pattern, and remove insert.
2		Brick-Masonry (Rough finish)
3		Aggregate stones shall be 5/8 inches maximum.
4		Traffic Buttons - not more than 1/4 inch high, 2 to 4 inches on center. Bright color. Buttons may be part of the concrete surface pattern.

Notes: (a) Type No. 1 is recommended for the center ramp surface.

(b) These standards are not a substitute for engineering judgment. They provide design guidance.

[Statutory Authority: RCW [35.68.076](#). 78-02-066 (Order 77-5), § 236-60-040, filed 1/24/78.]

236-60-050

Curb ramp types.

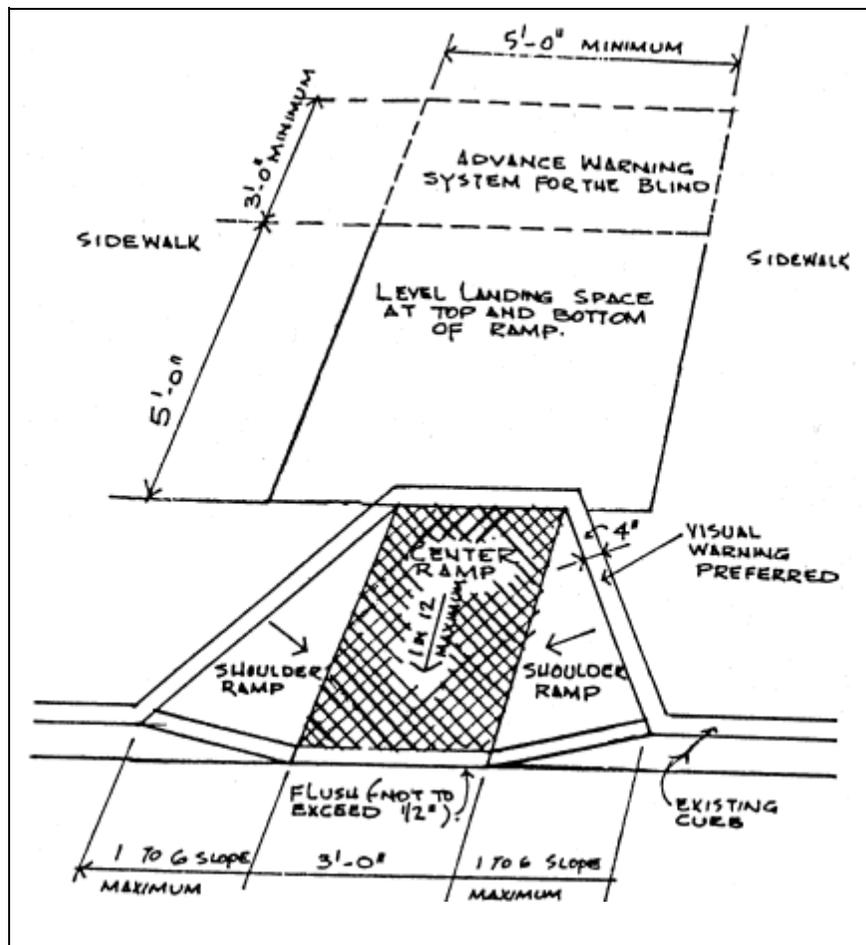
The curb ramp depicted in WAC [236-60-060](#) is the suggested design for a typical curb ramp including warning system. The drawings contained in WAC [236-60-070](#), [236-60-080](#), and [236-60-090](#) show the suggested location for curb ramps in three different but typical curb situations. All of these drawings are guidelines and are intended to show design concept.

[Statutory Authority: RCW [35.68.076](#). 78-02-066 (Order 77-5), § 236-60-050, filed 1/24/78.]

236-60-060

Curb ramp typical.

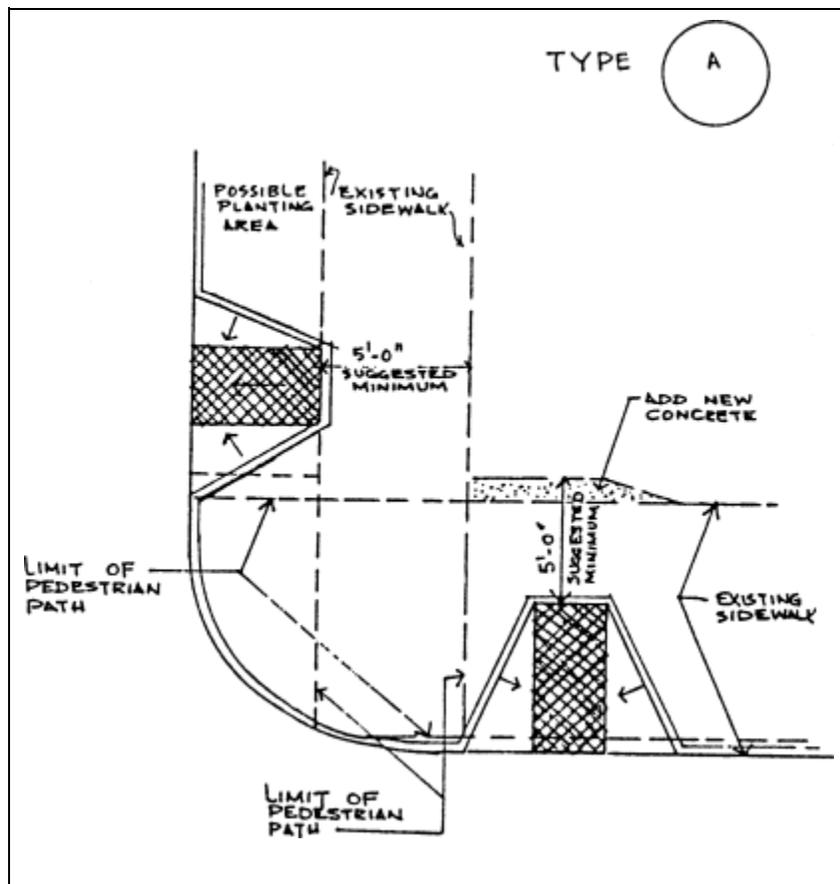
The following is a design for a typical curb ramp:



- (1) Texturing of center ramp recommended, with metal grid placed in wet concrete and then removed to leave ridged surface pattern. Pattern not to exceed 1/2" width.
- (2) Advance warning strip (shown dotted), necessary when ramp is in direct line of main pedestrian path.

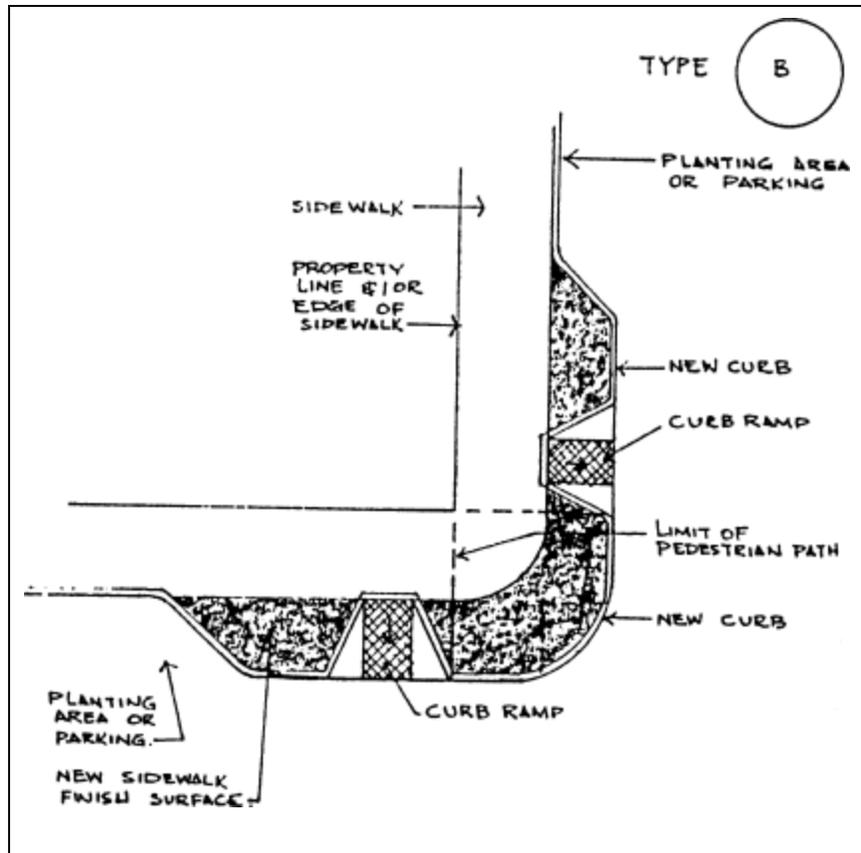
[Statutory Authority: RCW [35.68.076](#). 78-02-066 (Order 77-5), § 236-60-060, filed 1/24/78.]

236-60-070 Curb ramp — Type "A."



[Statutory Authority: RCW [35.68.076](#). 78-02-066 (Order 77-5), § 236-60-070, filed 1/24/78.]

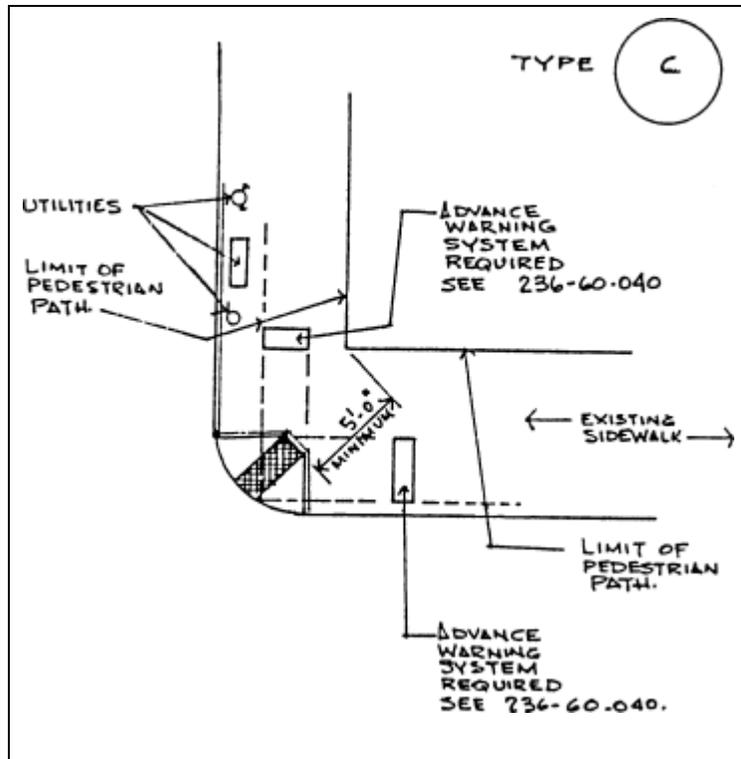
236-60-080 Curb ramp — Type "B."



- (1) This curb ramp type can be used with the existing planting area or with the sidewalk extension into the parking area.

[Statutory Authority: RCW [35.68.076](#). 78-02-066 (Order 77-5), § 236-60-080, filed 1/24/78.]

236-60-090
Curb ramp — Type "C."



This curb ramp type is acceptable when utilities are a conflict and/or the street grade exceeds twenty-five to one (4%).

[Statutory Authority: RCW [35.68.076](#). 78-02-066 (Order 77-5), § 236-60-090, filed 1/24/78.]

236-60-100

Factors to be considered.

Factors which should be considered by a city, town or county when deciding whether to follow or deviate from the design, surface textures and/or location standards set forth in this chapter include, but are not limited to, the following:

- (1) Street alignments and curb configurations that are substantially different from the curb situations shown.
- (2) An adjacent driveway or loading ramp.
- (3) Unusual sidewalk textures in the vicinity.
- (4) Steeper street grades.
- (5) Utility vaults.
- (6) Whether a different design or location would assist the handicapped pedestrian without uniquely endangering the blind.

[Statutory Authority: RCW [35.68.076](#). 78-02-066 (Order 77-5), § 236-60-100, filed 1/24/78.]

NEW SECTION

WAC 51-40-1106 Section 1106--Accessible design and standards.

Section 1106.1 General. Where accessibility is required by this chapter, buildings and facilities shall be designed and constructed in accordance with this section, unless otherwise specified in this chapter.

1106.2 Space Allowance and Reach Ranges.

1106.2.1 Wheelchair passage width. The minimum clear width for single wheelchair passage shall be 36 inches (915 mm). The minimum width for two wheelchairs to pass is 60 inches (1525 mm).

EXCEPTION: The minimum width for single wheelchair passage may be 32 inches (815 mm) for a maximum distance of 24 inches (610 mm).

1106.2.2 Wheelchair turning spaces. Wheelchair turning spaces shall be designed and constructed to satisfy one of the following requirements:

1. A turning space not less than 60 inches (1525 mm) in diameter; or,
2. A turning space at T-shaped intersections or within a room, where the minimum width is not less than 36 inches (915 mm). Each segment of the T shall be clear of obstructions not less than 24 inches (610 mm) in each direction.

Wheelchair turning space may include knee and toe clearance in accordance with Section 1106.2.4.3.

1106.2.3 Unobstructed floor space. A floor space, including the vertical space above such floor space, which is free of any physical obstruction including door swings, to a height of 29 inches (737 mm). Where a pair of doors occurs, the swing of the inactive leaf may be considered to be unobstructed floor space. Unobstructed floor space may include toe spaces

that are a minimum of 9 inches (230 mm) in height and not more than 6 inches (152 mm) in depth.

1106.2.4 Clear floor or ground spaces and maneuvering clearance space for wheelchairs.

1106.2.4.1 Size. The minimum clear floor or ground space required to accommodate a single, stationary wheelchair occupant shall be not less than 30 inches (760 mm) by 48 inches (1220 mm).

1106.2.4.2 Approach. Wheelchair spaces shall be designed to allow for forward or parallel approach to an accessible feature.

1106.2.4.3 Knee and toe clearances. Spaces under obstructions, work surfaces or fixtures may be included in the clear floor or ground space provided that they are at least 30 inches (760 mm) in width, a minimum of 27 inches (685 mm) in height, and not greater than 25 inches (635 mm) in depth. Toe spaces under obstructions, work surfaces or fixtures which comply with the requirements for unobstructed floor space may be included in the clear floor or ground space.

1106.2.4.4 Approach to wheelchair spaces. One full unobstructed side of the clear floor or ground space for a wheelchair shall adjoin or overlap an accessible route of travel, or shall adjoin another wheelchair clear space. Clear space located in an alcove or otherwise confined on all or part of three sides shall be not less than 36 inches (915 mm) in width where forward approach is provided, or 60 inches (1525 mm) in width where parallel approach is provided.

1106.2.4.5 Forward reach. Where the clear floor space allows only forward approach to an object, the maximum forward reach allowed shall not be higher than 48 inches (1220 mm). Reach obstructions 20 inches (510 mm) or less in depth may project into the clear space provided that knee clearance is maintained in accordance with Section 1106.2.4.3. Reach obstructions greater than 20 inches (510 mm) in depth may project into the clear space provided that the reach obstruction shall not exceed 25 inches (635 mm) in depth and the maximum forward reach shall not exceed 44 inches (1118 mm) in height. The minimum low forward reach shall not be

lower than 15 inches (380 mm).

1106.2.4.6 Side reach. Where the clear floor space allows parallel approach by a person in a wheelchair, the maximum high side reach allowed shall not be higher than 54 inches (1370 mm). Obstructions no greater than 34 inches (865 mm) in height and no more than 24 inches (610 mm) in depth may be located in the side reach area provided that when such obstructions are present, the side reach shall not exceed 46 inches (1170 mm) in height. The minimum low side reach shall not be lower than 9 inches (230 mm).

1106.3 Controls and Hardware.

1106.3.1 Operation. Handles, pulls, latches, locks, and other operating devices on doors, windows, cabinets, plumbing fixtures, and storage facilities, shall have a lever or other shape which will permit operation by wrist or arm pressure and which does not require tight grasping, pinching or twisting to operate. Doors shall comply with Section 1003.3.1.5.

The force to activate controls on lavatories and water fountains and flush valves on water closets and urinals shall not be greater than 5 pounds (22.2 N).

1106.3.2 Mounting heights. The highest operable part of environmental and other controls, dispensers, receptacles, and other operable equipment shall be within at least one of the reach ranges specified in Section 1106.2.4, and not less than 36 inches (915 mm) above the floor. Electrical and communications system receptacles on walls shall be mounted a minimum of 15 inches (380 mm) above the floor. Door hardware shall be mounted at not less than 36 inches (915 mm) and not more than 48 inches (1220 mm) above the floor.

1106.3.3 Clear floor space. Clear floor space that allows a forward or a side approach shall be provided at all controls or hardware.

1106.4 Accessible Route of Travel.

1106.4.1 Width. The minimum clear width of an accessible route of travel shall be 36 inches (915 mm) except at doors (see Section 1106.10.2). Where an accessible route includes a 180 degree turn around an obstruction which is less than 48 inches (1220 mm) in width, the clear width of the accessible route of travel around the obstruction shall be 42 inches (1065 mm) minimum. For exterior accessible routes of travel, the minimum clear width shall be 44 inches (1118 mm).

EXCEPTION: The minimum width for single wheelchair passage may be 32 inches (815 mm) for a maximum distance of 24 inches (610 mm).

Where an accessible route of travel is less than 60 inches (1525 mm) in width, passing spaces at least 60 inches (1525 mm) by 60 inches (1525 mm) shall be located at intervals not to exceed 200 feet (61 m). A T-shaped intersection of two corridors or walks may be used as a passing space.

1106.4.2 Height. Accessible routes shall have a clear height of not less than 79 inches (2007 mm). Where the vertical clearance of an area adjoining an accessible route of travel is less than 79 inches (2007 mm) but more than 27 inches (685 mm), a continuous permanent barrier shall be installed to prevent traffic into such areas of reduced clearance.

1106.4.3 Slope. An accessible route of travel shall have a running slope not greater than 1 vertical in 12 horizontal. An accessible route of travel with a running slope greater than 1 vertical in 20 horizontal shall comply with Section 1106.8. Cross slopes of an accessible route of travel shall not exceed 1 vertical in 48 horizontal.

1106.4.4 Changes in level. Changes in level along an accessible route of travel shall comply with Section 1106.6. Stairs or escalators shall not be part of an accessible route of travel. Any raised area within an accessible route of travel shall be cut through to maintain a level route or shall have curb ramps at both sides and a level area not less than 48 inches (1220 mm) long connecting the ramps.

1106.4.5 Surfaces.

1106.4.5.1 General. All floor and ground surfaces in an accessible route of travel shall comply with Section 1106.7.

1106.4.5.2 Detectable warnings. Curb ramps shall have detectable warnings complying with Section 1106.17. Detectable warnings shall extend the full width and depth of the curb ramp.

1106.4.6 Illumination. Illumination shall be provided along an exterior accessible route of travel at any time the building is occupied, with an intensity of not less than one footcandle (10.76 lx) on the surface of the route.

1106.4.7 Curb ramps.

1106.4.7.1 Slope. Slopes of curb ramps shall comply with Section 1106.8. Transitions from ramps to walks, gutters, or vehicular ways shall be flush and free of abrupt changes in height. Maximum slopes of adjoining gutters and road surfaces immediately adjacent to the curb ramp or accessible route of travel shall not exceed 1 vertical in 20 horizontal.

1106.4.7.2 Width. Curb ramps shall be not less than 36 inches (915 mm) in width, exclusive of the required side slopes.

1106.4.7.3 Side slopes of curb ramps. Curb ramps located where pedestrians must walk across the ramp, or where not protected by handrails or guardrails, shall have sloped sides. The maximum side slope shall be 1 vertical in 10 horizontal. Curb ramps with returned curbs may be used where pedestrians would not normally walk across the ramp.

EXCEPTION: Where the width of the walking surface at the top of the ramp and parallel to the run of the ramp is less than 48 inches (1220 mm), the maximum side slope shall be 1 vertical in 12 horizontal.

1106.4.7.4 Location. Built-up curb ramps shall be located so as not to project into vehicular ways nor be located within accessible parking spaces.

1106.4.7.5 Obstructions. Curb ramps shall be located or protected to prevent their obstruction by parked vehicles.

1106.4.7.6 Location at marked cross walks. Curb ramps at marked cross walks shall be wholly contained within the markings, excluding any sloped sides.

1106.4.7.7 Orientation. Curb ramps shall be oriented in the same direction as pedestrian flow of crosswalks; diagonally oriented curb ramps are prohibited.

1106.4.8 Vehicular areas. Where an accessible route of travel crosses or adjoins a vehicular way, and where there are no curbs, railings or other elements which separate the pedestrian and vehicular areas, and which are detectable by a person who has a severe vision impairment, the boundary between the areas shall be defined by a continuous detectable warning not less than 36 inches (915 mm) wide, complying with Section 1106.17.

1106.5 Protruding Objects. Protruding objects shall not reduce the clear width of a route of travel or maneuvering space. Any wall- or post-mounted object with its leading edge between 27 inches (685 mm) and 79 inches (2007 mm) above the floor may project not more than 4 inches (102 mm) into a route of travel, corridor, passageway, or aisle. Any wall- or post-mounted projection greater than 4 inches (102 mm) shall extend to the floor.

1106.6 Changes in Level. Accessible routes of travel and accessible spaces within buildings shall have continuous common floor or ramp surfaces. Abrupt change in height greater than 1/4 inch (6 mm) shall be beveled to 1 vertical in 2 horizontal. Changes in level greater than 1/2 inch (13 mm) shall be accomplished by means of a ramp meeting the requirements of Section 1106.8, a curb ramp meeting the requirements of Section 1106.4.7, or an elevator or platform lift meeting the requirements of Section 1105.3. For Type B dwelling units, see also Section 1106.27.

1106.7 Floor Coverings and Surface Treatments.

1106.7.1 General. All surfaces shall be firm and stable.

1106.7.2 Carpeting. Carpeting and floor mats in accessible areas shall be securely fastened to the underlying surface, and shall provide a firm, stable, continuous, and relatively smooth surface.

1106.7.3 Slip-resistant surfaces. Showers; locker rooms; swimming pool, spa, and hot tub decks; toilet rooms; and other areas subject to wet conditions shall have slip-resistant floors.

Exterior accessible routes of travel shall have slip-resistant surfaces.

1106.7.4 Grates. Within an accessible route of travel, grates shall have openings not more than 1/2 inch (13 mm) in one direction. Where grates have elongated openings, they shall be placed so that the long dimension is perpendicular to the dominant direction of travel. The maximum vertical surface change shall be 1/8 inch (3 mm).

1106.7.5 Expansion and construction joints. Expansion and construction joints in exterior routes of travel shall have a width of not more than 1/2 inch (13 mm), shall be filled with a firm, compressible, elastic material, and shall be substantially level with the surface of the accessible route of travel.

1106.8 Ramps.

1106.8.1 General. Ramps required to be accessible shall comply with Section 1003.3.4 and the provisions of this section. No ramp shall change direction between landings, except ramps with an inside radius of 30 feet (9144 mm) or greater.

1106.8.2 Slope and rise. The maximum slope of a ramp shall be 1 vertical in 12 horizontal. The maximum rise for any run shall be 30 inches (760 mm).

1106.8.3 Width. The minimum width of a ramp shall be not less than 36 inches (915 mm) for interior ramps and 44 inches (1118 mm) for exterior

ramps.

1106.8.4 Landings. Ramps within the accessible route of travel shall have landings at the top and bottom, and at least one intermediate landing shall be provided for each 30 inches (760 mm) of rise. Landings shall be level and have a minimum dimension measured in the direction of ramp run of not less than 60 inches (1525 mm). Where the ramp changes direction at a landing, the landing shall be not less than 60 inches (1525 mm) by 60 inches (1525 mm). The width of any landing shall be not less than the width of the ramp.

1106.8.5 Handrails. Ramps having slopes steeper than 1 vertical to 20 horizontal shall have handrails as required for stairways, except that intermediate handrails as required in Section 1003.3.3.6 are not required. Handrails shall be continuous provided that they shall not be required at any point of access along the ramp, nor at any curb ramp. Handrails shall extend at least 12 inches (305 mm) beyond the top and bottom of any ramp run.

EXCEPTION: Ramps having a rise less than or equal to 6 inches (152 mm), or a run less than or equal to 72 inches (1830 mm), need not have handrails.

1106.8.6 Exterior ramps. Exposed ramps and their approaches shall be constructed to prevent the accumulation of water on walking surfaces.

1106.8.7 Edge protection. Any portion of the edge of a ramp with a slope greater than 1 vertical in 20 horizontal, or landing which is more than 1/2 inch (13 mm) above the adjacent grade or floor, shall be provided with edge protection in accordance with the following:

1. Walls and Curbs. When used, walls or curbs shall be not less than 2 inches (51 mm) in height above the surface of the accessible route of travel.

2. Railings. When used, railings shall comply with Section 1106.8.5 and also shall have one of the following features:

2.1. An intermediate rail mounted 17 to 19 inches (430 to 485 mm) above the ramp or landing surface, or

2.2. A guardrail complying with Section 509.

1106.9 Stairways.

1106.9.1 General. Stairways required to be accessible shall comply with Section 1003.3.3 and provisions of this section.

1106.9.2 Open risers. Open risers shall not be permitted.

EXCEPTION: Stairways in Group R, Division 1 apartment buildings may have open risers.

1106.9.3 Nosings. Stair nosings shall be flush, slip-resistant, and rounded to a radius of 1/2 inch (13 mm) maximum. Risers shall be sloped, or the underside of the nosing shall have an angle of not less than 60 degrees from the horizontal. Nosings shall project no more than 1-1/2 inches (38 mm).

1106.9.4 Exterior stairways. Exposed stairways and their approaches shall be constructed to prevent the accumulation of water on walking surfaces.

1106.10 Doors.

1106.10.1 General. Doors required to be accessible shall comply with Section 1003.3.1 and with provisions of this section. For the purpose of this section, gates shall be considered to be doors. An accessible gate or door shall be provided adjacent to any turnstile or revolving door. Where doorways have two independently operated door leaves, then at least one leaf shall comply with this section.

1106.10.2 Clear width. Doors shall be capable of being opened so that the clear width of the opening is not less than 32 inches (815 mm).

EXCEPTION: Doors not requiring full user passage, such as shallow closets, may have a clear opening of not less than 20 inches (510 mm).

1106.10.3 Maneuvering clearances at doors. Except as provided in Section 1106.27, all doors shall have minimum maneuvering clearances as follows:

1. For a forward approach, where a door must be pulled to be opened, an unobstructed floor space shall extend at least 18 inches (455 mm) beyond the strike jamb and extend at least 60 inches (1525 mm) perpendicular to the doorway.
2. For a forward approach, where a door must be pushed to be opened and is equipped with a closer and a latch, an unobstructed floor space shall extend at least 12 inches (305 mm) beyond the strike jamb and extend at least 48 inches (1220 mm) perpendicular to the doorway.
3. For a forward approach, where a door must be pushed to be opened and is not equipped with a closer and a latch, an unobstructed floor space shall be at least the width of the doorway and extend at least 48 inches (1220 mm) perpendicular to the doorway.
4. For a hinge side approach, where a door must be pulled to be opened, an unobstructed floor space shall extend at least 36 inches (915 mm) beyond the latch side of the door and at least 60 inches (1525 mm) perpendicular to the doorway, or shall have an unobstructed floor space that extends at least 42 inches (1065 mm) beyond the latch side of the door and at least 54 inches (1370 mm) perpendicular to the doorway.
5. For a hinge side approach, where a door must be pushed to be opened and is not equipped with both a closer and a latch, an unobstructed floor space, measured from the latch side, shall extend across the width of the doorway and beyond the hinge side of the door for a total width of not less than 54 inches (1370 mm); and at least 42 inches (1065 mm) perpendicular to the doorway.
6. For a hinge side approach, where a door must be pushed to be opened and is equipped with both latch and closer, an unobstructed floor space, measured from the latch side, shall extend across the width of the doorway

and beyond the hinge side of the door for a total width of not less than 54 inches (1370 mm); and at least 48 inches (1220 mm) perpendicular to the doorway.

7. For a latch side approach, where a door must be pulled to be opened and is equipped with a closer, an unobstructed floor space shall extend at least 24 inches (610 mm) beyond the latch side of the door and at least 54 inches (1370 mm) perpendicular to the doorway.

8. For a latch side approach, where a door must be pulled to be opened and is not equipped with a closer, an unobstructed floor space shall extend at least 24 inches (610 mm) beyond the latch side of the door and at least 48 inches (1220 mm) perpendicular to the doorway.

9. For a latch side approach, where a door must be pushed to be opened and is equipped with a closer, an unobstructed floor space shall extend at least 24 inches (610 mm) beyond the latch side of the door and at least 48 inches (1370 mm) perpendicular to the doorway.

10. For a latch side approach, where a door must be pushed to be opened and is not equipped with a closer, an unobstructed floor space shall extend at least 24 inches (610 mm) parallel to the doorway, beyond the latch side of the door and at least 42 inches (1065 mm) perpendicular to the doorway.

11. For a forward approach, to a sliding or folding door, an unobstructed floor space shall extend the same width as the door opening and at least 48 inches (1220 mm) perpendicular to the doorway.

12. For a slide side approach to a sliding or folding door, an unobstructed floor space, measured from the latch side, shall extend across the width of the doorway and beyond the slide side of the door for a total width of not less than 54 inches (1370 mm); and at least 42 inches (1065 mm) perpendicular to the doorway.

13. For a latch side approach to a sliding or folding door, an unobstructed floor space shall extend at least 24 inches (610 mm) beyond the latch side of the door and at least 42 inches (1065 mm) perpendicular to the doorway.

14. Where two doors are in series, the minimum distance between two hinged or pivoted doors shall be 48 inches (1220 mm), in addition to any area needed for door swing. Doors in series shall swing either in the same direction, or away from the space between the doors.

15. All doors in alcoves shall comply with the requirement for a forward approach.

1106.10.4 Thresholds at doors. Thresholds at doors shall comply with Section 1106.6.

EXCEPTION: In dwelling units, exterior doors other than the accessible entrance to a dwelling unit, may be sliding doors with thresholds not exceeding 3/4 inch (19 mm).

1106.10.5 Automatic and power-assisted doors. Door-closers or power-operators shall be operable as required by Section 1003.3.1.2.

EXCEPTION: Floor pad or electric eye actuated power-operators.

All power-operated doors shall remain in the fully open position for not less than 6 seconds before closing. Touch switches shall be mounted 36 inches (915 mm) above the floor and not less than 18 inches (455 mm), nor more than 36 inches (915 mm), horizontally from the nearest point of travel of the moving door. Other power-operated doors must be actuated from a location not less than 36 inches (915 mm) from the nearest point of travel of the moving door. Power-operated doors shall automatically reopen when they encounter an obstruction other than the strike jamb.

1106.10.6 Door closers. Where provided, door closers shall be adjusted to close from an open position of 70 degrees to a point 3 inches (76 mm) from the latch, in not less than 3 seconds, when measured to the leading edge of the door.

1106.10.7 Vision panels. Where a door contains one or more vision panels, the bottom of the glass of at least one panel, shall be not more than 43 inches (1091 mm) above the floor.

1106.11 Bathrooms, Toilet Rooms, Bathing Facilities, and Shower Rooms.

1106.11.1 General. Bathrooms, toilet rooms, bathing facilities, and shower rooms shall be designed in accordance with this section. For dwelling units, see also Section 1106.27.

1106.11.2 Unobstructed floor space. An unobstructed floor space shall be provided within bathrooms, toilet rooms, bathing facilities, and shower rooms of sufficient size to inscribe a circle with a diameter not less than 60 inches (1525 mm). Doors in any position may encroach into this space by not more than 12 inches (305 mm). The clear floor spaces at fixtures, the accessible route of travel, and the unobstructed floor space may overlap.

1106.11.3 Wheelchair accessible toilet stalls.

1106.11.3.1 Dimensions. Wheelchair accessible toilet stalls shall be at least 60 inches (1525 mm) in width. Where wall-hung water closets are installed, the depth of the stall shall be not less than 56 inches (1420 mm). Where floor-mounted water closets are installed, the depth of the stall shall be not less than 59 inches (1500 mm). Entry to the compartment shall have a clear width of 32 inches (815 mm). Toilet stall doors shall not swing into the clear floor space required for any fixture. Except for door swing, a clear unobstructed access not less than 48 inches (1220 mm) in width shall be provided to toilet stalls.

EXCEPTION: Partitions may project not more than one inch (25 mm), in the aggregate, into the required width of the stall.

1106.11.3.2 Toe clearances. In any toilet stall, the front partition and at least one side partition shall provide a toe clearance of at least 9 inches (230 mm) above the floor.

EXCEPTION: Toe clearance is not required in a stall with a depth greater than 60 inches (1525 mm).

1106.11.3.3 Door hardware. Doors of accessible toilet stalls shall comply with Section 1106.3.

1106.11.4 Ambulatory accessible toilet stalls. Ambulatory accessible toilet stalls shall be at least 36 inches (915 mm) in width, with an outward swinging, self-closing door. Grab bars shall be installed on each side of the toilet stall and shall comply with Sections 1106.11.5.3 and 1106.11.11.

1106.11.5 Water closets.

1106.11.5.1 Clear floor space. The lateral distance from the center line of the water closet to the nearest obstruction, excluding grab bars, shall be 18 inches (455 mm) on one side and not less than 42 inches (1065 mm) on the other side. In other than stalls, a clear floor space of not less than 32 inches (815 mm), measured perpendicular to the wall on which the water closet is mounted, shall be provided in front of the water closet.

EXCEPTION: In other than a toilet stall, a lavatory may be located within the clear floor space required for a water closet provided that knee and toe clearances for the lavatory comply with Section 1106.11.7, below, and:

1. In Type B dwelling units the edge of the lavatory shall be located not less than 15 inches (380 mm) from the centerline of the water closet; or,
2. In all other occupancies the edge of the lavatory shall be located not less than 18 inches (455 mm) from the centerline of the water closet.

1106.11.5.2 Height. The height of water closets shall be a minimum of 17 inches (430 mm) and a maximum of 19 inches (485 mm) measured to the top of the seat. Seats shall not be sprung to return to a lifted position.

1106.11.5.3 Grab bars. Grab bars shall be installed at one side and at the back of the water closet. The top of grab bars shall be not less than 33 inches (840 mm) and not more than 36 inches (915 mm) above and parallel to the floor. Grab bars located at the side shall be a minimum 42 inches (1065 mm) in length located not more than 12 inches (305 mm) from the rear wall and extending at least 54 inches (1370 mm) from the rear wall. Grab bars located at the back shall be a minimum of 36 inches (915 mm) in length and shall extend at least 12 inches (305 mm) beyond the center of

the water closet toward the side wall and at least 24 inches (610 mm) toward the open side of the water closet. Grab bars located at the back shall be mounted not more than 9 inches (230 mm) behind the water closet seat. See also Section 1106.11.11.

1106.11.5.4 Flush controls. Flush controls shall be mounted for use from the wide side of the water closet area and not more than 44 inches (1118 mm) above the floor. Flush valves shall comply with Section 1106.3.

1106.11.5.5 Dispensers and receptacles. Toilet paper and other dispensers or receptacles shall be installed within easy reach of the water closet, and shall not interfere with unobstructed floor space or grab bar utilization.

1106.11.6 Urinals. A clear floor space measuring 30 inches (760 mm) in width by 48 inches (1220 mm) in depth shall be provided in front of urinals to allow for forward approach. Urinal shields shall have a clear space between them of not less than 29 inches (737 mm) and shall not extend farther than the front edge of the urinal rim. Urinals shall be stall-type or wall-hung with an elongated rim at a maximum of 17 inches (430 mm) above the floor. Flush controls shall be mounted not more than 44 inches (1118 mm) above the floor. Flush valves shall comply with Section 1106.3.

1106.11.7 Lavatories and sinks.

1106.11.7.1 Clear floor space. A clear floor space not less than 30 inches (760 mm) in width by 48 inches (1220 mm) in depth shall be provided in front of lavatories and sinks to allow a forward approach. The clear floor space may include knee and toe clearances not to exceed 19 inches (485 mm) extending under the lavatory or sink.

1106.11.7.2 Height. Lavatories and sinks shall be mounted with the rim or counter surface no higher than 34 inches (865 mm) above the finished floor.

1106.11.7.3 Knee and toe clearances.

1106.11.7.3.1 Lavatories. The total depth of the clear space beneath a lavatory shall be not less than 17 inches (430 mm), of which toe clearance shall be not more than 6 inches (152 mm) of the total depth. Knee clearance shall be not less than 29 inches (237 mm) in height and 30 inches (760 mm) in width.

1106.11.7.3.2 Sinks. Knee clearance not less than 27 inches (685 mm) in height, 30 inches (760 mm) in width, and 19 inches (485 mm) in depth shall be provided underneath sinks.

1106.11.7.4 Exposed pipes and surfaces. Hot water and drain pipes exposed under lavatories and sinks shall be insulated or otherwise covered. There shall be no sharp or abrasive surfaces under lavatories or sinks.

1106.11.7.5 Faucets. Faucet control handles shall be located not more than 17 inches (430 mm) from the front edge of the lavatory, sink or counter, and shall comply with Section 1106.3. Self-closing valves shall remain open for at least 10 seconds per operation.

1106.11.7.6 Sink depth. Sinks shall be not more than 6-1/2 inches (165 mm) in vertical depth.

1106.11.8 Mirrors, dispensers, and other fixtures. Mirrors or shelves shall be installed so that the bottom of the mirror or the top of the shelf is within 40 inches (1015 mm) of the floor.

Drying equipment, towel or other dispensers, and disposal fixtures shall be mounted so as to not exceed 40 inches (1015 mm) above the finished floor to any rack, operating controls, receptacle or dispenser.

1106.11.9 Bathtubs.

1106.11.9.1 Clear floor space. A clear floor space not less than 60 inches (1525 mm) in length shall be provided along the tub. Where the required seat is located at the end of the tub, the clear floor space shall be not less than 75 inches (1905 mm) in length. The clear floor space shall be not less

than 30 inches (760 mm) in width where access to the space is parallel to the tub and not less than 48 inches (1220 mm) in width where access to the space is at right angles to the tub.

A lavatory which complies with Section 1106.11.7, above, may be located in the clear floor space for the tub.

Where a seat is provided and a lavatory is located in the clear floor space for the tub, the lavatory shall be located at the end of the tub adjacent to the controls.

1106.11.9.2 Seats. An in-tub seat or a seat at the end of the tub shall be provided. In-tub seats shall be portable and removable, not less than 12 inches (305 mm) in width, and extend the full width of the tub. Seats at the end of the tub shall be constructed flush with the top of the tub and shall extend not less than 15 inches (380 mm) from the end of the tub. Seats shall be mounted securely and shall not slip during use.

1106.11.9.3 Grab bars. All required grab bars shall be installed parallel to the floor. Lower grab bars shall be installed centered 9 inches (230 mm) above the tub rim. Upper or single grab bars shall be installed centered not less than 33 inches (840 mm) and not more than 36 inches (915 mm) above the floor of the clear space.

Where a tub has a seat at the end, two grab bars not less than 48 inches (1220 mm) in length shall be installed on the wall opposite the clear floor space. One end of each grab bar shall terminate where the tub abuts the seat.

Where a tub has an in-tub seat, two grab bars, not less than 24 inches (610 mm) in length, shall be installed on the wall opposite the clear floor space. The grab bars shall extend to not less than 24 inches (610 mm) from one end of the tub and not less than 12 inches (305 mm) from the other end. One grab bar shall be installed on the wall at the end of the tub opposite the drain, extending at least 12 inches (305 mm) from the clear floor space.

For all bathtubs, one grab bar shall be installed on the wall at the end of the tub nearest the drain, extending at least 24 inches (610 mm) from the clear floor space.

1106.11.9.4 Controls and fixtures. Faucets and other controls shall be located above the tub rim and below the grab bars, shall be offset laterally from the clear floor space between the open edge of the tub and the mid-point of the tub and shall comply with Section 1106.3.

A shower spray unit, with a hose at least 60 inches (1525 mm) long, that can be used as a fixed shower head or as a hand-held shower, shall be provided.

1106.11.9.5 Bathtub enclosures. Where provided, enclosures for bathtubs shall not obstruct controls or obstruct transfer from wheelchairs onto bathtub seats or into tubs. Bathtub enclosures shall not have tracks mounted on the tub rim.

1106.11.10 Shower stalls.

1106.11.10.1 Configuration. Shower stalls shall have one of the following configurations:

1. Transfer shower stalls shall be 36 inches by 36 inches (915 by 915 mm), nominal, and shall have a seat; or,
2. Roll-in shower stalls shall be not less than 30 inches (760 mm) in depth by 60 inches (1525 mm) in length.

1106.11.10.2 Clear floor space. A clear floor space shall be provided adjacent to shower stalls.

1. For transfer shower stalls, a clear floor space not less than 48 inches (1220 mm) in length, parallel to the open side of the shower stall, and not less than 36 inches (915 mm) in width, perpendicular to the open edge of

the shower stall, shall be located so as to extend at least 12 inches (305 mm) beyond the wall on which the seat is mounted.

2. For roll-in shower stalls, a clear floor space not less than 60 inches (1525 mm) in length, parallel to the open edge of the shower stall, and not less than 36 inches (915 mm) in width, perpendicular to the open edge of the shower stall, shall be provided. A lavatory which complies with Section 1106.11.7, above, may be located within one end of the clear floor space. Where a seat is provided in the shower, a lavatory may be located only at the opposite end of the clear space.

1106.11.10.3 Seats. Transfer shower stalls shall be provided with a folding or non-folding seat located on the wall opposite the shower controls.

Roll-in shower stalls shall be provided with a folding seat located on the wall adjacent to the shower controls.

EXCEPTION: Roll-in shower stalls located in occupancies other than hotels, lodging houses and congregate residences need not be provided with a seat.

The seat shall be mounted not less than 17 inches (430 mm) and not more than 19 inches (485 mm) above the floor. The seat shall be mounted not more than 1-1/2 inches (38 mm) from the shower walls. The leading edge of the seat may be set back not more than 1-1/2 inches (38 mm) from the leading edge of the shower stall.

The seat shall be L-shaped and shall extend the full depth of the stall. The section of the seat adjacent to the wall opposite the clear floor space shall be at least 22 inches (560 mm) and not more than 23 inches (585 mm) wide, measured from the wall on which the seat is mounted. That section of the seat shall extend not less than 14 inches (355 mm) but not more than 15 inches (380 mm), measured from the wall opposite the clear floor space. The remaining portion of the seat shall be not less than 15 inches (380 mm) and not more than 16 inches (405 mm) wide, measured from the wall on which the seat is mounted, and shall extend the remaining depth of the stall.

1106.11.10.4 Grab bars. All required grab bars shall be installed parallel to the floor. All grab bars shall be installed not less than 33 inches (840 mm)

and not more than 36 inches (915 mm) above the floor of the adjacent clear space.

For transfer shower stalls, a grab bar, not less than 18 inches (455 mm) in length, shall be installed on the wall opposite the clear floor space. One end of the grab bar shall terminate at the wall opposite the seat. A grab bar not less than 27 inches (685 mm) in length shall also be installed on the wall opposite the seat.

For roll-in shower stalls, grab bars shall be provided on all permanent stall walls. Grab bars located on either end of the stall shall be not less than 27 inches (685 mm) in length. The grab bar located opposite the clear space shall be not less than 48 inches (1220 mm) in length.

1106.11.10.5 Controls and fixtures. Faucets and other controls shall be located on the same wall as the shower spray unit, and shall be installed not less than 38 inches (965 mm) or more than 48 inches (1220 mm) above the shower floor and shall comply with Section 1106.3. In addition:

1. For transfer shower stalls, the controls shall be located on the wall opposite the shower seat. The controls shall be located within 18 inches (455 mm) of the open side of the shower stall.
2. For roll-in shower stalls equipped with seats, the controls shall be mounted on the wall adjacent to the seat not more than 27 inches (685 mm) from the wall where the seat is mounted. For roll-in shower stalls without seats, the controls may be located on any wall. Where the controls are located on the back wall, they shall be located not more than 27 inches (685 mm) from a side wall.

A shower spray unit, with a hose at least 60 inches (1525 mm) long, that can be used as a fixed shower head or as a hand-held shower, shall be provided.

EXCEPTION: In unmonitored facilities where vandalism is a consideration, a fixed shower head may be installed not more than 48 inches (1220 mm) above the stall floor.

1106.11.10.6 Thresholds. In transfer shower stalls, thresholds shall be flush or beveled with a maximum edge height of 1/2 inch (13 mm), and a maximum slope of not more than 1 vertical in 2 horizontal.

Thresholds in roll-in shower stalls shall be level with the adjacent clear space.

1106.11.10.7 Shower enclosures. Where provided, enclosures for shower stalls shall not obstruct controls or obstruct transfer from wheelchairs onto shower seats.

1106.11.11 Structural requirements for grab bars, and tub and shower seats.

1106.11.11.1 General. All grab bars, and tub and shower seats required to be accessible, shall comply with this section.

1106.11.11.2 Size and spacing of grab bars. Grab bars shall have an outside diameter of not less than 1-1/4 inch (32 mm) nor more than 1-1/2 inches (38 mm) and shall provide a clearance of 1-1/2 inches (38 mm) between the grab bar and the wall.

1106.11.11.3 Structural strength. The structural strength of grab bars, tub and shower seats, fasteners and mounting devices shall meet the following specification:

1. Bending stress in a grab bar or seat induced by the maximum bending moment from the application of 300 pounds (1334 N) shall be less than the allowable stress for the material of the grab bar or seat.

2. Shear stress induced in a grab bar or seat by the application of 300 pounds (1334 N) shall be less than the allowable shear stress for the material of the grab bar or seat. If the connection between the grab bar or seat and its mounting bracket or other support is considered to be fully restrained, then direct and torsional shear stresses shall be totaled for the

combined shear stress, which shall not exceed the allowable shear stress.

3. Shear force induced in a fastener or mounting device from the application of 300 pounds (1334 N) shall be less than the allowable lateral load of either the fastener or mounting device or the supporting structure, whichever is the smaller allowable load.

4. Tensile force induced in a fastener by a direct tension force of 300 pounds (1334 N) plus the maximum moment from the application of 300 pounds (1334 N) shall be less than the allowable withdrawal load between the fastener and the supporting structure.

1106.11.11.4 Special hazards. A grab bar and any wall or other surface adjacent to it shall be free of any sharp or abrasive elements. Edges shall have a minimum radius of 1/8 inch (3 mm).

1106.12 Kitchens.

1106.12.1 Clear floor space. An unobstructed floor space shall be provided within kitchens of sufficient size to inscribe a circle with a diameter not less than 60 inches (1525 mm). Doors in any position may encroach into this space by not more than 12 inches (305 mm). The clear floor spaces at fixtures, the accessible route of travel, and the unobstructed floor space may overlap.

1106.12.2 Counter surfaces and shelving. Within Type A dwelling units, a counter surface, a minimum of 30 inches (760 mm) wide by 24 inches (610 mm) deep, shall be provided at a maximum height of 34 inches (865 mm), with a knee space beneath at least 27 inches (685 mm) in height.

In other than dwelling units, at least 50 percent of shelf space in cabinets, refrigerators and freezers shall be within the reach ranges specified in Section 1106.2.4.

1106.13 Water Fountains.

1106.13.1 Clear floor space. Wall- and post-mounted cantilevered units shall have a minimum clear floor space in front of the unit, of 30 inches (760 mm) in width by 48 inches (1220 mm) in depth to allow a forward approach.

Free-standing or built-in units not having a clear space beneath them shall have an adjacent clear floor space at least 30 inches (760 mm) in depth by 48 inches (1220 mm) in width in order to allow a person in a wheelchair to make a parallel approach to the unit.

1106.13.2 Knee space. Wall- and post-mounted cantilevered units shall have knee space in accordance with Section 1106.2.4.3. The knee space shall be not less than 17 inches (430 mm) nor more than 19 inches (485 mm) in depth.

1106.13.3 Spout location. Spouts shall be located not more than 36 inches (915 mm) above the floor or ground surface. Spouts shall be located at the front of the unit and shall direct a water flow not less than 4 inches (102 mm) in height, in a trajectory parallel to the front of the unit. Recessed units shall be installed such that the spout is not recessed beyond the plane of the wall.

1106.13.4 Controls. Controls shall be located not more than 6 inches (152 mm) from the front of the unit and shall comply with Section 1106.3. The force required to activate the control shall not exceed 5 pounds (22.2 N).

1106.13.5 Water fountains in alcoves. Where a unit is installed in an alcove greater than 8 inches (205 mm) in depth, the alcove shall be not less than 48 inches (1220 mm) in width. A minimum 24 inches (610 mm) of clear space shall be provided from the spout to the nearest side wall of the alcove.

1106.14 Telephones.

1106.14.1 Clear floor or ground space. A clear floor or ground space, not less than 30 inches (760 mm) by 48 inches (1220 mm), that allows either a forward or parallel approach, shall be provided in front of telephones. Bases, enclosures and fixed seats shall not project into the clear floor space.

Where parallel approach is provided, any shelf or enclosure shall not project farther than 10 inches (255 mm) beyond the face of the telephone.

Where a forward approach is provided, any shelf shall not project farther than 20 inches (510 mm) beyond the face of the telephone; any enclosure panels shall be a minimum 30 inches (760 mm) apart, and where less than 36 inches (915 mm) apart, shall project no more than 24 inches (610 mm) beyond the face of the phone.

1106.14.2 Height. The highest operable part of a telephone shall be within the reach ranges specified in Section 1106.2.4.

1106.14.3 Equipment for persons with hearing impairments. Telephones shall be equipped with volume controls and shall be hearing aid compatible. Volume controls shall be capable of increasing volume not less than 12 dbA nor more than 18 dbA above normal.

EXCEPTION: Where an automatic reset is provided, 18 dbA may be exceeded.

1106.14.4 Controls. Telephones shall have push-button controls where service for such equipment is available.

1106.14.5 Cord length. The cord from the telephone to the handset shall be not less than 29 inches (737 mm) in length.

1106.14.6 Text telephones. Text telephones shall be permanently affixed within, or adjacent to, the telephone enclosure. Where an acoustic coupler is used, the telephone cord shall be sufficiently long to allow connection of the text telephone and the telephone receiver.

1106.14.7 Shelf and electrical outlet. Shelves and an electrical outlet shall be located within or adjacent to the telephone enclosure. The shelf shall be not less than 10 inches by 10 inches (255 mm by 255 mm) in dimension, with a vertical clearance above the shelf of not less than 6 inches (152 mm). The telephone handset shall be capable of being placed flush on the surface

of the shelf.

1106.15 Alarms.

1106.15.1 Audible alarms. Audible alarms shall produce a sound in accordance with the Fire Code.

1106.15.2 Visible alarms. Visible alarm signal appliances shall be integrated into the building or facility alarm system. Where single-station audible alarms are provided, single-station visible alarm signals shall be provided.

EXCEPTION: Dwelling units in Group R, Division 1 apartment buildings.

Visible alarms shall be located not less than 80 inches (2030 mm) above floor level, or 6 inches (152 mm) below the ceiling, whichever is lower, and at an interval of not more than 50 feet (15 m) horizontal, in rooms, corridors, and hallways.

In rooms or spaces exceeding 100 feet (30 m) in horizontal dimension, with no obstructions exceeding 6 feet (1830 mm) in height above the finished floor, visible alarms may be placed around the perimeter at intervals not to exceed 100 feet (30 m) horizontally.

Visible alarm signals shall comply with the following criteria:

1. The lamp shall be a xenon strobe type or equivalent.
2. The color shall be clear or unfiltered white light.
3. The maximum pulse duration shall be two-tenths of one second (0.2 sec) with a maximum duty cycle of 40 percent. The pulse duration is defined as the time interval between initial and final point of 10 percent of maximum signal.

4. The intensity shall be a minimum of 75 candela.

5. The flash rate shall be a minimum of 1 Hz and a maximum of 3 Hz.

1106.15.3 Access to manual fire alarm systems. Manual fire alarm devices shall be mounted not more than 54 inches (1370 mm) above the floor where a parallel approach is provided.

1106.16 Signage.

1106.16.1 Symbols.

1106.16.1.1 International Symbol of Access. The International Symbol of Access shall be as shown below:

(WAC 51-40-1106, Illus. 1)

1106.16.1.2 Text telephones. Text telephones required by Section 1105.4.2 shall be identified by the International Text Telephone Symbol as shown below:

(WAC 51-40-1106, Illus. 2)

1106.16.1.3 Assistive listening systems. Permanently installed assistive listening systems that are required by Section 1103.1.2.2 shall be identified by the International Symbol of Access for Hearing Loss as shown below:

(WAC 51-40-1106, Illus. 3)

1106.16.1.4 Volume control telephones. Telephones required by Section 1105.4.2 to have volume controls shall be identified by a handset containing

a depiction of a telephone handset with radiating sound waves.

1106.16.2 Mounting location and height. Signs shall be installed on the wall adjacent to the latch side of the door. Signs shall be centered at 60 inches (1525 mm) above the finished floor. Mounting location for such signage shall be such that a person may approach within 3 inches (76 mm) of signage without encountering protruding objects or standing within the swing of a door.

1106.16.3 Finish and color. Characters and symbols shall have a high contrast with their background. The character and background of interior signs shall be eggshell, matte, or other nonglare finish.

All interior and exterior signs depicting the International Symbol of Access shall be white on a blue background.

1106.16.4 Character proportion and height. Letters and numbers on signs shall have a width-to-height ratio between 3:5 and 1:1 and a stroke-width-to-height ratio between 1:5 and 1:10.

Characters and numbers on signs shall be sized according to the viewing distance from which they are to be read. The minimum character height for signs that are suspended or projected overhead is 3 inches (76 mm) for upper case letters. Lower case letters are permitted.

1106.16.5 Raised and Braille characters and pictorial symbol signs (pictograms).

1106.16.5.1 Raised characters and symbols. Characters and symbols on tactile signs shall be raised at least 1/32 inch (.8 mm). Raised characters and symbols shall be simple type face upper case characters. Raised characters and symbols shall be between 5/8 inch (16 mm) and 2 inches (51 mm) in height. Raised characters shall be accompanied by Braille in accordance with this section.

1106.16.5.2 Braille. Braille shall be separated from the corresponding raised characters or symbols. Braille shall be Grade 2.

1106.16.5.3 Pictograms. Where provided, pictograms shall be accompanied by the equivalent verbal description placed directly below the pictogram. The border dimension of the pictogram shall be not less than 6 inches (152 mm) in height.

1106.17 Detectable Warnings. Detectable warnings on walking surfaces shall consist of raised truncated domes having a diameter of 0.9 inches (23 mm) nominal, a height of 0.2 inches (5 mm) nominal, and a center-to-center spacing of 2.35 inches (60 mm) nominal, and shall contrast visually with adjoining surfaces.

1106.18 Storage, Shelving and Display Units.

1106.18.1 Clear floor space. Storage, shelving and display units shall have a clear floor space, not less than 30 inches (760 mm) by 48 inches (1220 mm), that allows for either a forward or parallel approach.

1106.18.2 Height. Accessible storage, shelving and display units shall be within the reach ranges specified in Section 1106.2.4. Clothes rods shall be not more than 54 inches (1370 mm) above the floor.

1106.19 Seating, Tables, and Sinks.

1106.19.1 Clear floor space. Sinks and seating spaces at tables shall have a clear floor space of not less than 30 inches (760 mm) by 48 inches (1220 mm), that allows forward approach. The clear floor space shall not overlap knee space by more than 19 inches (483 mm).

1106.19.2 Knee clearances. Knee spaces at tables, counters, and sinks shall be provided in accordance with Section 1106.2.4.3. In addition, the depth of the knee space shall be not less than 19 inches (483 mm). No projection which might obstruct the arm of a wheelchair may intrude into this

clearance, within 24 inches (610 mm) horizontally from the table edge.

1106.19.3 Height. The tops of tables and sinks shall be not less than 28 inches (710 mm) nor more than 34 inches (865 mm) in height above the floor or ground.

1106.20 Aisles. All aisles required to be accessible, including check out aisles, food service lines, and aisles between fixed tables, shall be not less than 36 inches (915 mm) in width.

1106.21 Assembly Areas.

1106.21.1 Wheelchair spaces.

1106.21.1.1 Location. Wheelchair spaces shall be an integral part of any fixed seating plan and shall be dispersed throughout the seating area. Spaces shall adjoin an accessible route of travel that also serves as a means of egress and shall be located to provide lines of sight comparable to those for all viewing areas.

EXCEPTION: Accessible viewing positions may be clustered for bleachers, balconies and other areas having sight lines that require slopes of greater than 5 percent. Equivalent accessible viewing positions may be located on levels having accessible egress.

1106.21.1.2 Size. Wheelchair spaces shall be not less than 33 inches (840 mm) in width. Where forward or rear approach is provided, wheelchair spaces shall be not less than 48 inches (1220 mm) in depth. Where only side approach is provided, wheelchair spaces shall be not less than 60 inches (1525 mm) in depth.

1106.21.1.3 Surfaces. The ground or floor surfaces at wheelchair locations shall be level and shall comply with Section 1106.7.

1106.21.2 Placement of assistive listening systems. Where an assistive listening system serves individual fixed seats, such seats shall have a clear line of sight and shall be located not more than 50 feet (15 m) from the

stage or performance area.

1106.22 Restaurants and Cafeterias.

1106.22.1 Aisles. Aisles to fixed tables required to be accessible shall comply with Section 1106.20.

1106.22.2 Food service lines.

1106.22.2.1 Clear floor space. Food service lines shall comply with Section 1106.20.

1106.22.2.2 Height. Tray slides shall be mounted not more than 34 inches (865 mm) in height above the floor.

1106.22.2.3 Counters and bars. Where service of food or drink is provided at counters more than 34 inches (865 mm) in height, to customers seated on stools or standing, a portion of the main counter shall be provided in compliance with Section 1106.19, or service shall be available at accessible tables within the same area.

1106.22.2.4 Tableware and condiment areas. Self-service shelves and dispensing devices for tableware, dishware, condiments, food, and beverages shall be installed to comply with Section 1106.18.

1106.23 Patient bedrooms. Each patient bedroom shall be designed and constructed to provide space for a 180-degree turn that complies with Section 1106.2.2. Each patient room shall have a minimum clear floor space not less than 36 inches (915 mm) on each side of any bed.

1106.24 Customer Service Facilities.

1106.24.1 Dressing and fitting rooms.

1106.24.1.1 Clear floor space. Each dressing and fitting room shall have a clear floor space complying with Section 1106.2.

EXCEPTION: Dressing and fitting rooms that are entered through a curtained opening need not comply with Section 1106.2.2.

1106.24.1.2 Doors. All doors to accessible dressing and fitting rooms shall comply with Section 1106.10.

1106.24.1.3 Benches. Every accessible dressing or fitting room shall have a bench installed adjacent to the longest wall in the room. The bench shall be not less than 24 inches (610 mm) in width and 48 inches (1220 mm) in length, and shall be mounted not less than 17 inches (430 mm) nor more than 19 inches (483 mm) above the finished floor.

Clear floor space shall be provided adjacent to the bench to allow for parallel transfer, and the structural strength of the bench shall comply with Section 1106.11.11.3.

Where benches are installed in dressing and fitting rooms adjacent to showers, swimming pools, or other wet locations, water shall not accumulate upon the surface of the bench and the bench shall have a slip-resistant surface.

1106.24.1.4 Mirrors. Where provided, mirrors in accessible dressing and fitting rooms shall be not less than 18 inches (455 mm) in width by 54 inches (1370 mm) in height and shall be mounted opposite the bench.

1106.24.2 Counters and windows. Where counters are required to be accessible, the accessible portion shall be not less than 36 inches (915 mm) in length and not more than 36 inches (915 mm) in height above the finished floor.

Where accessible windows are required, they shall be no more than 36 inches (915 mm) in height above the finished floor.

EXCEPTION: An auxiliary counter with a maximum height of 36 inches (915 mm) is installed in close proximity to the main counter.

1106.24.3 Check-out aisles. The width of accessible check-out aisles shall comply with Section 1106.20. Counters in accessible check-out aisles shall be not more than 38 inches (965 mm) in height, and the top of the raised edge of the counter shall not exceed 40 inches (1015 mm) in height above the finished floor.

Accessible check-out aisles shall be identified by the International Symbol of Access in accordance with Section 1106.16.1.1.

1106.25 Libraries.

1106.25.1 Reading and study areas. At least 5 percent, or a minimum of one, of each element of fixed seating, tables, or study carrels shall comply with Section 1106.19. Clearances between fixed accessible tables and study carrels shall comply with Section 1106.20.

1106.25.2 Check-out areas. At least one lane at each check-out area shall comply with Section 1106.20. Any traffic control or book security gates or turnstiles shall comply with Section 1106.10.

1106.25.3 Card catalogs, magazine displays and stacks.

1106.25.3.1 Aisles. Aisles between card catalogs, magazine displays or stacks shall comply with Section 1106.20.

1106.25.3.2 Height. Card catalogs or magazine displays shall have a reach height of not more than 54 inches (1370 mm) for side approach and not more than 48 inches (1220 mm) for forward approach.

Not all shelves in library stacks need be located within reach ranges required by Section 1106.2.4.

1106.26 Hotels and Congregate Residences.

1106.26.1 Clear floor space. Each sleeping room shall have a space complying with Section 1106.4.1, along both sides of each bed.

EXCEPTION: In rooms with two beds, only one 36 inch (915 mm) wide maneuvering space need be provided between the two beds.

1106.26.2 Accessible route of travel. An accessible route of travel complying with Section 1103.2.2 shall connect all accessible spaces and elements; including telephones, patios, terraces, balconies, carports, garages or parking spaces; with all accessible sleeping rooms.

1106.26.3 Doors. Doors within all sleeping rooms, suites or other covered units shall comply with Section 1106.10.

1106.26.4 Storage. Where fixed or built-in storage is provided in accessible units, sleeping rooms, or suites; including cabinets, shelves, closets, and drawers; at least one of each type shall comply with Section 1106.18.

1106.26.5 Controls. All controls in accessible units, sleeping rooms, and suites shall comply with Section 1106.3.

1106.27 Dwelling Units.

1106.27.1 Type A and B dwelling units. Type A and B dwelling units shall comply with Section 1106.

EXCEPTIONS:

1. In a Type A accessible dwelling unit with two or more stories, access to other levels is not required if the accessible level complies with all requirements for Type A accessible dwelling units and that kitchen, toilet and bathing facilities, and at least one bedroom are provided on the accessible level.

2. Kitchens in Type B dwelling units need not comply with Section 1106.12.1, provided that:

- 2.1. A clear space at least 30 inches by 48 inches (760 mm by 1220 mm) that allows parallel approach by a person in a wheelchair is provided at the range or cook top and sink, and either a parallel or forward approach is provided at all other appliances; and,
- 2.2. In all other kitchens, clearance between all opposing counters, base cabinets, countertops, appliances, and walls shall be not less than 40 inches (1015 mm); and,
- 2.3. In "U" shaped kitchens with a sink, range, or cooktop at the base of the "U", an unobstructed floor space of sufficient size to inscribe a circle with a diameter of not less than 60 inches (1525 mm) shall be provided.
3. Bathrooms in Type B dwelling units need not comply with Section 1106.11.2, provided that sufficient maneuvering space which is not less than 30 inches by 48 inches (760 by 1220 mm) is provided within the bathroom. Doors may swing into the clear floor space provided at any fixture, but shall not encroach on the required maneuvering space.
4. Doors in Type B dwelling units, other than the primary entry door, need not comply with Section 1106.10.3.
5. Mezzanines in Type A or B dwelling units need not be accessible.
6. Raised or sunken floors in Type B dwelling units need not be accessible, provided that they do not interfere with the accessible route of travel through the unit, and are not located in the kitchen or bathroom.
7. Counter surfaces in Type B dwelling units need not comply with Section 1106.12.2.
8. Within an individual dwelling unit in a building with an elevator, access to other levels is not required if the accessible level complies with all requirements for accessible dwelling units.
9. In Type B dwelling units, exterior deck, patio, or balcony surfaces may be no more than 4 inches (100 mm) below the floor level of the interior surface where the exterior surface is constructed of an impervious material such as concrete, brick, or flagstone.
10. Vanities or lavatories in Type A and B dwelling units may be located in the clear floor spaces as permitted in Section 1106.11.5.1.
11. Seats for bathtubs or showers are not required in Type B dwelling units.
12. In Type B dwelling units, the clear floor space for bathtubs or showers may be reduced to not less than 30 inches (760 mm) in width by 48 inches (1220 mm) in length.

1106.27.2 Adaptable fixtures for dwelling units.

1106.27.2.1 Grab bars. Grab bars may be omitted in bathing and toilet facilities within Type A or B dwelling units, provided that all structural

reinforcements for grab bar installation are provided in the appropriate locations in the adjoining walls.

1106.27.2.2 Kitchen counters. Cabinets or shelving may be installed beneath the counter space required by Section 1106.12.2, provided that such cabinetry or shelving is not permanent, and is easily removable.

1106.27.2.3 Lavatories. Cabinets or shelving may be installed beneath bathroom lavatories provided that such cabinetry or shelving is not permanent, and is easily removable.

1106.27.2.4 Signage. Parking signage required by Section 1107.3 need not be installed in spaces designated for accessible dwelling units.

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NEW SECTION

WAC 51-40-1107 Section 1107--Parking facilities.

Section 1107.1 Accessible Parking Required.

1107.1.1 General. For other than Group R, Division 1 apartment buildings, when parking lots or garage facilities are provided, accessible parking spaces shall be provided in accordance with Table No. 11-F.

1107.1.2 Inpatient and outpatient medical care facilities. For Group I, Division 1.1, 1.2 and 2 units and facilities specializing in the treatment of persons with mobility impairments on either an inpatient or outpatient basis, 20 percent of the parking spaces provided accessory to such units and facilities shall be accessible.

1107.1.3 Outpatient medical care facilities. For Group I, Division 1.1 and 1.2 Occupancies providing outpatient medical care facilities, 10 percent of the

parking spaces provided accessory to such occupancies shall be accessible.

1107.1.4 Apartment buildings. For Group R, Division 1 apartment buildings where parking is provided, one accessible parking space shall be provided for each Type A dwelling unit and reserved for its occupants. In addition, where the total parking provided on a site exceeds 1 parking space per dwelling unit, not less than 2 percent, and in no case less than 1 space, of this additional parking shall be accessible.

1107.1.5 Van parking. For other than Group R, Division 1 apartment buildings, where accessible parking is required, one of every eight accessible parking spaces, or fraction thereof, shall be designed to be accessible to vans.

1107.1.6 Location of parking. Accessible parking spaces shall be located on the shortest possible accessible route of travel to an accessible building entrance. In facilities with multiple accessible building entrances with adjacent parking, accessible parking spaces shall be dispersed and located near the accessible entrances. Wherever practical, the accessible route of travel shall not cross lanes of vehicular traffic. Where crossing traffic lanes is necessary, the route of travel shall be designated and marked as a crosswalk.

EXCEPTION: In multilevel parking structures, all accessible van parking spaces may be located on the same level.

Where a parking facility is not accessory to a particular building, accessible parking spaces shall be located on the shortest accessible route to an accessible pedestrian entrance to the parking facility.

1107.2 Design and Construction.

1107.2.1 General. When accessible parking spaces are required by this section, they shall be designed and constructed in accordance with this section.

1107.2.2 Size. Parking spaces shall be not less than 96 inches (2440 mm) in width and shall have an adjacent access aisle not less than 60 inches (1525 mm) in width. Van accessible parking spaces shall have an adjacent access aisle not less than 96 inches (2440 mm) in width.

Where two adjacent spaces are provided, the access aisle may be shared between the two spaces. Boundaries of access aisles shall be marked so that the aisles will not be used as parking space.

1107.2.3 Vertical clearance. Where accessible parking spaces are required for vans, the vertical clearance shall be not less than 114 inches (2895 mm) at the parking space and along at least one vehicle access route to such spaces from site entrances and exits.

1107.2.4 Slope. Accessible parking spaces and access aisles shall be located on a surface with a slope not to exceed 1 vertical in 48 horizontal.

1107.2.5 Surface. Parking spaces and access aisles shall be firm, stable, smooth, and slip-resistant.

1107.3 Signs. Every parking space required by this section shall be identified by a sign, centered between 3 and 5 feet (915 mm and 1525 mm) above the parking surface, at the head of the parking space. The sign shall include the International Symbol of Access and the phrase "State Disabled Parking Permit Required".

Van accessible parking spaces shall have an additional sign mounted below the International Symbol of Access identifying the spaces as "Van Accessible."

EXCEPTION: Where all of the accessible parking spaces comply with the standards for van accessible parking spaces.

(See also Section 1106.27.2)

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NEW SECTION

WAC 51-40-1108 Section 1108--Passenger loading zones.

Section 1108.1 Location. Where provided, passenger loading zones shall be located on an accessible route of travel.

1108.2 Design and Construction.

1108.2.1 General. Passenger loading zones shall be designed and constructed in accordance with this section.

1108.2.2 Size. Passenger loading zones shall provide an access aisle not less than 60 inches (1525 mm) in width by 20 feet (6 m) in length with the long dimension abutting and parallel to: A: the vehicle space on one side; and B: an accessible route of travel on the other.

1108.2.3 Slope. Such zones shall be located on a surface with a slope not exceeding 1 vertical in 48 horizontal.

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PART III - ACCESSIBILITY FOR EXISTING BUILDINGS

NEW SECTION

WAC 51-40-1109 Section 1109--Scope.

Section 1109.1 General. The provisions of this part apply to renovation, alterations, and additions to existing buildings including those identified as

historic buildings. This chapter includes minimum standards for removing architectural barriers, and providing and maintaining accessibility for persons with disabilities to existing buildings and their related facilities.

1109.2 Equivalent Facilitation. Departures from specific technical and scoping requirements of this part by the use of alternate methods are permitted where such methods will provide equivalent or greater access to, and usability of, the facility. Alternate methods shall permit individuals with disabilities to approach, enter, and use a site, building, facility or portion thereof; as easily, safely, conveniently, and independently as the specified method.

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NEW SECTION

WAC 51-40-1110 Section 1110--Definitions.

Section 1110. For the purpose of this part, certain terms are designated as follows:

ALTERATION is any change, addition, or modification in construction or occupancy.

ALTERATION, SUBSTANTIAL is any alteration, where the total cost of all alterations (including but not limited to electrical, mechanical, plumbing, and structural changes) for a building or facility within any 12-month period amounts to 60 percent or more of the appraised value.

PATH OF TRAVEL means a continuous, unobstructed way of pedestrian passage by means of which an altered area may be approached, entered, and exited, and which connects the altered area with an exterior approach (including sidewalks, streets, and parking areas), an entry to the facility, and other parts of the facility. For the purposes of this part, the term path of travel also includes restrooms, telephones, and water fountains serving the

altered area.

TECHNICALLY INFEASIBLE means that an alteration has little likelihood of being accomplished because existing structural conditions would require removing or altering a load-bearing member which is an essential part of the structural frame, or because site constraints prohibit modification or addition of elements, spaces, or features which are in full and strict compliance with the minimum requirements for new construction and necessary to provide accessibility.

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NEW SECTION

WAC 51-40-1111 Section 1111--Additions.

Section 1111 Additions. New additions may be made to existing buildings without making the entire building comply, provided the new additions conform to the provisions of Part II of this chapter, except as follows:

1. Entrances. Where a new addition to a building or facility does not have an accessible entrance, at least one entrance in the existing building or facility shall be accessible.
2. Accessible Route. Where the only accessible entrance to the addition is located in the existing building or facility, at least one accessible route of travel shall be provided through the existing building or facility to all rooms, elements and spaces in the new addition which are required to be accessible.
3. Toilet and Bathing Facilities. Where there are no toilet rooms and bathing facilities in an addition and these facilities are provided in the existing building, then at least one toilet and bathing facility in the existing facility shall comply with Section 1106 or with Section 1112.3.7.

4. Group I Occupancies. Where patient rooms are added to an existing Group I Occupancy, a percentage of the additional rooms equal to the requirement of Section 1103.1.6, but in no case more than the total number of rooms required by Section 1103.1.6, shall comply with Section 1106.23. Where toilet or bathing facilities are part of the accessible rooms, they shall comply with Section 1106.11.

5. Path of Travel. Where an addition affects the access to or use of an area of primary function, to the maximum extent feasible, the path of travel to the area of primary function shall be made accessible.

EXCEPTION: Subject to the approval of the building official, the path of travel need not be made accessible if the cost of compliance with this part would exceed 20 percent of the total cost of construction, inclusive of the cost of eliminating barriers, within a 36-month period.

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NEW SECTION

WAC 51-40-1112 Section 1112--Alterations.

Section 1112 Alterations.

1112.1 General.

1112.1.1 Compliance. Alterations to existing buildings or facilities shall comply with this section. No alteration shall reduce or have the effect of reducing accessibility or usability of a building, portion of a building, or facility. If compliance with this section is technically infeasible, the alteration shall provide accessibility to the maximum extent feasible.

EXCEPTION: Except when substantial as defined by Section 1110, alterations to Group R, Division 1 apartment buildings need not comply with this section.

1112.1.2 Existing elements. Where existing elements, spaces, essential features or common areas are altered, each such altered element, space, feature, or area shall comply with the applicable provisions of Part II of this chapter. Where an alteration is to an area of primary function, to the maximum extent feasible, the path of travel to the altered area shall be made accessible. See also Appendix Chapter 11 Division II.

EXCEPTIONS:

1. An accessible route of travel need not be provided to altered elements, spaces or common areas which are not areas of primary function.
2. Areas of evacuation assistance need not be added to an altered building.
3. Subject to the approval of the building official, the path of travel need not be made accessible if the cost of compliance with this part would exceed 20 percent of the total cost of construction, inclusive of the cost of eliminating barriers, within an 36-month period.

1112.1.3 Installation of stairs or escalators. Where an escalator or new stairway is planned or installed requiring major structural changes, then a means of vertical transportation (e.g. elevator, platform lift) shall be provided in accordance with this chapter.

1112.1.4 Other requirements.

1112.1.4.1 Where alterations of single elements, when considered together, amount to an alteration of a room or space in a building or facility, the entire area or space shall be accessible.

1112.1.4.2 No alteration of an existing element, space or area of a building shall impose a requirement for greater accessibility than that which would be required for new construction.

1112.1.4.3 Where the alteration work is limited solely to the electrical, mechanical or plumbing system or hazardous materials removal, and does not involve the alteration, structural or otherwise, of any elements and spaces required to be accessible under these standards, Chapter 11 does not apply.

1112.1.4.4 Where alterations would increase the number of public pay telephones to four, with at least one in the interior, or where the facility has four or more public pay telephones and one or more is altered; at least one interior text telephone shall be provided in accordance with Section 1106.14.

1112.1.4.5 Where a building has an accessible entrance, altered entrances need not be made accessible unless they provide access to areas of primary function.

1112.1.4.6 Where sleeping rooms are altered in an existing Group R, Division 1 hotel, at least 1 sleeping room that complies with Section 1106.26 shall be provided for each 25 sleeping rooms or fraction thereof. In addition, at least 1 sleeping room for each 25 sleeping rooms or fraction thereof shall have telephones, visible alarms, and visible notification devices in accordance with Section 1103.1.8.3.

1112.1.4.7 Where patient bedrooms are altered in an existing Group I Occupancy, a percentage of the altered bedrooms equal to the requirement of Section 1103.1.6, but in no case more than the total number of bedrooms required by Section 1103.1.6, shall comply with Section 1106.23. Where toilet or bathing facilities are part of the accessible rooms, they shall comply with Section 1106.11.

1112.2 Substantial Alterations. Where substantial alteration as defined in Section 1110 occurs to a building or facility, the entire building or facility shall comply with Part II of this code.

EXCEPTIONS:

1. Areas of evacuation assistance need not be added to a substantially altered building.
2. Type B Dwelling units need not be provided in buildings which are substantially altered.

1112.3 Modifications.

1112.3.1 General. The following modifications set forth in this section may be used for compliance where the required standard is technically infeasible

or when providing access to historic buildings.

1112.3.2 Ramps. Curb ramps and ramps constructed on existing sites, or in existing buildings or facilities, may have slopes and rises greater than specified in Part II of this chapter, where space limitations preclude the use of 1 vertical in 12 horizontal slope or less, provided that:

1. A slope not greater than 1 vertical in 10 horizontal is allowed for a maximum rise of 6 inches (152 mm).
2. A slope not greater than 1 vertical in 8 horizontal is allowed for a maximum rise of 3 inches (76 mm).
3. Slopes greater than 1 vertical in 8 horizontal are prohibited.

1112.3.3 Stairways. Full extension of stair handrails is not required when such extension would be hazardous or impossible due to plan configuration. When an accessible elevator is provided, existing stairs need not be made accessible.

1112.3.4 Elevators. Elevators shall comply with Chapter 296-81, Washington Administrative Code.

1112.3.5 Platform lifts. Upon the approval of the building official, platform lifts may be used in alterations, in locations in addition to those permitted in Part II of this chapter, if installation of an elevator is technically infeasible.

Platform lifts shall comply with Chapter 296-81 of the Washington Administrative Code.

1112.3.6 Doors.

1112.3.6.1 Clearance. When existing elements prohibit strict compliance with the clearance requirements, a projection of 5/8 inch (16 mm) maximum

is permitted for the latch side door stop.

1112.3.6.2 Thresholds. Existing thresholds measuring 3/4 inch (19 mm) high or less which are modified to provide a beveled edge on each side, may be retained.

1112.3.7 Toilet rooms.

1112.3.7.1 Shared facilities. The addition of one unisex toilet facility accessible to all occupants on the floor may be provided in lieu of making existing toilet facilities accessible when it is technically infeasible to comply with either part of Chapter 11. The unisex facility shall be located in the same area as existing facilities.

1112.3.7.2 Number. The number of toilet facilities and water closets required by the Building Code may be reduced by one, in order to provide accessible features.

1112.3.7.3 Signage. When existing toilet facilities are altered and not all are made accessible, directional signage complying with Section 1106.16.3 and 1106.16.4 shall be provided indicating the location of the nearest accessible toilet facility.

1112.3.8 Assembly areas. Seating shall adjoin an accessible route of travel that also serves as a means of emergency egress or route to an area for evacuation assistance. In alterations, accessibility to raised or sunken dining areas, or to all parts of outdoor seating areas is not required provided that the same services and amenities are provided in an accessible space usable by the general public and not restricted to use by people with disabilities.

1112.3.9 Dressing rooms. Where it is technically infeasible to meet the requirements of Part II of this chapter, one dressing room for each sex, or a unisex dressing room, on each level shall be accessible.

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NEW SECTION

WAC 51-40-1113 Section 1113--Historic preservation.

Section 1113.1 General. Generally the accessibility provisions of this part shall be applied to historic buildings and facilities as defined in Section 3403.5 of this code.

The building official, after consulting with the appropriate historic preservation officer, shall determine whether provisions required by this part for accessible routes of travel (interior or exterior), ramps, entrances, toilets, parking, or signage would threaten or destroy the historic significance of the building or facility.

If it is determined that any of the accessibility requirements listed above would threaten or destroy the historic significance of a building or facility, the modifications of Section 1112.3 for that feature may be utilized.

1113.2 Special Provisions. Where removing architectural barriers or providing accessibility would threaten or destroy the historic significance of a building or facility, the following special provisions may be used:

1. At least one accessible route from a site access point to an accessible route of travel shall be provided.
2. At least one accessible entrance which is used by the public shall be provided.

EXCEPTION: Where it is determined by the building official that no entrance used by the public can comply, access at any accessible entrance which is unlocked during business hours may be used provided directional signs are located at the primary entrance, and the accessible entrance has a notification system. The route of travel for the accessible entrance shall not pass through hazardous areas, storage rooms, closets, kitchens or spaces used for similar purposes.

3. Where toilet facilities are provided, at least one toilet facility complying with Section 1111 and 1112 shall be provided along an accessible route. Such toilet facility shall be a shared facility available to both sexes.

4. Accessible routes from an accessible entrance to all publicly used spaces, on at least the level of accessible entrance, shall be provided. Access should be provided to all levels of a building or facility when practical. Displays and written information and documents shall be located where they can be seen by a seated person.

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NEW SECTION

WAC 51-40-1114 Section 1114--Appeal.

Section 1114.1 Request for Appeal. An appeal from the standards for accessibility for existing buildings may be filed with the building official in accordance with Section 105, when existing structural elements or physical constraints of the site prevent full compliance or would threaten or destroy the historical significance of a historic building.

1114.2 Review.

1114.2.1 Consideration of alternative methods. Review of appeal requests shall include consideration of alternative methods which may provide partial access.

1114.2.2 Waiver or modification of requirements. The appeals board may waive or modify the requirements of this section when it is determined that compliance with accessibility requirements would threaten or destroy the historic significance of a building or facility.

NEW SECTION

WAC 51-40-93116 Section 93116.

THIS APPENDIX IS FOR REFERENCE ONLY. IT IS NOT THE RESPONSIBILITY OF THE BUILDING OFFICIAL TO ENFORCE IT.

APPENDIX CHAPTER 11

DIVISION II

AMERICANS WITH DISABILITIES ACT

GUIDELINES FOR READILY ACHIEVABLE BARRIER REMOVAL

93116.1 Purpose. The purpose of this division is to provide the United States Department of Justice, Americans with Disabilities Act Guidelines for readily achievable barrier removal in existing buildings.

93116.2 Scope.

93116.2.1 General. The provisions of this division may be used as a guideline for the removal of readily achievable barriers to accessibility in existing buildings, as required by the Americans with Disabilities Act of 1990.

93116.2.2 Applicability of other provisions. Except as specifically allowed by this division, all buildings and portions thereof shall meet all applicable provisions of this code.

93116.3 Definitions. For the purpose of this division, certain terms are defined as follows:

COMMERCE is travel, trade, traffic, commerce, transportation, or communication--

1. Among the several States;
2. Between any foreign country or any territory or possession and any State; or
3. Between points in the same State but through another State or foreign country.

COMMERCIAL FACILITIES are facilities--

1. Whose operations will affect commerce;
2. That are intended for nonresidential use by a private entity; and
3. That are not--
 - 3.1. Facilities that are covered or expressly exempted from coverage under the Fair Housing Act of 1968, as amended (42 U.S.C. 3601-3631);
 - 3.2 Aircraft; or
 - 3.3. Railroad locomotives, railroad freight cars, railroad cabooses, commuter or intercity passenger rail cars (including coaches, dining cars, sleeping cars, lounge cars, and food service cars), any other railroad cars described in Section 242 of the American's with Disabilities Act or covered under title II of the American's with Disabilities Act, or railroad rights-of-way. For purposes of this definition, "rail" and "railroad" have the meaning given the term "railroad" in Section 202(e) of the Federal Railroad Safety Act of 1970 (46 U.S.C. 431(e)).

PLACE OF PUBLIC ACCOMMODATION is a facility, operated by a private entity, whose operations affect commerce and fall within at least one of the following categories--

1. An inn, hotel, motel, or other place of lodging, except for an establishment located within a building that contains not more than five rooms for rent or hire and that is actually occupied by the proprietor of the establishment as the residence of the proprietor;
2. A restaurant, bar, or other establishment serving food or drink;

3. A motion picture house, theater, concert hall, stadium, or other place of exhibition or entertainment;
4. An auditorium, convention center, lecture hall, or other place of public gathering;
5. A bakery, grocery store, clothing store, hardware store, shopping center, or other sales or rental establishment;
6. A laundromat, dry-cleaner, bank, barber shop, beauty shop, travel service, shoe repair service, funeral parlor, gas station, office of an accountant or lawyer, pharmacy, insurance office, professional office of a health care provider, hospital, or other service establishment;
7. A terminal, depot, or other station used for specified public transportation;
8. A museum, library, gallery, or other place of public display or collection;
9. A park, zoo, amusement park, or other place of recreation;
10. A nursery, elementary, secondary, undergraduate, or postgraduate private school, or other place of education;
11. A day care center, senior citizen center, homeless shelter, food bank, adoption agency, or other social service center establishment; and
12. A gymnasium, health spa, bowling alley, golf course, or other place of exercise or recreation.

PRIVATE ENTITY is a person or entity other than a public entity.

PUBLIC ACCOMMODATION is a private entity that owns, leases (or leases to), or operates a place of public accommodation.

PUBLIC ENTITY is--

1. Any State or local government;
2. Any department, agency, special purpose district, or other instrumentality of a State or States or local government; and

3. The National Railroad Passenger Corporation, and any commuter authority (as defined in Section 103(8) of the Rail Passenger Service Act).

READILY ACHIEVABLE is easily accomplishable and able to be carried out without much difficulty or expense. In determining whether an action is readily achievable, factors to be considered include--

1. The nature and cost of the action needed under this part;
2. The overall financial resources of the site or sites involved in the action; the number of persons employed at the site; the effect on expenses and resources, or the impact otherwise of the action upon the operation of the site;
3. The overall financial resources of any parent corporation or entity; the overall size of the parent corporation or entity with respect to the number of its employees; the number, type, and location of its facilities;
4. The type of operation or operations of the parent corporation or entity, including the composition, structure, and functions of the work force of the parent corporation or entity; and
5. The geographic separateness, and the administrative or fiscal relationship of the site or sites in question to the parent corporation or entity.

93116.4 Removal of Barriers. A public accommodation shall remove architectural barriers in existing facilities, including communication barriers that are structural in nature, where such removal is readily achievable, i.e., easily accomplishable and able to be carried out without much difficulty or expense.

93116.5 Examples. Examples of steps to remove barriers include, but are not limited to, the following actions:

1. Installing ramps;
2. Making curb cuts in sidewalks and entrances;
3. Lowering shelves;

4. Rearranging tables, chairs, vending machines, display racks, and other furniture;
5. Lowering telephones;
6. Adding raised letter markings on elevator control buttons;
7. Installing flashing alarm lights;
8. Widening doors;
9. Installing offset hinges to widen doorways;
10. Eliminating a turnstile or providing an alternative accessible path;
11. Installing accessible door hardware;
12. Installing grab bars in toilet stalls;
13. Rearranging toilet partitions to increase maneuvering space;
14. Insulating lavatory pipes;
15. Installing a raised toilet seat;
16. Installing a full-length bathroom mirror;
17. Lowering the paper towel dispenser in a bathroom;
18. Creating a designated accessible parking space;
19. Installing an accessible paper cup dispenser at an existing inaccessible water fountain;
20. Removing high pile, low density carpeting; or
21. Modifying vehicle hand controls.

93116.6 Priorities. A public accommodation shall take measures to comply with the barrier removal requirements of this section in accordance with the following order of priorities:

1. First, a public accommodation shall take measures to provide access to a place of public accommodation from public sidewalks, parking, or public

transportation. These measures include, for example, installing an entrance ramp, widening entrances, and providing accessible parking spaces.

2. Second, a public accommodation shall take measures to provide access to those areas of a place of public accommodation where goods and services are made available to the public. These measures include, for example, adjusting the layout of display racks, rearranging tables, widening doors, and installing ramps.

3. Third, a public accommodation shall take measures to provide access to restroom facilities in places of public accommodation where restroom facilities are used by the public on more than an incidental basis. These measures include, for example, removal of obstructing furniture or vending machines, widening of doors, installations of ramps, providing accessible signage, widening of toilet stalls, and installations of grab bars.

4. Fourth, a public accommodation shall take any other measures necessary to provide access to the goods, services, facilities, privileges, advantages, or accommodations of a place of public accommodation.

93116.7 Relationship to Alterations Requirements of Chapter 11, Part III of this Code. Measures taken solely to comply with the barrier removal requirements of this section are not required to conform to the requirements for alterations in Chapter 11, Part III of this code. These measures include, for example, installing a ramp with a steeper slope or widening a doorway to a narrower width than that required by Chapter 11, Part III of this code. No measure shall be taken, however, that poses a significant risk to the health or safety of individuals with disabilities or others. Barrier removal is required to conform to the Americans with Disabilities Act requirements for existing buildings.

93116.8 Portable Ramps. Portable ramps should be used to comply with this division only when installation of a permanent ramp is not readily achievable. In order to avoid any significant risk to the health or safety of individuals with disabilities or others in using portable ramps, due consideration shall be given to safety features such as nonslip surfaces, railings, anchoring, and strength of materials.

93116.9 Interpretation of Readily Achievable. The rearrangement of temporary or movable structures, such as furniture, equipment, and display racks is not readily achievable to the extent that it results in a significant

loss of selling or serving space.

93116.10 Alternatives to Barrier Removal.

93116.10.1 General. Where a public accommodation can demonstrate that barrier removal is not readily achievable, a public accommodation shall not fail to make its goods and services, facilities, privileges, advantages, or accommodations available through alternative methods, if those methods are readily achievable.

93116.10.2 Examples. Examples of alternatives to barrier removal include, but are not limited to, the following actions:

1. Providing curbside service or home delivery;
2. Retrieving merchandise from inaccessible shelves or racks;
3. Relocating activities to accessible locations;
4. Providing refueling service at inaccessible self-service gas stations.

93116.11 Personal Devices and Services. This section does not require a public accommodation to provide its customers, clients, or participants with personal devices, such as wheelchairs, or services of a personal nature including assistance in eating, toileting, or dressing.

93116.12 Multiscreen Cinemas. If it is not readily achievable to remove barriers to provide access by persons with mobility impairments to all of the theaters of a multiscreen cinema, the cinema shall establish a film rotation schedule that provides reasonable access for individuals who use wheelchairs to all films. Reasonable notice shall be provided to the public as to the location and time of accessible showings.

93116.13 Readily Achievable and Undue Burden: Factors to be Considered. In determining whether an action is readily achievable or would result in an undue burden, factors to be considered include:

1. The nature and cost of the action needed under this part;

2. The overall financial resources of the site or sites involved in the action; the number of persons employed at the site; the effect on expenses and resources, or the impact otherwise of the action upon the operation of the site;
3. The overall financial resources of any parent corporation or entity; the overall size of the parent corporation or entity with respects to the number of its employees; the number, type, and location of its facilities;
4. The type of operation or operations of the parent corporation or entity, including the composition, structure, and functions of the work force of the parent corporation or entity; and
5. The geographic separateness, and the administrative or fiscal relationship of the site or sites in question to the parent corporation or entity.

93116.14 Accessible or Special Goods.

93116.14.1 This part does not require a public accommodation to alter its inventory to include accessible or special goods that are designed for, or facilitate use by, individuals with disabilities.

93116.14.2 A public accommodation shall order accessible or special goods at the request of an individual with disabilities, if, in the normal course of its operation, it makes special orders on request for unstocked goods, and if the accessible or special goods can be obtained from a supplier with whom the public accommodation customarily does business.

93116.14.3 Examples of accessible or special goods include items such as Braille versions of books, books on audio cassettes, closed-captioned video tapes, special sizes or lines of clothing, and special foods to meet particular dietary needs.

93116.15 Seating in Assembly Areas. To the extent that it is readily achievable, a public accommodation shall:

1. Provide a reasonable number of wheelchair seating spaces in assembly areas; and,

2. Locate the wheelchair seating spaces so that they:
 - 2.1. Are dispersed throughout the seating area;
 - 2.2. Provide lines of sight comparable to those in all viewing areas;
 - 2.3. Adjoin an accessible route of travel that also serves as a means of egress in case of emergency; and,
 - 2.4. Permit individuals who use wheelchairs to sit with family members or other companions.

EXCEPTION: If removal of seats is not readily achievable, a public accommodation shall provide a portable chair or other means to permit a family member or other companion to sit with an individual who uses a wheelchair.

NEW SECTION

WAC 51-40-93117 Section 93117.

THIS APPENDIX IS FOR REFERENCE ONLY. IT IS NOT THE RESPONSIBILITY OF THE BUILDING OFFICIAL TO ENFORCE IT.

APPENDIX CHAPTER 11

DIVISION III

AMERICANS WITH DISABILITIES ACT

ALTERNATE GUIDELINES FOR DETECTABLE WARNINGS

93117.1 General. The purpose of this division is to provide additional design guidelines for construction and installation of truncated domes as required by the Americans with Disabilities Act of 1990.

93117.2 Raised Truncated Domes. Raised truncated domes shall have a diameter of 0.9 inches (23 mm) nominal, a height of 0.2 inches (5 mm) nominal and a center-to-center spacing of 2.35 (60 mm) inches nominal.

Raised truncated domes shall comply with Appendix Chapter 11, Division V for visual contrast.

NEW SECTION

WAC 51-40-93118 Section 93118.

APPENDIX CHAPTER 11

DIVISION IV

AMERICANS WITH DISABILITIES ACT

ALTERNATE GUIDELINES FOR AUDIBLE ALARMS

93118.1 Purpose. The purpose of this division is to provide the United States Department of Justice, Americans with Disabilities Act Guidelines for audible alarms.

93118.2 Audible Alarms. Audible alarms shall exceed the prevailing equivalent sound level in the room or space by at least 15 decibels, or shall exceed any maximum sound level with a duration of 30 seconds by 5 decibels, whichever is louder. Sound levels for alarm signals shall not exceed 120 decibels.

NEW SECTION

WAC 51-40-93119 Section 93119.

THIS APPENDIX IS FOR REFERENCE ONLY. IT IS NOT THE RESPONSIBILITY OF THE BUILDING OFFICIAL TO ENFORCE IT.

APPENDIX CHAPTER 11

DIVISION V

AMERICANS WITH DISABILITIES ACT
ALTERNATE GUIDELINES FOR VISUAL CONTRAST

93119.1 Purpose. The purpose of this division is to provide the United States Department of Justice, Americans with Disabilities Act.

93119.2 Guidelines for Visual Contrast.

93119.2.1 Raised truncated domes. Raised truncated domes used as detectable warnings shall contrast visually by 70 percent with adjoining surfaces. Contrast in percent shall be determined as follows:

$$\text{Contrast} = [(B^1 - B^2) / B^1] \times 100$$

Where: B^1 = light reflectance value (LRV) of the lighter area;

and,

B^2 = light reflectance value (LRV) of the darker area.

The material used to provide contrast shall be an integral part of the walking surface.

93119.2.2 Signage. The characters and background of signs shall be eggshell (11 to 19 degree gloss on 60 degree glossimeter). Characters shall be light on a dark background (or dark on a light background) and contrast with their background by at least 70 percent. Contrast in percent shall be determined as follows:

$$\text{Contrast} = [(B^1 - B^2) / B^1] \times 100$$

Where: B^1 = light reflectance value (LRV) of the lighter area;

and,

B^2 = light reflectance value (LRV) of the darker area.

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency and appear in the Register pursuant to the requirements of RCW 34.08.040.

NEW SECTION

WAC 51-40-93120 Section 93120.

THIS APPENDIX IS FOR REFERENCE ONLY. IT IS NOT THE RESPONSIBILITY OF THE BUILDING OFFICIAL TO ENFORCE IT.

APPENDIX CHAPTER 11

DIVISION VI

AMERICANS WITH DISABILITIES ACT GUIDELINES FOR AUTOMATED TELLER MACHINES

93120.1 Purpose. The purpose of this division is to provide the United States Architectural and Transportation Barriers Compliance Board Americans with Disabilities Act Guidelines for automated teller machines.

93120.2 Accessible Buildings: Automated Teller Machines. Where automated teller machines are provided, each machine shall comply with the requirements below except where two or more machines are provided at a location, then only one must comply.

EXCEPTION: Drive-up-only automated teller machines are not required to comply with 93120.4 and 93120.5.

93120.3 General. Each automated teller machine required to be accessible by 93120.2 shall be on an accessible route and shall comply with the provisions of this section.

93120.4 Clear Floor Space. The automated teller machine shall be located so that clear floor space complying with 1106.2.4.1, 1106.2.4.2, 1106.2.4.3 and 1106.2.4.4 is provided to allow a person using a wheelchair to make a forward approach, a parallel approach, or both, to the machine.

93120.5 Reach Ranges.

1. Forward Approach Only. If only a forward approach is possible, operable parts of all controls shall be placed within the forward reach range specified in 1106.2.4.5.

2. Parallel Approach Only. If only a parallel approach is possible, operable parts of controls shall be placed as follows:

2.1. Reach Depth Not More Than 10 inches (255 mm). Where the reach depth to the operable parts of all controls as measured from the vertical plane perpendicular to the edge of the unobstructed clear space at the farthest protrusion of the automated teller machine or surround is not more than 10 inches (255 mm), the maximum height above the finished floor or grade shall be 54 inches (1370 mm).

2.2. Reach Depth More Than 10 inches (255 mm). Where the reach depth to the operable parts of any control as measured from the vertical plane perpendicular to the edge of the unobstructed clear floor space at the farthest protrusion of the automated teller machine or surround is more than 10 inches (255 mm), the maximum height above the finished floor or grade shall be as follows:

3. Forward and Parallel Approach. If both a forward and parallel approach are possible, operable parts of controls shall be placed within at least one of the reach ranges in paragraphs (1) or (2) of this section.

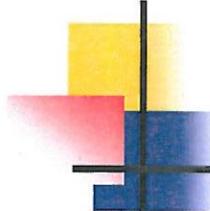
4. Bins. Where bins are provided for envelopes, waste paper, or other purposes, at least one of each type provided shall comply with the applicable reach ranges in paragraph (1), (2), or (3) of this section.

EXCEPTION: Where a function can be performed in a substantially equivalent manner by using an alternate control, only one of the controls needed to perform that function is required to comply with this section. If the controls are identified by tactile markings, such markings shall be provided on both controls.

93120.6 Controls. Controls for user activation shall comply with 1106.3.

93120.7 Equipment for Persons with Vision Impairments. Instructions and all information for use shall be made accessible to and independently usable by persons with vision impairments.

Appendix J: Funding Opportunities



Bicycle & Pedestrian Funding Opportunities (FTA/FHWA Funds)

DRAFT Bicycle and Pedestrian Funding Opportunities Federal Transit and Federal Highway Funds

This table indicates potential eligibility for pedestrian and bicycle projects under Federal Transit and Federal Highway programs. Specific program requirements must be met, and eligibility must be determined on a case-by-case basis. For example: transit funds must provide access to transit, CMAQ must benefit air quality, HSIP must benefit safety, NHPP must benefit NHS corridors, RTP must benefit trails, FLH must provide access to or within Federal lands. See more information about [Bikes and Transit](#) and [Eligibility of Pedestrian and Bicycle Improvements under Federal Transit Law](#).

This Table was revised **January 28, 2014**, to incorporate programs authorized under the Moving Ahead for Progress in the 21st Century Act (MAP-21). This table focuses on bicycle and pedestrian, trail, and related eligibility, not to other Federal transportation program provisions or requirements.

DRAFT Bicycle and Pedestrian Funding Opportunities / Federal Transit and Federal Highway Funds														
Activity	FTA	ATI	CMAQ	HSIP	NHPP NHS	STP	TAP TE	RTP	SRTS until expended	PLAN	402	FLH	BYW until not available	TCSP until not available
Access enhancements to public transportation	*	*	*			*	*					*		*
ADA/504 Self Evaluation / Transition Plan						*	*	*		*		*		*
Bicycle and/or pedestrian plans	*					*	*			*		*		*
Bicycle lanes on road	*	*	*	*	*	*	*		*			*	*	*
Bicycle parking	*	*	*			*	*		*			*	*	*
Bike racks on transit	*	*	*			*	*					*		*
Bicycle share (capital and equipment; not operations)	*	*	*		*	*	*					*		*
Bicycle storage or service centers	*	*	*			*	*							*

Appendix K: Now You Have a Transition Plan... Now What?



Now You Have a Transition Plan... Now What?

Implementing Your ADA Transition Plan

+ Overview



- ADA Transition Planning Process
- Implementation Considerations
- ADA Transition Plan Implementation Example – City of Plymouth



+ ADA Transition Planning
Process

+ ADA Transition Planning Process

■ **Collect Data**

- Preliminary Evaluation
 - In-Office using aerial photography
- Detailed Evaluation
 - In the field evaluation
 - Required when preliminary evaluation cannot determine if the site meets the ADA standard

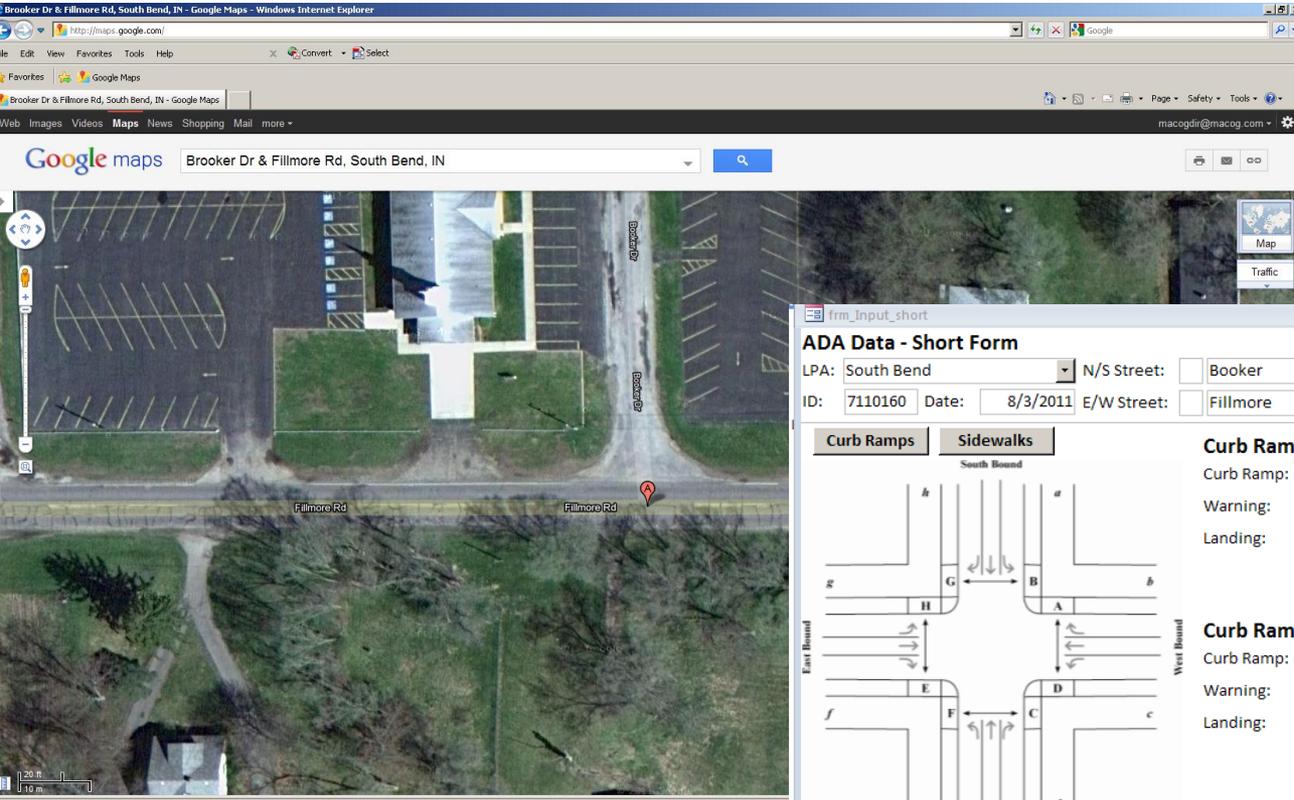
■ **Prioritize Improvements**

- Location Priority
- Accessibility Condition



ADA Transition Planning Process

Preliminary Evaluation



frm_input_short

ADA Data - Short Form

LPA: South Bend N/S Street: Booker Drive Initials: tj

ID: 7110160 Date: 8/3/2011 E/W Street: Fillmore Road Zone:

Curb Ramps	Sidewalks	Curb Ramp A	Curb Ramp B	Curb Ramp C	Curb Ramp D
		Curb Ramp: <input type="checkbox"/>			
		Warning: <input type="checkbox"/>	Warning: <input type="checkbox"/>	Warning: <input type="checkbox"/>	Warning: <input type="checkbox"/>
		Landing: <input type="checkbox"/>	Landing: <input type="checkbox"/>	Landing: <input type="checkbox"/>	Landing: <input type="checkbox"/>
		Curb Ramp E	Curb Ramp F	Curb Ramp G	Curb Ramp H
		Curb Ramp: <input type="checkbox"/>			
		Warning: <input type="checkbox"/>	Warning: <input type="checkbox"/>	Warning: <input type="checkbox"/>	Warning: <input type="checkbox"/>
		Landing: <input type="checkbox"/>	Landing: <input type="checkbox"/>	Landing: <input type="checkbox"/>	Landing: <input type="checkbox"/>

Comments: Booker T's into Fillmore. There are no sidewalks or curb ramps.

Search

LPA: South Bend ID: N/S Street: E/W Street:

Record: 38 of 715



ADA Transition Planning Process

Detailed Evaluation



frm_Input

ADA Data

LPA: Nappanee N/S Street: SR 19 (Main) Street Initials: pt Add Record

ID: 2010201 Date: 5/18/2010 E/W Street: US-6 (Market) Street Zone: Government Facilities

Curb Ramp A

Type: Perpendicular

Width: 57 in

Landing: 76 in

Clear Space: 48 in

Running Slope: 0.90%

Cross Slope: 0.10%

Gutter Slope: 0.90%

Edge Type: Returned

Flare Slope: 6.30%

Surface Ok:

Detectable Warning:

Grade Break Ok:

No Curb Ramp

Feet Inches Decimal Inches

Comments:

Search

LPA: ID: N/S Street: E/W Street:

Record: 43 of 2638 No Filter Search





ADA Transition Planning Process

Priority Ranking



	Location Priority		
	1	2	3
Access Grade	Locations serving Government Facilities	Locations serving Commercial & Employment Centers	Locations serving Other Areas
E	1E	2E	3E
D	1D	2D	3D
C	1C	2C	3C
B	1B	2B	3B
A	1A	2A	3A
Priority Rank Levels			
High		Medium	Low



ADA Transition Planning Process

- All-in-One Tool
- User friendly input
- Automated outputs
 - Generates a ranked priority inventory
 - Generates GIS color coded location maps
 - Generates ADA Transition Plan Narrative Report

ADA Data - Short Form

LPA: South Bend N/S Street: Booker Drive Initials: tj Add Record

ID: 7110160 Date: 8/3/2011 E/W Street: Fillmore Road Zone:

Curb Ramps Sidewalks

Curb Ramp A Curb Ramp B Curb Ramp C Curb Ramp D

Curb Ramp: Curb Ramp: Curb Ramp: Curb Ramp:

Warning: Warning: Warning: Warning:

Landing: Landing: Landing: Landing:

Curb Ramp E Curb Ramp F Curb Ramp G Curb Ramp H

Curb Ramp: Curb Ramp: Curb Ramp: Curb Ramp:

Warning: Warning: Warning: Warning:

Landing: Landing: Landing: Landing:

ADA Data

LPA: Nappanee N/S Street: SR 19 (Main) Street Initials: pt Add Record

ID: 2010201 Date: 5/18/2010 E/W Street: US-6 (Market) Street Zone: Government Facilities

Comments: Booker T's into

Search

LPA: South Bend ID: 38 of 715

Curb Ramp A

Type: Perpendicular

Width: 57 in.

Landing: 76 in.

Clear Space: 48 in.

Running Slope: 0.90%

Cross Slope: 0.10%

Gutter Slope: 0.90%

Edge Type: Returned

Flare Slope: 6.30%

Surface Ok:

Detectable Warning:

Grade Break Ok:

No Curb Ramp

Feet Inches Decimal Inches Decimal Feet

Comments:

Search

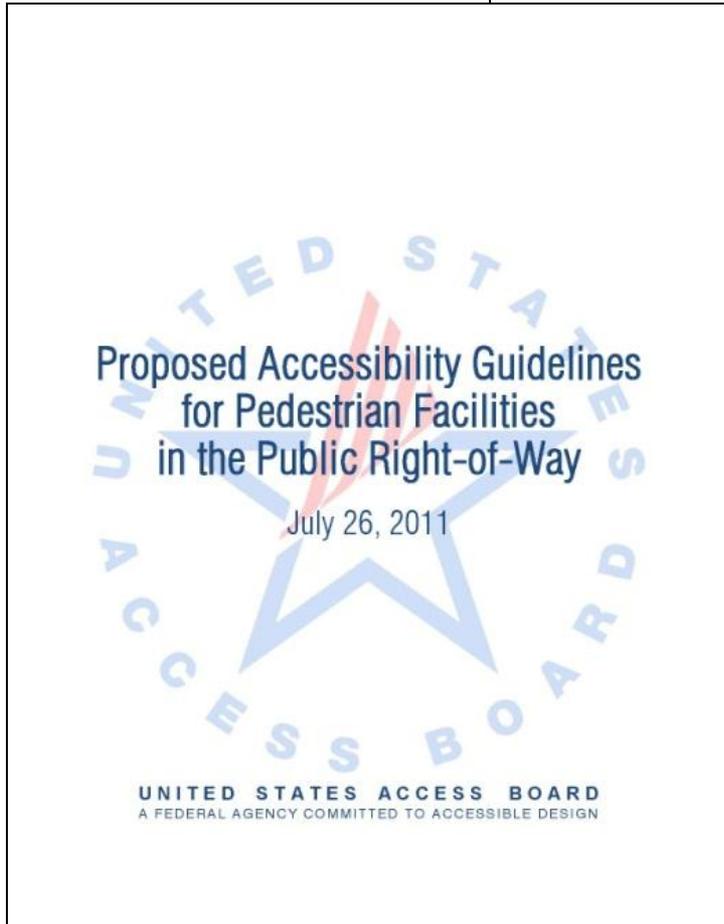
LPA: ID: N/S Street: E/W Street: Filter Reset

Record: 43 of 2638 No Filter Search



ADA Transition Planning Process

Resolutions



RESOLUTION XXXX-XXXX

RESOLUTION OF THE [City or Town] COUNCIL OF [Name of City or Town], INDIANA, ADOPTING THE AMERICANS WITH DISABILITIES ACT (ADA) GUIDELINES FOR STANDARDS FOR ACCESSIBLE DESIGN AND PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT-OF-WAY

Whereas the federal government enacted the Americans with Disabilities Act of 1990 to prohibit discrimination of the physically and mentally disabled relating to public facilities; and

Whereas the Americans with Disabilities Act requires that municipalities adopt the Americans with Disabilities Act's standards for Accessible Design that provide accessibility, through proposed structural modifications to remove accessibility barriers; and

Whereas the Americans with Disabilities Act recommends that municipalities adopt the Americans with Disabilities Act's standards for Pedestrian Facilities in the Public Right-of-Way that provide structural modifications to remove accessibility barriers; and

Whereas the United States Department of Justice recently modified the ADA Standards for Accessible Design and the Guidelines for Pedestrian Facilities in the Public Right-of-Way; and

Whereas [Name of City or Town] remains committed to the Americans with Disabilities Act's standards for public facilities; and

BE IT RESOLVED that the [City or Town] Council of the [City or Town] hereby adopts the 2010 Americans with Disabilities Act (ADA) Standards for Accessible Design and 2011 Guidelines for Pedestrian Facilities in the Public Right-of-Way.

BE IT FURTHER RESOLVED AND ADOPTED this [Date] day of [Month], [Year].

[Name], [Title]

NOTICE UNDER THE AMERICANS WITH DISABILITIES ACT

[Name of public entity] does not discriminate on the basis of disability in its programs, services, or activities. Individuals with disabilities are invited to participate in all such programs, services, and activities. [Name of public entity] does not discriminate on the basis of disability in its employment practices and complies with all regulations promulgated by the U.S. Equal Employment Opportunity Commission under title I of the ADA.

[Name of public entity] will generally, upon request, provide effective communication to qualified persons with disabilities, including but not limited to: qualified interpreters, documents in Braille, and other ways of making communications accessible to people who have speech, hearing, or vision impairments. [Name of public entity] will make all reasonable efforts to ensure that people with disabilities have an equal opportunity to participate in its programs, services, and activities. For example, individuals with disabilities are invited to participate in [Name of public entity] offices, even where pets are generally not permitted.

[Name of public entity] will provide auxiliary aid or service for effective communication, or a modification of its policies, procedures, or practices, to enable individuals with disabilities to participate in a program, service, or activity of [Name of public entity] if the individual requests such aid or service and the aid or service does not fundamentally alter the nature of the program, service, or activity. [Name of public entity] will make such aid or service available in a timely manner, but not more than 48 hours before the scheduled event.

[Name of public entity] will not take any action that would result in the exclusion of individuals with disabilities from its programs or services, or impose an undue financial or administrative burden on [Name of public entity].

If a program, service, or activity of [Name of public entity] is not accessible to individuals with disabilities, individuals with disabilities should be directed to [Name and contact information for ADA].

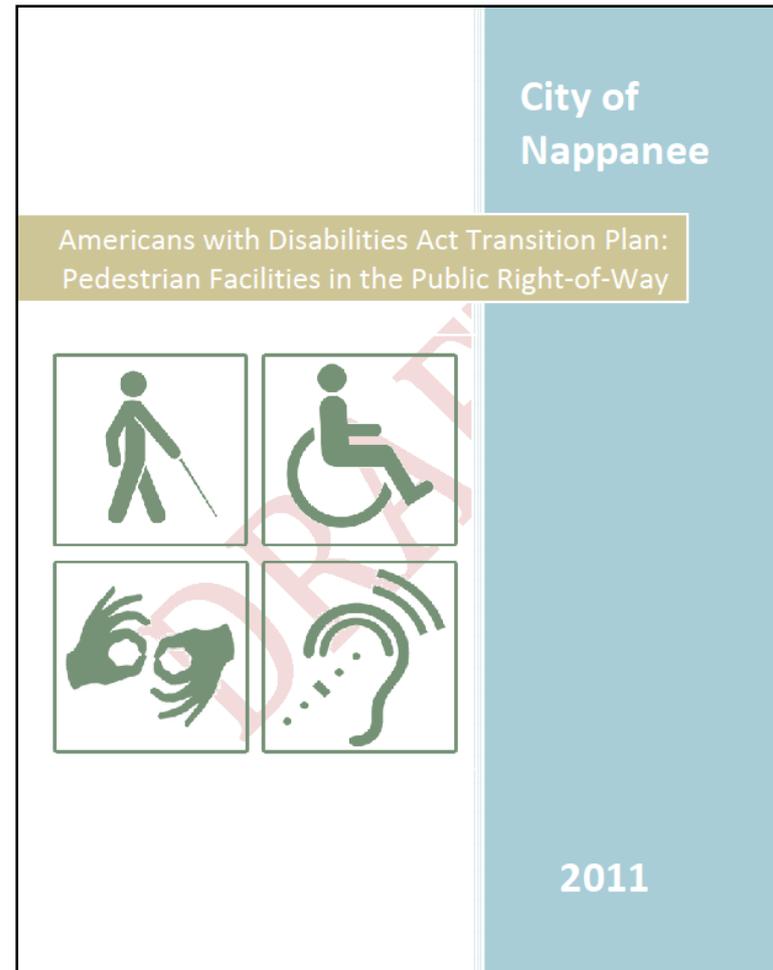
[Name of public entity] will not place a surcharge on a particular individual with a disability or disabilities to cover the cost of providing auxiliary aids/services or other accommodations, such as retrieving items from locations that are open to the public, for persons who use wheelchairs.



ADA Transition Planning Process

Transition Planning

- Provide for Public Comment
 - Adopted by the City,
Town or County Councils
- Finalize and Adopt

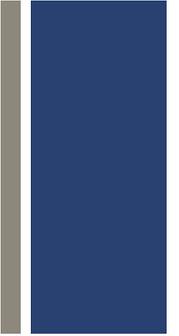




+ Implementation
Considerations

+ Implementation Considerations

- Keep Inventory Up-to-Date
- Develop a Transition Plan Update Strategy
- Train Maintenance Crews on proper ADA Standards
- Incorporate Requirements in Existing Programs





Implementation Considerations

Keep Inventory Up-to-Date

- Document any changes since original inventory
- Complete a Detailed Inventory on Curb Ramp/Sidewalk updates
- Incorporate into project contracts for the Contractor to complete your evaluation

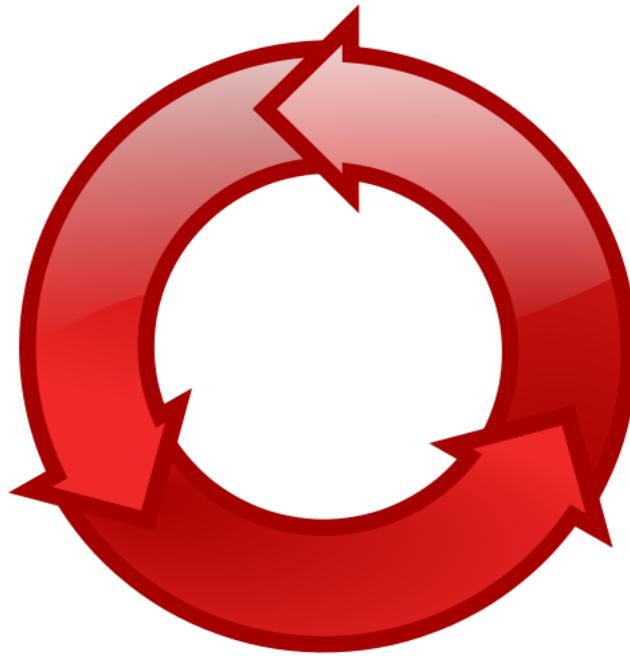




Implementation Considerations

Develop a Transition Plan Update Strategy

- Suggest a 3 year update cycle
- Inventory is up-to-date
- Document any Curb Ramp/Sidewalk updates

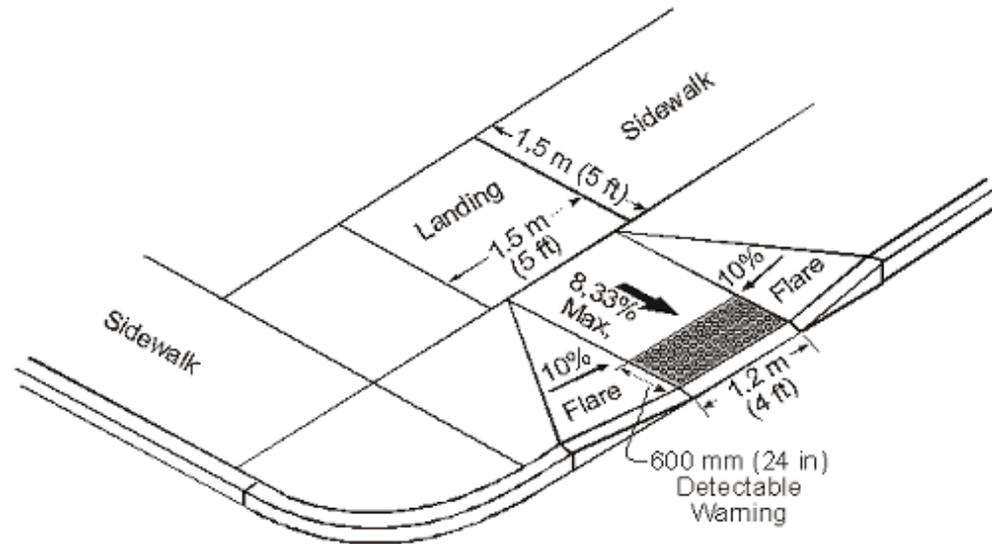




Implementation Considerations

Train Maintenance Crews on proper ADA Standards

- Review ADA Standards in office
- Consider hosting a training
- Develop standard ADA ramps to use in most projects





Implementation Considerations

Incorporate Requirements in Existing Programs

- Room to improve existing processes
- Work in existing budget
- Don't reinvent the wheel



Indiana



+ ADA Transition Plan
Implementation Example
City of Plymouth

+ ADA Transition Plan Implementation Example

City of Plymouth

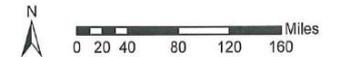
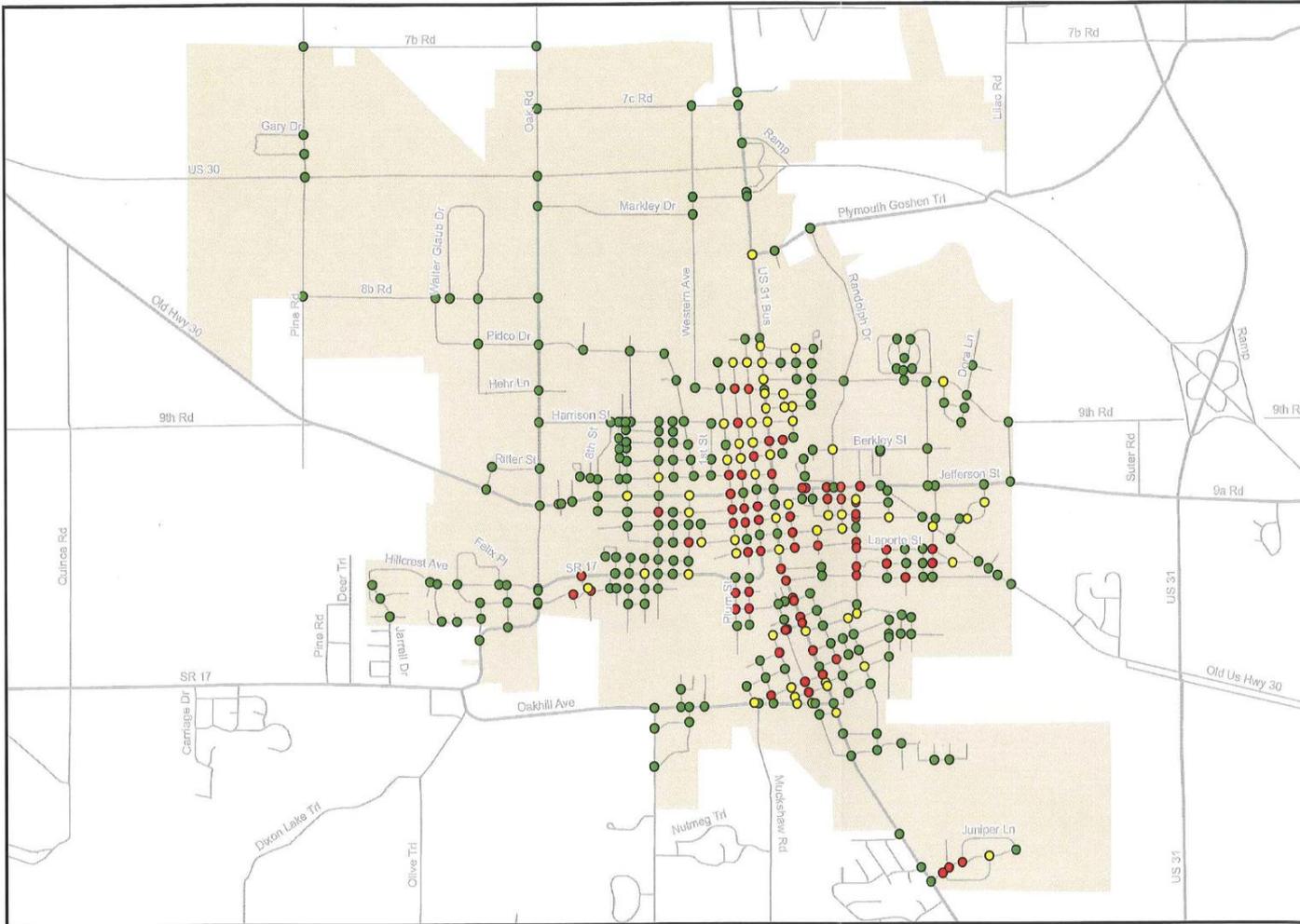
- Adopted Transition Plan in March 2012
- Inventory Priority Rank
 - High – 67 intersections
 - Medium – 63 intersections
 - Low – 248 intersections

Total Intersection Per Priority

Access Grade	1	2	3	Legend
	Locations serving Government Facilities	Locations serving Commercial & Employment Centers	Locations serving Other Areas	
E	10	10	35	High: ■
D	12	3	32	Med: ■
C	16	12	40	Low: ■
B	25	17	31	
A	29	45	61	

ADA Priorities Map

City of Plymouth



Coordinate grid is based on Indiana East State Plane Coordinate System 1983 North American Datum.

Information shown on this map is not warranted for accuracy or merchantability. Further reproduction or distribution of this material is not authorized without the expressed written permission of MACOG.

Legend

- Low
- Medium
- High



Date Printed: 2/6/2012

Source: MACOG ADA Database

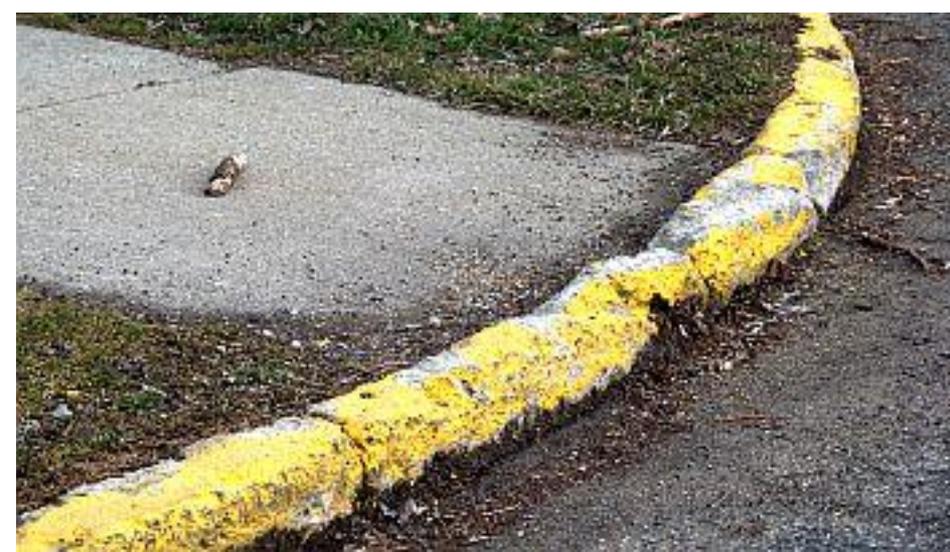
Note: Database is constantly updated and may result in this map being out-of-date



+ ADA Transition Plan Implementation Example

City of Plymouth

- Previous Sidewalk Selection Process
 - Each City Council Member has \$6,000 per year to improve sidewalks in their districts
- Updated Process
 - City Council Member must consider High Priority Intersections in their districts instead of ADA compliant.



+ ADA Transition Plan Implementation Example

City of Plymouth

- Updated most of the High Priority Intersections
- Reevaluate intersections this winter
- Received positive feedback on new selection process



+ Conclusion

- Don't reinvent the wheel
- Incorporate new requirements/considerations in existing processes
- Take little steps toward accessibility

