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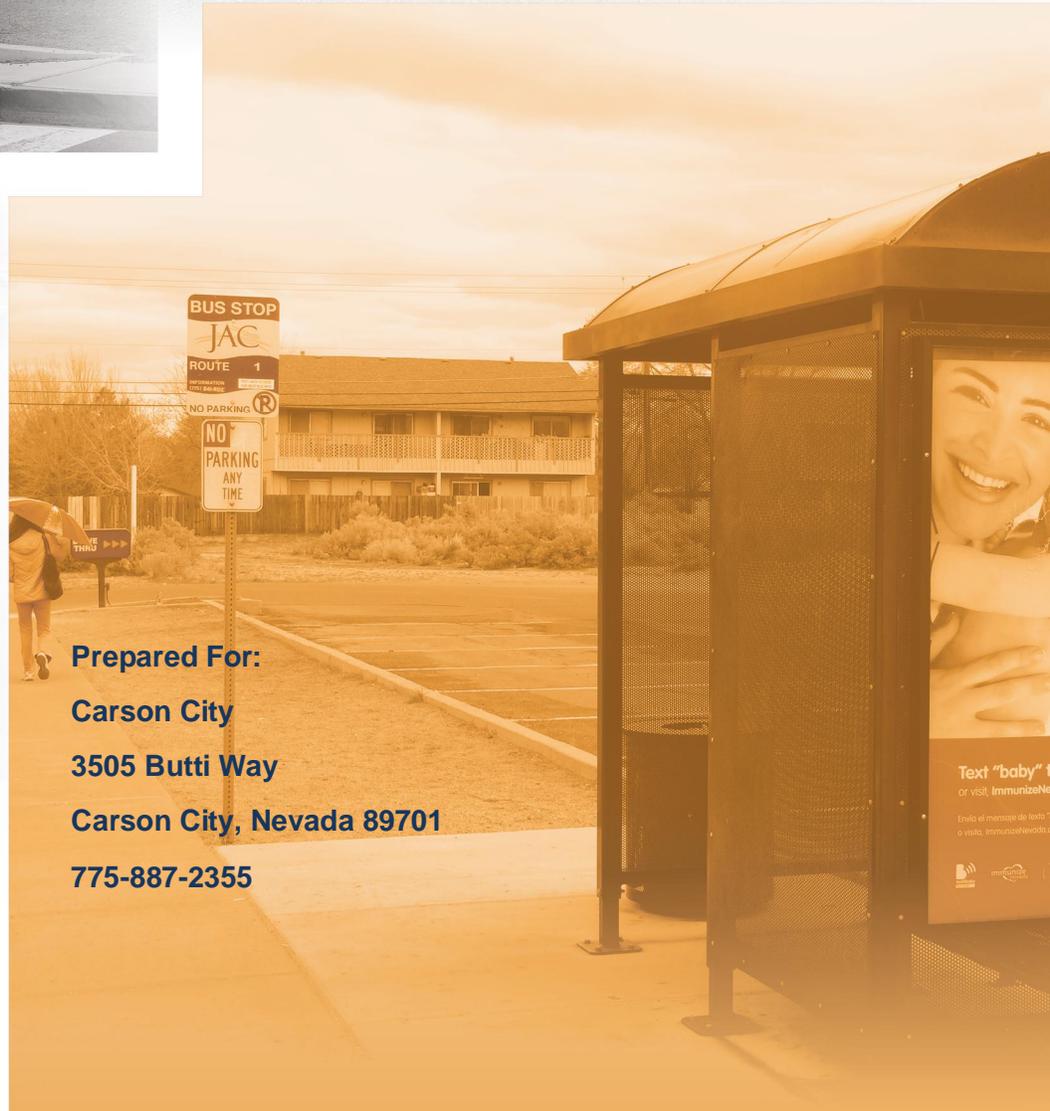
3505 BUTTI WAY

**FINAL**  
**ADA Transition Plan**  
AND SIDEWALK INVENTORY

RFP 1314-101



March 2015



Prepared For:  
**Carson City**  
**3505 Butti Way**  
**Carson City, Nevada 89701**  
**775-887-2355**



## ADA TRANSITION PLAN FOR TRANSPORTATION FACILITIES

**Prepared for:**



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Carson City, Nevada 89701  
775-887-2355

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## LIST OF ACRONYMS

402	State and Community Traffic Safety Program
ADA	Americans with Disabilities Act
DOJ	Department of Justice
FHWA	Federal Highway Administration
FLH	Federal Lands Highways Program
FTA	Federal Transit Capital, Urban & Rural Funds
GIS	Geographic Information Systems
GPS	Global Positioning System
HBRRP	Highway Bridge Replacement and Rehabilitation
HSIP	Highway Safety Improvement Program
JAC	Jump Around Carson
MAP-21	Moving Ahead for Progress in the 21 <sup>st</sup> Century Act
MUTCD	Manual on Uniform Traffic Control Devices
NHS	National Highway System
PLA	State/Metropolitan Planning Funds
PROWAG	Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way
PSA	Programs, Services, and Activities
RTP	Recreational Trails Program
SRTS	Safe Routes to School
STP	Surface Transportation Program
TAP	Transportation Alternatives Program
TCSP	Transportation and Community and System Preservation Program



## 1. INTRODUCTION

The purpose of this document is to provide an Americans with Disabilities Act (ADA) Transition Plan for Transportation Facilities within Carson City, Nevada. As part of this project, transportation related policies and procedures were reviewed for compliance with ADA guidelines. In addition to conducting a review of transportation related policies and procedures, a self-evaluation was conducted on the following facilities:

- 26 signalized intersections;
- approximately 30 miles of sidewalk and all unsignalized intersections and driveways along the sidewalk corridors; and
- 41 transit stops.

The recommended improvements were prioritized and an implementation plan was developed to provide guidance for Carson City improvement projects in the coming years. Public outreach was conducted as part of the project to aid in the development of the plan.

This Transition Plan is focused on a portion of Carson City's transportation facilities, and is not intended to be a comprehensive ADA Transition Plan for all of Carson City's public facilities (parks; buildings; the remaining transportation facilities; and other program accessibility guidelines, standards, and resources throughout Carson City). As funding becomes available, additional program, service, activity, and facility evaluations could be completed to provide a comprehensive Transition Plan for Carson City.

### 1.1. Legislative Mandate

The ADA is a civil rights law that mandates equal opportunity for individuals with disabilities. The ADA prohibits discrimination in access to jobs, public accommodations, government services, public transportation, and telecommunications. Title II of the ADA also requires that all Programs, Services and Activities (PSAs) of public entities provide equal access for individuals with disabilities.

Carson City has undertaken a comprehensive evaluation of its transportation related policies, programs, and a portion of their facilities along public rights-of-way to determine the extent to which individuals with disabilities may be restricted in their access to transportation facilities within Carson City.

### 1.2. ADA Self-Evaluation and Transition Plan Development Requirements and Process

Carson City is obligated to observe all requirements of Title I in its employment practices; Title II in its policies, programs, and services; any parts of Titles IV and V that apply to Carson City and its programs, services, or facilities; and all requirements specified in the 2010 ADA Standards and that apply to facilities and other physical holdings.



Title II has the broadest impact on Carson City. Included in Title II are administrative requirements for all government entities employing more than 50 people. These administrative requirements are:

- Completion of a self-evaluation;
- Development of an ADA complaint procedure;
- Designation of at least one person who is responsible for overseeing Title II compliance; and
- Development of a Transition Plan to schedule the removal of the barriers uncovered by the self-evaluation process. The Transition Plan will become a working document until all barriers have been addressed.

This document describes the process developed to complete the evaluation of Carson City's transportation related activities and transportation facilities, provides transportation policy, program, and facility improvement recommendations, and presents an implementation schedule for the modification of transportation facilities along public rights-of-way to improve accessibility. This Transition Plan will guide the planning and implementation of necessary program and facility modifications over the next 15 years. The ADA Self-Evaluation and Transition Plan is significant in that it establishes Carson City's ongoing commitment to the development and maintenance of transportation related policies, programs, and facilities that accommodate all of its citizenry.

### 1.3. Discrimination and Accessibility

Programmatic accessibility means that, when viewed in its entirety, each program is readily accessible to, and usable by, individuals with disabilities. Programmatic accessibility is necessary not only for individuals with needs related to mobility disabilities, but also to individuals with needs related to speech, cognitive, vision and hearing disabilities. The following are examples of transportation related elements that should be evaluated for accessibility:

- Physical Elements
  - Path of travel along sidewalk corridors within the public rights-of-way
  - Access to pedestrian equipment at signalized intersections
  - Access to transit stop amenities
- Programmatic Elements
  - Curb ramps
  - Transportation programs
  - Transportation procedures
  - Transportation policies

### 1.4. Ongoing Accessibility Improvements

Carson City transportation facilities, programs, services, policies, practices and procedures should continue to be evaluated on an ongoing basis, and the ADA Transition Plan for Transportation Facilities should be revised to account for changes to these elements since the initial self-evaluation. An accessibility inventory of signalized intersections, sidewalks, curb ramps, and transit stops on streets within designated locations within Carson City has been completed. This Plan will be posted to Carson City's website for review and consideration by the general public. In addition, notice will be provided of its existence in any official and unofficial Carson City publications.

## 1.5. Carson City's Approach

The purpose of the Plan is to provide the framework for achieving equal access to Carson City's transportation programs, services and activities within a reasonable timeframe. Carson City's elected officials and staff believe accommodating disabled persons on their transportation system is essential to good customer service, the quality of life Carson City residents and visitors seek to enjoy and to effective governance. This Transition Plan has been prepared after careful study of Carson City's transportation programs, services and activities.

Carson City shall make reasonable modifications in transportation policies, practices, or procedures when the modifications are necessary to avoid discrimination on the basis of disability, unless Carson City can demonstrate that making the modifications would fundamentally alter the nature of the service, program, or activity. Carson City will not place surcharges on individuals with disabilities to cover the cost involved in making transportation programs accessible.



## 2. OUTREACH

Carson City provided several opportunities to receive input from various departments within the City as well as the public concerning this Transition Plan. The following sections detail these opportunities.

### 2.1. ADA Transition Plan Committee

At the beginning of the project, an ADA Transition Plan Committee was formed to develop the initial study areas, self-evaluation and prioritization methodology, and received input on the project in general. This committee was composed of representatives from the Public Works Departments within the City. Recommendations from the Committee were incorporated into the preparation of this Transition Plan.

### 2.2. Public Workshop

A public workshop was held on Thursday, June 12, 2014, from 3:30 PM – 5:30 PM at the Carson City Community Center. Members of the disabled community were invited to attend this workshop, and members of the community who attended the workshop provided valuable input on the location of the sidewalks, corridors, signalized intersections, and transit stops that were to be evaluated as part of this plan.

### 2.3. Liaison Committee

A liaison committee comprised of representatives within various Carson City departments was established by Carson City to provide specific review comments on the Draft Transition Plan. A workshop was held with the liaison committee on Monday, February 9, 2015, from 1:00 PM – 4:00 PM. The following items were discussed during the workshop:

- Goals and objectives of the ADA Transition Plan Process
- ADA Background
- Steps to Compliance
- Scope of Services
- Self-Evaluation Findings
- Facility Cost Projections, Funding Sources, and Implementation Schedules
- Project Monitoring

After the conclusion of the workshop, members of the liaison committee attended a field demonstration of the data collection equipment that was utilized to conduct the self-evaluation on the transportation facilities.

### 2.4. Public Meeting

A public meeting was held after the Draft Transition Plan was made available for public review. The public meeting was held on Tuesday, March 17, from 4:00 PM – 6:00 PM at the Carson City Community Center.





### 3. SELF-EVALUATION SUMMARY AND FINDINGS

The following sections summarize the self-evaluation conducted for transportation programs, procedures, and policies, along with the review of the transportation facilities within Carson City.

#### 3.1. Transportation Programs, Procedures, and Policies

As part of the Carson City ADA Transition Plan for Transportation Facilities, an evaluation of transportation programs, procedures, and policies was conducted. Based on information provided within the documents and information provided by staff, portions of Carson City's transportation programs, procedures, and policies may present barriers to accessibility for people with disabilities. It is the intent of Carson City to address programmatic accessibility barriers by providing improvements in the following areas:

- Updating City Ordinances to remove barriers to the disabled public;
- Updating design standards to meet current requirements of the ADA and the *Manual on Uniform Traffic Control Devices (MUTCD)*;
- Uniformly applying the interpretation of alterations versus maintenance for the installation of curb ramps on projects; and
- Funding.

Additionally, when a policy, program, or procedure creates an accessibility barrier that is unique to a department or a certain program, Carson City's ADA Coordinator will coordinate with the department head or program manager to address the matter in the most reasonable and accommodating manner. The following sections describe the evaluation of transportation programs, procedures, and policies in further detail.

##### 3.1.1. Carson City ADA Information Webpage Review

A full website compliance review was not completed for this project; however, the Carson City ADA Information webpage was reviewed for the ADA Notice and Non Discrimination Policy and ADA Grievance Procedure. Following are some items to note.

- The current Carson City ADA Coordinator's name and contact information is posted on the ADA Information Webpage. The Carson City ADA Coordinator is:  
Cecilia Meyer, ADA Coordinator  
Carson City Risk Management  
201 N. Carson Street, Suite #3  
Carson City, Nevada 89701  
775-283-7484, cmeyer@carson.org
- A link to the Carson City ADA Transition Plan for Transportation Facilities is posted on the ADA Information Webpage.
- Links to the current ADA regulations are provided on the ADA Information Webpage.

##### 3.1.1.1. ADA Notice and Non Discrimination Policy

In accordance with the requirements of Title II of the ADA, Carson City will not discriminate against qualified individuals with disabilities on the basis of disability in Carson City's services, programs, or activities. Carson City's Personnel Policy governs employment-related complaints of disability discrimination. A copy of the ADA Notice and Non Discrimination Policy is located in **Appendix A**.



### 3.1.1.2. Grievance Procedure

In accordance with the requirements of the ADA, Carson City has established a Grievance Procedure, which may be used by anyone who wishes to file a complaint alleging discrimination on the basis of disability in the provision of services, activities, programs, or benefit by Carson City. A copy of the Grievance Procedure is located in **Appendix B**. While the Grievance Procedure outlines the information to be submitted to Carson City by the complainant, it may be useful for a Grievance Form to be created to aid Carson City in obtaining the complete information from the complainant in a timely manner. A sample Grievance Form that was created by the Department of Justice (DOJ) and modified to meet the needs of Carson City is included in **Appendix C**. Carson City can modify this form, if needed, to meet the needs of their agency.

During the workshop on February 9, 2015, it was noted that the ADA Coordinator is not currently receiving copies of all public comments and/or complaints. The ADA Coordinator should be copied on all work orders specific to ADA complaints to determine if the complaints have ADA compliance items and if the scope of work may extend beyond what the citizen complained about.

#### Recommended Actions:

- Provide a link to a standardized Grievance Form on the webpage and provide hard copies of the forms wherever the Grievance Procedure is posted.
- Copy the ADA Coordinator on work orders that specifically have ADA compliance items associated with them.

### 3.1.2. City Ordinance Review

As part of the ADA Transition Plan for Transportation Facilities, the following ordinances were identified and reviewed during the self-evaluation process:

- Title 11, Chapter 11.12 – Encroachments, Obstructions, Maintenance and Construction of Highways and Sidewalks
- Title 18, Division 12.12 – Sidewalks, Curb and Gutter, Driveway Approaches, Curb-cuts, Alleys and Bikeways

Copies of Title 11, Chapter 11.12 and Title 18, Division 12.12 are located in **Appendix D** and **Appendix E** respectively.

#### 3.1.2.1. Fence Permit (Title 11, Chapter 11.12.030)

The fence height, distance from curb, material, and consistency with the Carson City Master Plan are currently addressed.

#### Recommended Action:

- Add a requirement that the fence shall not obstruct an existing accessible route.

#### 3.1.2.2. Control of Driveway Encroachments (Title 11, Chapter 11.12.060)

The driveway construction specifications do not cover accessible routes crossing driveways.

#### Recommended Action:

- Add a requirement for accessible routes and sidewalks crossing driveways.



### 3.1.2.3. Duty of Owner to Repair Sidewalk (Title 11, Chapter 11.12.120)

Section 3 states that the Director of Public Works can “abate” the sidewalk in question, which implies that Carson City can reduce access. Carson City should either “abate the nuisance” or “reconstruct/replace such sidewalk.” Carson City is not allowed to reduce access.

#### Recommended Action:

- Reword Section 3 to either “abate the nuisance” or “reconstruct/replace such sidewalk.”

### 3.1.2.4. Snow Removal (Title 11, Chapter 11.12.070 and 11.12.130)

The responsibility of clearing snow and ice from driveway approaches and sidewalks is the responsibility of the property owner. The requirement for an accessible route is that the surface is firm, stable, and slip resistant. Properties used for commercial purposes and/or properties that lie within the “business district” who fail to remove snow within 48 hours of a snowfall are guilty of a public nuisance, and Public Works may abate this nuisance immediately and the cost of the abatement shall be borne by the owner of the parcel.

#### Recommended Actions:

- Create enforcement policy and procedure for residential properties and any others within the public rights-of-way not already addressed. Only commercial seems to have enforcement.
- Include written warning notifications as part of procedure for all property owners to ensure they are aware of the requirements before issuing fines.

### 3.1.2.5. Sidewalks (Title 18, Division 12.12.1)

The ordinance currently addresses the minimum sidewalk width of five feet (not including curb and gutter), and providing a minimum of five feet clear width when objects encroach into the sidewalk.

#### Recommended Action:

- Add “Sidewalks shall be constructed in accordance with the Americans with Disabilities Act (ADA).”

### 3.1.2.6. Bicycle and Pedestrian Paths (Title 18, Division 12.12.10)

The ordinance currently requires conformity with various documents and guidelines.

#### Recommended Action:

- Add “Current standards of the Americans with Disabilities Act (ADA)” to the list.

### 3.1.2.7. Accessibility during Construction

After review of Title 11, Chapter 11.12, it does not appear that there are guidelines in place for accessibility during construction.

#### Recommended Action:

- Establish guidelines, construction details and specifications and procedures for monitoring and maintenance of accessible paths of travel. Refer to existing similar documents produced by agencies such as those detailed in the U.S. Access Board’s Revised Draft Guidelines for Accessible Public Rights-of-Way (2011) available on the Access Board’s website.



Carson City currently provides advance warning for street closures using signage posted at the area undergoing alterations or repair. To help better inform the public of these closures and associated detours this information should also be distributed using other methods.

#### Recommended Actions:

- Provide advance notice of all street or sidewalk closures on informational materials and the Carson City website.
- Notify disability related organizations in advance of street or sidewalk closures. Provide dates of closure, specific locations, and alternative route information.
- Ensure that street closure signs and information conform to the MUTCD.

### 3.1.3. Design Standards Review

Construction projects completed within Carson City are built using Carson City Standard Details for Public Works Construction. The Standard Details are available on the Carson City website, and the July 2014 version was reviewed for consistency with federal accessibility requirements. At the time this Transition Plan was developed, the current enforceable standards were the 2010 ADA Standards for Accessible Design. The US Access Board is currently in the process of developing new guidelines for public rights-of-way, which are provided in *Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way* document, referred to as PROWAG. Per the US Access Board:

*Sidewalks, street crossings, and other elements in the public right-of-way can pose challenges to accessibility. The US Access Board's ADA and ABA Accessibility Guidelines focus mainly on facilities on sites. While they address certain features common to public sidewalks, such as curb ramps, further guidance is necessary to address conditions and constraints unique to public rights-of-way.*

*The US Access Board is developing new guidelines for public rights-of-way that will address various issues, including access for blind pedestrians at street crossings, wheelchair access to on-street parking, and various constraints posed by space limitations, roadway design practices, slope, and terrain. The new guidelines will cover pedestrian access to sidewalks and streets, including crosswalks, curb ramps, street furnishings, pedestrian signals, parking, and other components of public rights-of-way. The US Access Board's aim in developing these guidelines is to ensure that access for persons with disabilities is provided wherever a pedestrian way is newly built or altered, and that the same degree of convenience, connection, and safety afforded the public generally is available to pedestrians with disabilities. Once these guidelines are adopted by the Department of Justice, they will become enforceable standards under title II of the ADA.*

**Table 1** provides a summary of review comments for the Carson City Standard Details for Public Works Construction, and detailed mark-ups of the standard details are located in **Appendix F**. Although, the PROWAG guidelines have not been formally adopted, the Carson City Standard Details for Public Works Construction were reviewed for consistency with both the current standards and PROWAG requirements, as it is anticipated that PROWAG will be enforceable in the near future.

#### Recommended Action:

- Update the Carson City Standard Details for Public Works Construction.
- The updates to the design standards should be consistent with the construction practices and vice versa.



**Table 1 – Review of Carson City Standard Details for Public Works Construction**

Sheet	Description	Comments
C-4.1.8	SIDEWALK CROSS DRAIN	Show label in plan view indicating the maximum cross slope to the drain should be 2%. Include "MAX." after each of the 2% cross slopes to the drain shown in section B-B.
C-5.1.2	P.C.C VALLEY GUTTER	Add slopes in percentage format to section A-A.
C-5.1.3	PCC CURB AND GUTTER TYPE 1	No comments
C-5.1.4	PCC CURB AND GUTTER TYPE 2	No comments
C-5.1.8	ROADWAY SECTION INDUSTRIAL STREETS	Consider making the sidewalk width 6' when the sidewalk is against the back of curb. Include "2% MAX" label to indicate maximum sidewalk cross slope.
C-5.1.9	ROADWAY SECTION URBAN STREET	Consider making the sidewalk width 6' when the sidewalk is against the back of curb. Include "2% MAX" label to indicate maximum sidewalk cross slope
C-5.1.9.1	SPECIAL SECTION URBAN STREETS	Include dimensions for sidewalk width and curb width. Consider making the sidewalk width 6' when the sidewalk is against the back of curb. Include "2% MAX" label to indicate maximum sidewalk cross slope.
C-5.1.10	ROADWAY SECTION RURAL ROADS	No comments
C-5.2.1	SIDEWALK AND DRIVEWAY GENERAL NOTES	Add note: "9. PROPOSED SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%."
C-5.2.2	TYPE "A" SIDEWALK	Consider showing two directional ramps in detail instead of a single diagonal ramp. For consistency, show all maximum slopes in percentage format instead of ratio format. Consider making the sidewalk width 6' when the sidewalk is against the back of curb. Include "2% MAX" label to indicate maximum sidewalk cross slope. Include dimensions to show 5' as the minimum ramp width and 2' as the minimum offset distance for the detectable warning surface from the ramp opening.
C-5.2.3	P.C.C. DRIVEWAY APRON TYPE 1	For consistency, show all maximum slopes in percentage format instead of ratio format. Include "14% MAX" label to indicate maximum running slope on the driveway transition shown in section A-A. Add period following the word "approval" in note 3.
C-5.2.4	P.C.C. DRIVEWAY APRON TYPE 2	For consistency, show all maximum slopes in percentage format instead of ratio format. Label 3' width where "1:4 MAX" is shown in the elevation section, add separate "25% MAX." label for maximum slope.
C-5.2.5	AC DRIVEWAY APRON RURAL ROADS	No comments
C-5.2.6	P.C.C. DRIVEWAY APRON BYPASS	For consistency, show all maximum slopes in percentage format instead of ratio format.
C-5.3.1	CURB RAMP GENERAL NOTES	Add note: "12. PROPOSED SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%."

# ADA Transition Plan

FOR TRANSPORTATION FACILITIES

PREPARED FOR:  CONTRACT #1314-101  
 PREPARED BY: **Kimley»Horn**

Sheet	Description	Comments
C-5.3.2	PERPINDICULAR CURB RAMP - DIRECTIONAL	Show 5' X 5' landing area and note: "LANDING AREA 2% MAX SLOPE IN ANY DIRECTION". There is no need to show minimum flare slope percentage or minimum ramp running slope percentage, as ADA only specifies the maximum slope. Show maximum counter slope of 5%. Add a boundary showing the limits of pay. For consistency, show all maximum slopes in percentage format instead of ratio format.
C-5.3.3	PERPINDICULAR CURB RAMP - APEX	Show 5' X 5' landing area and note: "LANDING AREA 2% MAX SLOPE IN ANY DIRECTION". There is no need to show minimum flare slope percentage or minimum ramp running slope percentage, as ADA only specifies the maximum slope. Consider showing two directional ramps in detail instead of a single diagonal ramp. Show maximum counter slope of 5%. Add a boundary showing the limits of pay. For consistency, show all maximum slopes in percentage format instead of ratio format.
C-5.3.4	PARALLEL CURB RAMP - DIRECTIONAL	Where pedestrian access routes are contained within pedestrian street crossings, the grade (running slope) of the pedestrian access route shall be 5% maximum.  Where pedestrian access routes are contained within pedestrian street crossings without yield or stop control, the cross slope of the pedestrian access route shall be 5% maximum. Where pedestrian access routes are contained within midblock pedestrian street crossings, the cross slope of the pedestrian access route shall be permitted to equal the street or highway grade.
C-5.3.5	PARALLEL CURB RAMP - APEX	Show maximum counter slope of 5%. Show minimum ramp/sidewalk width of 5'. Consider showing two directional ramps in detail instead of a single diagonal ramp. Add a boundary showing the limits of pay. For consistency, show all maximum slopes in percentage format instead of ratio format.
C-5.3.6	RADIAL CURB RAMP	Show maximum counter slope of 5%. Show minimum 48" X 48" clear space at base of ramp. There is no need to show minimum ramp running slope percentage, as ADA only specifies the maximum slope. Add a boundary showing the limits of pay. For consistency, show all maximum slopes in percentage format instead of ratio format.
C-5.3.7	LINEAR CURB RAMP - OFFSET	Show maximum counter slope of 5%. There is no need to show minimum ramp running slope percentage, as ADA only specifies the maximum slope. Add a boundary showing the limits of pay. For consistency, show all maximum slopes in percentage format instead of ratio format.
C-5.3.8	LINEAR CURB RAMP - SINGLE ADJACENT	Show maximum counter slope of 5%. Show landing area that is 5' x 5' and has a maximum slope of 2% in any direction. Show dimension of 2' as the minimum width of the detectable warning surface. Add a boundary showing the limits of pay. For consistency, show all maximum slopes with label "MAX" and in percentage format instead of ratio format.
C-5.3.9	MID BLOCK CURB RAMP	Show limits of level landing area and show 2% maximum slope in any direction. Show maximum counter slope of 5%. Add a boundary showing the limits of pay. For consistency, show all maximum slopes with label "MAX" and in percentage format instead of ratio format.
C-5.3.10	P.C.C. RETAINING CURB	No comments



Sheet	Description	Comments
C-5.4.2	STREET SIGN INSTALLATION	Update sign offset dimension to be "5'-0" MIN.". Update sign offset dimension to be from the back of curb instead of from the face of curb.
C-5.4.3	CROSSWALK LEGEND	Add note: "4. CROSS SLOPES WITHIN CROSSWALKS SHALL NOT EXCEED 5%."
C-5.5.1	PARKING LOT REQUIREMENTS	Add separate detail showing requirements for for accessible parking, accessible van parking, striping, signing, and access aisles.
C-5.5.2	PARKING LOT REQUIREMENTS	Add separate detail showing requirements for for accessible parking, accessible van parking, striping, signing, and access aisles.

### 3.1.3.1. Accessible Pedestrian Signals (APS)

The 2009 MUTCD (Sections 4E.09 through 4E.13) details the application and placement of accessible pedestrian signals (APS). Carson City should consider installing APS at all new traffic signal installations where pedestrian signal equipment is included in the design. Once PROWAG is adopted, APS will be the standard for all new installations. For existing signalized intersections, Carson City should perform an engineering study at locations that have received citizen requests.

#### Recommended Action:

- Add references to the 2009 MUTCD (Sections 4E.09 through 4E.13) in the Carson City Standard Details for Public Works Construction.

### 3.1.4. Jump Around Carson (JAC)

The JAC ADA Policies and Procedures for Fixed-Route Service were reviewed. These policies and procedures provide reasonable accommodations for persons with disabilities. A copy of these Policies and Procedures is located in **Appendix G**.

#### Recommended Action:

- None.

### 3.1.5. JAC Assist Procedures

The JAC Assist ADA Complementary Paratransit Policies and Procedures, dated August 11, 2010, were reviewed for reasonable accommodation of persons with disabilities. The policies and procedures provide reasonable accommodation for persons with disabilities. However, it was noted that the user is required to fill out an application on the JAC Assist website. The web link on the policy document directs the user to the main JAC website. To get to the application, the user then needs to locate the link to the JAC Assist website on the toolbar along the left side of the page. It would be helpful if the link on the policy document provided direct access to the JAC Assist site. A copy of the JAC Assist Procedures is located in **Appendix H**.

#### Recommended Action:

- Update the link on the JAC Assist Procedures document to link directly to the JAC Assist application.



### 3.1.6. Maintenance versus Alternations

The DOJ has issued a briefing memorandum on clarification of maintenance versus projects. Information contained in the briefing memorandum is below, and a copy of the briefing memorandum along with additional information is included in **Appendix I**.

*The Americans with Disabilities Act of 1990 (ADA) is a civil rights statute prohibiting discrimination against persons with disabilities in all aspects of life, including transportation, based on regulations promulgated by the United States Department of Justice (DOJ). DOJ's regulations require accessible planning, design, and construction to integrate people with disabilities into mainstream society. Further, these laws require that public entities responsible for operating and maintaining the public rights-of-way do not discriminate in their programs and activities against persons with disabilities. The Federal Highway Administration's (FHWA's) ADA program implements the DOJ regulations through delegated authority to ensure that pedestrians with disabilities have the opportunity to use the transportation system's pedestrian facilities in an accessible and safe manner.*

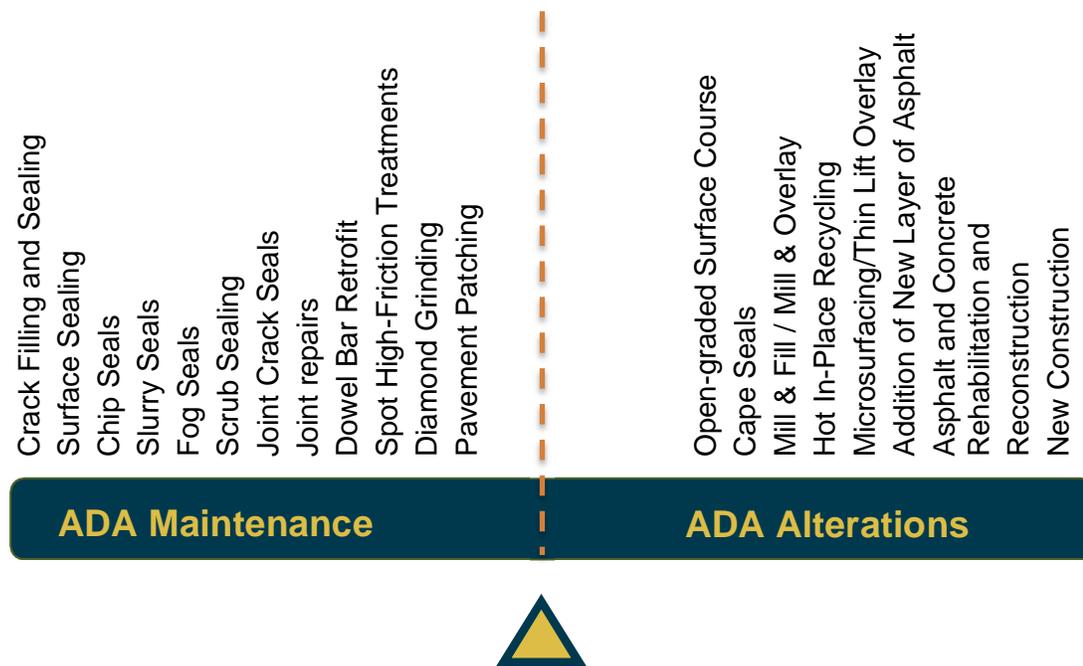
*FHWA and DOJ met in March 2012 and March 2013 to clarify guidance on the ADA's requirements for constructing curb ramps on resurfacing projects. Projects deemed to be alterations must include curb ramps within the scope of the project.*

*This clarification provides a single Federal policy that identifies specific asphalt and concrete-pavement repair treatments that are considered to be alterations – requiring installation of curb ramps within the scope of the project – and those that are considered to be maintenance, which do not require curb ramps at the time of the improvement. **Figure 1** provides a summary of the types of projects that fall within maintenance versus alterations.*

*This approach clearly identifies the types of structural treatments that both DOJ and FHWA agree require curb ramps (when there is a pedestrian walkway with a prepared surface for pedestrian use and a curb, elevation, or other barrier between the street and the walkway) and furthers the goal of the ADA to provide increased accessibility to the public right-of-way for persons with disabilities. This single Federal policy will provide for increased consistency and improved enforcement.*



**Figure 1 – Maintenance versus Alteration Projects**



Source: DOJ Briefing Memorandum on Maintenance versus Alteration Projects

**Recommended Actions:**

- Disseminate this clarification with regard to when curb ramps are required to Carson City Public Works employees.
- Establish a plan to implement this Federal policy as soon as practical.

**3.1.7. FHWA Guidance on Closing Pedestrian Crossings**

The FHWA has provided guidance on closing pedestrian crossings. If an engineering study (performed by Carson City and not included in the scope of this Transition Plan) determines the crossing is not safe for any user, the crossing should be closed by completing the following:

- A physical barrier is required to close an intersection. FHWA has determined that a strip of grass between the sidewalk and the curb is acceptable as a physical barrier.
- A sign should be used to communicate the closure.
- The agency wishing to close certain intersections should have a reasonable and consistent policy on how to do so written in their Transition Plan or as a standalone document.

**Recommended Action:**

- Develop and implement a policy to close pedestrian crossings where safety is a concern as established by an engineering study using the requirements noted above. (e.g. existing sidewalk leading up to the curb in the direction of the crossing or existing curb ramp or crosswalk currently serving the crossing at unsignalized intersections).



## 3.2. Transportation Facilities Review

The transportation facilities evaluation process was accomplished using field crews equipped with measuring devices and Global Positioning System (GPS) based data collection forms. The evaluations identified physical barriers in Carson City transportation facilities based on the 2010 ADA Standards and PROWAG. Although, the PROWAG guidelines have not been formally adopted, the Carson City transportation facilities review was conducted with these requirements, as it is anticipated PROWAG will be enforceable in the near future. Detailed measurements of the existing conditions, planning-level recommendations for removing the physical barriers, and photographs of each facility were recorded during the evaluation process and included in the facility reports. Field crews were also required to note if the specific facility was in close proximity to a significant pedestrian attractor (e.g., government office, medical facility, school, etc.). This additional information assisted the Consultant team and Carson City staff in prioritizing barriers for removal. All data collected will be provided to Carson City for inclusion in their existing Geographic Information Systems (GIS) database. The following facilities were evaluated:

- Signalized intersections;
- Sidewalk corridors; and
- Transit stops.

Summary reports were developed for each facility type to document the findings of the evaluations. The reports identify the ADA compliance status of each facility including the following elements:

- Listing of facilities that are in compliance with current ADA standards;
- Listing of facilities that are not in compliance with current ADA requirements;
- Recommended actions to resolve non-compliance issues for each facility;
- Prioritized list of improvements using criterion developed by the Consultant and Carson City staff;
- "Cost report" that assigns conceptual budget estimates to each recommended action; and
- Photolog summary for signalized and unsignalized intersections and issues along sidewalk corridors (sidewalk photographs provided in the GIS database only).

Copies of the evaluation reports are provided in the following Appendices:

- Signalized Intersections – **Appendix J**
- Sidewalk Corridors (Including Unsignalized Intersections and Driveways) – **Appendix K**
- Transit Stops – **Appendix L**

### 3.2.1. Signalized Intersections

Twenty-six (26) signalized intersections within Carson City were identified and evaluated as part of the Transition Plan. The signalized intersections that were included in the evaluations are illustrated on **Figure 2**.

Signalized intersection evaluations documented the conditions and measurements along the pedestrian street crossings, curb ramps and adjacent sidewalk, and pedestrian signal equipment and adjacent clear spaces. Common curb ramp issues included excessive curb ramp running and cross slopes, excessive flare cross slopes, excessive ramp counter slope, non-existent or non-compliant detectable warning surfaces, excessive landing area running and cross slopes,

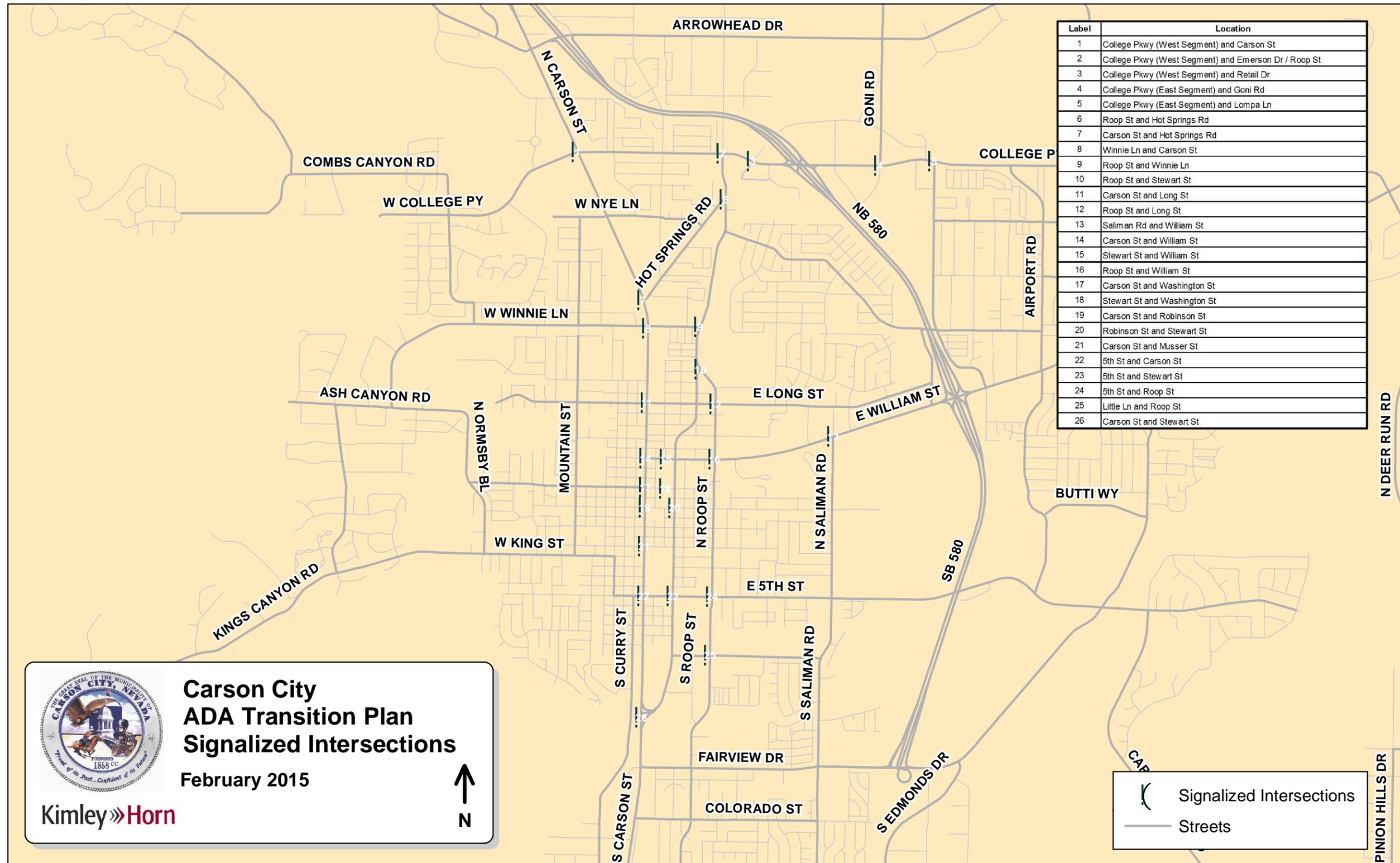


and ponding in the curb ramp run, landing, flares, or base of the ramp. **Table 2** provides a summary of curb ramp issues.

**Table 2 – Summary of Curb Ramp Issues at Signalized Intersections**

Ramp Issue	Number		Percent
	Evaluated	Non-Compliant	Non-Compliant
Ramp counter slope > 5%	137	98	71.5%
Obstruction	137	88	64.2%
No color contrast	137	75	54.7%
Ponding	137	74	54.0%
Ramp running slope > 8.3%	137	60	43.8%
Flare cross slope > 10%	79	29	36.7%
No landing	137	43	31.4%
Landing running slope > 2%	91	28	30.8%
Landing cross slope > 2%	91	26	28.6%
Ramp cross slope > 2%	137	36	26.3%
No texture contrast	137	26	19.0%
Flush transition	137	23	16.8%
Traversable sides	58	7	12.1%
No 48" crosswalk extension	98	11	11.2%
Ramp width < 48"	137	10	7.3%
Curbed sides < 90°	58	3	5.2%
No ramp where ramp is needed	144	6	4.2%
Ramp does not land in crosswalk	137	2	1.5%

Figure 2 – Signalized Intersections Inventory Locations





The majority of signalized intersections inventoried contained pedestrian heads and pedestrian push buttons. Common push button issues included excessive clear floor space running slope and cross slope, missing or non-accessible push button clear floor space, and push buttons mounted too high. **Table 3** provides a summary of observed push button issues.

**Table 3 – Summary of Push Button Issues**

Push Button Issue	Number		Percent
	Evaluated	Non-Compliant	Non-Compliant
CFS cross slope > 2%	118	71	60.2%
CFS running slope > 2%	118	49	41.5%
No clear floor space (CFS) or no access to clear floor space	187	69	36.9%
Push button height > 48"	187	30	16.0%
Push button offset from crosswalk > 5'	187	20	10.7%
Push button offset from curb > 10'	187	8	4.3%
Missing pedestrian head where pedestrian head is needed	235	4	1.7%
Missing push button where push button is needed	235	3	1.3%
Push button orientation not parallel	187	1	0.5%
Push button diameter not 2"	187	1	0.5%

### 3.2.2. Sidewalk Corridors

Approximately thirty (30) miles of arterial sidewalks was included in the sidewalk inventory. The specific arterial sidewalks were selected based on pedestrian activity along the corridor and proximity to major traffic generators. Sidewalks along arterials that were recently reconstructed and/or planned for future reconstruction were not included in the analysis. Future phases of the ADA Transition Plan are expected to complete evaluations for the remainder of the arterial system followed by the collector and local residential streets. The locations of the sidewalk inventory are shown on **Figure 3**.

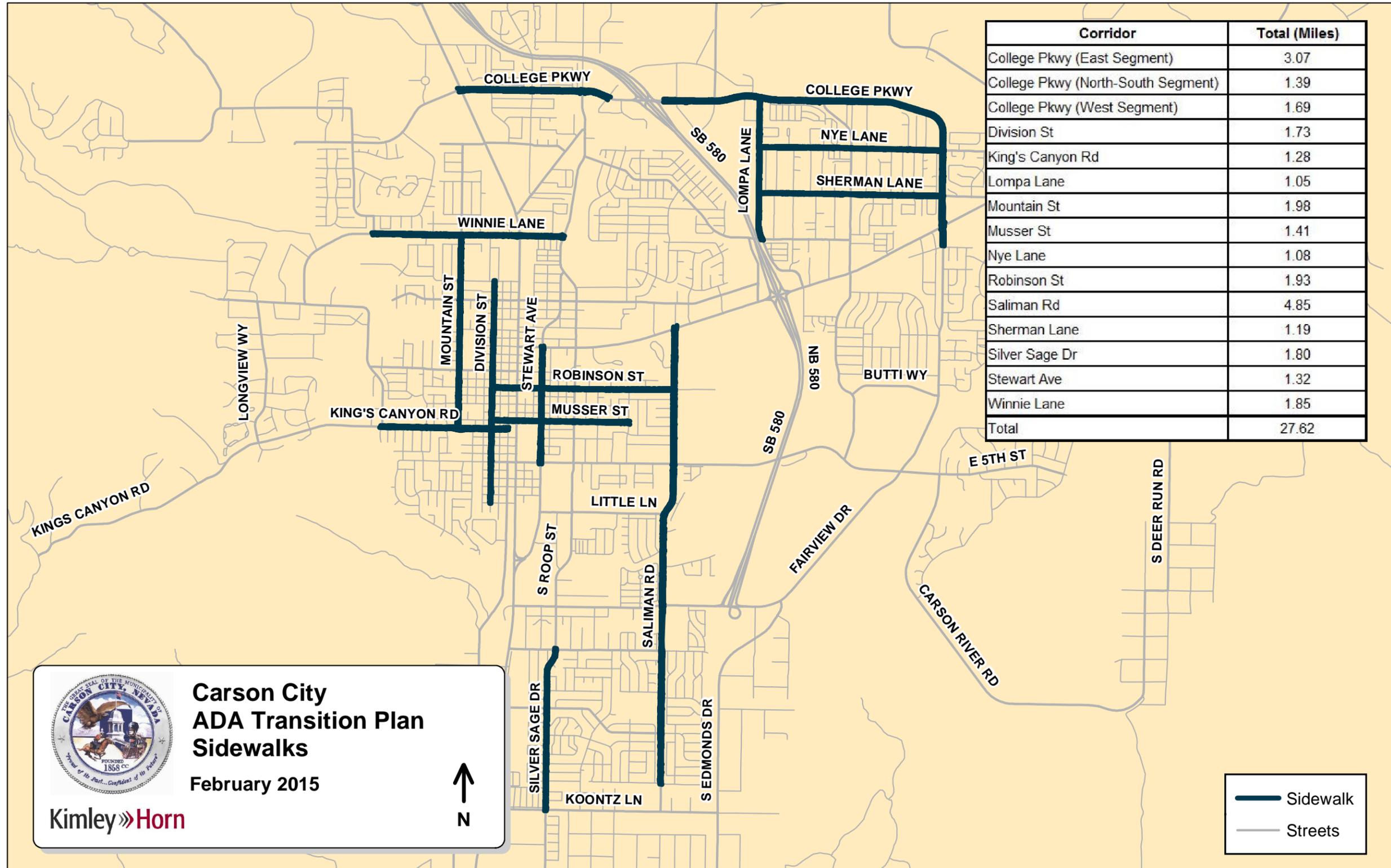
Sidewalk evaluations documented the conditions and measurements along the pedestrian path of travel including the sidewalk, pedestrian crossings at cross streets and pedestrian crossings at driveways. Common sidewalk issues included excessive sidewalk cross slopes, vertical surface discontinuities that caused excessive level changes, permanent obstructions in the sidewalk such as power poles or utilities, temporary obstructions in the sidewalk or path of travel such as weeds and low hanging tree branches, and missing sidewalk segments. Where excessive foliage overgrowth was present, field crews attempted to determine the condition of the underlying sidewalk. Where possible, the condition of the underlying sidewalk was also recorded; however, Carson City may find additional damage to the sidewalk once the temporary obstruction is removed.



Existing curb ramps at unsignalized intersections and driveways have issues similar to those at signalized intersections, and a summary of the curb ramp issues at unsignalized intersections is located in **Table 4**. Non-compliant curb ramps and pedestrian paths of travel along street crossings at unsignalized intersections and driveway crossings along the project corridor were recommended to be removed and replaced. Where existing sidewalk leads up to the curb at an intersection, both parallel and perpendicular to the project corridor, curb ramps were recommended to be installed. Where existing sidewalk leads up to the curb at a driveway, parallel to the project corridor, curb ramps were recommended to be installed.

The ADA of 1990, Section 35.150, Existing Facilities, requires that the Transition Plan include a schedule for providing curb ramps or other sloped areas at existing pedestrian walkways, which applies to all facilities constructed prior to 1992. For any sidewalk installations constructed from 1992 to March 15, 2012, the curb ramps should have been installed as part of the sidewalk construction project per the 1991 Standards for Accessible Design, Section 4.7 Curb Ramp, which states, “curb ramps complying with 4.7 shall be provided wherever an accessible route crosses a curb.” For sidewalk installations constructed on or after March 15, 2012 similar guidance is provided in the 2010 Standards for Accessible Design, Section 35.151 of 28 CFR Part 35, New construction and alterations, which states, “newly constructed or altered street level pedestrian walkways must contain curb ramps or other sloped area at any intersection having curb or other sloped area at intersections to streets, roads, or highways.”

Figure 3 – Sidewalk Corridor Facility Locations



**Carson City  
 ADA Transition Plan  
 Sidewalks**  
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— Sidewalk  
 — Streets



**Table 4 – Summary of Curb Ramp Issues (Unsignalized Intersections)**

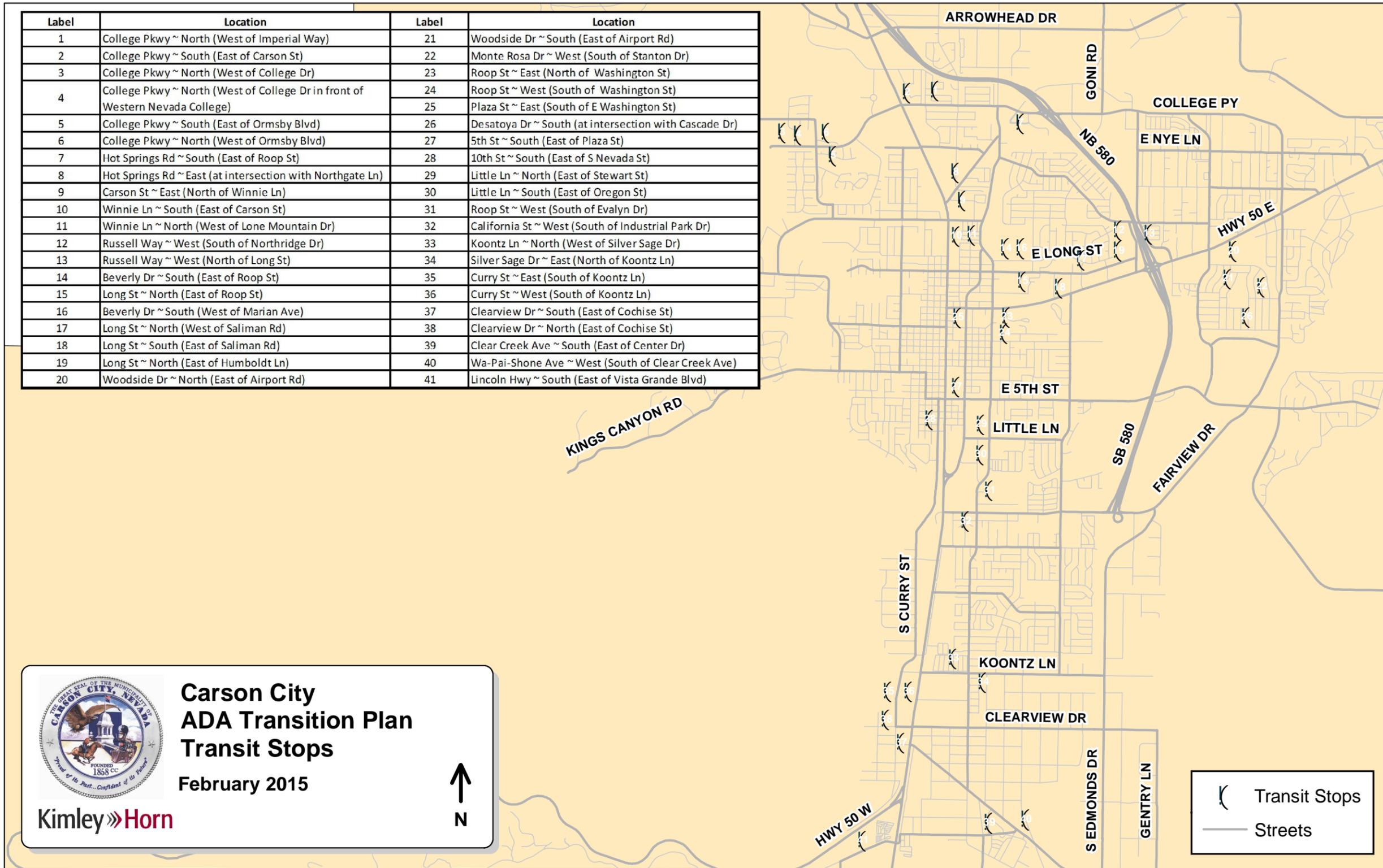
Ramp Issue	Number		Percent
	Evaluated	Non-Compliant	Non-Compliant
No color contrast	447	312	69.8%
Flare cross slope > 10%	260	167	64.2%
Ramp counter slope > 5%	447	239	53.5%
Ponding	447	231	51.7%
No Landing	447	197	44.1%
Landing running slope > 2%	245	103	42.0%
Ramp running slope > 8.3%	447	182	40.7%
No ramp where ramp is needed	916	318	34.7%
Landing cross slope > 2%	245	85	34.7%
Ramp cross slope > 2%	447	150	33.6%
Obstruction	447	143	32.0%
No texture contrast	447	94	21.0%
Ramp width < 48"	447	90	20.1%
Flush Transition	447	36	8.1%
Traversable sides	187	10	5.3%
Curbed sides < 90°	187	6	3.2%
Ramp does not land in crosswalk	447	13	2.9%
No 48" crosswalk extension	407	9	2.2%

### 3.2.3. Transit Stops

Forty-one (41) transit stops within Carson City were identified and evaluated as part of this project. Transit stops were chosen for evaluation based on transit ridership data, snow removal priority, and whether or not a shelter was present. The transit stops that were evaluated are depicted on **Figure 4**.

Transit stop evaluations documented the conditions and measurements within the boarding areas, adjacent sidewalk network, transit stop sidewalk areas, and transit stop amenities. A majority of the transit stops had very few issues, as displayed in **Table 5**. Common transit stop issues included boarding areas less than 96" in length, boarding area running slope greater than 2%, non-flush transition at the connection to the curb, and non-compliant transit stop signage. As part of the evaluations, transit stop sidewalk in the vicinity of the transit stop was evaluated. This transit stop sidewalk was an area that was exclusive of the boarding area and adjacent sidewalk network. Where a transit stop sidewalk or an adjacent sidewalk network existed and was evaluated, relevant information is included in the evaluation forms.

Figure 4 – Transit Stop Facility Locations




**Carson City  
 ADA Transition Plan  
 Transit Stops**  
 February 2015

**Kimley»Horn**





**Table 5 – Summary of Transit Stop Issues**

Transit Stop Issue	Number		Percent
	Evaluated	Non-Compliant	Non-Compliant
<b>Boarding Area Issues</b>			
Boarding area running slope is greater than 2%	39	22	56.4%
Transition at connection to the curb is greater than 0.25"	39	22	56.4%
Boarding area length is less than 96"	39	17	43.6%
Heaving/Sinking/Cracking present in the boarding area	39	7	17.9%
Permanent obstruction (>0.25") in boarding area	39	3	7.7%
Boarding area is missing a connection to the street or sidewalk network	39	2	5.1%
Boarding area does not exist	41	2	4.9%
Boarding area width is less than 60"	39	1	2.6%
Temporary obstruction (>0.25") in boarding area	39	1	2.6%
Ponding present in the boarding area	39	0	0.0%
<b>Transit Stop Amenity Issues</b>			
Transit stop signage is non-compliant	41	41	100.0%
Shelter clear space cross slope is greater than 2%	15	3	20.0%
Shelter clear space running slope is greater than 2%	15	3	20.0%
No transit stop signage	41	0	0.0%
No clear space adjacent to stand-alone bench	16	0	0.0%
Stand-alone bench clear space length is less than 48"	16	0	0.0%
Stand-alone bench clear space width is less than 30"	16	0	0.0%
Stand-alone bench clear space cross slope is greater than 2%	16	0	0.0%
Stand-alone bench clear space running slope is greater than 2%	16	0	0.0%
No clear space under shelter	15	0	0.0%
Shelter clear space length is less than 48"	15	0	0.0%
Shelter clear space width is less than 30"	15	0	0.0%
Shelter opening clear width is less than 32"	15	0	0.0%

### 3.3. Prioritization

The following sections outline the prioritization factors and results of the prioritization for signalized intersections, sidewalks, unsignalized intersections, and transit stops. Each facility

type has a different set of parameters to establish the prioritization for improvements. These prioritization factors were taken into consideration when developing the implementation plan for the proposed improvements.

### 3.3.1. Prioritization Factors for Signalized Intersections

Signalized intersections were prioritized on a 13-point scale. The 13-point scale is described in **Table 6**. This prioritization methodology has been developed by the Consultant to aid Carson City in determining which signalized intersections should be prioritized for improvements over other signalized intersections based on the severity of the non-compliance with ADA.

**Table 6 – Prioritization Factors for Signalized Intersections**

Priority	Criteria
1	Complaint filed on curb ramp or intersection or known accident/injury at site
2	Existing curb ramp with any of the following conditions: <ul style="list-style-type: none"> <li>▪ Running slope &gt; 12%</li> <li>▪ Cross slope &gt; 7%</li> <li>▪ Obstruction to or in the ramp or landing</li> <li>▪ Level change &gt; ¼” at the bottom of the curb ramp</li> <li>▪ No detectable warnings</li> </ul> AND within a couple of blocks of a hospital, retirement facility, medical facility, parking garage, major employer, disability service provider, event facility, bus/transit stop, school, government facility, public facility, park, library, or church, based on field observations.
3	<ul style="list-style-type: none"> <li>▪ No curb ramp where sidewalk or pedestrian path exists</li> </ul> AND within a couple of blocks of a hospital, retirement facility, medical facility, parking garage, major employer, disability service provider, event facility, bus/transit stop, school, government facility, public facility, park, library, or church, based on field observations.
4	No curb ramps but striped crosswalk exists
5	Existing curb ramp with any of the following conditions: <ul style="list-style-type: none"> <li>▪ Running slope &gt; 12%</li> <li>▪ Cross slope &gt; 7%</li> <li>▪ Obstruction to or in the ramp or landing</li> <li>▪ Level change &gt; ¼” at the bottom of the curb ramp</li> <li>▪ No detectable warnings</li> </ul> AND NOT within a couple of blocks of a hospital, retirement facility, medical facility, parking garage, major employer, disability service provider, event facility, bus/transit stop, school, government facility, public facility, park, library, or church, based on field observations.
6	<ul style="list-style-type: none"> <li>▪ No curb ramp where sidewalk or pedestrian path exists</li> </ul> AND NOT within a couple of blocks of a hospital, retirement facility, medical facility, parking garage, major employer, disability service provider, event facility, bus/transit stop, school, government facility, public facility, park, library, or church, based on field observations.
7	One curb ramp per corner and another is needed to serve the other crossing direction



Priority	Criteria
8	Existing curb ramp with any of the following conditions: <ul style="list-style-type: none"> <li>▪ Cross slope &gt; 5%</li> <li>▪ Width &lt; 36 inches</li> <li>▪ Median/island crossings that are inaccessible</li> </ul>
9	Existing curb ramp with either running slope between 8.3% and 11.9% or insufficient landing
10	Existing diagonal curb ramp without a 48" extension in the crosswalk
11	Existing pedestrian push button is not accessible from the sidewalk and/or ramp
12	Existing curb ramp with returned curbs where pedestrian travel across the curb is not protected
13	All other intersections not prioritized above

**Table 7** provides a summary of self-evaluation findings for signalized intersections by priority. As shown in **Table 7**, all of the signals that were evaluated fell within priority 2 and priority 5. The difference between these two priorities is that a priority 2 is a signal that is located near a pedestrian generator such as a hospital, school, transit stop, or government building.

**Table 7 – Self-Evaluation Findings for Signalized Intersections**

Priority	Number of Intersections
1 (high)	-
2	23
3	-
4	-
5	3
6	-
7	-
8	-
9	-
10	-
11	-
12	-
13 (low)	-
<b>Total</b>	<b>26</b>

### 3.3.2. Prioritization Factors for Sidewalk Corridors

Sidewalk corridors were prioritized on a 3-point scale and were given a removal priority of either “High”, “Medium”, or “Low” based on the severity of the non-compliance. **Table 8** summarizes the prioritization factors for sidewalks, and **Table 9** provides the length of sidewalk and priority for improvement.



**Table 8 – Prioritization Factors for Sidewalk Corridors**

Issue	Priority			
	High	Medium	Low	Compliant
Cross slope of sidewalk is greater than 2%	Value > 3.5	$3.5 \geq \text{Value} > 2.0$		Value $\leq 2.0$
Width of sidewalk is less than 48"	Value $\leq 36.0$	$36.0 < \text{Value} \leq 42.0$	$42.0 < \text{Value} < 48.0$	Value $\geq 48.0$
Obstruction present along sidewalk	Obstruction - Permanent	Obstruction - Temporary		None
Heaving, Sinking, or Cracking present on sidewalk	Heaving Sinking Cracking			None
Ponding on sidewalk		Ponding		None
Missing Sidewalk			Missing Sidewalk	
Cross street cross slope is greater than 2%	Value > 6.0	$6.0 \geq \text{Value} \geq 4.0$	$4.0 > \text{Value} > 2.0$	Value $\leq 2.0$
Cross street running slope is greater than 5%	Value > 7.0	$7.0 \geq \text{Value} \geq 6.0$	$6.0 > \text{Value} > 5.0$	Value $\leq 5.0$
Driveway sidewalk width is less than 48"	Value $\leq 46.0$	$46.0 < \text{Value} < 48.0$		Value $\geq 48.0$
Driveway (or sidewalk if applicable) cross slope is greater than 2%	Value > 6.0	$6.0 \geq \text{Value} \geq 4.0$	$4.0 > \text{Value} > 2.0$	Value $\leq 2.0$
Driveway (or sidewalk if applicable) condition is poor or poor dangerous	Poor-Dangerous (elevation change greater than ½ inch or gaps greater than 1 inch)	Poor (elevation change between ¼ inch and ½ inch or gaps between ½ inch and 1 inch)		Good



**Table 9 – Summary of Sidewalk Issues**

Line Type	Length (miles) by Priority				
	1 (high)	2 (medium)	3 (low)	Compliant	Total
Sidewalks	4.16	6.79	0.67	3.25	14.87
Sidewalk Issues (including missing sidewalk)	4.15	1.34	3.99	-	9.48
Driveways	2.27	0.60	0.21	0.18	3.26
Cross Streets	0.09	0.19	0.90	2.82	4.00
<b>Total</b>	<b>10.68</b>	<b>8.92</b>	<b>5.77</b>	<b>6.24</b>	<b>31.60</b>

Unsignalized intersections were also evaluated along each sidewalk corridor. The same 13-point scale for signalized intersections was utilized to prioritize unsignalized intersections. **Table 10** provides a summary of the prioritization for unsignalized intersections.

**Table 10 – Self-Evaluation Findings for Unsignalized Intersections**

Priority	Number of Intersections
1 (high)	-
2	112
3	23
4	7
5	43
6	24
7	-
8	1
9	4
10	-
11	-
12	-
13 (low)	23
<b>Total</b>	<b>237</b>

### 3.3.3. Prioritization Factors for Transit Stops

Transit stops were prioritized based on a four-point scale based on the severity of the non-compliance. **Table 11** provides a summary of the prioritization factors for transit stops and the results of the self-evaluation are illustrated in **Table 12**.



**Table 11 – Prioritization Factors for Transit Stops**

Priority	Criteria
1	<ul style="list-style-type: none"> <li>▪ No connection from transit stop to adjacent sidewalk</li> <li>▪ Transitions at connections between the boarding area, transit stop sidewalk, and/or sidewalk network is greater than 0.25"</li> <li>▪ Heaving/sinking/cracking in the boarding area, transit stop sidewalk, or sidewalk network that connects to the transit stop with level changes greater than 0.25", or gaps over 0.5"</li> <li>▪ Boarding area does not exist</li> </ul>
2	<ul style="list-style-type: none"> <li>▪ Boarding area length less than 48"</li> <li>▪ Boarding area width less than 36"</li> <li>▪ Boarding area running slope exceeds 5%</li> <li>▪ Permanent obstruction (&gt;0.25") in boarding area, transit stop sidewalk, or sidewalk network</li> <li>▪ Transition at connection to the curb is greater than 0.25"</li> <li>▪ Clear space width under shelter or adjacent to a stand-alone bench is less than 30"</li> </ul>
3	<ul style="list-style-type: none"> <li>▪ Boarding area cross slope is greater than 2% over the street grade</li> <li>▪ Sidewalk network or transit stop sidewalk cross slope is over 3.5%</li> <li>▪ No clear space adjacent to bench under shelter</li> <li>▪ Clear space cross slope under shelter or adjacent to a stand-alone bench is greater than 3.5%;</li> <li>▪ Clear space running slope under shelter or adjacent to a stand-alone bench is greater than 3.5%; Clear space length under shelter or adjacent to a stand-alone bench is less than 42"</li> <li>▪ Shelter opening clear width is less than 30"</li> </ul>
4	<ul style="list-style-type: none"> <li>▪ Boarding area length is 48" – 76.9"</li> <li>▪ Boarding area width is 36" – 47.9"</li> <li>▪ Boarding area running slope is 3.1% - 5%</li> <li>▪ Ponding in the boarding area, transit stop sidewalk, or sidewalk network</li> <li>▪ Temporary obstruction (&gt;0.25") in boarding area, transit stop sidewalk, or sidewalk network</li> <li>▪ Sidewalk network connecting to the transit stop is 46.1" – 47.9" wide</li> <li>▪ Sidewalk network cross slope is between 2.1% to 3.5%</li> <li>▪ No transit stop signage</li> <li>▪ Non-compliant transit stop signage</li> <li>▪ No clear space adjacent to stand-alone bench</li> <li>▪ Clear space cross slope under shelter or adjacent to a stand-alone bench is 2.1% - 3.5%</li> <li>▪ Clear space running slope under shelter or adjacent to a stand-alone bench is 2.1% - 3.5%</li> <li>▪ Clear space length under shelter or adjacent to a stand-alone bench is 42" – 45.9"</li> <li>▪ Shelter opening clear width is between 30" and 32"</li> </ul>

**Table 12 – Self-Evaluation Findings for Transit Stops**

Priority	Number of Transit Stops
1 (high)	13
2	15
3	-
4	13
5 (low)	-
<b>Total</b>	<b>41</b>



## 4. FACILITY COSTS

### 4.1. Facilities Cost Projection Overview

In order to identify funding sources and develop a reasonable implementation schedule, cost projection summaries for the initial study areas were developed for each facility type by priority. To develop these summaries, recent bid tabulations from Carson City and Nevada Department of Transportation construction projects, along with the project team’s experience with similar types of projects, were the basis for the unit prices used to calculate the improvement costs. A percentage (15%) was added to the improvement costs for engineering and surveying. Similarly, a contingency (20%) was added to the subtotal to account for increases in unit prices in the future. **Table 13** provides a summary of the estimated costs to bring each of the facility types up to compliance.

**Table 13 – Summary of Estimated Costs to Bring Each Facility Type to Compliance**

Facility Type	Estimated Costs to Bring to Compliance
Signalized Intersections	\$1,460,000
Sidewalk Corridors	\$13,235,000
Transit Stops	\$132,000
<b>Total</b>	<b>\$14,827,000</b>

### 4.2. Implementation Schedule

**Table 14** details the barrier removal costs and proposed implementation schedule by facility type for all facilities evaluated as part of this project. In addition, this plan includes a budget to conduct additional self-evaluations on transportation facilities, as well as update the ADA Transition Plan based on the additional self-evaluation findings. This 15-year plan will serve as the implementation schedule for the Transition Plan. Carson City reserves the right to change the barrier removal priorities on an ongoing basis in order to allow flexibility in accommodating community requests, petitions for reasonable modifications from persons with disabilities, and changes in Carson City programs.

It is the intent of the Carson City to have its ADA Coordinator work together with department heads and budget staff to determine the funding sources for barrier removal projects. Once funding is identified, the ADA Coordinator will coordinate the placement of projects into the Capital Improvement Program to be addressed on a fiscal year basis.



**Table 14 – Implementation Schedule**

Facility Type	Estimated Cost	Implementation Schedule (years)	Approximate Annual Budget
Signalized Intersections	\$1,460,000	5 years	\$292,000
Sidewalk Corridors *	\$13,235,000	15 years	\$882,333
Transit Stops	\$132,000	5 years	\$26,400
Self-Evaluation and ADA Transition Plan Updates	\$3,000,000	15 years	\$200,000
<b>Total</b>	<b>\$17,827,000</b>		
<b>Total Annual Budget (years 1-5)</b>			<b>\$1,400,733</b>
<b>Total Annual Budget (years 6-10)</b>			<b>\$1,082,334</b>
<b>Total Annual Budget (years 11-15)</b>			<b>\$1,082,334</b>

\* Includes unsignalized intersections and driveways along the corridor.



## 5. FUNDING OPPORTUNITIES

As can be seen in the results from the self-evaluation, there is a significant need for barrier removal in Carson City. As such, normal funding mechanisms may not be able to address all of the needs for barrier removal within Carson City. Over the past several years, Carson City has been spending approximately \$1,000,000 per year on ADA improvements. **Table 15** provides a summary of current funding sources and approximate annual amounts. It is important to note that funding varies from year to year, and the values outlined in **Table 15** are approximate annual amounts.

**Table 15 – Funding Devoted to Carson City ADA Improvements in Recent Years**

Funding Source	Approximate Annual Amount
CDBG – Community Development Block Grants	\$200,000
TAP – Transportation Alternative Funds	\$600,000
Local Street Funds	\$200,000
<b>Total</b>	<b>\$1,000,000</b>

There are several alternative funding sources available for Carson City to address these issues, including federal and state funding, local funding, and private funding. The following sections detail some different funding source options.

### 5.1. Federal and State Funding

**Table 16** depicts the various types of federal and state funding available for Carson City to apply for funding for various improvements. The following agencies and funding options are represented in the chart.

- NHS - National Highway System
- STP - Surface Transportation Program
- HSIP - Highway Safety Improvement Program
- TAP - Transportation Alternatives Program
- RTP - Recreational Trails Program
- FTA - Federal Transit Capital, Urban & Rural Funds
- 402 - State and Community Traffic Safety Program
- PLA - State/Metropolitan Planning Funds **(cannot be used for construction)**
- TCSP - Transportation and Community and System Preservation Program
- FLH - Federal Lands Highways Program
- SRTS - Safe Routes to School (Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21) now under TAP)

The majority of these programs are competitive type grants; therefore, Carson City is not guaranteed to receive these funds. It will be important for Carson City to track these programs in order to apply for the funds.

**Table 16 – Funding Opportunities**

Activity	NHS	STP	HSIP	TAP	RTP	FTA	402	PLA *	TCSP	FLH	SRTS
Pedestrian plan		X	X					X	X		
Paved shoulders	X	X	X	X					X	X	
Shared-use path/trail	X	X	X	X	X				X	X	X
Recreational trail					X					X	
Spot improvement program		X	X	X					X		X
Maps		X		X			X		X		X
Trail/highway intersection	X	X	X	X	X				X	X	X
Sidewalks, new or retrofit	X	X	X	X		X			X	X	X
Crosswalks, new or retrofit	X	X	X	X		X			X	X	X
Signal improvements	X	X	X	X					X		X
Curb cuts and ramps	X	X	X	X					X		X
Traffic calming		X	X						X		X
Safety brochure/book		X		X			X		X		X
Training	X	X	X	X	X		X		X		X

\* Cannot be used for construction.

## 5.2. Local Funding

There are several options for local funding for Carson City to consider. They include:

- General fund (sales tax and bond issue)
- Allocation of annual departmental budgets – requests for larger share to address needs in a more timely fashion
- Maintenance funds
- Special taxing districts
  - Tax Increment Financing District (TIF) – A TIF allows cities to create special districts and to make public improvements within those districts that will generate private-sector development. During the development period, the tax base is frozen at the predevelopment level. Property taxes continue to be paid, but taxes derived from increases in assessed values (the tax increment) resulting from new development either go into a special fund created to retire bonds issued to originate the development, or leverage future growth in the district.
- Community Improvement District (CID)
  - A geographically defined district in which commercial property owners vote to impose a self-tax. Funds are then collected by the taxing authority and given to a board of directors elected by the property owners.



- Tax Allocation District (TAD)
  - A defined area where real estate property tax monies gathered above a certain threshold for a certain period of time (typically 25 years) to be used a specified improvement. The funds raised from a TAD are placed in a tax-free bond (finance) where the money can continue to grow. These improvements are typically for revitalization and especially to complete redevelopment efforts.
- Sidewalk or Access Improvement Fee
- Transportation User Fee
- Scheduled/Funded CIP projects that are funded through bonds and sales tax.
- Community Development Block Grants (CDBG) – identified elements in alignment with priorities that have been adopted by the City.

### 5.3. Private Funding

Private funding may include local and national foundations, endowments, private development, and private individuals. While obtaining private funding to provide improvements along entire corridors might be difficult, it is important for Carson City to require private developers to improve pedestrian facilities to current ADA requirements, whether it by new development or redevelopment of an existing property.



## 6. NEXT STEPS

The purpose of this document is to provide an Americans with Disabilities Act (ADA) Transition Plan for Transportation Facilities within Carson City, Nevada. As part of this project, transportation related policies and procedures were reviewed for compliance with ADA guidelines. In addition to conducting a review of transportation related policies and procedures, a self-evaluation was conducted on the following facilities:

- 26 signalized intersections;
- approximately 30 miles of sidewalk and all unsignalized intersections and driveways along the sidewalk corridors; and
- 41 transit stops.

The recommended improvements were prioritized and an implementation plan was developed to provide guidance for Carson City improvement projects in the coming years. Public outreach was conducted as part of the project to aid in the development of the plan.

This Transition Plan is focused on a portion of Carson City's transportation facilities, and is not intended to be a comprehensive ADA Transition Plan for all of Carson City's public facilities (parks; buildings; the remaining transportation facilities; and other program accessibility guidelines, standards, and resources throughout Carson City). As funding becomes available, additional program, service, activity, and facility evaluations could be completed to provide a comprehensive Transition Plan for Carson City. A comprehensive Transition Plan for Carson City is recommended to include all of the physical and programmatic barriers including:

- Physical Barriers
  - Parking
  - Path of travel to, throughout and between buildings and amenities
  - Doors
  - Service counters
  - Restrooms
  - Drinking fountains
  - Public telephones
- Programmatic Barriers
  - Building signage
  - Customer communication and interaction
  - Access to public telephones
  - Emergency notifications, alarms, visible signals
  - Participation opportunities for events sponsored by Carson City