



INTRODUCTION

The Regional Transportation Commission of Southern Nevada (RTC) is both the transit authority and the Metropolitan Planning Organization for Clark County, Nevada. The RTC is responsible for identifying challenges and solutions to the region's transportation issues. RTC's goals include promoting sustainability, improved air quality, enhanced mobility, and increased quality of life in the region.

1.1 BACKGROUND

Purpose

As the regional transportation network in Southern Nevada becomes more congested, additional transportation capacity must be provided. This capacity needs to be added in a way that is safe and efficient for the public and also sustainable for the region. The RTC recognizes the need for a multimodal approach to capacity enhancements. With the help of its partner jurisdictional agencies, the RTC has made a number of significant efforts to improve alternative transportation options.

Along with enhancements, retrofitting existing streets has become a major priority in Southern Nevada. There is a growing recognition that street design has focused on automobile travel while not providing amenities for bicycles and pedestrians. As non-motorized modes of travel become increasingly popular, the need to redesign Southern Nevada streets is apparent.

Enhancements to the multimodal network must be done in a balanced and appropriate manner which takes into consideration local needs related to safety, livability, and economic develop-

ment while maintaining mobility for all users. Capturing these elements within a designated roadway or transportation corridor is often referred to as making a roadway more complete or a “Complete Street.”

This study has three purposes. The first purpose is to develop a regional Complete Streets Policy Statement. The second purpose is to develop guidelines for the Southern Nevada jurisdictions. The third purpose is to recommend an implementation strategy for developing and funding Complete Streets projects.

Complete Streets include typical urban roadway design features such as traffic calming, dedicated transit lanes, bicycle lanes, mid-block crossings, landscaping, and wide sidewalks. However, not all streets need to include every Complete Streets element. Certain criteria generally dictate which design features are appropriate. In other words, the appropriate level of roadway completeness depends upon its context and function.

Complete Streets can be planned as a retrofit to existing streets or incorporated into the design of new streets. A comprehensive Complete

Streets policy and guidelines/standards can easily be applied to both cases. In either case, the future capacity of the roadway to carry vehicular traffic will be of concern to both the owning jurisdiction and the RTC. The careful application of Complete Streets design guidelines and the consideration of all users will usually produce a set of reasonable trade-offs that can be evaluated in determining the final roadway geometry. In most cases, more efficient use of existing right-of-way will provide an acceptable solution. In some cases, with heavy vehicular traffic, a systems approach will be necessary to identify parallel facilities that can help meet network demand.

Recently, the cities of Nashville, Tennessee and Columbus, Ohio adopted broad policies to ensure that Complete Streets concepts are included in all development and redevelopment actions. Other cities and regions have Complete Streets policies and procedures embedded within existing planning and zoning requirements to the extent that they are part of the nominal permitting process. Since 2005 over 100 jurisdictions have enacted Complete Streets policies and standards. A comprehensive listing of complete streets references and resources from around the United States can be found in Appendix B of this document.

What is a Complete Street?

Complete Streets are roadways designed to safely and comfortably accommodate all users, regardless of age, ability or mode of transportation. Users include motorists, cyclists, pedestrians, and all vehicle types, including public transportation, emergency responders, and freight and delivery trucks among others. In addition to providing safety

and access for all users, Complete Street design treatments take into account accommodations for disabled persons as required by the ADA. Design considerations for connectivity and access management are also taken into account with regards to non-motorized users of the facility.





Bicycle lanes are an important component of complete streets, they provide a designated space for bicycles, improve safety, and provide more options for travel.

Recent federal actions have increased the utility of federal resources to fund complete streets projects, either as stand-alone projects or in connection with typical roadway improvements. Typical federal programs that have been used for this purpose include:

- U.S. Department of Transportation’s Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grant Program,
- Surface Transportation Funding Program (STP),
- Congestion Mitigation and Air Quality Funding Program (CMAQ).

Benefits of Complete Streets

Complete Streets and their benefits are being recognized by many different stakeholders. The National Complete Streets Coalition¹ is the national organization that advocates adoption of Complete Streets policies. The Coalition calls for adoption of policies that ensure “transportation planners and engineers consistently design and operate the entire roadway with all users in mind including bicyclists, public transportation vehicles and riders, and pedestrians of all ages and abilities.” Complete Streets offer a variety of mutual benefits to nearly all users of the transportation network, including the following.

1. <http://www.completestreets.org>

Safety

Complete Streets reduce accidents through comprehensive safety improvements. This is particularly important for Southern Nevada, where 86 pedestrians died in auto-related collisions between 2008 and 2011.² According to the report, “Complete Streets: Best Policy and Implementation Practices,” two previous findings have found a positive correlation between Complete Streets and safety.

1. Design elements including sidewalks, raised medians, better bus-stop placement, traffic calming measures, and treatments for disabled travelers improve pedestrian safety.³
2. Designing streets for pedestrian travel by installing raised medians and redesigning intersections and sidewalks can reduce pedestrian risk by 28 percent.⁴

When the stakeholders for the study were surveyed in late 2010, they considered safety the number one reason for looking into Complete Streets concepts.

Increased Transportation Choices

Providing multiple travel options within a transportation network can increase the capacity of a facility (in terms of people throughput) while

2. *2011-2015 Nevada Highway Safety Plan*

3. Barbara McCann and Suzanne Rynne, eds., *Complete Streets: Best Policy and Implementation Practices*, American Planning Association – Planning Advisory Service (Report 559), 2010.

4. *Ibid*

offering safe and attractive alternatives to the automobile.

Economic Revitalization

Increased access and efficiency to employment, residences, schools, parks, and retail destinations can create conditions favorable for economic activity to occur. In addition, public investment in roadway infrastructure which improves the safety and comfort of an area, can lead to a surge in private investment at adjacent properties.

Environmental Benefits

Encouraging non-motorized transportation helps reduce harmful emissions and reduces our dependence on non-renewable fossil fuels. In addition, reducing the amount of land necessary to accommodate parking and auto-oriented development helps reduce our overall growth footprint and consumption of natural lands.

Public Health

Walking and cycling are natural ways to help reduce obesity and increase the amount of physical activity we experience day-to-day. According to The Centers for Disease Control and Prevention, physical activity and active transportation have declined compared to previous generations. The lack of physical activity is a major contributor to the steady rise in rates of obesity, diabetes, heart disease, stroke, and other chronic health conditions.

Making our Streets Safe for Bicycles and Pedestrians

Complete street design features are only one step in improving safety for bicycles and pedestrians in Southern Nevada. There are various ongoing actions being undertaken to make our streets safe for bicycling and walking.

Safe Routes to School - Clark County School District

The purpose of this program is to enable children to walk and bicycle to school, make these activities safer and more appealing, and facilitate the development of projects that will create a better overall environment around the vicinities of schools. Not only is Safe Routes to School implemented to create a safer

environment for students, but it also encourages a healthy option for them, as walking and riding a bicycle starting at a young age can help children be more active.

Strategic Highway Safety Plan

Nevada's Strategic Highway Safety Plan, or SHSP, is a statewide, comprehensive safety plan that provides a coordinated framework for reducing fatalities and serious injuries on all Nevada public roads. The SHSP strategically establishes statewide goals and critical emphasis areas developed in consultation with Federal, state, local, and private sector safety stakeholders



Sources: *Safe Routes to School* (ccsd.net/partnership/saferoutes/); *Strategic Highway Safety Plan* (www.zerofatalitiesnv.com)



Designing our roadway to be usable by all abilities and skill levels is not only the law, but also good practice.

Expanding the availability of, safety for, and access to a variety of transportation options and integrating health-enhancing choices into transportation policy has the potential to save lives by preventing chronic diseases, reducing and preventing motor-vehicle-related injury and deaths, and improving environmental health.⁵

Accessibility

Incomplete streets are sometimes not accessible for persons with disabilities. Designing our roadways to be usable by persons of all abilities is not only the law, but also good practice.

1.2 DEVELOPMENT OF THE REPORT

The RTC Complete Streets Study began with scoping discussions between the consultant, CDM Smith (formerly Wilbur Smith Associates), and RTC staff in July 2010. The overall study vision is to create a report unique to Southern Nevada that provides guidance for local and regional agencies looking to incorporate Complete Streets design concepts into their standard practices. Once the regional report is completed, the RTC and its regional partners will work together in getting the elements from the report incorporated into existing plans, policies and standards. This study effort will ultimately help individual jurisdictions with implementation options for Complete Streets

design features on specific roadway segments (if needed).

After the initial scoping period was complete and stakeholders were identified, the first stakeholder meeting took place on September 23, 2010. At that meeting, CDM Smith summarized the experiences of developing Complete Streets policies and guidelines in other regions. Discussion included the key elements needed for Complete Streets development in Southern Nevada, the roles each jurisdiction might play, and the essential goals for a Complete Streets policy. Five additional stakeholder meetings have occurred since the initial meeting. They took place on December 7, 2010, March 3, 2011, May 4, 2011, October 12, 2011, and December 14, 2011.

CDM Smith gave the first draft report to the RTC in June 2011. It was reviewed by the stakeholders and RTC staff the summer of 2011, with comments being submitted in September 2011. Additionally, the Southern Nevada Complete Streets Policy Development Workshop took place on July 13, 2011. This was sponsored by RTC and the Southern Nevada Health District. The workshop instructors were John LaPlante, P.E. and PTOE, and Ryan Snyder, who represent the National Complete Streets Coalition. Workshop discussion generally focused on the creation of Complete Streets policies, including the use of performance measures and the potential for changing

⁵ <http://www.cdc.gov/transportation/default.htm>

the project development process. Discussion on how to create room within the right of way for Complete Streets also took place.

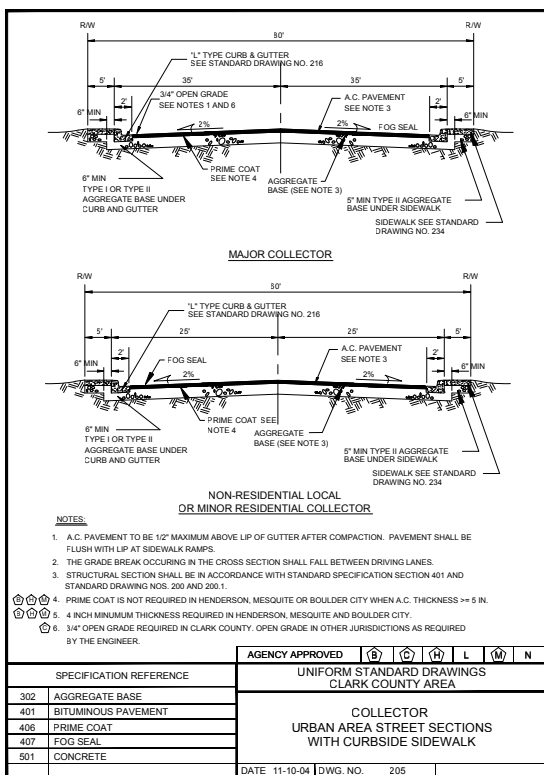
The following meetings and discussions were held during the review of the draft document.

- Meetings with homebuilders, engineers and other stakeholders that regularly work with homebuilders (January 19 and January 31, 2012).
- Presentation for the Southern Nevada Home Builders Association, Community Planning and Infrastructure Committee (January 26, 2012).
- Presentation for the National Association of Industrial and Office Properties, Government Affairs Committee (March 1, 2012).
- Individual meetings with staff of several jurisdictions, including:
 - City of Las Vegas Planning Department and Public Works Department (August 1, 2011)
 - City of Henderson Community Development Department and Public Works Department (August 22, 2011)
 - Clark County Public Works Department (April 11 and April 23, 2012)
- Comments on the December 2011 draft report were received from the City of Hen-

Stakeholders and Workshop Participants

- RTC - Metropolitan Planning Organization, Transit
- Freeway and Arterial System of Transportation (FAST)
- RTC Transportation Access Advisory Committee
- Nevada Department of Transportation
- City of Henderson - Community Development, Public Works
- City of Las Vegas - Planning, Public Works
- City of North Las Vegas - Planning, Public Works
- Clark County - Comprehensive Planning, Public Works
- City of Boulder City - Community Planning
- City of Mesquite - Planning
- Southern Nevada Health District
- Clark County School District
- University of Nevada, Las Vegas - Safe Community Partnership





Potential Complete Streets action items could include revisions to the Uniform Standard Drawings.

person, City of Las Vegas, City of North Las Vegas, Clark County, and the Southern Nevada Health District.

Organization of the Report

The RTC Complete Streets Study Report is divided into the following chapters:

- Chapter 2, Context – this chapter discusses the existing roadway challenges that makes Complete Streets necessary in Southern Nevada, along with the existing efforts underway to help make this possible.
- Chapter 3, Recommended Complete Streets Policy – this chapter provides the policy statement that CDM Smith and the study’s stakeholders recommend for adoption by the RTC Board of Commissioners.
- Chapter 4, Applying Complete Streets to Southern Nevada – this chapter discusses the conditions necessary to allow Complete Streets design features to occur regionally.
- Chapter 5, Design Guidelines – this chapter provides the recommended design guidelines for Complete Streets implementation in the region. Included are sample Complete Streets cross-sections that potentially can occur in Southern Nevada, per standard right-of-way width.
- Chapter 6, Implementation Strategy – this chapter discusses the options that the RTC and its regional partners have in imple-

menting Complete Streets elements in the region. Included is a funding strategy called the RTC Complete Streets Program, which is featured in Section 6.2.

- Appendices, which include a checklist for Complete Streets project development, a resource list, a best practices summary, and an example of evaluating streets for their potential in having Complete Streets design features.

1.3 POTENTIAL ACTION ITEMS

Further discussion of these action items will take place in Chapter 6 of this report. These items will only occur after acceptance of the RTC Complete Streets Report by the RTC’s Executive Advisory Committee (EAC) and the RTC Board of Commissioners. Potential action items include:

- Coordinate the Complete Streets initiative with other community initiatives taking place in Southern Nevada.
- Incorporate Complete Streets strategies into the overall transportation narrative developed for the Regional Transportation Plan.
- Adopt the Complete Streets Policy for Southern Nevada, outlined in Chapter 3 of this report, either into the RTC Policies and Procedures document (used as a guide

for administering funds under RTC jurisdiction) or as a stand-alone statement.

- Revise the Uniform Standard Drawings to reflect various Complete Streets design concepts.
- Assist any Southern Nevada jurisdictions that decide to further update their long-range planning documents and zoning codes to reflect any of the Complete Streets elements in this report.
- Target federal discretionary funding programs for Complete Streets projects in Southern Nevada.
- Work with the EAC to set-aside a certain percentage of one or two federal transportation funds. The set-asides will initially be used to fund Complete Streets demonstration projects, which are intended to get the RTC's partners accustomed to implementing them long-term.
- Once the demonstration projects are implemented, redevelop the funding of demonstration projects into a long-term Complete Streets funding program, with a secure fund source and a selection process identified.