

APPENDIX S

COMPLETE STREETS NEEDS, INITIATIVE, AND PRIMER

A MULTI-MODAL APPROACH TO ROADWAY INVESTMENTS

The streets of our cities and towns are an important part of our communities. They allow children to get to school and parents to get to work. They bring together neighbors and draw visitors to neighborhood stores. Communities are asking their planners and engineers to build roads that are safer, more accessible, and easier for pedestrians, bicyclists, and public transit users of all ages and abilities and not just the middle aged driver. In the process, they are creating better communities for people to live, play, work, and shop. More than 200 jurisdictions spanning all regions of the county have adopted policies through actions from elected officials, changes to internal agency policies, and revised street design manuals to better incorporate all users into roadway improvements. Facilities that attempt to balance the needs of all modes and the communities in which they are located have been called Complete Streets and Context Sensitive Solutions. In March, 2010 Secretary of Transportation Ray LaHood issued a new policy statement that calls for the full inclusion of pedestrians and bicyclists in transportation projects, with particular attention paid to transit riders and people of all ages and abilities. Amongst statement details are the following:

- A “well-connected walking and bicycling design should be a part of Federal-aid project developments.”
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- “Legislation and regulations exist that require inclusion of bicycle and pedestrian policies and projects into transportation plans and project development. Accordingly, transportation agencies should plan, fund, and implement improvements to their walking and bicycling networks, including linkages to transit.”
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- ‘United States Code and the Code of Federal Regulations in Title 23—Highways, Title 49—Transportation, and Title 42—The Public Health and Welfare. These sections, describe how bicyclists and pedestrians of all abilities should be involved throughout the planning process, should not be adversely affected by other transportation projects, and should be able to track annual obligations and expenditures on non-motorized transportation facilities.’

There is no singular design prescription for streets that meet the needs of their communities. However, these streets all have two things in common: 1. every investment in these streets starts with early attention to its community context and multi-modal potential; and, 2. they are designed to balance safety and convenience for everyone using the road.

This section outlines the substantial benefits that a more inclusive approach to investments in our public rights-of-way can bring; briefly addresses the state of the region’s public rights-of-way in terms of its accommodation of multiple all users; and makes recommendations on steps on how WFRC can better support multi-modalism. Extensive information from the CompleteStreets.org and the US Department of Transportation was used in this discussion.

BENEFITS

The benefits of investing in our roadways with all the users in mind can be far reaching. Doing so facilitates our regional visioning efforts, it improves public health and safety, it empowers the disadvantaged among us, and allows us all to live more financially and ecologically sustainably.



Regional Vision

The Wasatch Choice for 2040 visioning process has singled out areas for urban, mixed use, rural, and open space land uses with several objectives including reducing vehicle miles traveled per capita. However, this vision cannot accomplish these objectives without a supportively designed road system. Appropriate land uses, regardless how well planned, will not reduce single occupancy vehicle trips unless the road system that serves them also serves the potential pedestrian, cyclist, and transit patron. In other words, density without good walk and bike access to transit does not alleviate congestion and complementary land uses separated from each other by a nearly uncrossable street are of little benefit.

The 2001 National Household Transportation Survey finds that 50 percent of all trips in metropolitan areas are three miles or less and 28 percent of all metropolitan trips are one mile or less – distances easily traversed by foot or bicycle. About 44 percent of morning peak hour vehicle trips are not to work or related to a work trip. Instead, they are for shopping, going to school or the gym, or running errands. Parents cite traffic as a primary reason for driving children to school, yet in doing so, they account for 7 to 11 percent of non-commuting vehicle traffic during morning rush hour.

Many such trips could be made by walking, bicycling, or taking transit if provided attractive, safe facilities to do so. Shifting even a small portion of travelers out of single occupancy vehicles can have a big effect on congestion. In 2008, when national vehicle miles traveled (VMT) dropped by 3.6 percent, congestion plunged 30 percent in the nation's 100 most congested areas. Currently, short bicycling and walking trips account for 23 billion miles traveled annually. For typical U.S. cities with populations over 250,000, each additional mile of bike lanes per square mile is associated with a roughly one percent increase in the share of workers commuting by bicycle. Streets that are well designed for transit can encourage more people to get out of their cars and onto the bus. Such streets provide accessible bus stops and assist buses in moving through traffic. Since 2000, Enhanced Bus (BRTI) service in Los Angeles has used a priority signal system that allows buses to extend green lights or shorten red ones. Within the first year of operation, travel time decreased by 25 percent and ridership increased by more than 30 percent. Additionally, the California Center for Innovative Transportation found a 7 percent increase in traffic flow during morning rush hour and a 14 percent decrease in total time spent in congestion since the Orange Line Bus Rapid Transit (BRTIV) began operating.

The participants in the extensive Wasatch Choices public involvement process recognized how essential multi-modal streets are to this vision. Eighty-four percent named Transit Oriented Emphasis as their first or second ideal mix of transportation facilities and eighty-one percent named the Walkable Boulevard Emphasis whereas only 23 percent named Decentralized Employment Center and 20 Business As Usual as their first or second choices for transportation mix.

Health And Safety Improvements

In 2007, there were 4,654 pedestrian deaths and 70,000 reported pedestrian injuries nationally. Pedestrian injury is a leading cause of unintentional, injury-related death among children, age 5 to 14. In 2008 over 175,000 pedestrians and cyclists were killed or injured. Facility design seems to be critical aspect of these often tragic events. Pedestrian crashes are more than twice as likely to occur in places without sidewalks; streets with sidewalks on both sides have the fewest crashes. More than 40 percent of pedestrian fatalities occurred where no crosswalk was available. One study found that designing for pedestrian travel by installing raised medians and redesigning intersections and sidewalks reduced pedestrian risk by 28 percent. Sidewalk bicycle riding, especially against the flow of adjacent traffic, is more dangerous than riding in the road due to unexpected conflicts at driveways and intersections. On-road bicycle lanes reduced these accident rates by about 50 percent.



The latest data show that 32 percent of adults are obese, the number of overweight or obese American children nearly tripled between 1980 and 2004. Childhood obesity also tripled during this timeframe. Health experts agree that a big factor is inactivity – 55 percent of the U.S. adult population falls short of recommended activity guidelines, and approximately 25 percent report being completely inactive. Inactivity is a factor in many other diseases, including diabetes, heart disease, and stroke. Streets lacking pedestrian, bike, and transit facilities mean many people lack safe opportunities to be active. A comprehensive study of walkability has found that people in walkable neighborhoods did about 35-45 more minutes of moderate intensity physical activity per week and were substantially less likely to be overweight or obese than similar people living in low-walkable neighborhoods.

Disadvantaged Populations

Streets in our communities must allow safe and comfortable travel for everyone, including the young, the elderly and people with disabilities. In total, the young, the elderly and people with disabilities make up around half of the population of Utah and many of these people do not drive. Yet, our public rights-of-way put them at a disadvantage by not accommodating them. All too frequently this leads to lost economic opportunities, isolation, health and safety issues, higher transportation costs, and more reliance upon society for the less fortunate among us.

In 1990, those under 18 years of age accounted for about 31 percent of all Utahans'. Many of these people are unable to drive or do not have access to an automobile. For our youth that do not have good pedestrian, bike, or transit facilities, this can lead to isolation and inactivity. For the very youngest this lack of perspective on the part of road planners is a personal safety issue. As indicated above, pedestrian injury is a leading cause of unintentional, injury-related death among children, age 5 to 14. For our older low income youth it can be a serious impediment to getting to much needed work.

Senior citizens are a quickly growing segment of our society. In 1990, senior citizens accounted for about 9 percent of all Utahans' and the US Census forecasts that the number of seniors will more than double with some of the most significant changes coming in the older segments of the senior citizen population. Those with disabilities account for 13 percent of Utah's population. Many of the elderly and disabled also are unable to drive or do not have access to an automobile. Yet, often our roadways are difficult to navigate for people who use wheelchairs, have diminished vision, can't hear well, or for people who move more slowly. Unpaved surfaces and disconnected, narrow, or deteriorated sidewalks discourage wheelchair travel and the lack of a curb ramp can force a pedestrian into the street. Wide intersections designed to quickly move motorized traffic may not provide enough time for someone with a disability to cross safely. Pedestrian signals that use only visual cues can lead to dangerous situations for those with low vision.

Many older adults will continue to drive for most of their trips, but some will face physical and cognitive challenges that must be addressed to enable their continued mobility and independence. In 2008, older pedestrians were overrepresented in fatalities; while comprising 13 percent of the population, they accounted for 18 percent of the fatalities. Designing a street with pedestrians in mind – sidewalks, raised medians, better bus stop placement, traffic-calming measures, and treatments for travelers with disabilities – may reduce pedestrian risk by as much as 28 percent.

In 2009 nearly twelve percent of all Utahans lived under the federal poverty level. To put that into perspective a family of four would need to make less than \$23,000 a year to be considered impoverished by federal standards. About one-third of these people and more than twice the proportion of those newly impoverished in the last ten years live in the more auto dominated suburbs. Transportation is the second largest expense for American households, costing more than



food, clothing, and health care. Even prior to the recent run-up in gasoline prices, Americans spent an average of 18 cents of every dollar on transportation, with the poorest fifth of families spending more than double that figure. Much of this household transportation expense is pumped directly into the gas tank. The United States uses 20 million barrels of oil per day and over 40 percent of American oil consumption goes to passenger cars. Using public transportation helps the United States save 1.4 billion gallons of fuel annually, which is 3.9 million gallons saved every day. That translates into family savings. In fact, a two-person adult household that uses public transportation saves an average of \$6,251 annually compared to a household with two cars and no public transportation accessibility. Improving access to transit also reduces the dependence of those who are disadvantaged on more costly alternatives, such as paratransit or private transportation services.

In short, the USDOT Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations may say it best. "The establishment of well-connected walking and bicycling networks in an important component for livable communities, and their design should be a part of...project developments. Walking and bicycling foster safer, more livable, family-friendly communities; promote physical activity and health; and reduce vehicle emissions and fuel use."

THE STATE OF THE REGION

City "Walk and Ride-ability"

Most cities along the Wasatch Front address certain "Complete Street" elements. A 2009 survey looking at Active Community Enhancement and overall walk-ability, in Utah found that 92.4 percent of Utah cities address sidewalks and 13.9 percent address bicycle lanes in their general plans. The Active Community Enhancement Survey also looked at Wasatch Front cities and counted the actual number of miles of sidewalks and bicycle lanes in each municipality. The data is a ratio of roadway miles to amenity miles. For example, a city with a complete sidewalk network would have a sidewalk ratio of "2.0," since there are sidewalks on both sides of the street. Statewide, the survey found a 1.11 sidewalk-to-road ratio and a 0.05 bike lane-to road ratio, statewide surveyed. Table S-1 below present these finding by WFRC city.

TABLE S-1

CITY BY CITY SIDEWALK AND BIKE LANE SURVEY FINDINGS

	Miles of Road	Miles of Sidewalk	Road-to-sidewalk ratio	Miles of Bike Lane	Road-to-bike lane ratio
Bluffdale	140	120	0.86	0	0
Bountiful	158	224	1.42	1.58	0.01
Centerville	60	-	-	-	-
Clearfield	78	149	1.91	2.34	0.03
Clinton	-	-	-	-	0
Cottonwood Heights	115	181	1.57	-	-
Draper	237	230	0.97	9.48	0.04
Farmington	76	-	-	59.28	0.78
Farr West	-	-	-	-	-
Fruit Heights	-	-	-	-	-
Harrisville	-	-	-	-	-
Herriman	84	128	1.52	0	0
Holladay	94	60	0.64	1.88	0.02
Hooper City	46	13	0.28	5.06	0.11



	Miles of Road	Miles of Sidewalk	Road-to-sidewalk ratio	Miles of Bike Lane	Road-to-bike lane ratio
Kaysville	120	-	-	-	-
Layton	-	-	-	-	-
Midvale	75	-	-	35.25	0.47
Murray	144	330	2.29	1.44	0.01
North Ogden	75	-	-	0	0
North Salt Lake	56	87	1.55	-	-
Pleasant View	-	-	-	-	-
Riverdale	-	-	-	-	-
Riverton	38	5	0.13	1.9	0.05
Roy	-	-	-	-	-
Salt Lake City	-	-	-	-	-
South Jordan	-	-	-	-	-
South Ogden	-	-	-	-	-
South Salt Lake	77	-	-	-	-
South Weber City	26	-	-	0	0
Sunset	25	50	2	0	0
Syracuse	-	-	-	-	-
Taylorsville	190	-	-	0	0
Washington Terrace	-	-	-	-	-
West Bountiful	30	22	0.73	0	0
West Haven	65	30	0.46	0	0
West Jordan	-	-	-	-	-
West Point	37	12	0.32	0	0
West Valley City	358	501	1.4	-	-
Woods Cross	31	-	-	0	0
A hyphen ("-") indicates no data available					
Source: Active Community Enhancement Survey 2009					

Bridges and Other Crossings

Crossing long linear features with few crossing points such as rivers and freeways can be of particular concern to those attempting to use travel without the automobile. The design of overpasses and bridges can sometimes overlook non-motorized users of the road. They can create choke-points and hazards for pedestrians and bicyclists who are using an, otherwise, "complete" street. Tables S-2 present the results of an aerial survey of pedestrian and bike facilities on the regions' bridges and overpasses. The Jordan River, Weber River, Highway 201, US-89, the Legacy Parkway, Bangor Highway, and Interstates 15, 80, 84, and 215 were surveyed.

TABLE S-2

PEDESTIAN AND BIKE FACILITIES ON BRIDGES AND OTHER CROSSINGS (non-expressway bridges only)

	Adequate Sidewalk	Paved Shoulder	Dedicated Bike Lane	Pedestrian Safety Wall
Weber River				
Cottonwood Drive				



	Adequate Sidewalk	Paved Shoulder	Dedicated Bike Lane	Pedestrian Safety Wall
Adams Avenue Parkway				
4600 South				
Riverdale Road	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Parker Drive				
31st Street		<input type="checkbox"/>		
Capitol Street				
24th Street		<input type="checkbox"/>		
Exchange Road				
Middleton Road				
21st Street		<input type="checkbox"/>		
1900 West	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
12th Street				
2700 West				
4700 West				
1150 South				
Interstate 84				
Riverdale Road	<input type="checkbox"/>	<input type="checkbox"/>		
Adams Avenue Pkwy		<input type="checkbox"/>		
US 89				
Burke Lane		<input type="checkbox"/>		
Main Street	<input type="checkbox"/>	<input type="checkbox"/>		
3000 North		<input type="checkbox"/>		
Weber Drive	One-Side Only			
Legacy Highway				
Center Street	One-Side Only	<input type="checkbox"/>		
500 South	One-Side Only	<input type="checkbox"/>		
1250 West	One-Side Only			
Glovers Lane	<input type="checkbox"/>	<input type="checkbox"/>		
State Street	<input type="checkbox"/>	<input type="checkbox"/>		
Interstate 215				
3300 South	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
4430 South	<input type="checkbox"/>	<input type="checkbox"/>		
2300 East	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Highland Drive	<input type="checkbox"/>			<input type="checkbox"/>
1300 East	<input type="checkbox"/>			<input type="checkbox"/>
Union Park Avenue		<input type="checkbox"/>		
900 East	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
700 East	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
State Street	<input type="checkbox"/>	One-Side Only		<input type="checkbox"/>
Winchester	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
300 West	One-Side Only			One-Side Only
700 West	<input type="checkbox"/>			<input type="checkbox"/>
Murray Parkway				
4100 South	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>



	Adequate Sidewalk	Paved Shoulder	Dedicated Bike Lane	Pedestrian Safety Wall
3100 South	<input type="checkbox"/>			<input type="checkbox"/>
2700 South	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
1700 North			<input type="checkbox"/>	
2100 North		<input type="checkbox"/>		
Redwood Road (North)		<input type="checkbox"/>		
Interstate 215				
10600 South	<input type="checkbox"/>	<input type="checkbox"/>		
Vine Street	<input type="checkbox"/>			<input type="checkbox"/>
3900 South	One-Side Only	<input type="checkbox"/>		One-Side Only
2700 South	One-Side Only	<input type="checkbox"/>		One-Side Only
600 North	One-Side Only	<input type="checkbox"/>		
400 North	<input type="checkbox"/>			<input type="checkbox"/>
Glovers Lane	One-Side Only			One-Side Only
State Street	One-Side Only			One-Side Only
Burke Lane		<input type="checkbox"/>		
Shepherd Lane				
Burton Lane				
Gentile Street	<input type="checkbox"/>			<input type="checkbox"/>
Church Street	<input type="checkbox"/>			<input type="checkbox"/>
Antelope Drive	One-Side Only			One-Side Only
Riverdale Road				
4400 South				
31 st Street		<input type="checkbox"/>		
700 South	One-Side Only			One-Side Only
2000 West				
Jordan River				
500 South				
Indiana Ave		<input type="checkbox"/>		
California Ave	One-Side Only			
Redwood Rd	One-Side Only			
1700 South	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2100 South	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3300 South	One-Side Only			<input type="checkbox"/>
3900 South		<input type="checkbox"/>		
4500 South		<input type="checkbox"/>		
4800 South				
5400 South		<input type="checkbox"/>		
Bullion Drive	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Winchester				
7200 South	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
7800 South	One-Side Only			
9000 South		<input type="checkbox"/>		
9800 South	One-Side Only			
10600 South	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>



	Adequate Sidewalk	Paved Shoulder	Dedicated Bike Lane	Pedestrian Safety Wall
11400 South				
12600 South	<input type="checkbox"/>		<input type="checkbox"/>	
14600 South	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Bangerter Highway				
Old Bingham Highway	One-Side Only	<input type="checkbox"/>		<input type="checkbox"/>
Highway 201				
Bangerter Highway		<input type="checkbox"/>		
5600 West	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Interstate 80				
1700 East			<input type="checkbox"/>	
1300 East	One-Side Only			
Redwood Road	<input type="checkbox"/>		<input type="checkbox"/>	
5600 West		<input type="checkbox"/>		
7200 West		<input type="checkbox"/>		
SR-202		<input type="checkbox"/>		

Source: Aerial Photography

RECOMMENDATIONS

Since the 1950's, all too often the public rights-of-way have become dominated by the automobile but recently government has begun to wake to the fact that these public rights-of-way belong to all and need to be designed to balance all the needs of the public.

Federal, State, Regional and Local governments need to work in concert to apply multi-modal accommodations across jurisdictional boundaries and to all roads regardless of which government agency "owns" them. In March, 2010 Secretary of Transportation Ray LaHood issued "full inclusion" and no 'adverse affect' policies relating directly to all Federal-aid transportation projects and supporting multi-modal accommodation on other facilities. Each state accepting federal funding is required to develop a multimodal plan that includes non-motorized and public transportation in accordance with the *Code of Federal Regulations* (23 CFR 450.214). Nineteen States have established internal policies and/or legislation to guide the accommodation of multiple modes in the public rights-of-way. Our neighboring state, Colorado, is one of these states. Colorado has a CDOT internal policy and procedural directive as well as supporting legislation which provides for routine accommodation of pedestrians and bicyclists in planning, design, and operation of transportation facilities.

Nearly 200 local or regional jurisdictions including Salt Lake City and Salt Lake County have adopted express policies and processes for the accommodation of multiple modes in their public rights-of-way. 124 jurisdictions had adopted or committed to adopt complete streets policies. Salt Lake City's and Salt Lake County's formal policies guide their staff to include specific elements of multi-modal accommodation unless unfeasible. These policies are found in Attachment 1.

One of the most cited local efforts to include consideration of all modes into the public rights-of-way is that of Charlotte, NC. Charlotte uses a road functional classification system which recognizes land use, community character; existing and future modal mix; trip type; and regional and community objectives as a guide to road design. Each facility segment is broadly assessed for its needs using the six step process outlined Figure S-1. Attachment 2 provides significant additional information about the Charlotte plan and process.

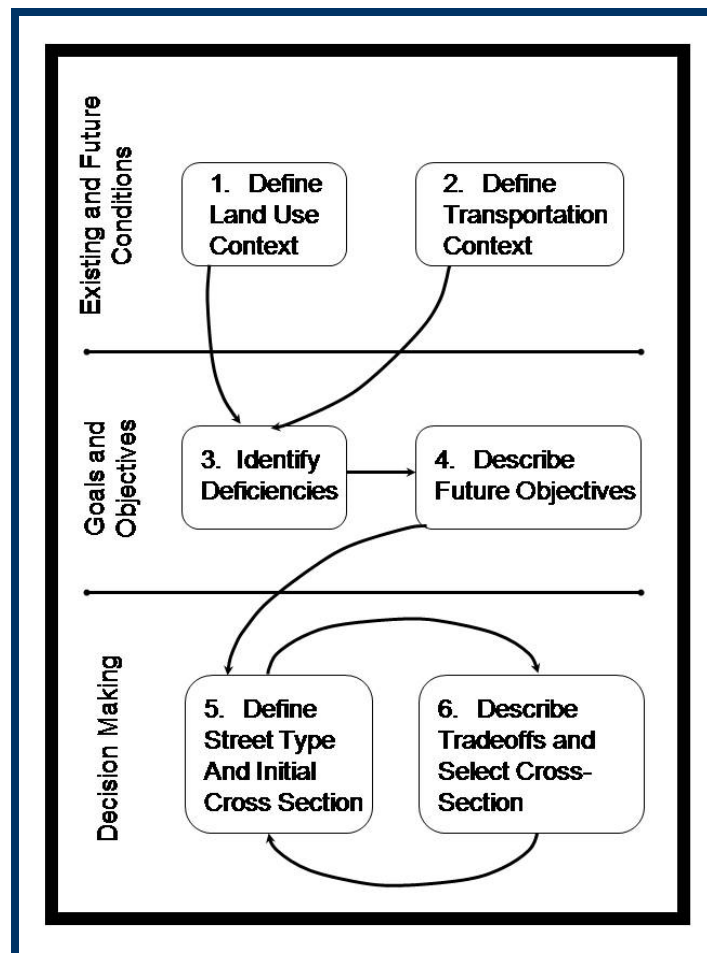


With regard to the role of Metropolitan Planning Organizations, the Federal Highway Administration states that “MPOs hold the greatest responsibility for adopting livability goals and promoting concepts such as complete streets in an urban region.” Some of the things that MPOs can do include:

1. Setting regional goals;
2. Including multimodalism in determining funding priorities;
3. Ensuring that a robust public involvement process includes key stakeholders, interest groups, and the public; and,
4. Coordinating regional planning with local transportation and comprehensive plans to include not only roadways but also facilities and systems related to transit and non-motorized traffic.

FIGURE S-1

THE CHARLOTTE ROAD DESIGNATION PROCESS



Some examples of MPOs efforts in this realm include the following:

The San Antonio MPO Transportation Policy Board adopted a complete streets resolution. The MPO now pledges to use complete streets practices as guiding principles in the design, construction, operation, and maintenance of the region's transportation network and will include it in existing



planning documents and policies. The MPO also encourages other agencies to adopt complete streets policies.

The Bloomington/Monroe County MPO in Indiana adopted a complete streets policy that applies to all local roadway projects where the MPO has programming authority to allocate Federal funding.

The Cheyenne MPO in Wyoming took an active role developing an integrated city-county comprehensive transportation plan known as Plan Cheyenne. This plan unifies subdivisions, zoning, and street and site design standards in a way that promotes a balanced design of rights-of-way. Each MPO needs to decide if and how it will promote complete streets within its region, but its approaches can be creative and tailored to local circumstances.

The Regional Transportation Plan recommends that WFRC develop a set of policies and planning efforts to support the federal and local efforts to better accommodate pedestrian, bike, and transit uses on our public rights-of-way. The specific recommendations are in Figure S-2, below:

FIGURE S-2

**RECOMMENDED WFRC ACTIONS TO ACCOMMODATE
MULTIPLE MODES IN PUBLIC RIGHTS-OF-WAY**

- Establish a WFRC sub-committee to address the accommodation of multimodal facilities in public rights-of-way.
- Expand the Wasatch Choice for 2040 vision to include a functional classification system for the existing and future road network which recognizes land use, development type; existing and future modal mix; trip type; and regional and community objectives as a guide to amenity placement.
- Establish internal WFRC policies and procedural directives to more fully integrate and/or accommodate multi-modal planning into our planning and processes.
- Encourage jurisdictions to adopt pedestrian, bicycle, and transit elements in their General Plans, internal policies and ordinances.
- Encourage the use of the best currently available standards and guidelines such as the AASHTO Guide to AASHTO's A Policy on Geometric Design of Highways and Streets; the Institute of Transportation Engineers "Design and Safety of Pedestrian Facilities", and the U.S. Department of Transportation sponsored *Designing Sidewalks and Trails for access Part II: Best Practices Design Guide*.
- Develop a best practices manual for the region.

This section has outlined some of the substantial benefits that a more inclusive approach to investments in our public rights-of-way can bring; briefly addressed the state of the region's public rights-of-way in terms of its accommodation of multiple all users; and makes recommendations on steps on how WFRC can better support multi-modalism. More information on the Charlotte Urban Street Guidelines is found in Attachment 2. Information on some specific roadway treatments and multimodal funding can be found in Attachments 3 and 4.



ATTACHEMENT 1**SALT LAKE CITY AND SALT LAKE COUNTY COMPLETE STREET EFFORTS****SALT LAKE CITY “COMPLETE STREET” EXECUTIVE ORDER - JANUARY 5, 2007:**

The benefits of bicycling and walking span across many aspects of our daily lives. The social and environmental benefits include healthier citizens and the improved health of our community through a substantial reduction in air pollution. A transportation system that encourages bicycling and walking can also save money, reduce traffic congestion, build community, and improve the overall quality of life. Therefore, Salt Lake City supports the concept of Complete Streets, requiring the accommodation of pedestrians and bicyclists throughout the planning process by providing the following policy.

All transportation facilities in the public right of way owned by Salt Lake City on which bicyclists and pedestrians are permitted by law, including, but not limited to streets, bridges, and all other connecting pathways, shall be designed, constructed, operated and maintained so that users, including people with disabilities, can travel safely and independently.

Therefore I enact this Executive Order:

1. General

1.1 Bicycle and pedestrian ways shall be established in the City's new construction and reconstruction projects in the public right of way, subject to budget limitations, unless one or more of the following three exemption conditions are met:

a) Bicyclists and pedestrians are prohibited by law from using the street or facility. In this instance, a greater effort may be necessary to accommodate bicyclists and pedestrians elsewhere within the right of way or within the same transportation corridor.

b) The cost of establishing bikeways or walkways would be excessively disproportionate to the need or probable use. A Complete Streets Committee, consisting of the Transportation Director, Planning Director, City Engineer and Airport Director (if applicable), will determine whether the cost of establishing bikeways or walkways is excessively disproportionate on a project by project basis.

c) Scarcity of population or other factors indicate an absence of need, with consideration given to future population growth.

1.2 The design and development of the transportation infrastructure shall improve conditions for bicycling and walking through the following additional steps:

a) Planning projects for the long-term. Transportation facilities are long-term investments that remain in place for many years. The design and construction of new facilities that meet the criteria in the



above stated exemption conditions should anticipate likely future demand for bicycling and walking facilities and not preclude the provision of future improvements. For example, a bridge that is likely to remain in place for 50 years might be built with sufficient width for safe bicycle and pedestrian use in anticipation that facilities will be available at either end of the bridge even if that is not currently the case.

b) Addressing the need for bicyclists and pedestrians to cross corridors as well as travel along them. Even where bicyclists and pedestrians may not commonly use a particular travel corridor that is being improved or constructed, they will likely need to be able to cross that corridor safely and conveniently. Therefore, the design of intersections and interchanges shall accommodate bicyclists and pedestrians in a manner that is safe, accessible and convenient.

c) Exemptions. Exemptions regarding the installation of bikeways and walkways shall be approved by the aforementioned Complete Streets Committee and be documented with supporting data that indicates the basis for the decision.

d) Designing facilities to the best currently available standards and guidelines. The design of facilities for bicyclists and pedestrians should follow design guidelines and standards that are commonly used, such as the AASHTO Guide for the Development of Bicycle Facilities,

4 AASHTO's A Policy on Geometric Design of Highways and Streets, the Institute of Transportation Engineers recommended practice "Design and Safety of Pedestrian Facilities", and the U.S. Department of Transportation sponsored *Designing Sidewalks and Trails for access Part II: Best Practices Design Guide*.

SALT LAKE COUNTY "COMPLETE STREET" ORDINANCE:

WHEREAS, Salt Lake County recognizes the need for an effective and active Bicycle Advisory Committee.

WHEREAS, the newly structured Bicycle Advisory Committee comprises dedicated volunteers from our greater Salt Lake County Community charged with promoting bicycle education, advocacy, and outreach

WHEREAS, the formal and informal members of the Bicycle Advisory Committee have committed their energy to promoting health, safety and well-being for cyclists throughout Salt Lake County; and

WHEREAS, the Bicycle Advisory Committee joins with Salt Lake County Officials, Salt Lake County Public Works, Salt Lake County Parks and Recreation, the Unified Police Department, the Salt Lake County Mayor's Office and Bicycle Advocacy leaders throughout Salt Lake County Communities.

NOW, THEREFORE, I, Peter Corroon, Mayor of the County of Salt Lake with the endorsement of the Salt Lake County Council, do hereby proclaim that the Salt Lake County Bicycle Advisory Committee will be a leading force and resource, through dedication and commitment, to the improvement of bicycle-issues on behalf of the citizens throughout Salt Lake County.



AND FURTHER proclaim Salt Lake County's endorsement of the goals and priorities of the Bicycle Advisory Committee to better health, safety and welfare of our communities through bicycle outreach.

SALT LAKE COUNTY PUBLIC WORKS DEPARTMENT POLICY ON COMPLETE STREETS

Purpose

A complete street is an arterial or collector road designed to be safe for all users. The purpose of this policy is to improve the ability of pedestrians, bicyclists, motorists, and transit riders of all ages and abilities to safely move along and across a complete street. This policy is intended to integrate the needs of all road users into Salt Lake County's everyday transportation planning practices. It is the purpose of this department policy to require department staff, builders, developers, and all other affected persons and entities to review, consider and, where appropriate, apply complete street ideals.

Policy

1.0 Complete Street Components

When reviewing for design or construction or when approving building or zoning applications, department staff shall review and consider the following complete streets components and, where appropriate and practical, incorporate these components into the design, construction or approval process.

1.1 Speed limits should be designated that are appropriate to the actual type of street and its location and that allow safe movement by all street users.

1.2 Traffic signal timing should be reviewed in order to provide progression at a constant lower speed which could actually reduce travel time by eliminating stopping and providing for a safer environment for other users.

1.3 Streets should be constructed and designed with narrower travel lanes, tighter corner curb radii, raised medians, parkway landscaping, curb parking, pedestrian crossing locations, and designated bicycle lanes.

1.4 Streets should be designed, operated and maintained using the latest and best design standards, to promote safe and convenient access and travel for all users, including pedestrians, bicyclists, transit riders, disabled users, and car and truck motorists.

1.5 Street design should include, where practical, facilities and amenities that are recognized as contributing to complete streets, including street and sidewalk lighting; pedestrian and bicycle safety improvements; access improvements for freight; access improvements in accordance with the Americans with Disabilities Act; public transit facility accommodation, pedestrian access improvement to transit stops and stations; trees and landscaping; and other street amenities. Streets should be connected to existing facilities to create a comprehensive, integrated network.

1.6 The engineering division shall implement policies and procedures in the construction, reconstruction or other changes of transportation facilities on arterial and collector streets to support the creation of complete streets, including capital improvements, rechannelization projects and major maintenance, recognizing that all streets are different and in each case user needs must be balanced. Any street improvements should fit the needs and circumstances of the area.

2.0 Approval

2.1 All development applications shall be reviewed for compliance with all applicable laws, ordinances and codes and with this policy and shall adhere to American Association of State Highway and Transportation Officials guidelines, where practical and appropriate. The planning and development services division shall apply the requirements set out in this policy in reviewing development applications.



2.2 All roadway projects, parks projects, facilities projects and other County projects (including remodel projects) shall be reviewed to incorporate the requirements of this policy where applicable. Any exceptions to this policy must be approved by the County Engineer.



ATTACHEMENT 2**EXCERPTS FROM THE CHARLOTTE URBAN STREET GUIDELINES****Process for developing a “Complete Streets” plan****1. Define the Existing and Future Land Use and Urban Design Context**

The end-product of a street should reflect the existing and future land uses the road is adjacent to. This means looking at regional land-use plan, as well as talking to individual property owners along the road about their plans. Each case will be different. For example, a retail area may be more likely to redevelop than an established neighborhood. Questions to ask include:

- What does the area look like today?
- What’s the current land use and density?
- What are the typical building types? Setbacks? Scale?
- What building permits has the city issued? May soon issue?
- What function does the area serve to the surrounding neighborhood?
- Is there an existing plan for the neighborhood? Will it likely to be adopted?

2. Define the Existing and Future Transportation Context

Similar to your inquiry into land use, a transportation assessment looks at existing and future conditions of the transportation network. Any “Complete Street” design recommendations should reflect both immediate local needs, as well as long-range regional needs. Questions to ask include:

- What is the character of the existing street?
- What are the hourly traffic volumes? Level of service for cars, pedestrians, and cyclists?
- What infrastructure already exists? Sidewalks? Bike lanes? Traffic signals?
- What transit service exists? Is needed? Transit infrastructure?
- What is the relationship between the street and the surrounding network?
- What improvements or new construction exist in city and regional plans? Funded projects?
- Any future policy decisions that could affect this street segment?

3. Identify Deficiencies

Once we know what current conditions are and what future conditions might be, identifying deficiencies is the next step. These include, but are not limited to:

- Gaps in the street network
- Gaps in the bicycle or pedestrian network that this road segment could close
- Insufficient pedestrian or bicycle facilities
- Inconsistency between land-use (both existing and planned) and transit offered
- Inconsistency between land-use (both existing and planned) and other features along the road

4. Describe Future Objectives

Here, we synthesize information from the previous steps into project objectives. The objectives help us form the basis for a road segment’s classification and ultimate design. The objectives can also include local plans and policies for the area near the street. Issues to consider when setting objectives include:

- What existing policies might influence street objectives?
- What existing conditions should not change?
- Do the community and other stakeholders want change?
- If so, how would the community and other stakeholders want the area to change?
- What conditions will result if a road segment is classified a certain way?



5. Recommend Street Classification and Test Initial Cross-Section

Drawing all these ideas together, a certain street classification should begin to fit. Test the initial cross-section against objectives and both land-use and transportation contexts. Evaluate constraints, which may include:

- Size of right-of-way
- Existing structures, trees, or other environmental features
- Topography
- Existing driveways

6. Describe Tradeoffs and Select Cross-Section

Likely, the initial cross-section will need refining to better address the objectives. Refinements should thoughtfully consider the tradeoffs among all competing users. It may be useful to build a matrix, contrasting objectives with each user's demands. All perspectives should be seen with equal consideration, but users should not all expect equal accommodation, which would be impossible. The culmination of all the previous steps should provide sufficient rationale to select an alternative for construction or retrofit.

Design Standards

Not all "Complete Street" amenities are appropriate on every street. The Charlotte Urban Street Guidelines recommend the following design standards as a baseline when considering building new road or retrofitting an existing one:

		Main Street	Avenue	Boulevard	Parkway
Speed Limit		15-25	25-35	35-45	45-50
Lanes	Number	2, 2+ turn lane	3, 5	4, 6	4, 6, 8
	Travel	12', 13'	10', 11'	10', 11'	12'
	Turning	10'	10'	17' (median)	20' (median)
	Parking	7'	Wide outside lane	NO	NO
Sidewalk	Width	10' unobstructed	At least 6'	At least 6'	NO (use pathway)
	Amenities	8'	As needed	NO	NO
	Bulb-outs	7' (width of parking)	For bus stops	NO	NO
Street Lighting		Decorative	Decorative	Decorative	Present
Block Length		Shorter than 400'	Shorter than 600'	Approx 1/4 mile	Over 1/2 mile
Utilities		Underground, back of lot away from street	Underground, reduce number of poles	Underground, reduce number of poles	Back of Right of Way away from travel
Traffic Calming		Not needed	Some, as needed	Minor, if justified	NO
Mid-Block Crossing		Blocks over 600'	Yes	NO	NO
	Ped Refuge	Yes	Yes	NO	NO
On-Street Parking		Parallel, angled	Parallel (retail area)	NO (park on side street)	NO
Median		NO	OK, with breaks	17' (refuge + left turn lane)	At least 20'



Bus Stop		NO (bus at intersection)	Bulb-outs	At cross streets	Pull-off
Dedicated Bike Lane		Share traffic lane	At least 4'	At least 4'	Separate trail
Greenery Strip		NO (amenity strip instead)	At least 8'	At least 8'	At least 25'
Shoulder		NO	NO	NO	At least 10'
Pedestrian Trail		NO	NO	NO	At least 5'

Local Roads: These are the countless smaller, typically un-striped streets that compose neighborhoods, the internal areas of office complexes, and industrial parks. Local roads should also adopt some "Complete Street" amenities:

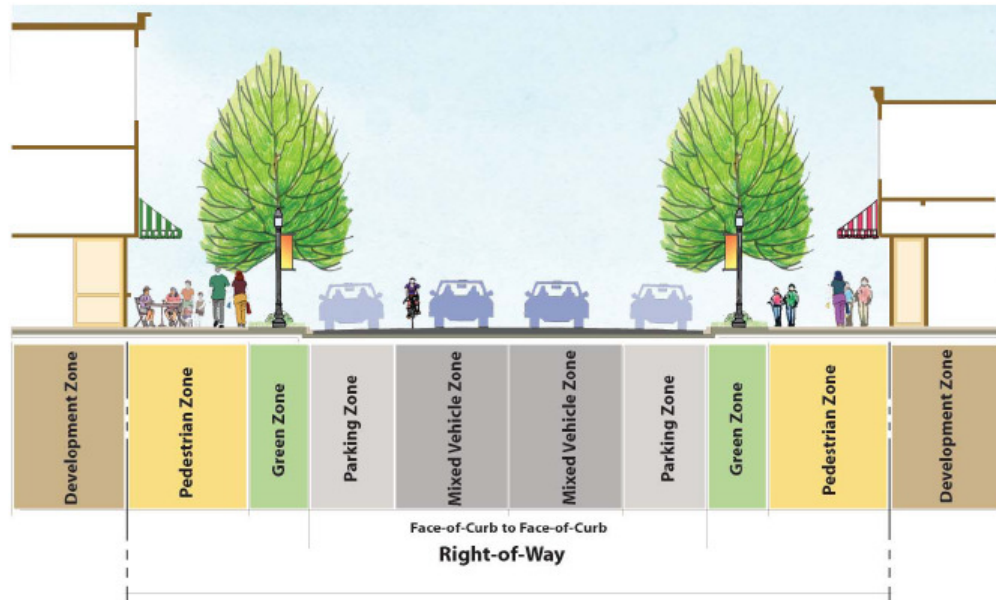
		Local Residential	Local Commercial	Local Industrial
Speed Limit		25	25	25
Lanes	Number	2	2	2
	Travel	10', 12'	12'	12'
	Turning	NO	OK	OK
	Parking	7'	7'	7'
Sidewalk	Width	At least 5'	At least 5'	At least 5'
	Amenities	NO	If needed	NO
	Bulb-outs	NO	NO	NO
Street Lighting		Decorative	Decorative	Present
Block Length		400' - 600'	400' - 600'	Up to 1000'
Utilities		Underground, reduce number of poles	Underground, reduce number of poles	Underground, reduce number of poles
Traffic Calming		If needed	NO	NO
Mid-Block Crossing		Not needed (short block)	Not needed (short block)	NO
	Ped Refuge	Not needed (short block)	Not needed (short block)	NO
On-Street Parking		Parallel	Parallel	Parallel
Median		If needed	NO	NO
Bus Stop		OK	Especially near retail	OK
Dedicated Bike Lane		Share traffic lane	Share traffic lane	Share traffic lane
Greenery Strip		At least 8'	At least 8'	At least 8'
Shoulder		NO	NO	NO
Pedestrian Trail		NO	NO	NO

Source: Charlotte, North Carolina "Urban Street Guidelines"

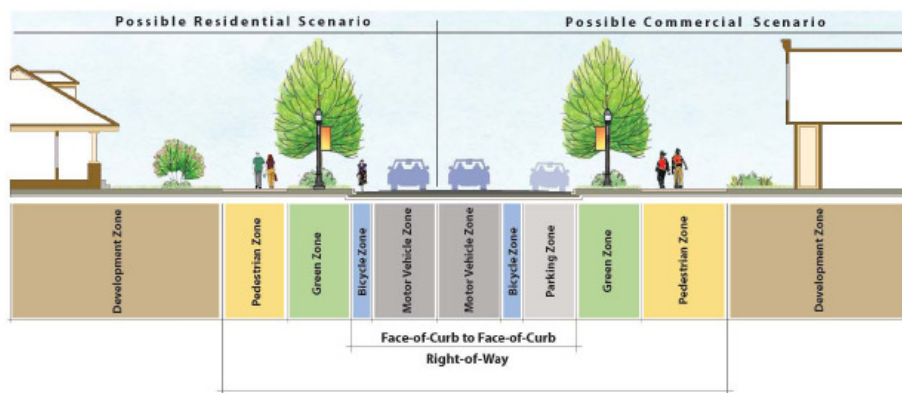


Typical Cross Sections

Main Street on a 75-foot R.O.W., minimum:

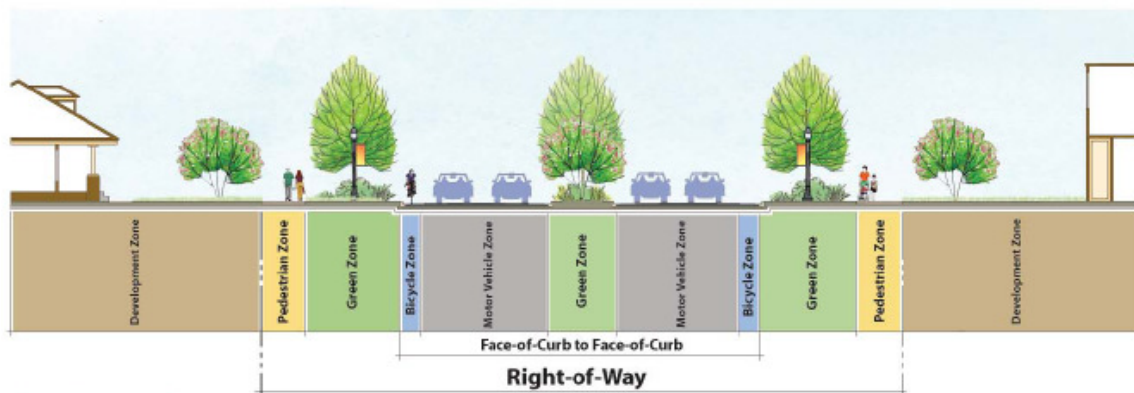


Avenue on a 71-foot R.O.W., minimum:

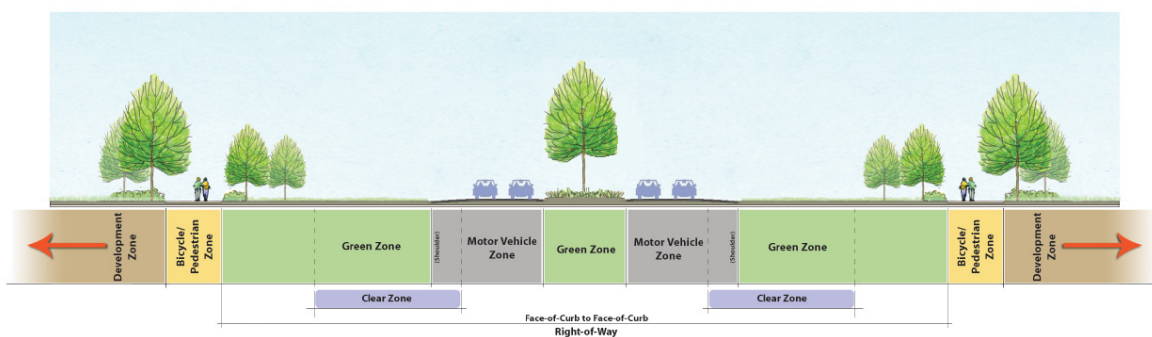




Boulevard on a 97-foot (four lanes) or 117-foot R.O.W. (six lanes), minimum:



Parkway on a 148-foot (four lanes), 172-foot (six lanes), 196-foot (eight lanes) R.O.W.:



Intersections

Planning a "Complete Street" becomes more complicated at intersections. A cross-section may be completely appropriate for a given area. But in areas where it crosses other streets, it re-introduces new conflicts and need for trade-off analysis.

One example might be where a highly pedestrian travelled road crosses a busy, regionally-significant arterial road. Engineering to alleviate congestion on the arterial may make the



intersection difficult or unsafe for pedestrians to cross. Likewise, pedestrian amenities like narrow lanes, low speed limits, and long walk signals may damage the level of service for cars on the arterial, and could even clog traffic flow regionally.

	Main Street	Avenue	Boulevard	Parkway
Main Street	<ul style="list-style-type: none"> • Pedestrian LOS priority over vehicles • 1 lane • Left-turn lane • NO right-turn lane • NO bike lane • NO acceleration taper • Curb extensions • Crosswalk w/ audible walk signal • Bicycle detectors 	<ul style="list-style-type: none"> • Pedestrian LOS equal with vehicles • 1-2 lane(s) • Left-turn lane • NO right-turn lane • Bike lane • NO acceleration taper • Curb extensions OK • Crosswalk w/ audible walk signal • Bicycle detectors OK 	<ul style="list-style-type: none"> • Pedestrian LOS equal with vehicles • Median w/ refuge • 2-3 lane(s) • Left-turn lane • NO Right-turn lane • Bike lane • NO acceleration taper • NO curb extensions • Crosswalk w/ audible walk signal 	<p>Incompatible junction.</p> <p>This intersection type should never exist.</p>
Avenue	<ul style="list-style-type: none"> • Pedestrian LOS equal with vehicles • 1-2 lane(s) • Left-turn lane • NO right-turn lane • Bike lane • NO acceleration taper • Curb extensions OK • Crosswalk w/ audible walk signal • Bicycle detectors OK 	<ul style="list-style-type: none"> • Pedestrian LOS equal with vehicles • Median w/ refuge • 1-2 lane(s) • Left-turn lane • Right-turn lane, if warranted • Bike lane • NO acceleration taper • Curb extensions OK • Crosswalk w/ audible walk signal 	<ul style="list-style-type: none"> • Pedestrian LOS equal with vehicles • Median w/ refuge • 2-3 lane(s) • Left-turn lane, dual if warranted • Right-turn lane, if warranted • Bike lane • NO acceleration taper • NO curb extensions • Crosswalk w/ audible walk signal 	<ul style="list-style-type: none"> • Pedestrian LOS equal with vehicles • Median w/ refuge • 1-2 lane(s) • Left-turn lane • Right-turn lane, if warranted • Bike lane • NO Acceleration taper • NO Curb extensions • Crosswalk w/ audible walk signal
Boulevard	<ul style="list-style-type: none"> • Pedestrian LOS equal with vehicles • Median w/ refuge • 2-3 lane(s) • Left-turn lane • NO Right-turn lane • Bike lane • NO acceleration taper • NO curb extensions • Crosswalk w/ audible walk signal 	<ul style="list-style-type: none"> • Pedestrian LOS equal with vehicles • Median w/ refuge • 2-3 lane(s) • Left-turn lane, dual if warranted • Right-turn lane, if warranted • Bike lane • NO acceleration taper • NO curb extensions • Crosswalk w/ audible walk signal 	<ul style="list-style-type: none"> • Pedestrian LOS equal with vehicles • Median w/ refuge • 2-3 lane(s) • Left-turn lane, dual if warranted • Right-turn lane, island recommended • Bike lane • Acceleration taper • NO curb extensions • Crosswalk w/ audible walk signal • Bus stop pull-out 	<ul style="list-style-type: none"> • Vehicle LOS priority over pedestrian • Median w/ refuge • 2-3 lane(s) • Left-turn lane, dual if warranted • Right-turn lane, island recommended • NO bike lane, trail instead • Acceleration taper • NO curb extensions • Crosswalk w/ audible walk signal • Bus stop pull-out



Parkway	<p>Incompatible junction.</p> <p>This intersection type should never exist.</p>	<ul style="list-style-type: none"> • Pedestrian LOS equal with vehicles • Median w/ refuge • 1-2 lane(s) • Left-turn lane • Right-turn lane, if warranted • Bike lane • NO Acceleration taper • NO Curb extensions • Crosswalk w/ audible walk signal 	<ul style="list-style-type: none"> • Vehicle LOS priority over pedestrian • Median w/ refuge • 2-3 lane(s) • Left-turn lane, dual if warranted • Right-turn lane, island recommended • NO bike lane, trail instead • Acceleration taper • NO curb extensions • Crosswalk w/ audible walk signal • Bus stop pull-out 	<ul style="list-style-type: none"> • Vehicle LOS priority over pedestrian • Median w/ refuge • 2-4 lane(s) • Left-turn lane, dual if warranted • Right-turn lane, island recommended • NO bike lane, trail instead • Acceleration taper • NO curb extensions • Crosswalk w/ audible walk signal • Bus stop pull-out • Grade separation, if warranted
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Source: Charlotte, North Carolina "Urban Street Guidelines"

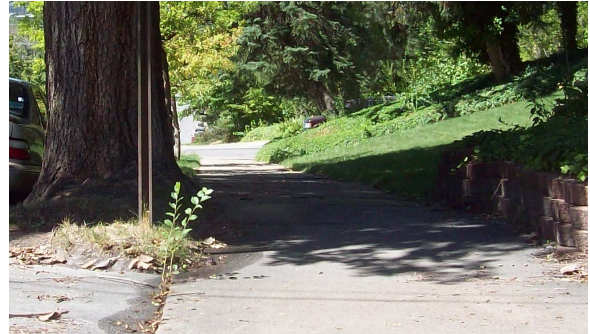


ATTACHEMENT 3 ROADWAY TREATMENTS

There are a variety of features a “Complete Street” can adopt. These include:

Sidewalks: Among the most common amenity, which most Wasatch Front cities require in new development.

Typical sidewalks are 5-feet wide. The wider the sidewalk is the more comfortable it feels for pedestrians, and allows bicyclists to share the sidewalk more easily. “Complete Streets” guidelines typically recommend at least 8-feet.



Frequent, Well-Designed Crosswalks: A crosswalk should be well-marked and signed so motorists can spot it.

Design features, like raising the crosswalk or changing its pavement type to something else (such as brick), make it easier to see.

Frequent crosswalks are more convenient for pedestrians, which mean a person is less likely to jaywalk.



Sidewalk Bulb-Outs: A type of curb that intrudes into the shoulder, temporarily narrowing the road.

These can draw attention to a specific area, such as a crosswalk. Or they can open up an area for a side-of-the-road use, such as on-street parking or a bus pull-out.

They can also calm traffic flow.



Crossing Islands: These give pedestrians a safe location to stand while crossing a busy or large street. A person walking only needs to focus on two or three lanes at a time, rather than worrying about five or seven lanes.

Generally used on mid-block crosswalks on long blocks with medians.

Sometimes a mid-block crosswalk can warrant a full signal or another traffic control device.





Bicycle Lanes: Marked areas on the road that clearly dedicate or indicate bicycle travel. Dedicated lanes (left photo) are on the right-hand side of the roadway, inside the shoulder. A bicycle lane either displaces on-street parking, or is located just left of it, allowing cars to park along the curb. These type of lanes are compatible with roads of low or high speed limits. A very-wide green stripe painted down the center of a traffic lane indicates a shared bicycle lane (right photo). These are only compatible with streets with low speed limits.



Wide Shoulders: In areas where a bicycle lane is unsuitable, a wide shoulder can work as an unmarked bicycle and pedestrian lane. On high-speed roads bicycle lanes could create a false-sense of security for amateur riders, but wide shoulders provide a safe riding location for advanced cyclists.

A shoulder also separates pedestrians on the sidewalk from motorists, especially those driving at high speeds.

A wide shoulder can also serve as a break-down lane, allowing a disabled car to leave the flow of traffic, preventing accidents.



Traffic-Pedestrian Buffer: A greenery strip between the curb and sidewalk help distance pedestrians from traffic, creating a safer and more comfortable environment for those walking or riding bicycles.

Street trees and planter boxes add to the sense of security.



On-Street Parking: An additional type of traffic-pedestrian buffer.

Parked cars help those walking or riding bicycles to feel protected from the traffic.

On-street parking also helps "Main Street" districts keep the store-fronts at the curb, rather than have parking lots in front. Curb-side storefronts are more convenient for pedestrians to walk to.





Street Lighting: Well-lit streets are safer streets, both in terms of crime and traffic accidents.

A pedestrian or bicyclist may feel more comfortable walking along a well-illuminated sidewalk. Visually appealing light fixtures feel more inviting and add to the aesthetics of the entire street.

Good lighting, particularly near crosswalks, helps drivers spot pedestrians and reduce accidents.

Audible Pedestrian Signals: Accommodate visually challenged pedestrians, helping them safely cross an intersection.

Newer signals also include a countdown timer, which helps somebody walking better judge if they can safely make it across the street.



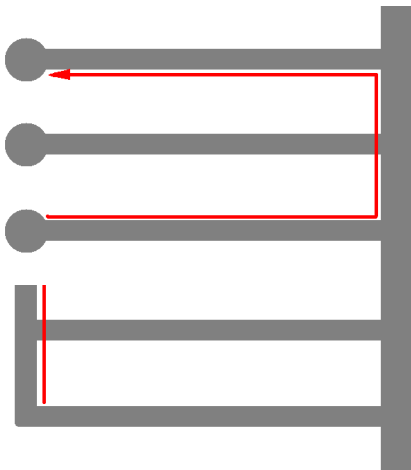
Reduce Number of Driveways: Each driveway creates a pedestrian-automobile conflict point. Each becomes a small road that a pedestrian or bicyclist has to cross. Bundling driveways, or pushing traffic onto side streets reduces the number of places a pedestrian has to worry about.

Dedicated Transit-Way: In places where a transit line is appropriate, it should be an integrated part of the street.

Plan adding additional right-of-way for Bus Rapid Transit (BRT), LRT (Light Rail Transit), and its accompanying stations.

Improve Visual Aesthetics: Small aesthetic improvements not only make a street more visually appealing to drive through, but it makes it more inviting for pedestrians, too.

This can include lighting (see above), street furniture (below), and city ordinances governing storefronts.



Short Blocks: A pedestrian, bicyclist, and transit rider amenity. A street's connectivity to other nearby roads can encourage or discourage pedestrian activity. For example, a person may want to visit a shop. Since they have to travel three sides of a square, the person may choose to drive:

Had the block length been shorter, they might have been able to walk instead, reducing one vehicle trip. Even if the person chooses to drive anyway, the extra block makes the trip shorter, reducing traffic on the surrounding streets.

Other cities, like Charlotte, NC recommend reducing the maximum allowed block length from its current size to 400-600 feet in areas that justify more pedestrian-oriented amenities.

Multi-Purpose Pathway: A traffic-separated pathway, typically 10-20 feet away from vehicle traffic along boulevards and parkways.

These are generally paved for cyclists, but both paved and unpaved pathways are useful for those walking, jogging, and equestrian users.

Street Furniture: A city can enhance its streetscape, particularly along "Main Street" shopping districts, with inviting furniture.

This can include benches, outgoing mailboxes, decorative and functional transit stops, public restrooms, statues, memorials, fountains, and drinking fountains.



High-Visibility Street Signs: Improving street signs can help city can improve a street's functionality and overall aesthetics.

Backlit signs are easier to read at dawn, dusk, at night, and during bad weather.

If a city cannot afford a backlit sign, it might consider hanging a steel mast sign with a larger font. This makes it easier for all users of the road to read, especially senior citizens and those with poor vision.

Better visibility allows motorists and cyclists to maneuver to the correct lane in advance.



ATTACHEMENT 4

FINANCING OF MULTIPLE MODE ACCOMMODATIONS

Recreational Trails Program – A federal funding source to develop and maintain recreational trails for both motorized and non-motorized users. Recreationists with snowmobiles, ATVs, or other off-highway vehicles still pay federal fuel taxes, even though they do not use the roadway. Recreational Trails Program funds represent the portion of motor fuel excise these users pay.

The Federal Highway Administration administers the funds to state legislatures, based on each state's population and their amount of non-highway recreational fuel use. Each state develops its own procedures for determining which projects to fund. A "Complete Street" Parkway uses a separated pedestrian and bicycle trail to accommodate non-vehicle traffic. These may be eligible for funds.

Recreational Trails Program funds can be used for: Maintaining and restoring existing trails, developing and rehabilitating trailheads, purchasing or leasing trail construction and maintenance equipment, constructing new trails, acquisition of easements for future trails, and trail condition assessments.

The funds may not be used for: Eminent domain, constructing new motorized trails on National Forest or BLM land, or facilitating motorized access on non-motorized trails.

Congress authorized \$60 million for Recreational Trails Program in 2005. It increased to \$75 million in 2006, \$80 million in 2007, and \$85 million in 2009. No numbers are available for future years, but it would be reasonable to assume that more funding could be available in the future.

Federal Safe Routes to School Program – The program works with schools, districts, students, parents, and law enforcement to find ways to encourage students to walk or ride their bikes to school. The goal is to improve safety, reduce the need for parents to drive their children to school, and reduce traffic congestion on streets near schools at the times children are walking to and from school. It requires each state designate a Safe Routes to School coordinator.

The Federal Highway Administration will provide funds to states to support education, safety, and other programs to pay for infrastructure improvements. States generally use a competitive grant process to distribute funding. Since "Complete Streets" and the Federal Safe Routes to School share common goals, this could be a potential funding source.

National Highway System – Funds from the National Highway System may be used to construct bicycle transportation facilities, according to 23 USC Section 217 (b). It says NHS funds can also be used for pedestrian facilities, so long as either is adjacent to any highway on the National Highway System, including Interstates.

Surface Transportation Program – Both bicycle transportation facilities and pedestrian walkways are eligible for STP funds. Past transportation bills, such as TEA-21, also had funds for converting sidewalks into ADA compliance, which may be useful in building "Complete Streets."

Congestion Mitigation and Air Quality Programs – Funds from the National Highway System may be used to construct bicycle transportation facilities, according to 23 USC Section 217 (b), as well as pedestrian walkways.



National Scenic Byways Program – Funds from this program may be used for pedestrian and bicycle facility construction along a scenic byway. See 23 USC Section 162 (c)(4).

Job Access and Reverse Commute Grants – Some funding has historically been available, under past transportation bills, for projects designed to transport welfare recipients and eligible low-income individuals to and from work. This includes bicycle-related construction and facilities.

Local Bond Packages – If a city or county feels a “Complete Street” project is of great enough priority, local leaders could propose a bond issue to pay for improvements.

For example, the city of Charlotte, North Carolina issued a bond in 2002 to re-design Rea Road.

Developer Construction - Private developers construct many new streets, particularly local roads, with their own capital. Using the six-step process, cities could require developers to adopt certain “Complete Street” elements into their designs, as part of the construction permit process. This allows new street construction without using public financing.

	National Highway System	Surface Transp. Program	Safe Routes to School	Congestion Mitigation and Air Quality	Recreation Trails Program	Scenic Byway
Bicycle and Pedestrian Plan		<input type="checkbox"/>		<input type="checkbox"/>		
Bicycle Lanes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Paved Shoulders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Signed Bike Route	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Shared Use Trail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bus Bike Racks		<input type="checkbox"/>		<input type="checkbox"/>		
Bicycle Parking Facilities		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Trail-Highway Intersection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bicycle Service Center		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Sidewalks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Crosswalks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Signal Improvements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Curb Cuts and Ramps	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Traffic Calming		<input type="checkbox"/>	<input type="checkbox"/>			

Source: Minnesota Dept. of Transportation

