

Bicycle and Pedestrian Planning Purpose and Process



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Introduction

Bicycling and walking are increasingly important means of transportation for Jefferson County residents and are integral components to the regional transportation system. The Bicycle and Pedestrian Plans will help satisfy the growing demand for travel, commuting, and recreational oriented bicycle and pedestrian infrastructure. People walk and bike for a variety of reasons. People may walk and bike because of the health benefits associated with recreation and being active. Other people may choose alternative modes of transportation because of the economic and environmental benefits. For whatever reason, the primary advantages to providing adequate bicycle and pedestrian accommodations are to provide personal mobility options, encourage active lifestyles. Secondary benefits may include a reduction in noise and air pollution, congestion, and motor vehicle travel.

The Bicycle and Pedestrian Plans were adopted by the Jefferson County Planning Commission in June of 2012. These Plans are designed to serve as the blueprint for making improvements to the County's bicycle and pedestrian network. The existing multimodal transportation system will be enhanced through the implementation of safe and convenient on-street and off-street facilities. These planning processes utilized a regional approach that focuses on the implementation of bicycle and pedestrian accommodations that are continuous and consistent throughout the cities, towns, and unincorporated areas of Jefferson County.

Purpose and Objectives

Both Plans accurately reflect the bicycle and pedestrian related transportation needs and challenges within Jefferson County. These particular planning processes were initiated in 2009 and were intended to complement previous bicycle and pedestrian planning efforts that have been conducted to promote bicycling and walking as viable modes of transportation. More specifically, these plans supplement the *Countywide Transportation Plan*, last amended in 2002, and the *Jefferson County Comprehensive Master Plan*, which was adopted in 2010 and amended in December 2012. These planning documents contain several bicycle and pedestrian related goals, objectives, recommendations, and implementation strategies. A more extensive bicycle and pedestrian network will help the County achieve its goal of increasing the number of bike and walk trips.

Stakeholder and Public Engagement

Public participation was an important element to the development of these Bicycle and Pedestrian Master Plans. Both were drafted to reflect the stakeholder and public input that was received throughout the public engagement process. Initial input was provided by a stakeholder group comprised of representatives from neighboring cities and counties and from the cities and towns located within Jefferson County. Regional partners, such as the Regional Transportation District, Colorado Department of Transportation, and Denver Regional Council of Governments, also participated as did several bicycle advocacy organizations, non-profit organizations, and businesses. Stakeholders provided policy direction, bicycle and pedestrian

infrastructure inventory assistance, design guidance, and helped identify gaps, missing links, and other deficiencies in the existing bicycle and pedestrian network.

The public was engaged throughout the planning process through a project website, an Open House, Town Hall meetings, and a citizen survey. Additionally, a public hearing was held prior to the formal adoption of these Bicycle and Pedestrian Master Plans. Hundreds of public comments were submitted throughout the duration of this planning effort and participation from area residents was substantial.

Facility Recommendations

The bicycle and pedestrian accommodations outlined below are the most common facility types that have been implemented previously and are likely to be incorporated into future multimodal planning efforts. In addition, these Plans recommend the implementation of bicycle and pedestrian corridors that are comprised of various facility types.

Bicycle lanes

A bicycle lane is a portion of a roadway that has been designated by the use of signage, striping, and other pavement markings to delineate the space assigned to cyclists. They are generally one-way facilities and are typically located to the right of general travel lanes. Bike lane facilities provide more predictable movements bicycle traffic and are primarily implemented along moderate (collector) to high volume (arterial) streets.

Bicycle routes

Signed bicycle routes are streets that do not provide exclusive space for cyclists. These travel lanes are shared fully with automobiles and are generally implemented on roadways that can be navigated safely by cyclists and motorists. “Bike Route” signs are used to designate a street as part of a bicycle network and are often used to connect on-street bike lane segments and off-street shared use pathways.

Paved shoulders

Paved shoulders are accommodations typically provided along roadways in rural or less developed areas. They are similar in appearance to bike lanes but are not used exclusively by bicyclists. The space provided is not a dedicated cycling or pedestrian right-of-way. Paved shoulders also provide vehicles with a safety buffer and emergency breakdown space.

Shared use paths

Shared use paths are bicycle and pedestrian facilities dedicated to transportation and recreation and are physically separated from street and roadways by barriers or buffers. Shared use paths are generally located adjacent to roadways, waterways, or abandoned railroads. They are also often used to access open space and parks.

Sidewalks

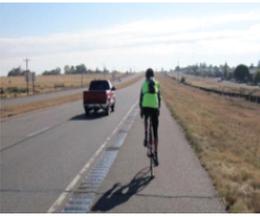
Sidewalks are hard surface paths primarily used by pedestrians and are the most commonly provided pedestrian accommodation. There are two types of sidewalks: attached and detached.

Attached sidewalks are physically connected to the curb of a roadway and detached sidewalks are physically separated from vehicle travel lanes by barriers or planting strips. Sidewalks can also be used by younger and less confident cyclists who choose not to use on-street facilities.

Wide curb lanes

Wide curb lanes are shared by motorists and bicyclists. These lanes provide vehicles with adequate space to comfortably maneuver and pass cyclists without interfering with their operating space or safety and minimize encroachment into the adjacent travel lane. A wide outside lane can improve traffic flow while also providing significant improvements for bicyclist.

Bicycle and pedestrian characteristics for each facility type are provided in Table 1.

Table 1: Bicycle and Pedestrian Facility Characteristics					
Type	Intended User	Surface	Application	Width	
Bike Lanes 	bicyclists: basic and advanced riders	asphalt or concrete	urban and suburban	3' minimum 4' preferred	
Bicycle Routes 	bicyclists: basic and advanced riders; pedestrians	asphalt or concrete	urban and suburban	NA	
Paved Shoulders 	bicyclists: advanced riders; pedestrians	asphalt or concrete	suburban and rural	3' minimum 4' preferred	
Shared Use Paths 	bicyclists: children and basic riders; pedestrians and equestrians	asphalt, concrete, crusher fines, or gravel	urban and suburban	8 - 10'	
Sidewalks 	bicyclists: children; pedestrians	asphalt or concrete	urban and suburban	4 - 8'	
Wide Curb Vehicle Lanes 	bicyclists: basic and advanced riders	asphalt or concrete	urban and suburban	13'	

Design Standards

A variety of design options and accommodations exist that can enhance and influence bicycle and pedestrian mobility. The Denver Regional Council of Governments *Guidelines for Successful Pedestrian and Bicycle Facilities in the Denver Region* and the *Pedestrian and Bicycle Element of the 2035 Metro Vision Regional Transportation Plan* both contain design standards that are used throughout the region. These design guidelines, consistent with the American's with Disabilities Act, will ensure consistency with local and regional bicycle and pedestrian planning and construction efforts.

Additional design guidance and best practices can be found by consulting the following resources:

- American Association of State Highway and Transportation Officials (AASHTO) – *Guide for the Development of Bicycle Facilities*
- AASHTO - *Guide for the Planning, Design, and Operation of Pedestrian Facilities*
- AASHTO - *Roadside Design Guide*
- Colorado Department of Transportation - *Roadway Design Guide*
- Federal Highway Administration (FHWA) - *Manual of Uniform Traffic Control Devices*
- FHWA - *Trail Design Guide*

Next Steps and Implementation

These Bicycle and Pedestrian Plans outline long-term visions for the County and detail significant future transportation investments to be evaluated and potentially implemented. Implementation is, in large part, dependant on the availability of funding and the feasibility of each proposed project. Existing or proposed land use patterns will also influence the level of accommodation provided for cyclists and pedestrians.

The adoption of these Plans by the Jefferson County Planning Commission does not guarantee adequate financial resources for the implementation of bicycle and pedestrian facilities. Currently, there is not a funding source specifically designed for the implementation of these Plans. However, when feasible, these projects will be incorporated into the Jefferson County Transportation and Engineering Capital Improvement Plan, Safety Improvement Program, and the Roadway Maintenance Program. Grants will also be pursued. Additionally, new development and redevelopment occurring adjacent to proposed projects will be responsible for constructing certain facility types and for providing cash-in-lieu when appropriate. Proposed projects will also be evaluated and constructed as individual roadway corridors are redeveloped. Jefferson County will also work with its communities and regional partners to implement elements of these Bicycle and Pedestrian Plans.

