Executive Summary

apid City is in an excellent position to capitalize on existing bicycle-and pedestrian-friendly attributes in the area, like the Leonard "Swanny" Swanson Memorial Pathway and a walkable and bikeable downtown, to increase the number of residents and visitors who walk and bicycle not just for recreation but also for transportation.

The Rapid City Bicycle and Pedestrian Master Plan builds on efforts by the community to improve transportation options and the quality of life in the Rapid City area. The Master Plan guides the development of a network of bicycle and pedestrian routes linking activity centers within the City as well as to the larger regional network. The improved network will not only make bicycling and walking more viable modes of transportation, but will contribute to economic development opportunities and enhanced quality of life for the community.



Rapid City residents enjoy the Leonard "Swanny" Swanson path every day, using it for transportation and recreation.

Vision

Rapid City will provide transportation choices by developing a network of on-street and off-street bicycle and pedestrian facilities that provide connections to destinations throughout the city.

Goals & Objectives

Goal 1:

Support bicycling and walking as viable transportation modes in Rapid City.

Goal 2

Promote bicycling and walking in the Rapid City area by improving awareness of bicycle and pedestrian facilities and opportunities.

Goal 3:

Integrate bicycle and pedestrian planning into Rapid City's Planning Processes.

Why Bicycling and Walking?

Bicycling and walking are low-cost means of transportation that are non-polluting, energy-efficient, versatile, healthy and fun. Both modes can help build physical activity into our daily lives while reducing traffic congestion and air pollution and saving money. The many advantages to walking and bicycling include:

- Bicycling and walking are good for the economy. Bicycling makes up \$133 billion of the US economy, funding 1.1 million jobs.¹
- Walkable and bikeable neighborhoods are more livable and attractive, increasing home values property tax revenue.²

- Walking and bicycling can save families money. By replacing short car trips, bicycling and walking can help lessen personal transportation costs.³
- Walking and bicycling are good for public health. Bicycling for exercise can reduce the cost of spending on health care by as much as \$514 per person every year.⁴
- More people walking and bicycling increase safety for others. In a community where twice as many people walk, a person walking has a 66 percent reduced risk of being injured by a motorist.⁵

This Master Plan envisions the Rapid City Area as a world-class biking and walking community with a diversified transportation system in which pedestrians and bicyclists are a priority in transportation planning, design and maintenance; where streets that accommodate bicyclists and sidewalks are accessible and user-friendly; and where citizens have many travel options in their daily lives.

Existing Conditions

The Rapid City area is home to a 16-mile network of existing trails and a relatively complete sidewalk system. This Plan seeks to overcome barriers to accommodating and encouraging bicycle and pedestrian trips.

Opportunities include:

- A pedestrian- and bicycle- friendly downtown;
- Existing walk- and bicycle-friendly streets in some parts of the community;
- The Leonard "Swanny" Swanson Memorial Pathway "spine trail" with its grade-separated crossings;
- Space in many locations to provide low-cost bicycle improvements; and
- Bicycle racks on the RapidRide transit buses.

Constraints include:

- Major streets, Rapid Creek and railroads impede local street connectivity;
- Lack of wayfinding tools along existing walkway and bikeway networks;
- User conflicts on the area trails; and
- Uncomfortable walking and bicycling environments along high-volume roadways.

Approximately 6,000 trips are currently made by bicycle and another 66,000 trips for exercise or to access work, school, shopping or other services are made on foot every day in the Rapid City area. If this Plan is implemented, these numbers are estimated to increase to 30,000 bicycling trips and 109,000 walking trips every day in the region. These increases have the opportunity to reduce emissions and congestion, improve health and livability, and spur economic development.

Plan Organization and Use

The Plan is organized as follows:

- Chapter 1: Introduction and Plan Purpose
- Chapter 2: Existing Bicycling and Walking Conditions in the Rapid City area
- Chapter 3: Recommended Bicycle and Pedestrian Supportive Policies
- Chapter 4: Recommended Walkway and Bikeway Network Improvements
- Chapter 5: Recommended Education/Encouragement/Enforcement/Evaluation Programs
- Chapter 6: Implementation Plan and Funding Strategies

Public Involvement

Rapid City area residents, community stakeholder groups and public agency staff helped guide the development of this Plan. Public input about the opportunities and challenges to better bicycling and walking in the Rapid City area was obtained in several ways, including two public input workshops (June 2010 and April 2011), a community survey and through project steering committee meetings.



Rapid City residents and stakeholders provided important input into the development of this Plan.

Implementation

The Rapid City Bicycle and Pedestrian Master Plan provides the long-term vision for the development of a community-wide bikeway and walkway network usable by residents and visitors for transportation and recreation. Implementation of the plan will take place over many years. The implementation strategy presents a targeted methodology for how Rapid City can institutionalize bicycle and pedestrian improvements into local and regional planning processes and projects.

The following strategies and action items are provided to guide Rapid City toward the vision identified in the plan:

 Strategically pursue infrastructure projects by obtaining capital improvement and grant funding as well as incorporating projects into upcoming public works projects, especially the short-term bicycle and pedestrian improvements.

- Regularly revisit project priorities in the plan as projects are completed, conditions change and new projects are needed.
- Integrate bicycle and pedestrian planning into Rapid City's planning processes by incorporating the recommendations into the day-to-day activities of planning, design, funding, construction, and maintenance.
- Encourage private donors to support the bicycle and pedestrian system through volunteer projects like trail construction and maintenance services as well as funding projects like wayfinding signage and other encouragement programs.
- Implement education, encouragement and enforcement activities to encourage more walking and bicycling in Rapid City.

Top Ten Priority Projects			
Facility	Route	Extent	Length
Signed Shared	Sagewood St/Northridge Dr	Bunker Dr - Haines Ave	0.56
Bike Lane	Jackson Blvd	W Highway 44 - Chapel Ln	1.53
Bike Lane	North St	West Blvd N - Allen Ave	0.91
Bike Lane	Soo San Rd	W Main St - Brookside Rd	0.16
Shared Lane	5th St	Omaha St - Columbus St	0.46
Shared Lane	Covington St	Twilight Dr - E Highway 44	0.89
Shared Lane	E Centennial St/Locust St	Parkview Dr - E Fairmont Blvd	0.82
Shared Lane	E New York St/N Maple Ave/	East Blvd - Cambell St	1.00
	E Philadelphia St		
Shared Lane	Flormann St/Meade St	West Blvd - 5th St	1.27
Shared Lane	Milwaukee St	Crestwood Dr - E New York St	1.00



Walking and bicycling are safe and healthy modes of transportation and recreation that contribute to quality of life.



Bike lanes provide key on-street access for commuting to work, shopping, or connecting to the existing off-street trail system.

Developing the Network of Bikeways and Walkways

The recommended bikeways and sidewalks connect key destinations in and around Rapid City. The recommended improvements are designed to overcome barriers to walking and bicycling, including providing access where destinations are separated by major highways. In many of these areas, residents and visitors have no choice but to drive a motor vehicle to every destination.

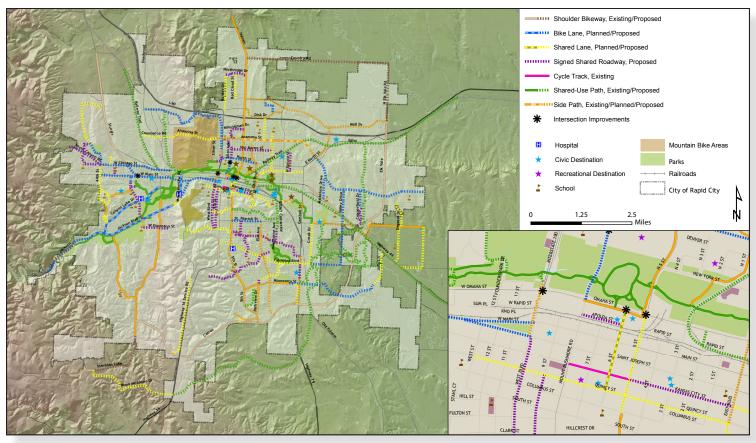
Improvements vary from low-cost measures yielding immediate results – like

restriping streets to accommodate bike lanes – to longer-term strategies for transforming Rapid City into a more bicycle- and pedestrian-friendly community, like larger-scale trail construction. The highest priority projects outlined in this Plan provide improved options for transportation and recreation and could be implemented in the near future.

The infrastructure recommendations fall into three categories:

 Priority bikeway improvements that focus on low-cost treatments on key corridors that provide bicycle access to

- downtown, the existing trails, schools, parks and other destinations.
- Priority sidewalk projects are identified along collector and arterial streets
 that improve access by filling key gaps
 that link to important destinations.
- Community-wide improvements include wayfinding signs, bicyclefriendly retrofits to drainage grates, bicycle parking and new development requirements to ensure provision of bicycle and pedestrian facilities.



Recommended bikeway facility improvements

- $1\quad Flusche, Darren \ for \ the \ League \ of \ American \ Bicyclists. \ (2009). \ The \ Economic \ Benefits \ of \ Bicycle \ Infrastructure \ Investments.$
- 2 Cortright, Joe for CEOs for Cities. (2009). Walking the Walk: How Walkability Raises Home Values in U.S. Cities.
- 3 Center for Neighborhood Technology. (2005). Driven to Spend: Pumping Dollars out of Our Households and Communities.
- 4 Feifei, W., McDonald, T., Champagne, L.J., and Edington, D.W. (2004). Relationship of Body Mass Index and Physical Activity to Health Care Costs Among Employees. Journal of Occupational and Environmental Medicine. 46(5):428-436
- 5 Jacobsen, P.L. (2003). Safety in numbers: more walkers and bicyclists, safer walking and bicycling. Injury Prevention 9:205-209.