# **Executive Summary**

#### Vision and Purpose of the Plan

The Roadways to Bikeways Plan provides a broad vision, policy, goals and objectives for how the Ada County Highway District (ACHD) can facilitate and improve conditions for bicycling in Ada County over the next fifty years. The Plan envisions an interconnected bicycle network that connects local neighborhoods, schools, public facilities, business districts and environmental features. The proposed network will connect all parts of the County, while providing a bicycle facility within a quarter-mile from 95 percent of all the residents in Ada County and its six cities. Once achieved, this Plan will improve Ada County residents' health, enhance their quality of life, help improve and protect the County's vital natural resources, and be a source of pride to the community. The project was produced by the consulting team of Alta Planning + Design and Parametrix, Inc and funded by ACHD.

#### Overarching Concepts

Ada County currently benefits from an existing bikeway system that has been developed over the past several decades. Ada County remains one of only two counties in the nation designated as bronze-level Bicycle Friendly Communities. Over 4,000 people in Ada County's workforce use a bicycle as their primary mode of transportation, and thousands more bicycle to school, to visit friends, to go shopping, and to improve their health. In the decade since the update of the 1996 Ridge-to-Rivers Pathway Plan, numerous on- and off-street bicycle facilities have been constructed by ACHD, Ada County, and its cities. This 2009 Plan takes an updated look at the existing ACHD roadway network, building upon the previous planning foundation and making recommendations to enhance and expand the existing on-street bikeway network, connect gaps, address constrained areas, provide for greater local and regional connectivity, and encourage more residents to bicycle. This Plan provides a basis and recommendations for an updated system of bike lanes, signed shared roadways, and bicycle boulevard designations. The Plan also recommends a variety of programs and policies to allow for safe, efficient and convenient bicycle travel in and between the communities of Ada County and connecting to destinations outside the county.

# Reasons for the Plan

Having a unified Plan for all of Ada County is important for the following reasons:

• Create a multimodal transportation system that includes bicycling as a practical alterative to driving and increases the use of bicycling for commuting and short distance trips to meet daily needs: A multimodal transportation system which includes bicycling as a practical alternative to automobile use, particularly for short daily commute and utilitarian trips, leads to reduced traffic congestion, air pollution and consumption of non-renewable fuels.

- Enhance the quality of life in Ada County. The development of bicycle facilities creates people-friendly streets, paths, trails, and activity centers that are accessible to everyone and supports sustainable community development. Commuting and utilitarian bicycling reduces traffic congestion, vehicle exhaust emissions, noise, and non-renewable energy consumption. It is a healthy and active form of travel. It is an affordable means of transportation and recreation. Good bicycling opportunities can also stimulate the economy by bolstering businesses. Safe and efficient recreational cycling opportunities will attract tourists to scenic areas and employees to the many sports and recreation-oriented businesses.
- Improve safety and encourage cycling: The design standards and guidelines, education, and enforcement recommendations outlined in this plan are tools to enhance safety for bicyclists. This plan provides recommendations for route improvements intended to make cycling safer for bicyclists of all ability levels. Encouragement programs are also suggested to motivate residents to ride for work, school, exercise and recreation.
- Expand the network and support facilities: Ada County and its six cities already have a number of vastly popular bikeways such as the Boise River Greenbelt, which is also used by pedestrians and in-line skaters. While many of these existing facilities provide excellent scenic routes for recreational bicyclists, developing a more comprehensive on-street network is necessary to provide full bicycle connectivity. Implementing a complete bikeway network that links a variety of destinations employment, shopping, school, and recreation is the key to attracting greater numbers of bicyclists. In addition to expanding and connecting the key routes, providing support facilities such as clear directional signage and secure bicycle parking will enhance the functionality of the network and encourage more people to bicycle.
- Increase funding for implementation: With the identification and prioritization of specific facility and programmatic improvements found in the Roadways to Bikeways Plan, ACHD and other local jurisdictions can apply for appropriate funding to support bicycling throughout the county and its six cities.

# Bicycling as Part of the Transportation System

Developing a multimodal transportation system will address traffic congestion, air and water pollution, energy consumption, problems with near-exclusive use of automobiles, use of non-renewable fuels to supply transportation, and increased pressure on infrastructure budgets to build and maintain roads. Bikeway network enhancements are expected to generate more bicycling trips in the future. This growth is expected to improve air quality by further reducing the number of vehicle trips, vehicle miles traveled and associated vehicle emissions. This Plan seeks to develop the bicycle network to encourage bicycling to be a practical alternative to driving for Ada County residents during spring, summer and fall months.

# Bicycling for Recreation

Bicycling is also a healthy and active form of recreation, which takes advantage of the natural beauty and scenic quality of the region. ACHD is in an excellent position to capitalize on the bicycle-

friendly attributes that exist in the area – moderate climate, relatively flat terrain in developed areas, centralized agency control and a reputation as a place with ample recreational amenities—to increase the number of residents and visitors who travel by bicycle for recreational trips.

## **Existing Conditions and Planning History**

Ada County has a growing reputation as a desirable, livable community. One of the aspects that makes a community livable are places where people feel comfortable bicycling, whether they be school children, young adults, working people, or senior citizens. In general, the six cities in Ada County have connected street grids and several low-traffic roads that are pleasant to bicycle on. Despite this existing system, Ada County residents have identified several issues with the existing system and key safety concerns, which are addressed in this Plan.

#### State of the Network

Bicycle counts found that a large proportion of cyclists ride on sidewalks, indicating that they are uncomfortable riding in the street with cars. More than half of residents responding to an online survey cited a lack of bike paths, lanes or routes and too many cars/cars drive too fast as key problems with the existing bicycle network (see Figure ES-1).

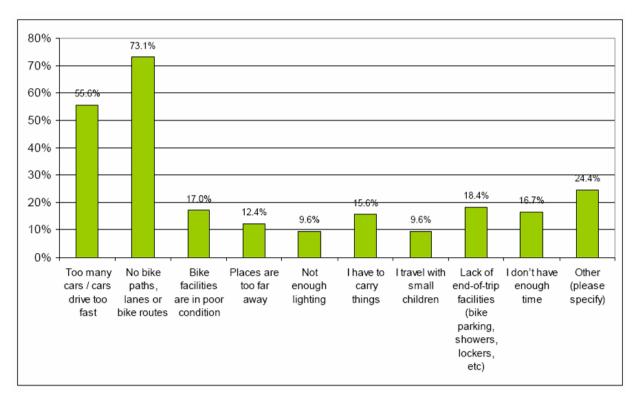


Figure ES-1. Problems with the existing bicycle network as identified by participants in the online survey

When asked what facilities they would like to see in Ada County, respondents of the online survey most frequently answered: more off-street or separated pathways, more bike lanes and completion

of the gaps in the existing system. Increasing ridership among occasional bicyclists, which is the largest cycling group, depends on a better bicycle network and support facilities.

#### Current Bicycle Activity

The online survey found that the single largest group of adult cyclists in Ada County is the intermittent recreational rider who generally prefers to ride on pathways or quiet side streets. School children also make up a large percentage of bicycle riders, often riding to school, parks or other local destinations. A bicycle demand model was developed, using the 2007 American Community Survey and the most recent available data for the region. The model estimates that Ada County bicyclists currently make approximately 55,000 trips per day, reducing more than 5,000 weekday motor vehicle trips and eliminating 37,000 miles to daily vehicle travel and 21,000 tons of vehicle emissions per year. While many residents of Ada County currently bicycle for some trips, the public outreach identified a significant opportunity to increase the number of residents who travel by bicycle not just for recreation, but for transportation as well.

### **Planning Foundation**

In the decade since the update of the 1996 *Ridge-to-Rivers Pathway Plan*, numerous on- and off-street bicycle facilities have been constructed by ACHD, Ada County, and its cities. ACHD alone has increased the number of miles of on-road bicycle facilities in the county to 164 total miles. This 2009 Plan takes an updated look at the existing ACHD roadway network, building upon the previous planning foundation and making recommendations to enhance and expand the existing on-street bikeway network, connect gaps, address constrained areas, provide for greater local and regional connectivity, and encourage more residents to bicycle. The 2005 *Pedestrian Bicycle Transition Plan* (PBTP) aids this study by laying the groundwork for bicycle and pedestrian planning in Ada County, particularly to address "federal pedestrian planning guidelines and the regulatory requirements of the *Americans with Disabilities Act* (ADA)".

# Plan Development

The Plan was developed through a series of research, field, and public process activities from late Spring 2007 to early 2008. Activities included:

- Existing document/policy review
- Bicycle counts
- Interviews
- An online questionnaire
- Assessment of existing conditions/facilities
- Evaluation of bicyclist needs

- Field assessment of missing gaps/system deficiencies
- Regular meetings with a Steering Committee
- Two public open houses
- Additional comments submitted by residents
- Additional presentations and materials to other groups

#### Technical Review

Development of the plan included technical analysis and extensive public involvement. ACHD staff and the Roadways to Bikeways Steering Committee conducted a review of existing documents and policies, an analysis of demographic, employment and geographic factors affecting demand for bicycle facilities, bicycle count, assessment of existing bicycling conditions and facilities, evaluation of bicyclist needs such as safety improvements, and field assessment of system deficiencies. The differing needs of commuter, utilitarian and recreational bicyclists, and of experienced and more casual riders, were considered to ensure that the proposed network provides facilities for all types of riders.

#### Types of Cyclists

The differing needs of experienced and casual riders, and of riders making utilitarian and recreational trips, were considered to ensure that the proposed network provides facilities for all types of riders. Experienced cyclists include long-distance road cyclists, racers, commuters and utilitarian cyclists those who use their bicycle as a primary means of transportation. These cyclists generally feel comfortable riding on roads and with traffic. Casual cyclists include youth and adults who are intermittent riders and may be nervous about riding in a street with cars, preferring quiet streets. Rather than be directed to side streets, most cyclists making utilitarian trips would prefer to be given bike lanes or wider curb lanes on direct routes, and unprotected crosswalks and intersections are a key concerns of riders making utilitarian trips. Recreational users cover all age groups from children to adults to senior citizens. Recreational trips can range from a 50-mile weekend group rides, to a family outing along the Greenbelt, and all levels in between. Recreational cyclists' needs vary depending on their skill level

#### Public Outreach and Involvement

Public involvement was a key part of creating the Roadways to Bikeways Plan, and helped develop citizen support for a sense of ownership of the overall Plan Public outreach included a review of existing documents and policies, bicycle counts, interviews with local agency representatives, an online Roadways to Bikeways survey, two public open houses, additional comments submitted by citizens, and additional presentations and materials upon request.

## Goals, Objectives and Action Steps

Based on feedback from the public process and previous planning efforts the County and cities have undertaken, two overarching goals were established for a comprehensive Ada County bikeway system. They are:

- Goal 1: Complete a bicycle facility network that maximizes safety, provides connectivity, and supports the bicycle as a viable transportation mode among the residents of Ada County and its six cities.
- Goal 2: Promote bicycle safety and increased bicycling within Ada County and its six cities.

The goals provide the long-term vision and serve as the foundation of the Plan, while the objectives and actions provide more specific descriptions of actions to undertake to implement the plan. Four principle objectives have been identified for achieving the two overarching goals of the Plan.

Objective 1: Implement the Roadways to Bikeways Recommended Bikeway Network to encourage increased use of the bicycle for transportation.

- Action 1.1 Complete the recommended bikeway network by closing existing gaps and considering innovative design solutions for constrained locations to provide accessible bicycling corridors throughout Ada County.
- Action 1.2 Provide safe and accessible bicycle facilities that link local and community destinations (downtowns, schools, parks, neighborhood centers) and pathway systems, as well as regional facilities and other destinations.
- Action 1.3 Implement a continuous network of bike lanes, signed shared bikeways, and bike boulevards that serve all bicycle user groups, including both recreational and utilitarian riders.
- Action 1.4 Seek funding for bicycle transportation projects through current local, regional, state, and federal funding programs while forming local partnerships to leverage those funds to maximize the use of available dollars.

Objective 2: Encourage Ada County residents to use bicycles as an alternative mode of travel for both local and commuter trips by publicizing routes and proper facility maintenance.

- Action 2.1 Encourage construction or repair activities, both on street and of adjacent buildings, to minimize disruption to bicycle facilities, consider bicyclist safety at all times, and provide alternate routes if necessary.
- Action 2.2 Incorporate bicycle network repair and maintenance needs into the regular roadway maintenance regime as appropriate, paying particular attention to sweeping and pothole repair on priority bicycle facilities.
- Action 2.3 Install signage along all local and regional bikeways to assist with way finding and to increase awareness of bicyclists.
- Action 2.4 Publicize the availability of bicycling maps and other bicycling resources through the ACHD website, bicycle shops, schools, employers, and other locations.

Objective 3: Promote bicycling educational and safety programs, support encouragement programs and implement law enforcement activities.

- Action 3.1 Continue existing and pursue new adult and youth bicycle education and safety programs.
- Action 3.2 Increase attention by law enforcement officers to bicycle-related violations by both motorists and bicyclists, and emphasize positive enforcement for safe bicycling behavior by children.
- Action 3.3 Support Safe Routes to School and other efforts, including educational and incentive programs to encourage more students to bicycle or walk to school, through a partnership with the school districts and YMCA.
- Action 3.4 Encourage employers to provide incentives and support facilities for employees that commute by bicycle.
- Action 3.5 Encourage jurisdictions to provide incentives to developers completing new and redevelopment of properties that include bicycle-friendly facilities and design in their projects.

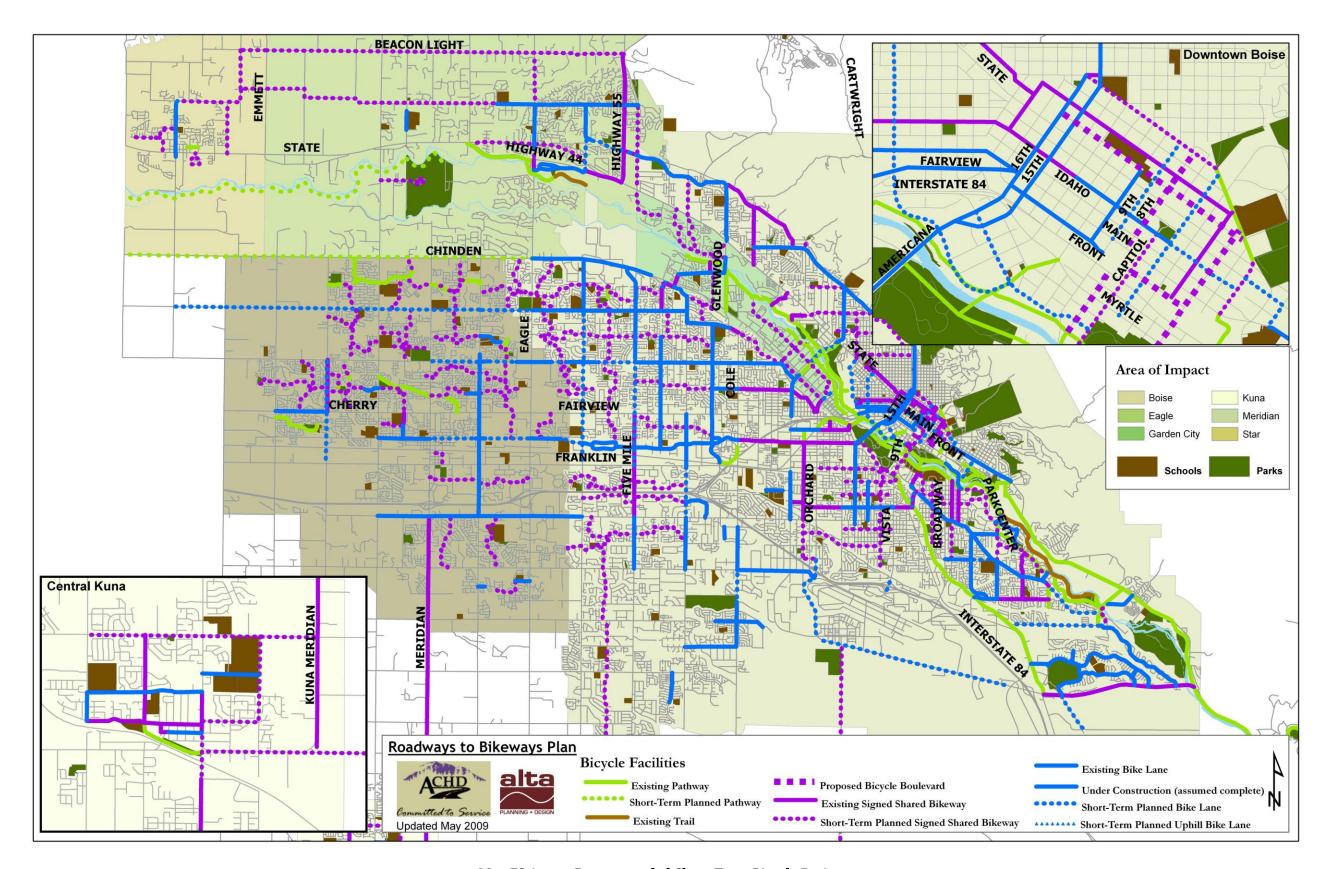
Objective 4: Facilitate Coordination and Cooperation Among Local Jurisdictions in Development of the Roadways to Bikeways Recommendations.

- Action 4.1 Provide ACHD community partners and local agencies with the tools and guidance necessary to implement bicycle-specific improvements within their jurisdictions.
- Action 4.2 Encourage regular communications between ACHD, constituent cities, ITD, COMPASS, Valley Regional Transit, Ada County, and other affected agencies regarding bicycle planning issues.
- Action 4.3 Encourage large employers, colleges and universities, activity centers and major transit stops to provide secure bicycle storage facilities and racks and promote their efforts.
- Action 4.4 Provide projects that improve multi-modal connections and enhance bicycle-transit trip linking.

## **Implementation**

Recommended bicycle infrastructure types to accomplish the first Goal of the Plan include: bike lanes, signed shared bikeways, including bicycle boulevards, other on-road facilities, which include wide outside lanes and shoulder bikeways, and pathways or shared-use paths. Design guidelines for each of these facility types were developed.

The network – when fully implemented – will provide primary routes for bicycling throughout Ada County. The Roadways to Bikeways Recommended Bikeway Network shown on the following Map will serve as a core system of bike facilities that provide easier access to all parts of the county for bicyclists, while serving as a tool for ACHD to focus and prioritize bicycle facility implementation efforts where they will provide the greatest benefit to bicyclists and the community at large.



Map ES-1. Recommended Short-Term Bicycle Projects

In addition to the public outreach and analysis described above, criteria considered in the analysis of existing roadway conditions and selecting specific treatments were:

- Traffic volumes and travel speeds on streets
- Safety concerns
- Amount of side friction (driveways, side streets)
- Curb-to-curb width, available right-of-way and shoulder conditions
- Number of destinations served, including schools, parks and employment centers
- Topography and gradients
- Integration into the regional system
- Presence of reasonable alternatives for bicyclists
- Directness and connectivity to destination

The project prioritization list and individual projects outlined in this Plan are flexible concepts to serve as implementation guidelines. The short-term project list and overall system may change over time as a result of changing bicycling patterns, land use patterns, and implementation constraints and opportunities. ACHD Staff, in conjunction with the Bicycle Advisory Committee and community members, should review the project list and associated projects at regular intervals to ensure that it reflects the most current priorities, need and opportunities for implementing the bicycle network in a logical and efficient manner.

Funding prioritization criteria were developed to reflect the costs and benefits of individual projects and to determine short-term (within 10 years), medium-term (10-25 years), and long-term (25-50 years) project lists. The ranking criteria include: A variety of potential funding sources are available to construct the proposed bikeway improvements, which include Federal, state, regional, local, and private funding programs. Most funding programs are competitive, and involve an extensive application documenting project need, costs, and benefits. Local funding for bicycle facilities would typically come from Ada County or potential future bond or other local revenues. The primary Federal funding source is the U.S. Department of Transportation (USDOT), through the Safe, Accountable, Flexible, and Efficient Transportation Equity Act (SAFETEA). Private funding may be found through foundations, advocacy organizations and businesses.

Implementation strategies to facilitate implementation of the proposed network include:

- **Implementation Strategy 1:** Strategically pursue bicycle infrastructure projects to maximize results and minimize costs.
- Implementation Strategy 2: Ensure that the Roadways to Bikeways Plan and project list are current and relevant.
- Implementation Strategy 3: Integrate bicycle planning and construction into ACHD's day-to-day activities of planning, designing, funding, constructing and maintaining infrastructure in the county.

- Implementation Strategy4: Include bicycle infrastructure in cities' development requirements to further expand the bicycle network in Ada County
- **Implementation Strategy 5:** Encourage private donors to support the bikeway system.
- Implementation Strategy 6: Qualitatively measure the County's progress toward implementing the Roadways to Bikeways Plan.
- Implementation Strategy 7: Implement education, encouragement and enforcement activities to augment the expanded bicycle network, and encourage people who would otherwise not ride to bicycle.

Several supporting programs are also important for promoting bicycling in Ada County, working with and bolstering the comprehensive network of bicycle facilities. These programs include a regular maintenance plan, network signage, education, encouragement and enforcement programs, and community partnerships. Maintenance recommendations outline ways of considering bicyclist safety during construction and maintenance projects. While not directly under ACHD's purview, it is helpful for the Highway District to recognize the importance of support programs for bicyclists, and to support cities and community groups' encouragement efforts.

Community partners can assist ACHD in developing and maintaining the proposed bikeway network, as well as implementing supporting programs and facilities. Cities, employers, colleges and universities, and bicycle advocacy groups are all potential partners.

This Plan presents a blueprint for creating a world-class bicycle network in Ada County, serving both the recreational and transportation needs of this fast growing community. To ensure that this vision is implemented, the Plan must become a living document that is incorporated into ACHD's day-to-day activities of planning, design, funding, constructing and maintaining bicycle facilities as part of its roadway system. With the leadership of ACHD, the region's partner agencies, citizens and organizations, bicycling will be an important part of the future for Ada County.