

Wyoming

BICYCLE & PEDESTRIAN SYSTEM REPORT 2018

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LEGISLATION THAT LED TO THE CREATION OF THIS REPORT REQUIRED THAT A DIVERSE, 13-MEMBER TASK FORCE BE APPOINTED BY THE GOVERNOR:

Matt Carlson, WYDOT Highway Safety Office
Jeff Wiggins, City of Cheyenne Trails Planner Coordinator
John Rutter, Wyoming Office of Tourism Board Member
Pat Collins, Bicycle Station Bike Shop Owner
Tim Young, Wyoming Pathways
Angela Emery, Platte River Trails
Andy Greenman, Wyoming Business Council
Alexia Harrist, Wyoming Department of Health
Domenic Bravo, Wyoming State Parks
Peggy Caldwell, Wyoming Backcountry Horsemen Officer
Jack Koehler, Friends of Pathways
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PRODUCED BY THE WYOMING BICYCLE AND PEDESTRIAN TASK FORCE WITH TECHNICAL ASSISTANCE FROM ALTA PLANNING + DESIGN AND FINANCIAL CONTRIBUTIONS FROM PUBLIC AND PRIVATE PARTNERS (SEE PAGE 80)

alta PLANNING + DESIGN



Walking is critical to successful local businesses in Campbell County

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Executive Summary

Legislative Background

The Bicycle and Pedestrian System Task Force was created with the passage of **Senate Enrolled Act 8** during the 2016 legislative session. The bill was developed by the Joint Travel, Recreation, Wildlife and Cultural Resources Committee over the course of the prior year as part of an Interim Study Topic, and passed with strong support in both Senate and House. Governor Matt Mead signed the bill into law, and following an application process, he appointed **13 people representing key areas of expertise from around Wyoming to serve on the Task Force**.

Task Force

The Task Force was charged with developing this report to help the legislature, local communities, and state agencies, including WYDOT and the Departments of Health, Tourism, State Parks, and the Business Council, to better understand the opportunities, benefits, and challenges of bicycle and pedestrian pathways and natural surface trails. This is **the first state-level effort of its kind** to **study these issues** in Wyoming and **provide recommendations** to the legislature and agencies.

Benefits

The legislation calls for the Task Force to consider the **economic benefits** of bicycle and pedestrian pathways and natural surface trails through enhanced tourism opportunities and community **quality of life enhancements**, and to study the **health benefits** to Wyoming residents and visitors of encouraging bicycle and pedestrian recreation and active transportation, and ways in which these benefits can best be attained.

Safety issues will be addressed in Chapter 5 of the report. A tragic number of bicycle and pedestrian fatalities and injuries have occurred around Wyoming in recent years. These crashes were part of the Legislature's purpose in forming the Task Force. The legislation calls for safety analyses of bicycle and pedestrian crashes and to recommend ways to improve public safety for all travelers.

Many communities have pathway and trail programs, and **at least 25 Wyoming communities have plan documents** that address existing and future pathways and trails. The legislation calls for the Task Force to identify and evaluate **options to fund the construction and maintenance** of these pathways and natural surface trails, including private and non-profit sources, along with local, state, and federal sources.

The legislation requires the Task Force to prepare a preliminary report by October 1, 2016, and to prepare a Final Report due by October 1, 2017. This report represents the efforts of the Task Force and consultants in preparing the 2018 Final Report.

Following completion of the report, the Task Force will continue to be available to assist the Legislature through July 1, 2018, when the Task Force will end.

indicates benefits throughout the report

Report Development & Meetings

The Bicycle and Pedestrian System Task Force held its **first meeting in August 2016**. The group appointed Tim Young, Executive Director of Wyoming Pathways, as Chairman, and established topic area subcommittees to assist in the work. The full Task Force has met a total of ten times to date, including two in-person meetings, the first in Casper and the second in Lander (near the end of the report writing process). In addition to the full group meetings, the five subcommittees and agency representatives have contributed.

To prepare the most useful report for the legislature, the Task Force determined that bringing in professional assistance would be beneficial. To do so, the Task Force successfully raised **$50,000** in private and public funding. In spring 2017, a qualified consultant was contracted to assist in the report preparation. **Alta Planning + Design** was selected based on their qualifications and experience on similar state bicycle and pedestrian plans, which also included health and economic benefits of active transportation and recreation, and for their knowledge in best practices in the planning, design, management, and safety of bicycle and pedestrian systems.

The Task Force gathered existing plans and data on bicycling and walking in Wyoming that were available from state and federal agencies, tribal and local governments, public land agencies, and tourism sources, and then provided the information to Alta Planning + Design. The Task Force also held conference calls with the consultant and each of the five subcommittees in order to provide additional Wyoming background on the report's topic areas. In addition, the Task Force organized additional calls with public land managers.

The Legislature assigned the **Wyoming Business Council** (WBC) to provide administrative support for the Task Force. The WBC staff have excelled at managing the flow of information, announcing meetings, and creating a website page to gather public input and organize the information for the report. The members of the Task Force are grateful for this assistance.

The Bicycle and Pedestrian System Task Force's efforts have also been informed with the work of the Governor's **ENDOW Initiative**, which includes the Outdoor Recreation Task Force. That task force is developing policy recommendations for Governor Mead's consideration to guide and expand business opportunities and to improve recreation infrastructure in the state's second largest industry. There has been communication between the two task force entities regarding funding needs and possible fee proposals.

Report Structure

The Final Report is structured around **five chapters** (Part 1), outlined below, followed by recommendations (Part 2) tailored to major agencies and stakeholders in Wyoming. Each chapter has written content, infographics, photos, and successful Wyoming case studies. Important takeaways, recommendations, or stories are identified in sidebars (like this one) or full page features.

01 **Community Pathways & Local Streets**

02 **Main Streets & Downtowns**

03 **Rural Bicycling & Walking in Wyoming**

04 **Natural Surface Trails**

05 **Health & Safety Benefits**

Recommendations

After the overview of existing conditions and benefits in Part 1, the *Wyoming Bicycle & Pedestrian System Report* concludes with policy, statute, program, and infrastructure recommendations specifically tailored to 12 agencies or groups of agencies in Wyoming. By following the Report guidance and recommendations, users, land managers, visitors, taxpayers, and the state as a whole will be able to maximize the active transportation and recreation accessibility, economic, and community health benefits of walking and bicycling.

Below are one to two high priority recommendations from each agency identified in Part 2 of this report.

The report's recommendations were derived from local experience, needs, and desires, as well as national literature and regional and national case studies on safe community design, anticipated outcomes, and benefits.

Agency	*High Priority Recommendations*
Wyoming State Legislature	• Create an Interim Study to evaluate Wyo. Stat. § 31-5-601 et. seq. (Pedestrians) and Wyo. Stat. § 31-5-701 et. seq. (Bicycles), and related statutes, to explore legislative opportunities to improve and update statutes to help realize the safety, economic and health benefits described in this report. [SL S.2]
	• Create and fund a $10 million annual statewide bicycle and pedestrian infrastructure and information initiative to address identified needs of, and benefits to, Wyoming communities of enhancing walkable main streets, community pathways, rural cycling routes, and natural surface trails. [SL F.1]
	• Develop legislation to provide funding and direction to state agencies to prepare a comprehensive and quantitative study of the health, safety, economic, and other benefits of walking and bicycling in Wyoming. [SL S.1]
Office of the Governor	• Evaluate agency initiatives recommended in the Wyoming Bicycle & Pedestrian System Report, and work with state agencies to incorporate appropriate changes into budgets and work plans. (GOV 1)
	• Contact and persuade the Wyoming Delegation and federal land agencies regarding the serious federal land trail maintenance backlog and need for continued federal investment on public trails and community pathways in Wyoming. (GOV 3)
Wyoming Department of Transportation (WYDOT)	• Create a WYDOT Office of Bicycle and Pedestrian Transportation to address the transportation needs of people bicycling and walking, and to realize the transportation and community benefits and opportunities outlined in this report. (DOT AO.1)
	• Increase investments of Wyoming's federal and state transportation funding for walking and bicycling projects when developing future State Transportation Improvement Program (STIP) lists, using existing program authority in the FAST Act and state statute. (DOT F.1)
Wyoming Business Council (WBC)	• Continue and enhance the Wyoming Main Street program to offer incentives, funding, and technical support that is relevant to communities of all sizes; collaborate with WYDOT to leverage WBC community grant and loan programs and highway improvement projects, particularly as they involve Main Streets. (WBC 5 & 6)

Agency	*High Priority Recommendations*
Wyoming Office of Tourism (WOT)	• Work with communities, local pathway and trail organizations, WBC and State Parks to help promote and advertise Wyoming's walkable main street communities, trail systems, community pathways, bicycle routes, and long-distance trails as an experience targeted towards out-of-state visitors. (WOT 1) • Promote and market long distance bicycling opportunities in Wyoming, and provide information on key bicycle touring amenities for visitors (WOT 5)
Wyoming Department of Health (WDH)	• Partner with County Health Offices, the Wyoming Department of Transportation (WYDOT), and local pathway and trail non-profit organizations to promote physical activity and active transportation in worksites, schools (Safe Routes to School Program), and community settings by improving and creating pedestrian- and bicycle-friendly environments. (WDH 2)
Wyoming State Parks	• Complete a system-wide non-motorized trail plan for Wyoming State Parks and Historic Sites, prioritizing the trail building projects to be completed. (SP 1) • Lead the state effort to develop long distance bike trails in Wyoming, including the Great American Rail Trail, Greater Yellowstone Trail, Great Divide Trail, and potential new Gravel Bike routes; partner with communities and trail organizations on concept plans for Wyoming. (SP 10)
Wyoming Office of State Lands and Investments	• Identify potential opportunities on State Trust Lands and other lands managed by the State of Wyoming to support enhanced "close to home" trail systems (Land 1) • Develop creative solutions to provide enhanced recreational trails through community partnerships that protect State Lands, generate sufficient fees for public trail use, and which generate stewardship assistance to help construct and maintain the trails. (Land 2)
Wyoming Department of Education	• Partner with local communities, school districts, transportation entities, and non-governmental organizations (NGO) on Safe Routes to School (SRTS) programs (ED 1) • Elevate the importance of SRTS in new school siting evaluations. Include criteria to recognize the importance and health benefits of easy access for walking and biking to school in the decision-making process for new school locations and designs. (ED 3)
Wyoming Law Enforcement Academy	• Develop a Police Officer Standards and Training (POST) curriculum for bicycling and walking enforcement (LE 1)
Pathway and Trail Non-Profit & Advocacy Organizations	• Help distribute the Wyoming Bicycle & Pedestrian System Report to the public and members of local and state user groups. Encourage state and local government to adopt its recommendations (Part 2). Encourage the establishment of local task forces to implement the report's recommendations. (NGO 1) • Provide private funding and leverage public funding for maintenance needs, perhaps as partnerships with cities, towns, and counties to increase impact. (NGO 3)
Federal Land Managers (USFS, NPS, BLM)	• FS: Complete District-level trails assessments for all 26 Ranger Districts in Wyoming, with prioritized trail improvement plans, and increase federal funding for trails crews to address trail system needs. (FL FS.1) • NPS: Improve bicycle and pedestrian safety on existing roads and explore opportunities for enhancing bicycle, hike, walk, and other non-motorized use and trails in all park units in Wyoming. (FL NPS.3,4,9) • BLM: Identify opportunities on BLM lands for "close to home" trail systems; work toward developing trails with community partnership support. (FL BLM.2)

Preface

What Will Success Look Like?

Successful bicycle and pedestrian networks have one key trait in common: comfort. Research collected since 2009 has shown that up to **60 percent** of the American population feels that there are significant barriers to their increased use of bicycling and walking, specifically concerns with traffic and safety[1]. Therefore, widespread walking and bicycling, also know as active transportation, is difficult to achieve without routes that are comfortable and safe.



1 Roger Geller, City of Portland Bureau of Transportation. *Four Types of Cyclists*. http://www.portlandonline.com/transportation/index.cfm?&a=237507. 2009; Dill, J., McNeil, N. *Four Types of Cyclists? Testing a Typology to Better Understand Bicycling Behavior and Potential*. 2012.

indicates benefits



Shared use path in Laramie

What does "all ages and abilities" mean?

All ages means that children as young as eight can walk and bike independently from their parents. It also means that older adults can get around comfortably without a car. **All abilities** means that people, especially those using mobility devices or with disabilities, are not faced with barriers.

Networks of these facilities are needed to promote travel choices in Wyoming communities. The network may be comprised of a variety of facility types, but ultimately provides convenient access to and from key destinations while minimizing exposure to vehicle traffic.

The Federal Highway Administration (FHWA) issued a policy statement in March 2010 to encourage agencies to, "proactively provide **convenient, safe and context-sensitive** facilities that foster increased use by bicyclists and pedestrians of all ages and abilities."

Pedestrian and Bicycle Facilities and Comfort

There are a variety of active transportation facility types that can be implemented. Conventional bike lanes, for example, will only appeal to a small percentage of the overall population that is comfortable with little separation from motor vehicles (far left), whereas **the majority of the population prefers more separation from the roadway and motor vehicle traffic**. Thus, a variety of facility types, catering to different ability levels, is necessary.

INCREASING LEVEL OF COMFORT, SAFETY, AND INTEREST IN WALKING

No sidewalks or narrow sidewalks on high speed roads





Sidewalks on moderate speed roads or on only one side of the road





Sidewalks on low-to-moderate speed roads or landscaped/offset sidewalk on one side





Residential streets with sidewalks or landscaped/offset sidewalks on both sides of the road





INCREASING LEVEL OF COMFORT, SAFETY, AND INTEREST IN BICYCLING

No bike lanes on a busy street





Narrow bike lane or shoulders on a busy street



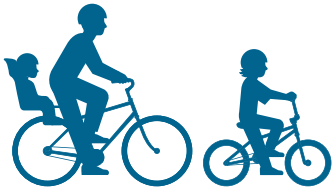


Buffered bike lane on a calm street





Separated bike lane, bicycle boulevard, or shared use path



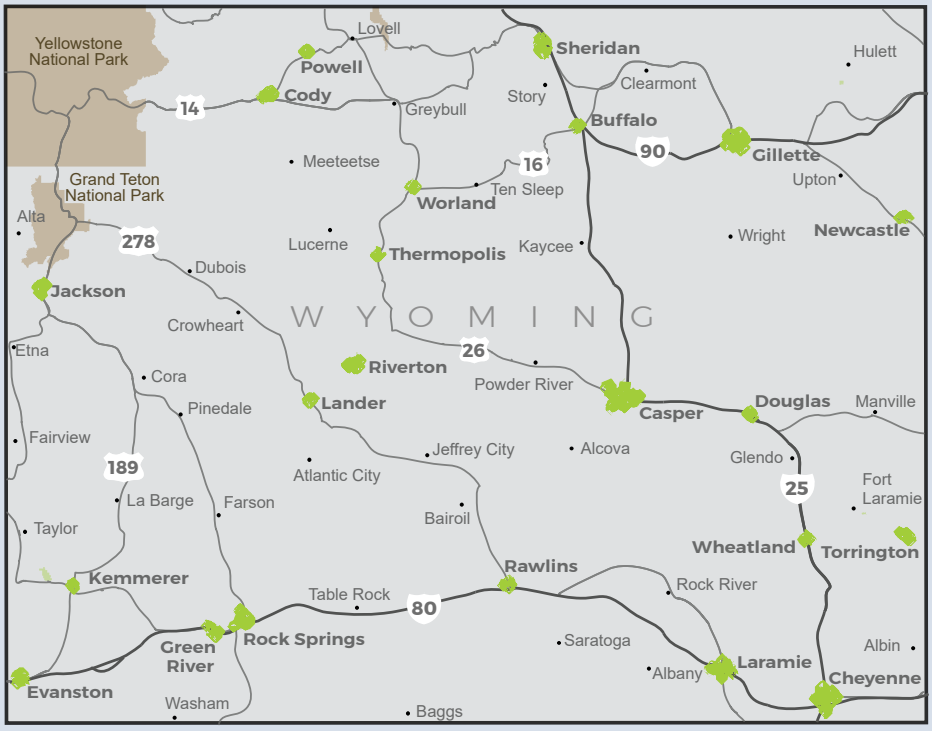


Rural vs. Urban

While Wyoming is considered one of the most rural states in the country (2nd lowest overall population density), **65 percent of its population live in urban centers** (Census block groups with 1,000 or more residents per sq mi), where networks of high quality bicycle and pedestrian facilities can be implemented cost effectively.

There are significant opportunities to improve active transportation in all areas of the state, both urban and in rural and less populated areas, as well. The FHWA *Small Town and Rural Multimodal Networks* states that "small and rural towns have great potential for creating viable networks that serve residents and visitors. Common attributes of a small town network include connections between communities that are located along highways and access to retail businesses and schools in a relative small area within the community core. Communities with strong ties to public lands may also prioritize connections to natural areas, and tribal communities may desire access to ceremonial sites outside the core."





Existing Usage & Federal Funding

Wyoming ranks as the **9th most active walk and bicycle commuting state in the country**. It is also **7th in per capita spending on active transportation projects** and the state with the **8th fewest bicycle and pedestrian fatalities** per 10,000 active transportation commuters.[1]

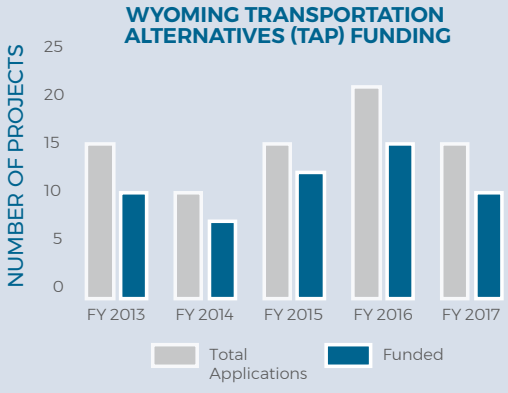
Since 2005, Wyoming has invested over **$31 million** in federal Transporation Enhacement and Transportation Alternatives Program (TAP) funded walking and bicycling projects (Table P.1). Since 2010, **projects have been constructed in over 50 communities and in nearly every county in the state**, averaging 13 projects per year and ~$240,000 per project. A majority of these funds have been expended in:

- Pedestrian and bicycle facilities;
- Education and safety programs; and,
- Safe routes to schools projects.

Additional funding sources, like sales taxes, community grants, general funds, etc., will be discussed later in this report.

1 Alliance for Biking and Walking. *2016 Benchmarking Report*. http://www.bikewalkalliance.org/resources/benchmarking. 2016

TAP is the primary federal funding source for walking and bicycling projects. WYDOT receives more applications for TAP funding than it can fund. Additionally, many communities are only able to submit small projects because **the maximum funding request would only build approximately one mile of pathway.**



FEDERAL FUNDING

1%

Of Federal Transportation Dollars Spent on Walking & Bicycling

4.7%

Wyoming Bike/Walk to Work Mode Share

LARAMIE, WY

*ranked **8th** nationally among small cities for rates of bicycling to work at 6.8% percent according to the U.S. Census Bureau*



% OF FEDERAL TRANSPORTATION FUNDING FOR BIKE & WALK PROJECTS (2012-2014)

Table P.1: WY Federal Transportation Spending on Walking and Bicycling Projects

FISCAL YEARS	AMOUNT SPENT PER CAPITA	% OF FEDERAL TRANSPORTATION DOLLARS
2006–2008	$5.79	1.3%
2009–2011	$7.22	1.3%*
2012–2014	$4.57	1.0%

*Dollars spent peaked in 2009-2010 due to additional funding provided by the American Recovery and Reinvestment Act

Note: Federal spending per capita on highway projects are also higher than the national average largely due to the rural nature of the state and the need to connect communities with more robust roadways.

Walking, Bicycling, Tourism, and the Economy

Safe, comfortable, well-designed, and adequately advertised opportunities for walking and bicycling will help Wyoming to increase mode share, tourism opportunities, and economic benefits of walking and bicycling.

Walking and bicycling make economic sense. Benefits include decreased family transportation costs, lower healthcare costs, higher property values, and improved tourism revenues.

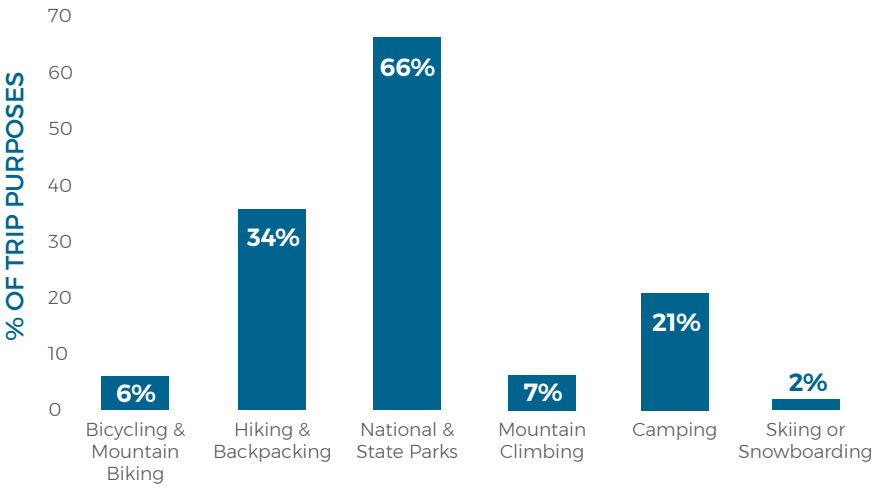
Wyoming's natural beauty, national parks, federal lands, city and state parks, wildlife areas, and countless opportunities for outdoor recreation resulted in the following benefits.

8.5 MILLION



annual **OVERNIGHT VISITORS** in Wyoming

WYOMING TOURISM & RECREATION TRIP ACTIVITIES



Source: Wyoming Office of Tourism's Overnight Visitor Profile (2016)
Note: Values equal more than 100% due to potential for multiple purposes per trip.

$3.2 BILLION



spent by *domestic & international* visitors in 2016

$171 MILLION *in local & state tax revenue collected*

$730 *more in taxes each WY household would pay per year for the same level of services without tourism tax revenue*

31,770 *full & part-time jobs supported*

8.5 million visitors and above graphic based on Dean Runyan Associates, WY Travel Impact Report, April 2017

Investment in Tourism

When investments are made in attracting tourists to the state, real benefits have been measured resulting in new jobs, increased tax revenue for the state and others. The Wyoming Office of Tourism has been tracking its effectiveness in attracting new tourists to the state. [1]

The State of Wyoming Tourism Campaign has Influenced over 930,000 trips to Wyoming

GENERATING

$49 MILLION

in new

TAX REVENUE

2016 Wyoming Advertising Effectiveness Study

Therefore, **increased focus on active transportation and recreation** for visitors can be expected to **yield substantial financial benefits**.

The Institute for Tourism Recreation Research has a study[2] on the long-distance touring cyclist specifically for Montana. Montana's study can be used as a proxy for Wyoming to determine the economic impact of bicycle tourism. Most cyclists travel with at least one other cyclist, and they spend on average $75 each day for a mean of 8 days. This study also provides insight on what cyclists plan for and look for on roads and cycling experiences which helps planning committees understand the needs of the bicycle traveler.

1 Wyoming Advertising Effectiveness Study (2016) https://www.travelwyoming.com/sites/default/site-files/files/uploads/industry/2016%20Ad%20Effectiveness%20ROI%20FINAL.pdf

2 Analysis of Touring Cyclists, Institute for Tourism and Recreation Research, University of Montana (2013) https://www.adventurecycling.org/default/assets/File/USBRS/Research/Multi-dayCyclingStudyWeb.pdf



Mountain biking (shown here in Curt Gowdy State Park) is a significant tourism activity in Wyoming

Part 1

Existing Conditions, Benefits, & State of the Practice



Reducing crossing distances through traffic calming and provided ADA-compliant tactile warnings, help to encourage safer and more comfortable pedestrian environments

DRAFT

Chapter 1

Community Pathways & Local Streets

This section focuses on two specific types of infrastructure that can dramatically increase use for a wide spectrum of the population: **shared use paths (community pathways) and enhanced local street networks**. These are but two parts of a larger system of facilities that creates a mature network offering substantial transportation choices to Wyoming residents of all ages and abilities.

Pathways

Paved pathways (also known as shared use paths or trails) offer an **inviting experience that appeals to nearly everyone**. Pathways are often found in two settings: (1) in their own rights-of-way, or (2) along roadways or highways.

Pathways are typically **10-12 feet wide** and have stabilized shoulders and a firm, smooth paved surface (see typical section below). Equestrians in urbanized areas may need a separate tread provided.. In more rural areas, equestrians may be compatible pathway users.

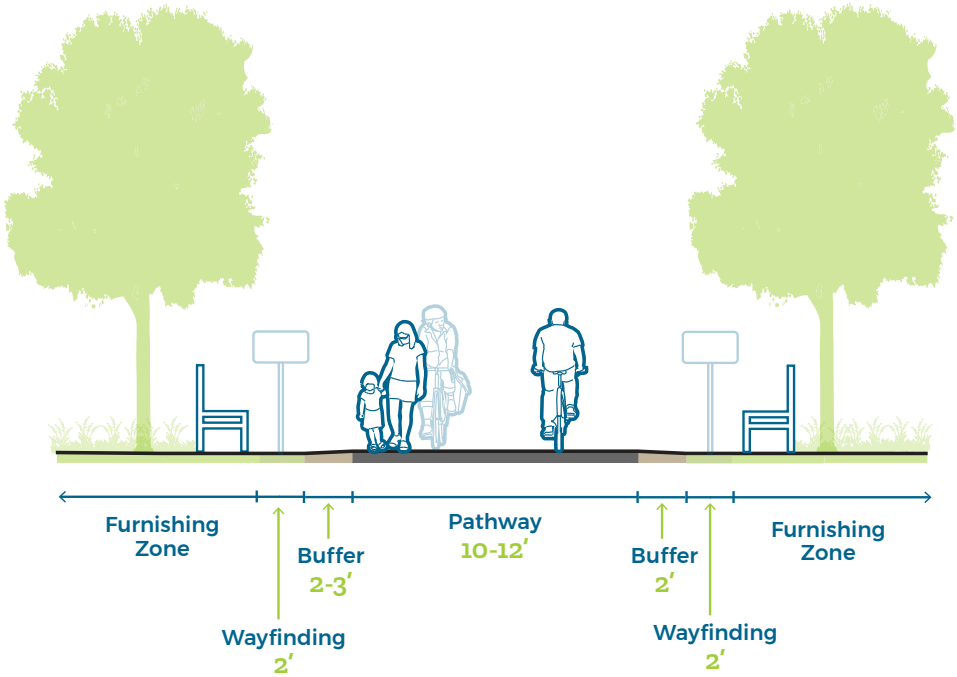
indicates benefits

25

WYOMING
Communities have plan documents that address existing & future pathways*

* Wyoming Bicycle and Pedestrian Transportation Plan

Pathways create unique and comfortable connections to and from key destinations, such as schools, parks or commercial areas. Pathways can be versatile facilities that offer a range of experiences and frequently serve both **transportation and recreation** functions.



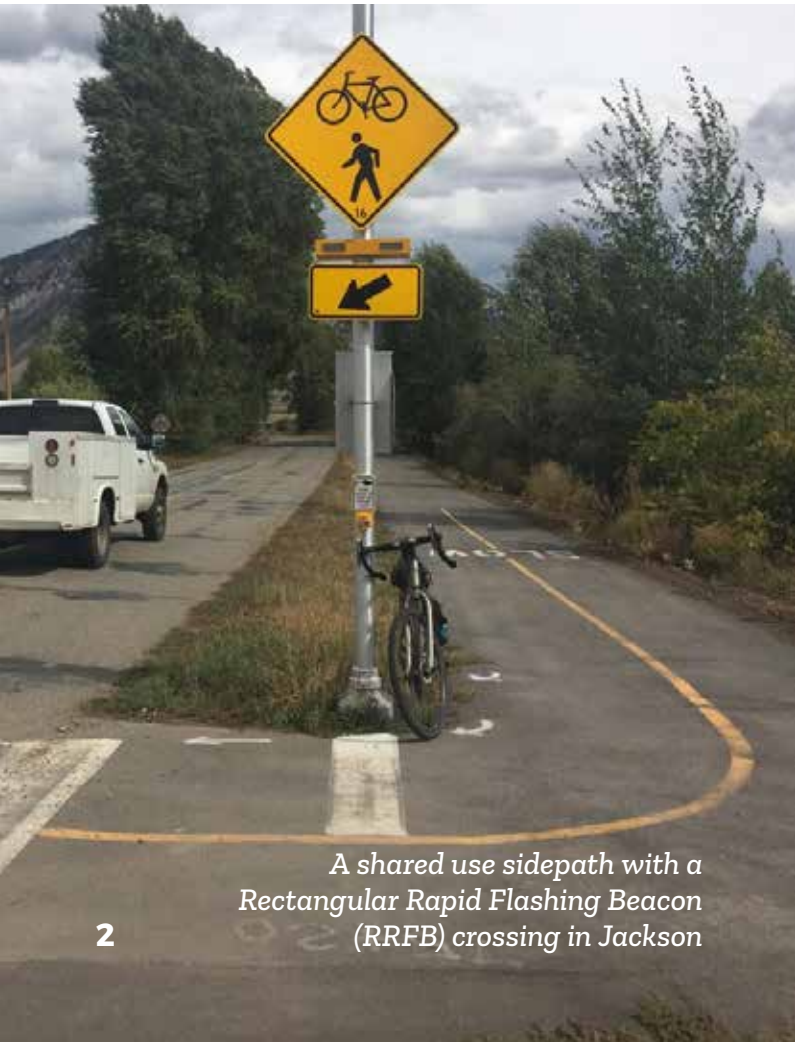


A shared use pathway bridge designed for people walking and bicycling

Pathways in Own Right-of-Way

Pathways in their own rights-of-way are common in Wyoming and include the following characteristics:

- **Frequent access points** from the local road network.
- **At-grade crossings of roadways that are comfortable and safe.** Untreated crossings represent weak spots in the user experience and may limit use of the facility.
- **Logical termini** of the pathway where it is easy to transition on and off of the roadway network.



A shared use sidepath with a Rectangular Rapid Flashing Beacon (RRFB) crossing in Jackson

Pathways Along Roadways (Sidepaths)

Pathways within roadway rights-of-way (also known as sidepaths) can be implemented with five or more feet of separation from the roadway and/or a physical barrier. Pathways along roadways are typically recommended where driveway and intersection frequency is low and where an on-street facility would not be appropriate due to high motor vehicle speeds or volumes. Comfortable sidepath design requires:

- **Good design at driveways** and minor street intersections; setback (bend-out) crossings at intersections improve reaction time and visibility of approaching pathway users.
- **Logical sidepath termini** at locations where users can easily transition to directional travel along the roadway. Sidepaths create situations where a portion of the bicycle traffic rides against the normal flow of motor vehicle traffic, which can result in wrong-way riding where bicyclists enter or leave the path.
- That **major intersections** have sufficiently **wide curb ramps** and **clear crossing markings.**

In **CHEYENNE**, *there are currently*

41
miles of greenways



18
miles of shared use pathways



10
miles of bike lanes & sharrows



44
miles of bike routes



25
underpasses



5
overpasses



The pathway usage at Holliday Park & Dry Creek Greenway (Lincolnway Underpass), the only location with a permanent counter, is **30,000 users per year** *and* **4,600 in June alone.**

Since 2011, bicycle and pedestrian usage at several of the 18 count locations citywide has **increased 20-50%.**

In **JACKSON HOLE**, *there are currently*

65
miles of shared use pathways

130
miles of Front Country Trails

9.5
miles of bike lanes & sharrows

8
underpasses

18
overpasses

2
resort bike parks

On the Garaman Pathway between September 1, 2016 and August 31, 2017, there were more than **172,000 users**, *with* **33,258 in July 2017 alone.**

In **CASPER**, *there are currently*

28.2
miles of shared use paths

9
miles of bike lanes

1
BMX track (Mike Cedar)

7
underpasses

22
overpasses

1
Trails Center (Casper Mtn.)

In addition to these facilities, Casper reports additional **gravel, unimproved, dirt, or otherwise natural surface** *biathlon, cyclocross, hiking, and mountain biking trails within and near the city. There is tremendous public support of the North Platte River trails system.*

PAVED PATHWAYS *in* WYOMING*

630 Miles of Pathways

* Wyoming Bicycle and Pedestrian Transportation Plan

GRAND TETON NATIONAL PARK

Bicycle use increased by over

1,000%

after the construction of a pathway along Teton Park Road
(measured in 2007 and 2010)

Maintenance

Sustainable maintenance programs are critical for the long-term success of pathways. These programs include **routine maintenance** (i.e., seasonal sweeping, weed abatement, and snow clearing) and **capital maintenance** (i.e., pavement preservation and other repairs).

Funding sources and organization of successful programs can be diverse and are often the result of **successful partnerships and resource-sharing** between multiple organizations. There is no "one size fits all" approach to pathway maintenance, and creativity is often critical depending on local context. Pathways that serve primarily transportation purposes may qualify for certain federal/state funding sources.

Paved pathways are typically **asphalt or concrete**. Concrete is typically more expensive to construct,



Teton Village Trail in Wilson



This pathway in Kemmerer, known as the Walking Trail, may require significant repairs

Maintenance Case Studies

Well-maintained pathway networks can provide safe, comfortable experiences for users; encourage greater use; and reduce routine and capital pathway expenditures.

Kemmerer, WY

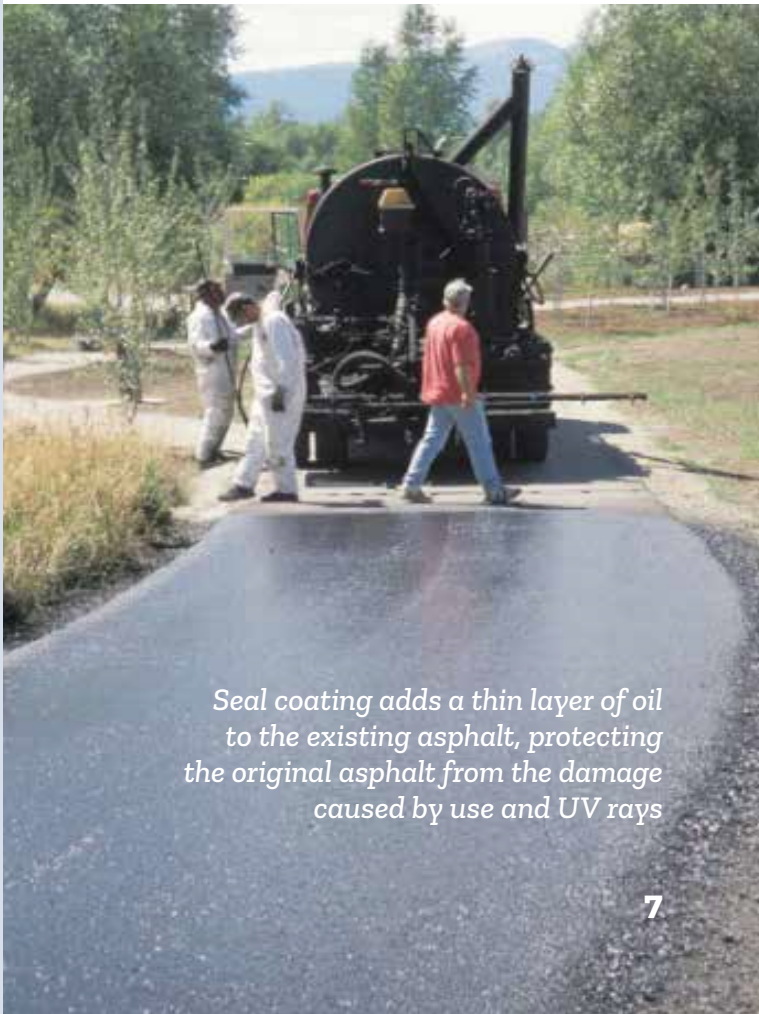
Kemmerer's paved pathways, including the Walking Trail (pictured on p. 6), are a hugely popular amenity and source of pride for the community. Cracks and potholes, however, make use uncomfortable, especially by those using mobility devices. Due to deferred routine maintenance, many pathways have deteriorated to the point where significant maintenance or complete replacement are necessary. In July 2017, the City of Kemmerer, Lion's Club, and The Kemmerer Community Foundation applied for a Transportation Alternatives Program (TAP) grant (80% federal, 20% local) to remedy these issues. With local public and private sponsors, the City hopes that its application will not only be successful but also a funding example for Wyoming towns.

Jackson, WY

The Town of Jackson and Teton County have a world-class pathway system, well-maintained by staff. The result of robust funding and on-going dedication to capital and maintenance investment in pathways is an impressive and **connected system** providing comfortable transportation and recreation options. Average annual maintenance costs for asphalt pathways are $7,000–$10,000/mile, which may decrease in coming years. The Town and County are observing that the seal coating on its pathways is lasting longer than expected and may only be required every 6-7 years. Some pathways with heavier use, closer proximity to roads, and more exposure may still require seal coating every 4-5 years. The Town and County perform an annual network condition assessment of the 50-mile pathway network to determine its upcoming maintenance schedules.



Crack sealing is an important routine maintenance activity that fills and prevents expansion of cracks in the asphalt



Seal coating adds a thin layer of oil to the existing asphalt, protecting the original asphalt from the damage caused by use and UV rays

but lasts much longer with significantly lower routine maintenance costs over its lifetime. Asphalt pathways may require frequent crack sealing and seal coating to maintain a high level of service.

For projects in WYDOT's transportation system, shared use pathways are typically paid for and maintained by a local agency that has requested that the facility be included in a larger project.

Wyoming Communities' Pathway Network Development

Wyoming communities have pursued the development of pathway networks through various strategies.

For example, Green River, WY, is pursuing the creation of a **ring** of pathways around the community. Other communities, like Evanston, WY, have focused on **linear** corridors linking key destinations such as the Bear River Trail. Rail lines (active or abandoned), rivers and streams, and other utility easements make attractive candidates for pathway development.

Regardless of the approach, pathway network development should be based on community needs and context-appropriate design.

Other Design Considerations

Design solutions for roadway crossings, such as signage, landscaping, and multiple curb ramps (see graphic below) are encouraged. The **use of bollards** or other barriers at entrances to pathways and at roadway crossings **is discouraged** unless there is a documented history of unauthorized intrusion by motorized vehicles. If unauthorized use persists, assess whether the problems posed by motorized users exceed the risks posed to pathways users by obstacles such as bollards.

Additional measures and more detail in Chapter 5 of the AASHTO *Guide for the Development of Bicycle Facilities* should inform and direct these solutions.

Pathway Design Resources

Guidance for the planning and design of pathways is provided by several of national resources:

- AASHTO *Guide for the Development of Bicycle Facilities* (2012)
- FHWA *Small Town and Rural Multimodal Networks Guide* (2016)
- *Manual of Uniform Traffic Control Devices [MUTCD]* (2009)
- *Public Rights of Way Accessibility Guidelines [PROWAG]* (Draft, link unavailable).
- FHWA *Equestrian Design Guidebook for Trails, Trailheads, and Campgrounds* (2007)



Local Streets

Local streets are a part of every trip. They typically comprise approximately **60 percent of the roadway miles** in American communities. For motorists, they generally only serve to connect to more significant roadways and are typically spared from through traffic. These very characteristics make local streets attractive places to walk and ride bicycles. Many communities have local streets that can be activated to become part of a network comfortable enough for people of **all ages and abilities**.

Enhanced Local Street Networks

Rural and urban communities have created enhanced local street networks under many different names, including Bicycle Boulevards, Neighborhood Greenways, Quiet Streets, Neighborhood Bikeways, etc. Benefits of these calm, neighborhood streets, like destination connectivity, calmer traffic, and improved real and perceived safety and comfort, are enjoyed by residents, business owners, and people walking and bicycling.

Successful local street networks have safe and comfortable crossings of major streets. For both pathway and local street crossings of major streets, the factors that influence comfort and safety are similar. The speed of prevailing traffic, the number of travel lanes to cross, and the number of vehicles all impact crossing comfort and safety.

Improvements to major street intersections can be the costliest component of a local street network; however, they can also do the most to make the network successful. Depending on the character of the major street, signage, striping, beacons, and signals could all be employed to make the crossing safe and predictable. Mid-block crossings have fewer issues because there are typically no vehicle turning movements.

Key Characteristics of Successful Enhanced Local Street Networks

01 Low vehicle **volumes** (below 3,000 vehicles per day, with below 1,500 desired)

02 Low vehicle **speeds** (below 25 mph, with below 20 mph desired)

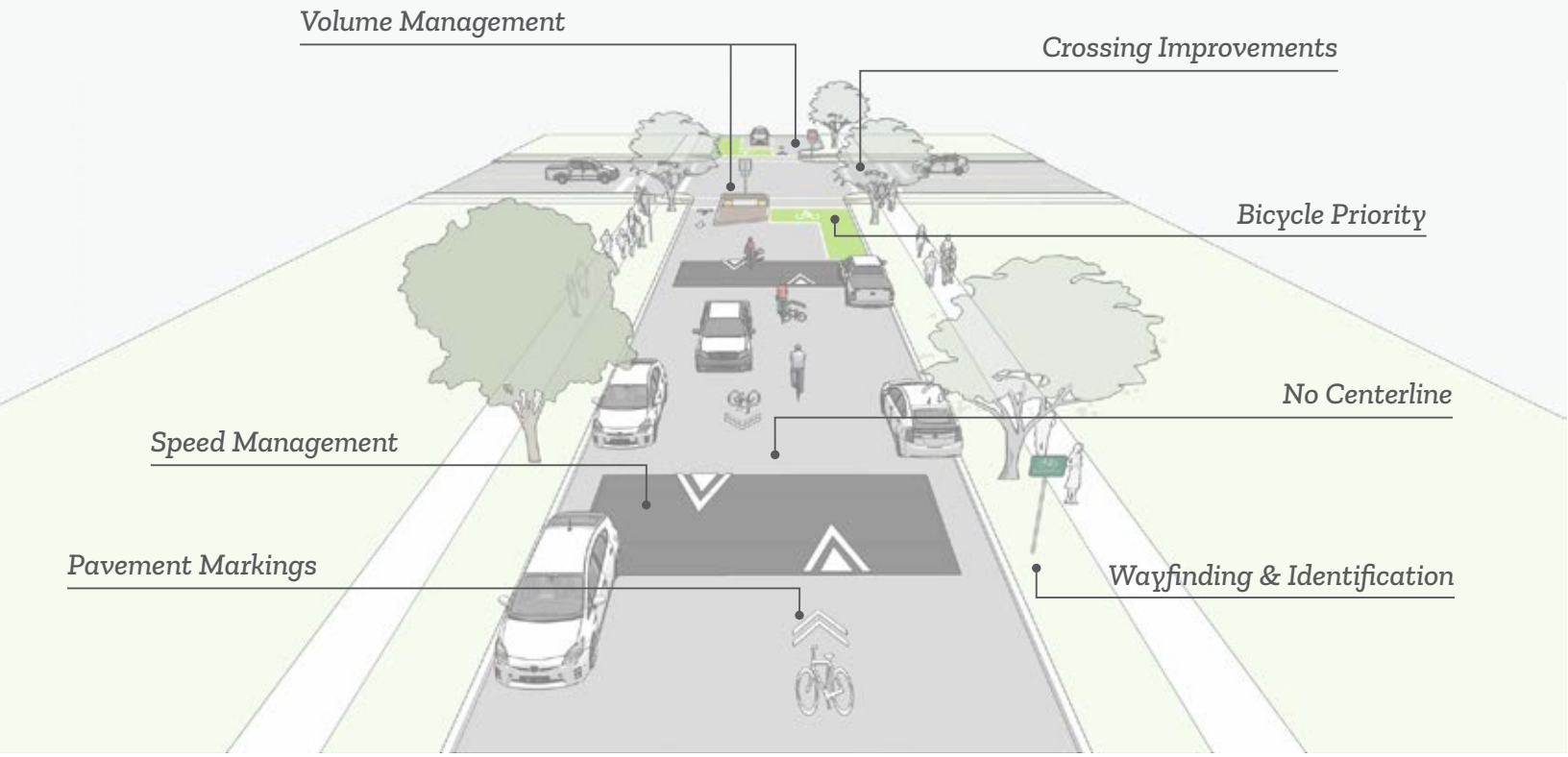
03 Safe and comfortable **crossings** of major streets

04 **Landscaping/aesthetics** that make the local street an attractive place

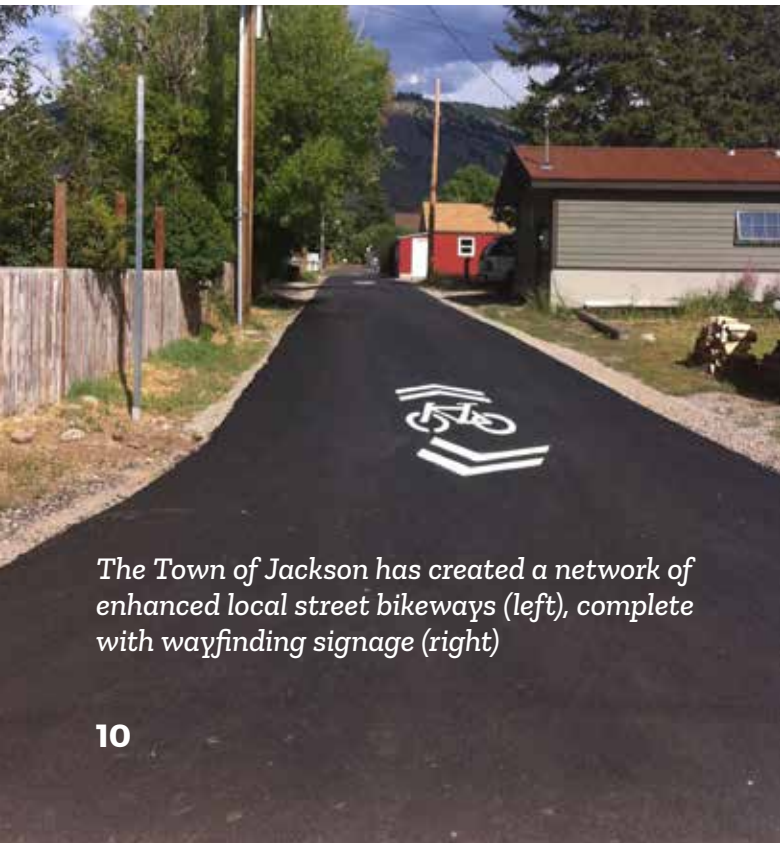
05 **Wayfinding** for people walking and bicycling on local streets that may be unfamiliar outside of one's own neighborhood

Examples of local street networks in Wyoming include Lander, Laramie, Sheridan, Pinedale and Cody

Potential Elements of an Enhanced Local Street Bikeway



Most local streets in Wyoming are likely to experience lower traffic volumes and speeds, requiring little change to the street environment. If the traffic thresholds identified on the previous page are exceeded, some of the above speed and/or volume control measures could be employed.





The Town of Jackson has created a network of enhanced local street bikeways (left), complete with wayfinding signage (right)

Other Local Street Bikeway Types

Local streets with more traffic demands than candidates for enhanced local street treatments can utilize several bicycle facility types, including **bike lanes (right), buffered bike lanes, and separated bike lanes**. These facilities offer either visually or physically separated space for people riding bicycles on Wyoming's streets.

Several communities in Wyoming, including Casper, Cheyenne, and Jackson, have installed these different types of bike lanes on appropriate roadways. Laramie has 10-12 blocks of separated bike lanes planned to connect Downtown to the University of Wyoming.

Local Street Design Resources

- AASHTO *Guide for the Development of Bicycle Facilities* (2012)
- FHWA *Small Town and Rural Multimodal Networks Guide* (2016)
- NACTO *Urban Bikeway Design Guide* (2012)



A local street bike lane in Jackson.

Chapter 2

Main Streets & Downtowns

Introduction

Main streets and downtowns are the heart and soul of many Wyoming communities. They are also often the most developed and "urbanized" areas in Wyoming. One can better understand the health and vitality of a community by understanding its main street. Successful main streets as the **cultural centers** of their respective communities contribute to their continued relevance.

Main streets, especially those in downtown areas, are one of the principal focuses of this report because they often **serve as the "commons" of Wyoming communities**, where many social, political, and recreational public functions take place.

Main Streets

The presence, vitality, and composition of a community's main street are often indicators of **local economic health.** Main streets are, in effect, public spaces. Additionally, those with amenities like trees, landscaping, places to gather and interact, as well as comfortable accommodations for all modes of transportation are often more economically successful than those without.

In many cases, a community's main street is also a state highway serving through traffic in addition to local access. Some main streets have **limited width** where providing ample space for all modes is difficult, while others are **overly wide**, have excess capacity, but also offer substantial opportunities for improvement.

Benefits

By focusing on local needs rather than following the development patterns of more urban areas, Wyoming towns and cities can create main streets that reflect the characters, economic development capacities and needs, demographics, and sizes of each community.

Creating human-scale, walkable, and bikeable main streets (as part of a larger downtown focus) can help Wyoming reap the following benefits:

- **Competitive local economies** that can attract diverse retail opportunities, talent, and job creators;
- Concentrated retail opportunities downtown that reduce sprawl and vehicle miles traveled while increasing opportunities for **healthy transportation choices and socializing**;
- Reduced vehicle speeds and **increased safety** for all users, especially vulnerable users like people walking and bicycling.

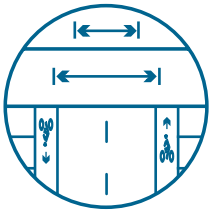
indicates benefits

Main Street in Lander has space for motor vehicles, parking, bicycle parking, dining, socializing, walking



Multimodal **MAIN STREETS**

*from the Small Town and Rural Multimodal Networks Guide**



Flexible Design

Main streets can be constrained spaces, with more demand for roadway design features than there is typically space to accommodate. Decisions should be informed by local context and reflect the community vision.



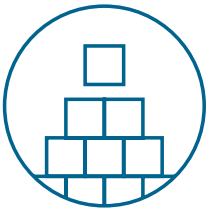
Multimodal Design

Multimodal networks provide mobility and access for all users and modes of travel. Main streets are connections between modes. Motorists exiting their cars and trucks become pedestrians; pedestrians become transit users and bicyclists.



Placemaking

Main streets can strengthen community identity by creating enhanced aesthetics, spaces for civic activities, and conditions to attract and retain business. Successful places foster improved community cohesion and participation in public life.



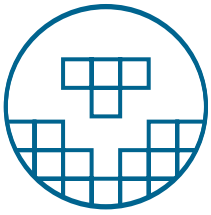
Incrementalism

Small projects can make a big difference. Opportunities, such as roadway resurfacing, or enhancements associated with individual development projects can be the first step in a gradual transformation.



Environmental Sustainability

Street trees and other vegetation can support a pleasant environment, filter the air we breathe, provide shade, and are a key component of stormwater management strategies. Trees and other vegetation intercept rainfall and can help regulate the flow of stormwater.



Compactness

No one transportation mode or use should dominate the street. Providing compact, well delineated zones for each main street user creates a sense of belonging and can contribute to increased safety and perceived comfort.

*The Small Town and Rural Multimodal Networks Guide (2016), from the Federal Highway Administration (FHWA), applies national and local best practices for application in small town and rural settings

Award-Winning Wyoming Downtown Advocates

In September 2016, the Wyoming Business Council featured stories about several communities that have won awards for improving downtowns across the state in recent years.

Rock Springs. The Urban Renewal Association/Main Street won a Wyoming Business Council award for creating Art Underground, a beautification of the railroad trestle and tunnel that connect the two halves of downtown.

Rawlins. In 2015, Rawlins became the first community in the northern Rocky Mountain region to earn the National Main Street Center's Great American Main Street award.

Laramie. In 2016, the home to the University of Wyoming won the Innovation on Main Street award for a downtown mural project.



Downtown Laramie mural
Photo: Brian Harrington, BHP Imaging

Main and other downtown streets typically fall into one of two categories, those that are **constrained** (competing needs in a limited space) and **unconstrained** (wider and typically without diversity of needs)**.**

Constrained Main Streets

Constrained streets, many of which were **designed before motor vehicles**, have limited space that must be carefully considered. They typically reap the design benefits of being human scaled, **attractive places** for pedestrians; having slower traffic that encourages business/attraction recognition, reduces the number and severity of crashes, and results in **safety** benefits; and an increase in pedestrians who feel more **comfortable** walking along and crossing these streets.

Many western cities have opted to lower or eliminate level of service (LOS) standards in downtowns to promote placemaking. Because of LOS's provision for extra capacity, its results often conflict with downtowns' economic performance.

Unconstrained Main Streets

Unconstrained main streets have a **surplus of available space**, are often overbuilt for vehicle capacity, can be great candidates for significant changes that can create human-scaled, community amenities. **"Right-sizing"**, or analyzing the design capacity of the street versus its existing and near future use, can allow for underutilized asphalt to be repurposed as **streetscape amenities and sidewalks, parking, and/or bicycle infrastructure.** Table 2.1 can help begin a street reconfiguration analysis, though a complete traffic study is recommended before making significant changes.

Table 2.1 Conceptual Capacities* of Various Lane Configurations

TRAVEL LANES	VEHICLES PER DAY	
2	< 12,000	
3	< 20,000	
4	< 34,000	
5	< 40,000	

Source: Alta Planning + Design

**Capacity depends on directional parity, peak volumes, turns, transit, heavy vehicles, and walking and bicycling volumes*

Evolution of Main Streets

Many main streets were established before the widespread use of automobiles, in an era when **horses** were the principal mode of transportation.

Since their establishment, main streets nationwide have been **reimagined in light of advances in transportation technology and preferences**, including street cars, automobiles, traffic signals, and on-street parking. Many main streets now primarily accommodate **motor vehicles**.

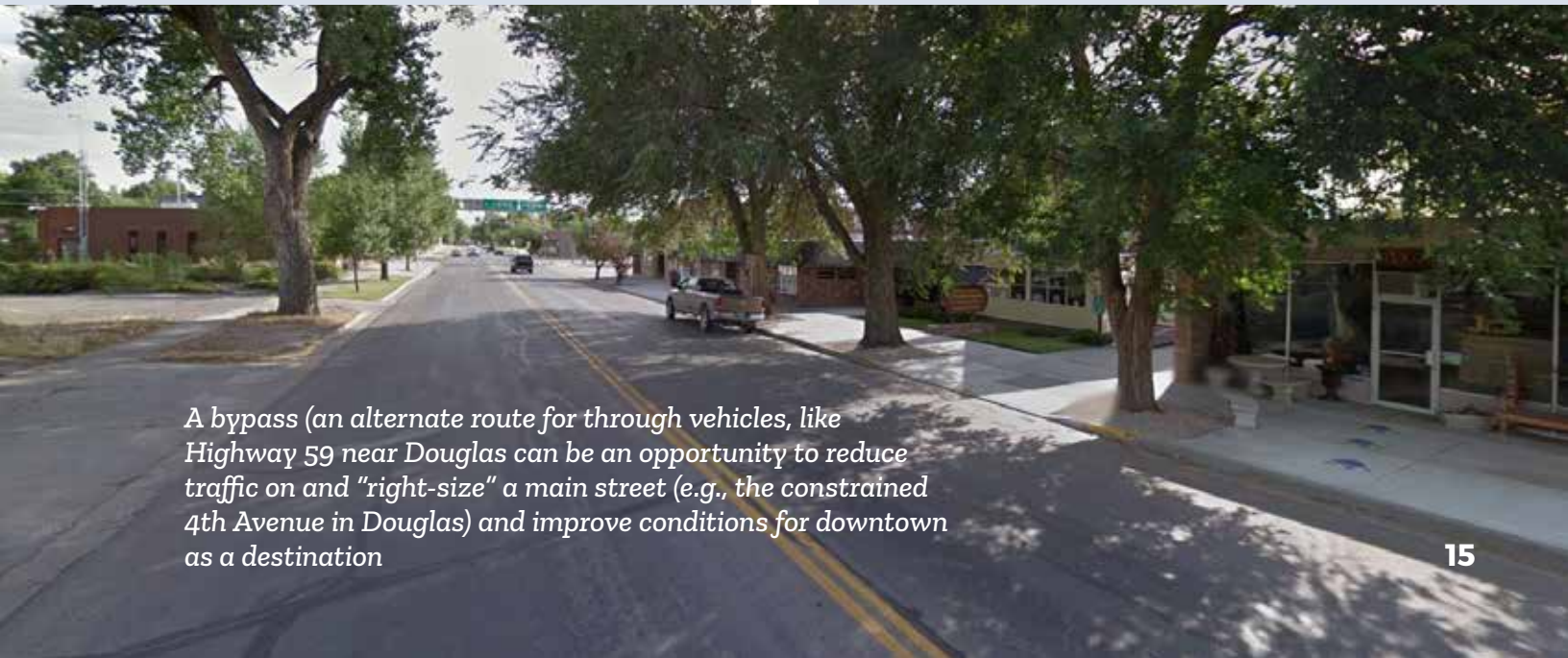
In Wyoming and elsewhere in the West, wide streets offer opportunities for redesign not afforded to those in the Midwest and on the East Coast. Main streets and downtowns can and should continue to adapt, and be planned and reimagined as **transportation, economic, social, and health** priorities and objectives specific to the community, state, and country change.

Wyoming Main Streets Program

The Wyoming Business Council's Wyoming Main Street program assists Wyoming communities of various sizes and resource levels with downtown revitalization efforts. It provides **technical assistance** and coordinates with the Council's Business Ready Community (BRC) Grant Program.

The program follows the National Trust for Historic Preservation's Main Street Four Point Approach, which is: **organization, promotion, design, and economic vitality**. As of 2017, **19 communities** have achieved one of the program's three levels: aspiring, affiliate, and certified.

For example, in coordination with the Main Street program, **Pinedale** has been able to install or create **wayfinding signs, a historic walking tour, benches, trash cans, public art in the Main Street right-of-way, landscaping, curb extensions, events, bike share, and façade grants for businesses**, which have helped to promote a walking and bicycling friendly downtown.



A bypass (an alternate route for through vehicles, like Highway 59 near Douglas can be an opportunity to reduce traffic on and "right-size" a main street (e.g., the constrained 4th Avenue in Douglas) and improve conditions for downtown as a destination

Main Streets' Wide Lanes

The Federal Highway Administration (FHWA) has found no safety or operational disadvantages for lane widths as low as **10 feet** in urban areas with speed limits below 45 mph. Simply **narrowing lanes** of a typical, unconstrained, 5-lane main street from 12 feet to 10 feet results in 10 feet of **additional space**, which could be used for streetscape expansion or the provision of bike lanes.

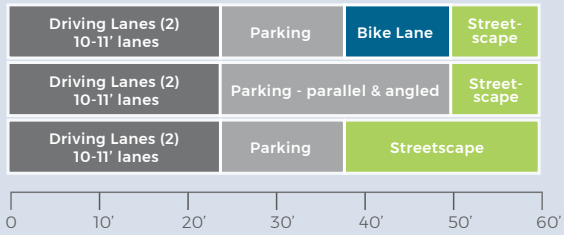
CONSTRAINED (EXISTING)



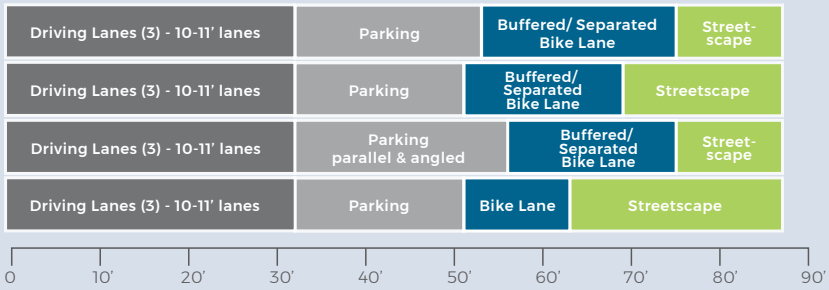
UNCONSTRAINED (EXISTING)



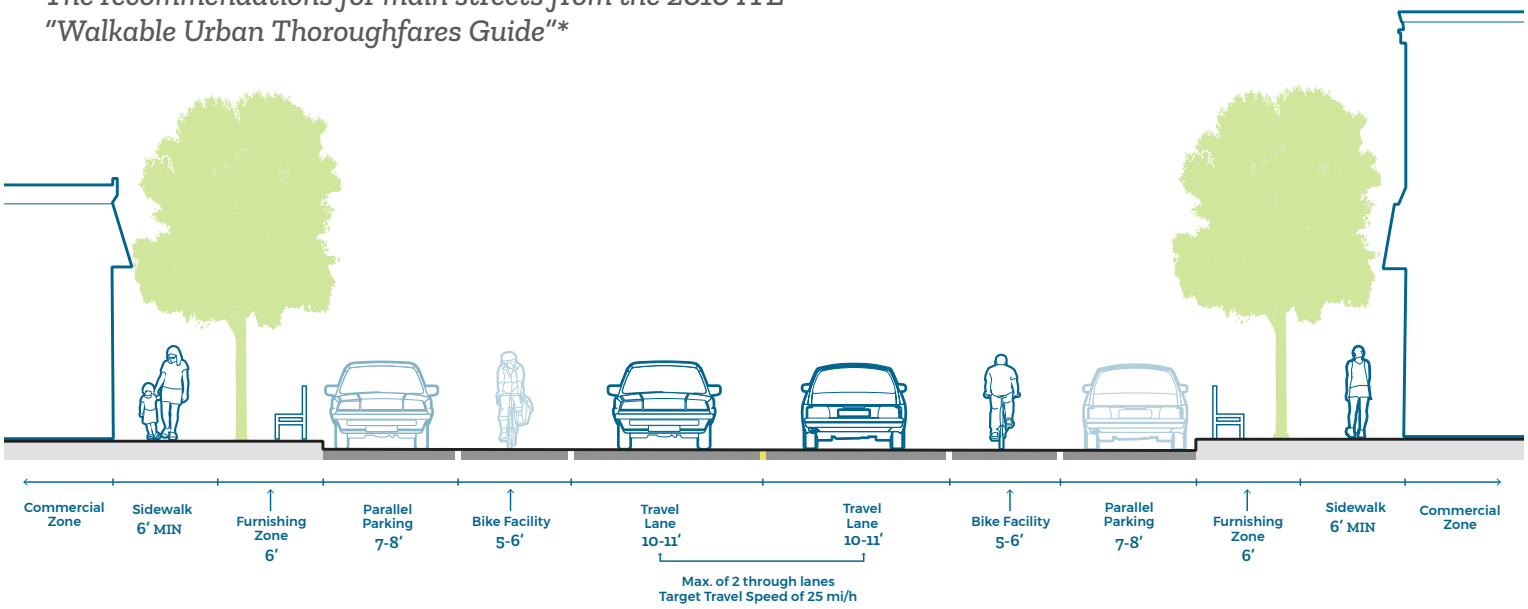
CONSTRAINED (POTENTIAL)



UNCONSTRAINED (POTENTIAL)



*The recommendations for main streets from the 2010 ITE "Walkable Urban Thoroughfares Guide"**



*The graphic is one of many street types and configurations. The ITE guide and other best practice design guidelines offer solutions and enhancements that may fit other Wyoming community circumstances.

Downtowns

Downtowns have traditionally been the **cultural and commercial centers** of Wyoming communities. Statewide, Wyoming has one of the highest rates of walking to work (12th nationally; 3.7% of trips)[1]. Due to changes in the oil and gas industry, sparse residential development patterns, and lower density retail developments, however, some Wyoming downtowns have floundered in recent years. Small and rural communities often stuggle to maintain open space and small town character while benefiting from modern development. Because growth can bring economic opportunities that many rural areas want, it can also bring traffic congestion and other conflicts[2].

Benefits

Studies have shown that planning for, developing, and maintaining downtowns that are comfortable for walking and bicycling improves **economic strength and resilience, safety, and sense of community**. Many communities in the United States have prioritized connecting people to and within downtown areas through sidewalks and bike lanes, crossings, trails, and effective policies, encouragement, education, and enforcement.

The benefits of focusing on the needs of people walking and bicycling in Wyoming's downtowns:

- Improved **safety** and reduced crash severity and likelihood of a fatality for motorists, pedestrians, and bicyclists[3];
- The possibility of narrower and fewer travel lanes, resulting in fewer square feet of roadway to maintain and **reduced maintenance costs**;
- More inviting **retail** realm[4], which encourages people to walk and bike more, spend more[5], and drive less; and, among others,
- Reduced parking and roadway usage demands.

1 Alliance for Biking and Walking. *2016 Benchmarking Report*. http://www.bikewalkalliance.org/resources/benchmarking. 2016

2 Smart Growth America "Main Street And Open Space: Smart Growth At Work In Rural Areas" (2011)

3 FHWA *Small Town and Rural Multimodal Networks Guide* (2016)

4 National Complete Streets Coalition "Complete Streets Spark Economic Revitalization"

5 Portland State Univeristy "Consumer Behavior and Travel Choices: A Focus on Cyclists and Pedestrians" (2012)

ENDOW Initiative

The benefits of **active transportation-focused, economically-vibrant, and safe downtowns** (and towns and cities as a whole) are directly related to Wyoming Governor Matt Mead's "Economically Needed Diversity Options for Wyoming" (ENDOW) initiative. The initiative is a "comprehensive approach to **diversify the Wyoming economy**", including investing in "technology as the fourth leg of Wyoming's economic strength" (in addition to the value of minerals and natural resources) and in "grow[ing] opportunities that keep our young people in Wyoming". These will be directly benefited by fiscal, policy, and infrastructure **investment in walking and bicycling**.

"Wyoming is proud of its quality of life. More places to walk and bike get people outdoors and are a great way to see Wyoming in a different way. It's these things that attract entrepreneurs, working men and women, and families to this wonderful place."

- Governor Matt Mead



Casper's Rialto Theater and downtown streetscape improvements

How can my **DOWNTOWN** *streets be improved?*

PERFORM AN INITIAL ASSESSMENT

Does the street appear to have potential?
Does it appear to be uncrowded with vehicles?
Is the streetscape narrow or uninviting?
What is the crash history of the corridor?

CREATE AN ADVISORY GROUP

Composed of City/Town staff, local business owners, and interested residents. Define goals and a vision for the corridor

COMMISSION A PROFESSIONAL STUDY

A corridor study or as part of a larger downtown plan done by agency staff or by consultants.

PURSUE FUNDING

Look for opportunities, such as upcoming resurfacing projects, grants, special improvement districts, tax increment financing, etc.

Funding

There are many innovative and creative funding programs and main street and downtown improvements in Wyoming. This section will offer a *snapshot of sources and examples* to help Wyoming communities invest smarter.

Special Improvement Districts (SIDs) & Business Improvement Districts (BIDs)
Funded Project: David St. Station, Plants, Maintenance (Casper)

- Special assessment districts within a city formed by property and/or business owners to fund and implement local improvement projects
- **Low-interest financing, funded through the sale of bonds**, for district-wide improvement projects
- Incremental assessments collected over several years for the collective costs of area projects

Tax Increment Financing (TIF)
Funded Project Type: Walking, Streetscape, Parking Improvements

- **Leverages future tax gains** to subsidize improvements projected to create the conditions for said gains (i.e., increase in real estate and property values and additional tax revenues)

WYDOT State Transportation Improvement Program (STIP)
Funded Project: Pinedale Bike Path (Pinedale)

- If identified early, opportunities to **piggyback on WYDOT's routine improvements** along state routes and through downtowns in Wyoming
- Leverage roadway design, create context-sensitive improvements, promote economic growth, and accommodate all user types

Business Ready Community (BRC) Grant and Loan Program (includes all WBC funding programs)
Funded Project: David St. Station (Casper); Polk Ave. (Cheyenne)

- State Legislature allocates state general funds on a two-year cycle; **$38M** for priorities in FY 17-18
- Focus on community infrastructure, economic development, recreation/education facilities, quality of life
- The Community Development Division and Main Street program offers **placemaking training and funding** opportunities for "quicker, lighter, cheaper" projects
- **Planning grants** for tourism, feasibility, and economic development available

Community Development Block Grants (CDBG)
Funded Project: Hotel Evanston, ADA, Sidewalks (Evanston)

- **$2.2M to $3.75M** from HUD for **community and economic development needs**
- Meets one of **three criteria**: 1) benefits low- and moderate-income families; 2) eliminates slums, blight; 3) meets urgent community development need that poses a threat to health or welfare

Sales Tax

Funded Project: Pedestrian Improvements (Jackson)

- State statutes allows each county to have voter-approved **sales tax increases**, including for general, specific, and economic development purposes
- Local governments may enact or increase the **lodging tax** rate (additional 2-4%), as well
- In Jackson (Teton County), a one-percentage-point increase each for general and specific purpose taxes generates **$10-$12M** in revenue per year

Wyoming Office of Tourism (WOT) Funding

Funded Project Type: Benefiting Tourism, Wayfinding

- Technical Assistance Co-op Program (TACP) supports and facilitates projects that contribute to the development of the **tourism industry statewide**
- Projects (**$5,000** each with 50% cash match) that support WOT's **strategic areas of focus**

Main Streets and Downtowns Design Resources

- FHWA *Small Town and Rural Multimodal Networks Guide* (2016)
- Institute of Transportation Engineers (ITE) *Designing Walkable Urban Thoroughfares: A Context Sensitive Approach* (2010)
- FHWA *Road Diet Informational Guide* (2014)
- FHWA *Achieving Multimodal Networks: Applying Design Flexibility and Reducing Conflict* (2016)

David Street Station's Innovative Funding

Through the Downtown Development Authority (DDA) of Casper, the David Street Station (rendering of all phases of the final project below) is a new landmark on the current western edge of downtown.

The Station is designed for farmers markets, concerts, ice skating, and community gathering. It is a permeable park, with custom bicycle parking and access to other downtown destinations, including the new Lyric Theater.

Its funding, however, is one of its most impressive traits. Phase One of the project was completed in August 2017 with $4.6M in **private, community-based investment**, two $500,000 **BRC grants** ($1M total), and additional public funds.



Chapter 3

Rural Bicycling & Walking in Wyoming

As former Governor Mike Sullivan once quipped, "Wyoming is a small town with really long streets."

Introduction

Wyoming is a large state with significant distances between communities. With 563,626 people (2010 Census) in 97,818 square miles, Wyoming is, as a whole, seven times less dense than Colorado and Utah. However, 65% of Wyomingites live in approximately 0.2% of the land area, defined as "urban areas" by the U.S. Census Bureau.

Due to the Bureau's "urban" areas (referenced in the preface) not directly aligning with Wyoming's Census block groups or tracts, it is not possible to perform a similar analysis for the percentages of Wyomingites living in small town and rural environments. A rough estimate, using only raw block groups, reveals that **approximately 50% of Wyomingites live in places with fewer than 500 people per square mile (rural) and 7% in tracts with between 500 and 1,000 people per square mile (small town)**. Many of these areas are either currently or potentially equally excellent places for active transportation as urban areas, including serving as way points along long distance routes.

This chapter of the *Wyoming Bicycle & Pedestrian System Report* will discuss:

- The **benefits** of rural active transportation system development
- **Long distance bicycling routes**, from the tourism and economic benefits perspective as well as from a perspective of providing transportation and recreation options for residents
- **Rural and small town** bicycling and walking **needs**

indicates benefits

6 *in* 7

Rural Communities



with developed bicycle infrastructure saw overall improvements on their TRANSPORTATION SYSTEMS.

Twaddel, Hannah and Dan Emerine, *Best Practices to Enhance the Transportation-Land Use Connection in the Rural United States*. National Cooperative Highway Research Program, 2007.

Benefits of Rural Active Transportation

Connecting people through walking and bicycling within and between Wyoming's rural and small communities is an effective countermeasure to significant challenges faced by rural and other low-density areas, such as:

- **Health.** In a 2015 report, the U.S. Department of Health and Human Services reported that 35-38% of rural children are overweight or obese.[1] Improved opportunities and encouragement for walking and bicycling help to counteract that.
- **Tourism and Travel.** Tourists engage in biking and pedestrian activities while on leisure travel. Growth to these efforts leads to more inviting communities through developed attractions and stimulating economic growth.
- **Mobility and Automobile Access.** 1.6M U.S. rural households are without access to an automobile; improving walking and bicycling will increase mobility and independence for them.
- **Greater Independence for Children, Young Adults, and Older Adults.** Small towns and rural areas can be places where youth can travel independently of their parents. Often small connectivity and safety projects can make a big difference to younger transportation users. Improved walking and bicycling can help elderly Wyomingites maintain their independence and physical and mental vitality.

1 U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau, The Health and Well-Being of Children in Rural Areas: A Portrait of the Nation, 2011-2012. Rockville, Maryland: U.S. Department of Health and Human Services, 2015.

- **Economics and Livability.** People are attracted to walkable communities. Trails and pathways are frequently cited as desired enhancements to residents' and prospective residents' quality of life. Encouraging walking and bicycling can promote smarter growth, greater access to local and nearby businesses, attract jobs /businesses, lower household medical expenses, and encourage local tourism across the state.
- **Connectivity and Safety.** Because small towns and rural communities in Wyoming are often bisected by higher speed roadways (i.e., state highways), context-appropriate bicycle and pedestrian design can promote increased usage, safety, and comfort, as well as encourage predictability between modes, decrease exposure to traffic, and bolster economic growth.

Recreation, Long Distance Bicycling, and Tourism

Wyoming has long been a **crossroads** and a home for Native American tribes, trappers, and emigrants on overland routes, like the California, Oregon, Mormon, Pony Express trails. Between 1841 and 1868, these latter trails carried approximately 500,000 Eastern and European pioneers on their journey to the west. Some of these historically-significant trails can still be seen. In recent history, Wyoming's reputation as a crossroads, and its unique natural landscape, has lent itself to being an inviting and popular **destination for bicycling for recreation and recreation-based tourism**.

This appeal has led Wyoming to be a highlight and an important link for local, nationwide, and international long-distance bicycling tourists. These are opportunities on which Wyoming can build.

Routes

The TransAmerica Bicycle Trail, or the planned **Route 76** of the U.S. Bicycle Route System (USBRS), was the first bicycle touring route to cross the U.S. Its 439 miles in Wyoming cross the continental divide at Togwotee Pass. The planned USBRS **Route 40** will cross the northern tier of the state over the Bighorn Range. These routes can be formally adopted into the national system and used to enhance tourism and visitor experience.

The **Great Divide Trail** (472 miles in Wyoming) is a mountain biking route that follows the Continental Divide from Canada to Mexico. In Wyoming, travelers stay and buy provisions in towns like Jackson, Pinedale, Boulder, South Pass City, Rawlins, and Baggs. Some users of that trail compete in a race from Banff, Canada to the Mexican Border. The **Continental Divide National Scenic Trail** (510 miles in Wyoming) is a hiking and horse route that follows a parallel but more rugged route along the high mountains.

In addition to these existing and proposed major cross-state routes, the Rails to Trails Conservancy is developing a plan for the **"Great American Rail Trail"** (mileage in Wyoming to be determined), which would cross Wyoming along a new, long-distance corridor developed for bicyclists, hikers, walkers, and other non-motorized users using trails and abandoned rail beds.

Users of these trails, residents and visitors alike, are typically wholly dependent on local Wyoming businesses and communities for supplies and lodging. Promoting bicycle tourism by providing developed routes, improved accommodations, wayfinding, and amenities can create **more inviting, more economically-diversified rural communities**.

Many of Wyoming's rural and **remote paved, unpaved, or gravel roads** are also growing in popularity among people riding road, mountain, and a new trend of all-purpose "gravel bikes" that are designed to be ridden on mixed surfaces. Gravel bike packing is a growing trend and some enthusiasts participate in races, such as the Cowboy Tough Adventure Race; other organized events; and their own rides and tours specifically targeting rural areas and unpaved roads. These users are interested in scenic routes, socializing, exercise, and recreation.



Touring bicyclists on the TransAmerica Bicycle Trail near Togwotee Pass in rural Wyoming

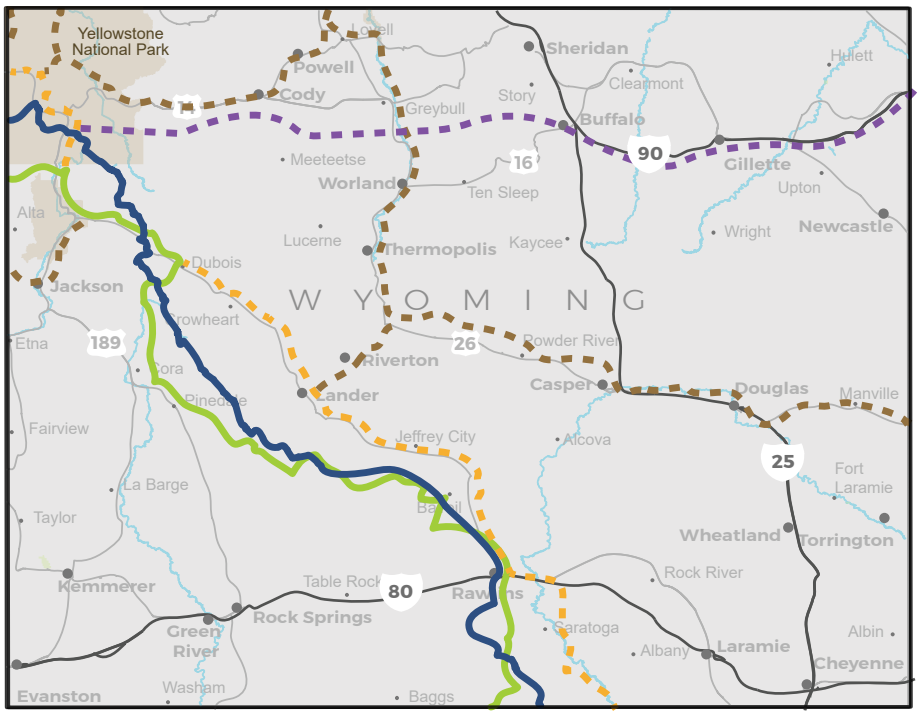
EXISTING & PLANNED
STATEWIDE TRAILS
in WYOMING

EXISTING

- **CONTINENTAL DIVIDE NATIONAL SCENIC TRAIL**
  Hiking and Equestrian Route
  510 miles
- **GREAT DIVIDE TRAIL**
  Mountain Biking Route
  472 miles

PLANNED

- **USBRS 76 TRANSAMERICA BICYCLE TRAIL**
  Touring Route
- **USBRS 40**
  Touring Route
- **GREAT AMERICAN RAIL TRAIL** *
  *Route Options
  Bicycling and Hiking Route



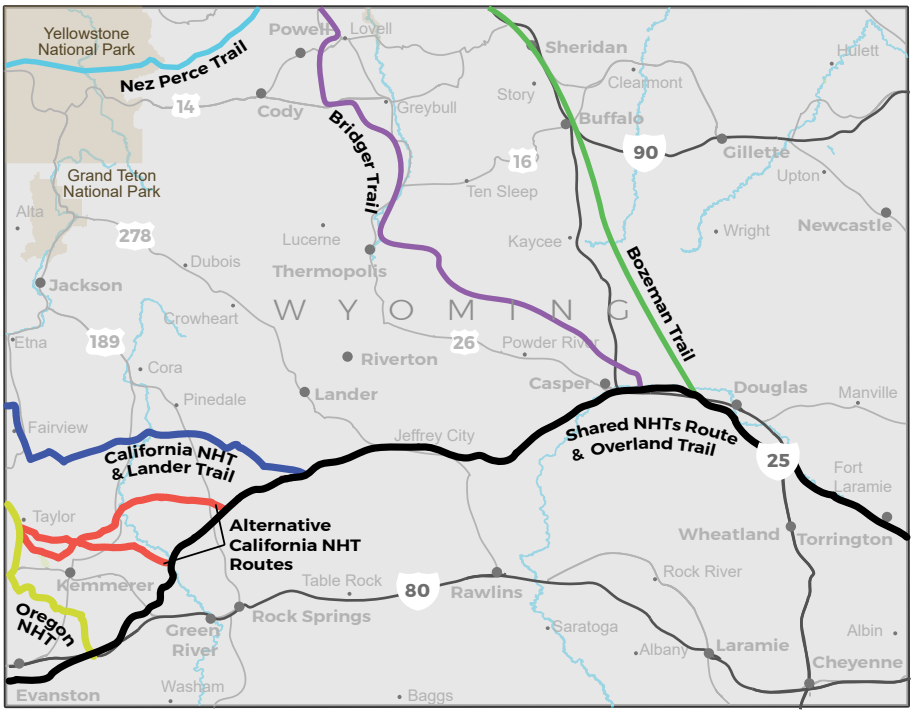
HISTORIC TRAILS
in WYOMING

NATIONAL HISTORIC TRAILS

- **CALIFORNIA NHT**
- **MORMON PIONEER NHT**
- **OREGON NHT**
- **PONY EXPRESS NHT**

OTHER HISTORIC TRAILS

- **OVERLAND TRAIL**
- **BOZEMAN TRAIL**
- **NEZ PERCE TRAIL**
- **BRIDGER TRAIL**
- **LANDER TRAIL**



Challenges

Long distance users face many challenges on highway sections of long distance routes, including **high motor vehicle speeds; periodic absence or partial paving of shoulders; and the presence, location, and design of rumble strips**, which can make bicycling on these roads prohibitive for all but the most determined. Another challenge is that improvements to highways and shoulders are expensive and may be impractical in rural and/or undeveloped areas on a large, statewide scale.









From the top right to bottom right: Fast traffic; narrow, partially, or poorly paved shoulders, rumble strips inconvenient to long distance bicyclists (occupying about half of available shoulder in the background)

Finding a Life in Wyoming on a Bike and a Prayer

When bicycle tour leader, Judy Raymond's **cross-country bicycle touring group** stopped at a bed and breakfast in Lamont in 1993, she had no idea that her stay there would set into motion events that would change her life and lead to her becoming the answer to a Wyoming rancher's prayer. After hitting it off with the owner of the B&B and mentioning how much she loved the Wyoming scenery, the owner invited her to come back someday and become the cook at the B&B.

When Judy returned to Lamont three years later, at the end of a bike tour to spread the word about straw bale houses, she took the owner up on her offer. Once she had settled in, the owner began talking about Gary Raymond, the son of the owners of the nearby Ferris Mountain Ranch, who she thought Judy should meet. Judy's interest in seeing an old homestead cabin on the ranch and her employer's urging convinced her to visit the ranch. There, she met Gary, who had the keys to the cabin. This meeting eventually led to a year and a half of dating and ultimately marriage, but that is not the whole story.

It turns out Judy was literally the answer to Gary's prayer. Although he loved the ranch, Gary had been lamenting his chances of ever getting married due to the isolation of the ranch and because he was always working. Resolved to leave in two weeks, he prayed one last time for a wife and within days of leaving, met Judy. Coincidence? Maybe, but the term "God works in mysterious ways" comes to mind, especially because it was a bicycle that delivered Judy to her new life in Wyoming.



Judy and Gary Raymond, with their daughter. Photo courtesy of Judy Raymond

Rural & Small Town Needs

Populations in rural counties in the United States are growing[2]. As such, the number and types of trips in rural areas are increasing. Improving walking and bicycling access, comfort, and safety in Wyoming's rural and small town areas can increase and preserve quality of life, transportation choices, and the benefits of compact, rural community planning. In addition, planning and designing school land uses (i.e., elementary, middle, and high schools) that are accessible by walking and bicycling and are located in the core of rural communities can also **increase safety, reduce childhood dependence on automobiles, improve personal and public health, and decrease bussing costs**.

Historically, rural town design was based on walking rather than driving. This focus created very walkable communities, with **gridded streets, focal gathering places, transportation options, network redundancy, and compact development**. Following this approach, it was easier and more feasible to walk to destinations. **Some of Wyoming's rural and small towns are still very walkable**, but some have begun to expand and mimic the development patterns and mistakes of more suburban and urban communities.

2 Dalbey, Matthew, "Implementing Smart Growth Strategies in Rural America: Development Patterns That Support Public Health Goals." *Public Health Management Practice*, 2008.



Downtown Lander

Rural Walking & Bicycling Planning

Wind River Indian Reservation

The **Pedestrian and Walkway Long Range Transportation Plan** for the Wind River Indian Reservation was developed for the Shoshone and Arapaho Tribes Transportation Department in 2012. "The Plan is **a vision for a safe and enjoyable walking environment for all members of the community**. It is committed to implementing safe routes for all pedestrians and bicyclists." Survey results revealed that 40% would walk or bike two or more miles to access offices, shopping, and recreation. What was lacking, according to respondents (88% of whom enjoy walking and bicycling for transportation), was dedicated facilities and safe crossings. Plans like this should be encouraged and well-funded so as to **provide the benefits of walking and bicycling to Native American communities**. Outreach, solutions, and recommendations should be tailored to the needs of each community. Download here.

Town of Story Conceptual Trails Plan

Completed in October 2016, the Town of Story, Wyoming's plan (prepared for the Story Community Fund by the Sheridan Community Land Trust and Trail Solutions) established an **example of how small towns can fund, research, and complete a community-driven plan** for improving walking and bicycling. Community priorities included **safe and accessible** pathways, trails, trailheads, and other facilities, especially those that connect to schools, businesses, neighborhoods, and open spaces. The plan divided its focus, analysis, and recommendations between several **"trail development zones"**, areas that have the demand and are most suitable for trail development; and includes trail design and building guidance and preliminary cost estimates. Download here.

Creating Comfortable Multimodal Networks in Small Towns and Rural Areas

Even though active transportation is common in small towns and rural communities in Wyoming, dedicated walking and bicycling infrastructure to support these uses are very often either limited or do not exist. In some contexts, no specific walking or bicycling infrastructure may be needed; however, in other contexts the lack of facilities discourages or prohibits active transportation. The existing roadways and barriers in these communities can be retrofitted and redesigned over time to provide a transportation network that better serves the interests of the community.

30%

of trips in rural areas are

≤ 2 MILES



with 20% under 1 mile.

The majority of short trips, however, are done by automobile[3]. According to the Safe Routes to School National Partnership, rural Americans rated sidewalks as the highest transportation priority (when selecting from a list that also included major roads and long-distance travel).

3 National Household Travel Survey, 2009



Downtown Buffalo

Walking and Bicycling to Work in Rural Areas and Small Towns

2X

1X

According to the Safe Routes to School National Partnership, the rate of **bicycling** to work in small, rural towns is **double** the rate in urban areas nationwide; in towns of 2,500 to 10,000, people **walk** to work at a **nearly identical** rate as urban core communities.

The Federal Highway Administration's (FHWA) *Small Town and Rural Multimodal Networks* guide was released in December 2016. It provides context on the challenges and the needs of rural and small, low density communities. These challenges include health and income disparities, higher crash rates, longer distances to travel, lack of shoulders on highways connecting communities, constrained bridges, and limited funding and/or political will.

The guide also provides recommendations on how to effectively implement **different types of facilities** for walking and bicycling in the rural context, including **mixed traffic, visually-separated, and physical-separated facility types**.

In addition to these, the guide includes case studies from successful small towns and rural communities, and strategies for **"key network opportunities"** and **"planning and project development"**.

Mixed Traffic | ***Visually-Separated*** | ***Physically-Separated***



Yield Roadway



Paved Shoulder



Sidepath



Bicycle Boulevard



Bike Lane



Shared Use Path



Advisory Shoulder



Pedestrian Lane



Separated Bike Lane

The FHWA Small Town and Rural Multimodal Networks Guide is a very relevant resource for Wyoming and should be a key reference to towns and counties.

Chapter 4
Natural Surface Trails

Introduction

Natural surface trails are part of the history and fabric of Wyoming: from the Native American trade routes and the original wagon train routes of the 19th Century, to today's purpose-built, **singletrack trails** that allow people to recreate and experience the state's natural beauty.

Chapter 4 will discuss:

- Natural surface trails for a variety of nonmotorized user groups (including equestrians)
- Trail applicability to various public lands management agencies
- Development of close to home community trail systems
- Planning and design guidelines, funding, maintenance, and implementation methods will also be summarized along with relevant economic data

Modern natural surface trail systems are some of the most variable facility types in this report. Trails can be **primitive or developed**; they can be designed specifically to suit a particular user group, or to be flexible enough to support multiple uses. They can be **wide and accessible by all ages and abilities, or narrow and technical**.

The majority of natural surface trails in Wyoming are shared use, providing opportunities for people walking, bicycling, and on horseback to share the same spaces.

Regardless of width or intended use, **sustainable trails** integrate substantial engineering elements to carefully shed water and manage grades. The content of this chapter demonstrate that there truly is a trail for everyone.

Benefits & Trail Experiences

Why do people love trails?

Natural surface trails share some of the benefits produced by other walking and bicycling facilities, while some benefits are unique to these largely recreational trails and public land trail systems. These can be divided, for the most part, into trail **experiences**.

Provide an Escape. Providing a relief from the commotion of life.

Connect with Nature. Promoting experiences with nature, from urban open spaces to rugged backcountry wilderness.

Access Destinations. Connecting users to specific destinations, such as scenic vistas, hunting and fishing access, or mountain summits.

Provide Healthy Exercise. Offering an outlet or mechanism for heath and fitness goals.

Provide a Challenge. Encouraging the continued development of certain trail and outdoor skills, such as bike-handling, navigation or horse-back riding.

Promote Play. Promoting experiences that create enjoyment.

Provide Solitude. Escaping other people and more developed, urbanized environment.



3x

user visitation increase at

Curt Gowdy State Park

after installing a mountain biking trail system



Mountain biking is a popular activity on Wyoming's natural surface trails, shown here at Curt Gowdy State Park

Wyoming Natural Surface Trails

Wyoming has an impressive number and diversity of trails, ranging from rugged wilderness routes to close to home trails for recreation trips that begin at users' front doors. **2,160 total non-motorized trails** in Wyoming that are identified by federal, state, local agencies and private organizations are described in the 2013 Wyoming non-motorized trails inventory, **totaling 10,472 miles**. It is unknown how many additional miles of well-used, non-system or informal trails on Forest Service, State Trust, and Bureau of Land Management lands exist.

The majority of non-motorized trails in Wyoming, accounting for **65 percent of trails and 73 percent of all trail miles, are administered by the US Forest Service** (see Table 4.1 on p. 32). Four forests—Shoshone, Bridger-Teton, Bighorn, and Medicine Bow-Routt National Forests—are headquartered and primarily located in Wyoming; portions of the Black Hills, Uinta-Wasatch-Cache, and Caribou-Targhee National Forests are also located in the state. Twenty-six Ranger Districts administer trails in the state under these seven National Forests. The **National Park Service (NPS) is the second largest trail administrator in Wyoming.**

Wyoming Trail Uses

- Mountain biking & bicycle touring
- Walking, hiking, & running
- Cross-country skiing, fat biking, snowshoeing
- Equestrian uses
- Accessing camping, hunting, and fishing

Table 4.1: Wyoming Natural Surface Trail Mileage by Administering Agency

	ADMINISTERING AGENCY	NUMBER OF TRAILS	PERCENT OF TOTAL	MILES OF TRAILS	PERCENT OF TOTAL
FEDERAL	U.S. Forest Service	1,399	64.8%	7,610 miles	72.7%
	National Park Service	284	13.1%	1,474 miles	14.1%
	Bureau of Land Management	71	3.3%	520 miles	5.0%
	Wind River Indian Reservation	39	1.8%	131 miles	1.3%
	U.S. Fish and Wildlife Service	1	< 1%	1 mile	< 1%
		1,794	***83.1%***	***9,737 miles***	***93.0%***
STATE	Wyoming State Parks, Historic Sites and Trails	236	10.9%	115 miles	1.1%
	Wyoming Game and Fish	5	0.2%	6 miles	0.1%
	Wyoming Department of Transportation	3	0.1%	6 miles	0.1%
		244	***11.3%***	***127 miles***	***1.2%***
LOCAL	All Municipal Agencies	86	4.0%	393 miles	3.8%
	All County Agencies	25	1.2%	102 miles	1.0%
		111	***5.1%***	***495 miles***	***4.7%***
PRIVATE	Miscellaneous	11	0.5%	112 miles	1.1%
		11	***0.5%***	***112 miles***	***1.1%***
	ALL WYOMING AGENCIES	**2,160 Trails**	**100%**	**10,472 miles**	**100%**

Trail Design Guides

A variety of agencies and organizations publish trail design guides that can help Wyoming communities and agencies to provide **meaningful trails and connections**, while **reducing maintenance demands**, and **encouraging proper etiquette** between users and user types.

Click each for more information or to download the PDF of the guide.

US Access Board
Trail Guidelines and Standards

National Trails Training Partnership
Trail Design and Construction Resources

Minnesota Department of Natural Resources
Trail Planning, Design, and Development Guidelines

BLM & International Mountain Bike Alliance (IMBA)
Guidelines for a Quality Trail Experience

IMBA
Trail Solutions: IMBA's Guide to Building Sweet Singletrack

IMBA
Managing Mountain Biking: IMBA's Guide to Providing Great Riding

U.S. Forest Service (USFS)
Equestrian Design Guidebook for Trail, Trailheads, and Campgrounds

Bridger-Teton National Forest
The Ten Trail System Tasks, by Tim Farris

Close to Home Systems

Many Wyoming communities provide "close to home" trails, which are trails or trail systems that are **accessible without driving**. This proximity **lowers the barrier to access** the trail and can result in **increased use** over a remote site. Such trail systems can be simple trails or complex networks of interconnected routes which offer access between natural areas as well as community destinations like schools, parks and commercial areas.

"Close to home" trail systems:

- **Connect people to public lands**
- Encourage active living and **improved health outcomes**
- **Promote** walking and bicycling for recreation and transportation
- **Reduce motor vehicle demand and traffic** on roadways and at trailheads, which also reduces the amount of space needed for parking and the potential conflicts between trail users and motor vehicles
- **Create travel and tourism economic benefits**

In recent years there has been a trend to design and build **higher quality trail systems** that provide a range of challenges for different skill levels. These purpose-built trail systems are springing up across the state, including in, but not limited to, Cody, Sheridan, Gillette, Cheyenne, Laramie, Casper, Green River, Evanston, Jackson, Dubois, and Lander.

Mountain biking at Glendo State Park



Funding & Partnerships for Natural Surface Trails

Capital (Construction) Funds

Because natural surface trails are primarily considered recreational amenities, they **do not typically qualify for federal or state transportation spending**. Communities around Wyoming have used a variety of other specific sources and volunteer strategies for funding natural surface trails.

The **Recreational Trails Program (RTP)**, is one federal program that offers funding for natural surface trail projects in Wyoming. This funding is limited, amounting to just under $1.4M in 2016, and of this amount, just over **$400,000 is for nonmotorized trails**. As such, funding is so limited and competitive that many Wyoming communities have created diverse partnerships and funding mechanisms to continue to grow their trail systems.

Another federal program available to Wyoming communities is the **Land and Water Conservation Fund (LWCF)**. This program is administered through Wyoming State Parks and requires a **50% match** by local communities. Funds can be utilized for acquisition, planning, design, and/or construction of recreational trail facilities.

The Wyoming Business Council's **Business Ready Community Grant and Loan Program**, a state funding program, has also been used successfully in some Wyoming communities for trail building.

The following are other funding strategies and sources that have been successful in various combinations across the state:

- Grants
- Fundraising through non-profit organizations and partner groups (e.g., Friends of Pathways [Jackson]; Medicine Bow Nordic Association [Laramie])
- Private donations
- Volunteer trail building efforts
- Challenge Cost Share (CCS) agreements with federal land management agencies
- Local bond measure
- Specific use sales taxes

Maintenance Funds

Creative partnerships are in part a response to federal land managers' severely decreased trail maintenance budgets. A 2013 GAO Report on Forest Service trails revealed that only about **one-quarter of trail miles meet Forest Service standards**. Loss of trail crew leaders, lack of skilled trail builders, and the inability to manage volunteer labor is hindering many public land managers in Wyoming from enhancing their trail systems.

Due to this dearth of funding and manpower, many Wyoming trails, in recent years, have been maintained through some or a combination of the following maintenance funding strategies or sources:

- Volunteer trail building and maintenance efforts
- Sponsorships (e.g., "Adopt a Trail", like Cody)
- Local Parks & Recreation Department funding
- Grants
- Trail user fees (typically for commercial ski area groomed trails)
- Special use sales taxes

Even during Wyoming's winters, walking and hiking for outdoor recreation are popular activities (shown here during the First Day Hike on January 1st)



Other Creative Funding Strategies

Nearly all of Wyoming's new trail systems are built using creative partnerships between trail users and land managers. For example, the **Park County Pedalers Club** in Cody raised over **$300,000** in private and public funding, and donated thousands of volunteer hours to construct the acclaimed **Becks Lake trails** and the new **Cody Bike Park**.

Cheyenne has also created several miles of trails in North Park that can be accessed from neighborhoods. Wyoming State Parks has built an award-winning trail system at nearby Curt Gowdy Park.

In **Jackson**, 20 years of **partnerships** between the Bridger-Teton National Forest and local non-profits have completely reconstructed **over 100 miles of front-country trails in Cache Creek and Teton Pass**. Jackson Hole and Grand Targhee Resorts have also added purpose-built trails that include both cross country and lift-served downhill natural surface trails. The Teton area was recently recognized as a **"Silver Level Ride Center"** by IMBA*, one of only a handful in the country.

**An IMBA Ride Center recognizes the best mountain bike trail areas in the world with differing levels. In addition to recognizing the efforts of trail building and maintenance, they are also an effective way for a community to benefit economically from mountain bike tourism.*

Trail Promotion

Trails can be substantial **economic generators** as quality experiences motivate tourists to visit a location or extend the duration of their stay. Wyoming's **world-class natural areas**, such as Yellowstone and Grand Teton National Parks, seven National Forests, vast BLM lands, Devil's Tower, Fossil Butte, and the Wyoming State Trust lands and State Park system, contribute to many communities economically benefitting from **trail-based tourism visitation**.

According to the Wyoming Business Council, the state's tourists "fill the coffers of hoteliers, restaurateurs, retailers and service providers to the tune of **$5.6 billion every year** as they travel the state." In addition, "the outdoor industry in Wyoming... provides **50,000 direct jobs** – nearly double that of the oil, gas, mining and extraction industries combined." Successful promotion can result in **more hotel stays, increased sales tax revenue, and direct local spending for savvy communities**.

The following strategies have been or could be employed in Wyoming to promote trail visitation:

- Promotion by local trail groups, Chambers of Commerce, or business organizations
- Application for and award of the IMBA Ride Center designation, which can attract mountain bike tourism from around the world (e.g., Teton Region Silver-level Ride Center)
- Population of trail spatial data through GIS or other online mapping sites
- Sponsorship and financial and in-kind investment by volunteer, non-profit, and private trail user groups (e.g., Jackson, Cody)
- Publication of print and/or online maps, including mobile-enabled maps
- Incorporation of downtown economic development and tourism strategies from "Chapter 2: Main Streets and Downtowns" from this report.
- Promotion by state organizations such as the Wyoming Business Council and Wyoming Office of Tourism

CURRENT TRAIL ISSUES FOR WYOMING

Technology

Bicycle technology is evolving rapidly with both traditional and electric pedal assist bikes extending the boundaries of where and how far users are able to go. The popularity of gravel bikes, designed to be used on a variety of paved and dirt roads, is also increasing in Wyoming. Land managers may need to reevaluate management practices as bicycle technologies influence how users interact.

Access

Trail recreation activities, such as cross-country skiing, equestrian use, nature viewing, hiking, and mountain biking, have continued to grow in popularity. Currently, 93% of Wyoming's nature surface trail miles are located on Federal lands. As such, partnerships with Federal agencies are critical in connecting to and maintaining many of Wyoming's trails. Communities can help promote bicycle and pedestrian connections to and withing nature surface trails and trail areas by pursuing construction and management partnerships.

Communication

Modern trail users expect to be able to have useful information at their fingertips. Reviews, recommendations, and navigation are now available through a number of free and paid mobile applications, allowing users to share their experiences, learn about new trail destinations, and utilize web-based navigation while on the trail. Wyoming is likely to reap the associated visitation, tourism, and economic benefits of embracing, supporting, and enhancing digital and handheld methods of providing information for trail users.

Federal Land Budgets

The severely reduced trail maintenance budgets for National Forests and BLM land is not a sustainable trend. Currently and in the future, volunteer efforts alone will not be sufficient to maintain Wyoming's trail resources. Increased funding, especially consistent funding from the federal level, will likely be required in tandem with effective community partnerships.

For more information on these issues, refer to the BLM/IMBA document "Guidelines for a Quality Trail Experience" (2017) and the Wyoming "Statewide Comprehensive Outdoor Recreation Plan (SCORP)" (2014).

Chapter 5
Health & Safety Benefits

Introduction

Improving the safety and comfort of walking and bicycling leads to increased use, which results in safety and health benefits for the users themselves and for Wyoming communities and the state as a whole. Health and safety benefits come in various forms: **physical, mental, environmental, and economic**.

Improving conditions for and use of walking and bicycling by the general population can help Wyoming **decrease rates of obesity, depression, anxiety, cardiovascular disease, stroke**, and other physical and mental health conditions; and **reduce the rate and severity of crashes involving bicyclists and pedestrians**.

Research collected since 2009 has shown that up to 60% of the American population feels that there are significant barriers to their increased use of bicycling and walking, specifically concerns with traffic and safety.[1] The key to increasing and diversifying the benefits derived from active transportation to the greatest degree possible is to create comfortable environments for people of all ages and abilities to be able to choose walking and bicycling.

Organization

This chapter is dedicated to identifying and elaborating on health and safety challenges, solutions, and benefits that Wyoming communities can derive from active living. It is divided into **three parts: introduction, health, and safety**. The latter two are then divided into, first, existing challenges and, second, strategies for and benefits from improving those challenges.

1 Roger Geller, City of Portland Bureau of Transportation. Four Types of Cyclists. http://www.portlandonline.com/transportation/index.cfm?&a=237507. 2009; Dill, J., McNeil, N. Four Types of Cyclists? Testing a Typology to Better Understand Bicycling Behavior and Potential. 2012.

What Shapes Health?

Health challenges stem from causes related more to **zip code** than genetic code. Among the determinants (i.e., causes) of health in the United States, 40% are behavioral patterns (e.g., how we get to school), 15% social circumstances (e.g., the development patterns where we live), and 5% environmental exposure (e.g., air quality).[2]

The typical built environment has a tremendous impact on the health of Wyoming communities. For example, low-density development, longer distances between origins and destinations, and lack of comfortable spaces to walk and bike can contribute to a relative lack of usage.

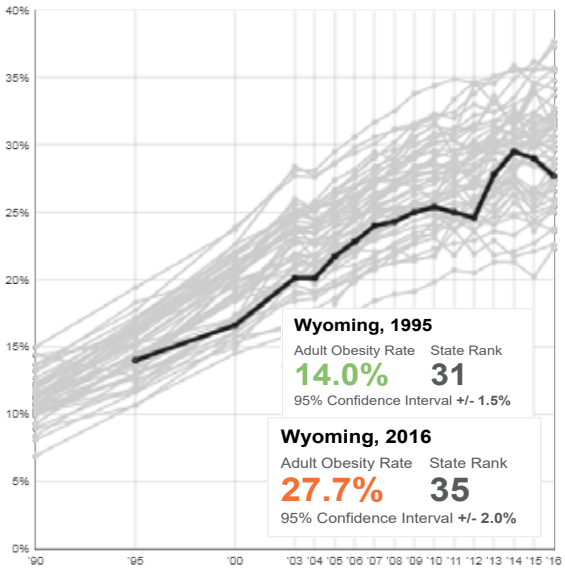
Challenges

In Wyoming, **27.7% of adults are obese, 64% are overweight or obese**, on average.[3] Rates are disproportionately higher for populations 35

2 American Planning Association, Metrics for Planning Healthy Communities, 2017.

3 WDH, Chronic Disease and Maternal Child Health Epidemiology Unit, Wyoming Behavior Risk Factor Surveillance System (BRFSS), 2016 data.

Adult obesity rates, 1990 to 2016



years old and older, as well as Hispanic and Native American persons. Additionally, these rates have increased steadily since at least 1995, though not as quickly as many other states (see chart from the Robert Wood Johnson Foundation below).

Depression also affects nearly 15.5% of the adult population in Wyoming.[4] Improving rates of physical activity can also decrease rates of some mental health issues. According to the Wyoming Department of Health, only about 29.2% of Wyoming children 6-11 years old are active every day.[5] 16.3% of those ages 12-17 are active every day. 26% of adults reported no physical activity at all in the past 30 days outside of their regular employment. This rate is higher for women than for men, and incrementally higher, on average, for every age group over 35 years old.[6]

4 WDH, Chronic Disease and Maternal Child Health Epidemiology Unit, BRFSS, 2016 Data.

5 Data Resource Center for Child & Adolecent Health, National Survey of Children's Health, 2016.

6 WDH, Chronic Disease and Maternal Child Health Epidemiology Unit, BRFSS, 2015 Data.

Outcomes and Benefits

Walking and bicycling are some of the most basic forms of physical activity. Improving active modes of recreation and transportation through **safe and context-sensitive network design**, as well as connecting people to destinations (like work or school), will improve access to **convenient exercise options.** These improvements would contribute to reduced health care costs and other benefits included in this section.

Studies show that people walk more in safe, connected, and aesthetically-pleasing places. Adding and improving facilities, like sidewalks, pathways, trails, and safe street crossings, **promotes physical activity by making active transportation more appealing, easier, and safer.**[7]

7 Robert Wood Johnson Foundation. Active Transportation: Making the Link from Transportation to Physical Activity and Obesity. Active Living Research. Research Brief; 2009. Available at http://www.activelivingresearch.org/ files/ALR_Brief_ActiveTransportation.pdf.

Walking & Bicycling Shown to Improve Health

The Centers for Disease Control and Prevention recommends **at least 2.5 hours of moderate exercise each week**, yet many people do not have convenient access to places where they can be physically active. Communities that are accessible by and comfortable for walking and bicycling help to provide **convenient and natural opportunities** to exercise, decrease obesity and other physical ailments, and improve mental health.



An inviting pedestrian and retail realm in Lander invites people to walk, sit, and eat downtown

Physical, Mental, and Emotional Health Benefits

A variety of physical, mental, environmental, and economic health benefits can be enjoyed by the residents of and visitors to Wyoming by encouraging use and designing and maintaining context-appropriate facilities for active transportation.

Physical

- Decreasing obesity
- Decreasing risk of chronic diseases
- Improving ability to complete daily activities
- Strengthening muscles and improving joint mobility, thereby improving balance and coordination and preventing falls in older adults
- Improving cardiovascular fitness
- Improving roadway safety and reduced crash rates and severities
- Improving awareness of vulnerable users

Environmental (Built and Natural)

- Decreasing reliance on motor vehicles and associated costs, emissions and air pollution
- Reducing parking demand and traffic congestion and delay
- Tighter-knit communities

Mental

- Improving mental health by reducing anxiety, depression, and negative mood and by improving self-esteem and cognitive function
- Decreasing stress levels associated with mental health issues and high blood pressure

Richard Garrett's Story

"I ride my bike regularly and believe that it has contributed meaningfully to my life in many ways. I have found new friends, discovered new places in Wyoming, and my overall health has improved.

"I also believe that improving bicycling and walking will help to increase Wyoming's cardiovascular health, mobility, mental health, coordination, and disease prevention."

- Richard Garrett, Lander

Other states have studied and quantified benefits from improving and/or planning to improve walking and bicycling usage in their own state.

- **Utah's** study, "The Utah Active Transportation Benefits Study", found that the annual healthcare cost savings per person by bicycling 10 miles or walking two miles per day (approximately 40-60 minutes of exercise) was approximately $2,500, and that the annual economic impact of bicycle-related businesses and tourism was **$425M**.
- **Minnesota**, in "Assessing the Economic Impact and Health Effects of Bicycling in Minnesota", found that only 100 minutes of bicycling per week was associated with a 10% lower death rate. Statewide, the **current annual value** of the 200,000 – 300,000 bicycle commuters was **between $108M and $569M**.
- In **Colorado's** "Economic and Health Benefits of Bicycling and Walking", it was reported that the total and monetized **economic and health benefits** of only bicycling estimated for the entire state are approximately **$1.6B**, with a total **$3.2B** between walking *and* bicycling.

Although similar data do not currently exist for Wyoming, a similar study could **demonstrate how many benefits the Equality State does and could reap from walking and bicycling**.

Summary of Health Benefits from Previous Chapters

1 Well-designed **pathways and enhanced local streets** can benefit Wyoming communities by:

- Improving safety and comfort benefits from well-designed pathways and enhanced local streets
- Minimizing exposure to traffic
- Reducing trip distances, dependence on automobiles, and the overall potential for collisions

2 Healthy, popular, and lower speed **main streets and downtowns** can contribute to:

- Economic strength and resilience, safety, and sense of place and community
- Reduced crash severity and likelihood of fatalities for all user types
- Reduced traffic speeds, which typically correlate to business and attraction recognition

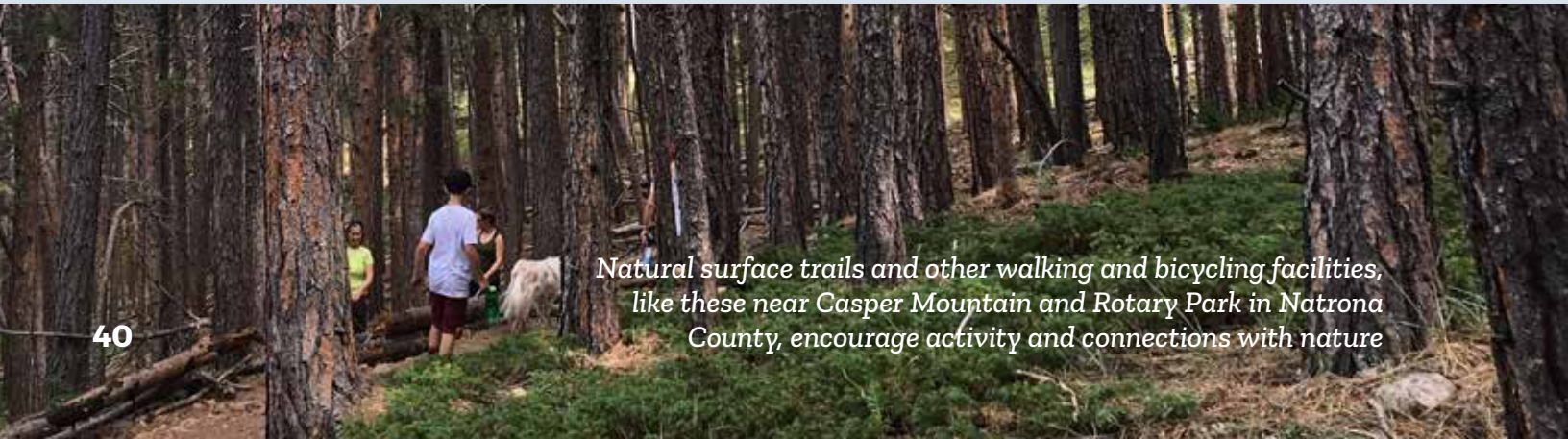
3 In Wyoming's **rural** communities:

- 35-38% of children are overweight or obese[1], but improved opportunities and encouragement for walking and bicycling can help to counteract that
- Higher speed roadways (state highways) typically bisect the community, but context-appropriate design can promote walking and bicycling, increase safety, encourage predictability between modes, decrease exposure to traffic, and bolster economic growth
- Long-distance bicycle tourists rely on and support local services and economies

4 **Natural surface trails** and "close to home" trail systems can provide safety and physical and mental health benefits by:

- Providing relief from the commotion of life
- Promoting experiences with nature, from urban open spaces to rugged backcountry wilderness
- Connecting users to specific destinations (e.g., scenic vistas, hunting grounds, or mountain tops)
- Offering an outlet or mechanism for heath or fitness goals
- Encouraging continued development of certain trail skills, such as bike-handling or navigation
- Promoting experiences that create enjoyment
- Escaping other people and more developed, urbanized environments

1 U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau, The Health and Well-Being of Children in Rural Areas: A Portrait of the Nation, 2011-2012. Rockville, Maryland: U.S. Department of Health and Human Services, 2015.



Natural surface trails and other walking and bicycling facilities, like these near Casper Mountain and Rotary Park in Natrona County, encourage activity and connections with nature

Safety

Perceived or real lack of safety and comfort are often cited as the principal reasons why people do not walk and/or bike, or don't do it more often.

Challenges

According to the Wyoming Department of Health, **52%** of all fatal childhood unintentional injuries in the state involve a motor vehicle. With the **third highest unintentional childhood injury death rate** in the United States, improving transportation choices in Wyoming, especially bicycling and walking, while designing safer streets can help to reduce the number and severity of those injuries.[8]

Death rates from motor vehicle traffic-related injuries were 147% higher in rural U.S. counties compared to large, urban counties between 2008 and 2011.[9] People in rural and small urban areas, like many of Wyoming's towns and cities, are already walking and bicycling and would like to be able to do so more often, more comfortably, and with a greater degree of safety.

Crash Data Analysis

Data collected by police, transportation, and public health and safety agencies and organizations in Wyoming indicate the **locations, types, and results of crashes involving people walking and bicycling** in the state. These data and their analyses are essential to determining possible solutions to bicycle and pedestrian safety issues in Wyoming. A snapshot of recent data is summarized in this chapter, though specific time frames may differ depending on the data source.

Even though the total number of crashes statewide has **declined by nearly 22% since 2008**, there were still 13,846 total traffic collisions reported in Wyoming in 2016. **Economic loss** resulting from these crashes exceeds **$5B**.[10]

A total of 171 of those 13,846 crashes involved bicyclists or pedestrians. Five pedestrian crashes (5.1% of 99) and one bicycle crash (1.4% of 72) resulted in fatalities.

IN WYOMING, ONLY ABOUT

1.2% of reported crashes involved bicyclists or pedestrians

and

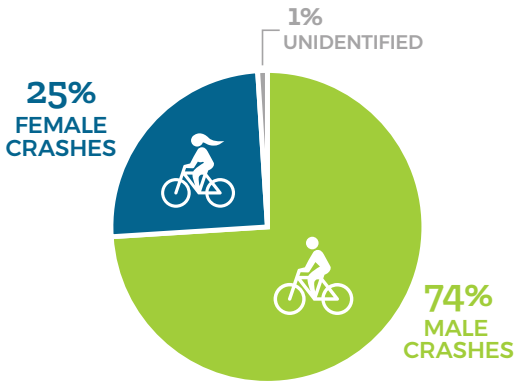
3.8% of reported fatalities were bicyclists or pedestrians

even though these modes accounted for

4.7% of all trips taken in 2016

According to the Wyoming Strategic Highway Safety Plan, even though recent active transportation crash rate trends are lower than other modes, the **state would still like to improve safety in order to achieve its goals** within that Plan, particularly as they relate to fatal crashes (see sections and charts about the fatality rates for bicyclists and pedestrians in Wyoming in that Plan).

Gender. Male pedestrians are slightly more likely (57% of 99 crashes) to be involved in a crash than females. However, males are much more likely than females to be involved in a crash as bicyclists.



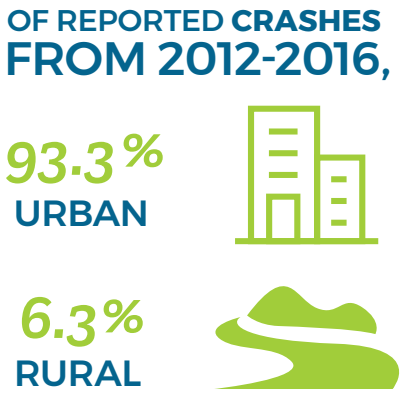
8 Rural Health Reform Policy Research Center, Update of the Rural-Urban Chartbook (2008–2011), 2014.

9 Ibid.

10 Figures used to determine economic loss came from the US Department of Transportation Memorandum; dated June 17, 2015 for the "Treatment of the Economic Value of a Statistical Life in Departmental Analyses." WYDOT has adopted a slightly modified version of the Relative Disutility Factors by Injury Status level.

Even though the Census Bureau found similar rates of males and females bicycling to work in Wyoming (according to the 2013 American Community Survey's three-year average estimates[11]), the above statistics are generally consistent with the gender split for walking and bicycling usage for **all trips**. Between 20-30% of bicycle ridership in the U.S. is female, compared to 50-55% in European countries that have more comfortable bicycle infrastructure, which appeals to people of all ages and abilities.

Rural vs. Urban. 65% of Wyoming's population lives in "urban areas", as defined by the U.S. Census Bureau as being Census tracts with 1,000 people per square mile or greater. The State's crash data show that the majority of all reported crashes involving people walking and bicycling are in urban areas, however that may vary depending on how the crash is reported.



Location. Nearly 57% of all pedestrian crashes between 2012 and 2016 occurred at intersections, driveways, or junctions. For bicyclists, this figure is 84%.

Actions and Causes. Other than "No Improper Action" on the part of the pedestrian (52.5% of crashes), the four most common prevailing actions of pedestrians prior to crashes between 2012 and 2016 are included in the nested charts (at right).

11 Alliance for Biking and Walking. *2016 Benchmarking Report*. http://www.bikewalkalliance.org/resources/benchmarking.2016

"Dangerous by Design"

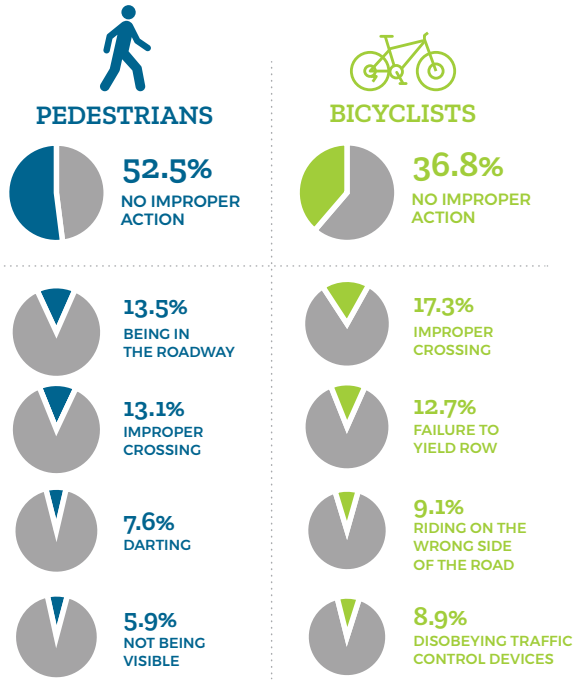
The "Dangerous by Design" study released by Smart Growth America in 2016 ranks **Wyoming as the seventh safest state or territory (where data were available) to walk in the U.S.**, with 48 total pedestrian deaths between 2005 and 2014 (0.83 pedestrian deaths per year per 100,000 people) and a Pedestrian Danger Index* (PDI) of 22.0 (a 6.4% decrease since 2014 and a 17.9% decrease since 2011). Even though this report ranks Wyoming near the top, the Wyoming 2017 Highway Safety Plan indicates that crash rates still exceed safety goals (reduce pedestrian fatalities by 25% and bicyclist fatalities from 1 to 0 by the end of 2017).

In addition, **non-white populations are often disproportionately involved in walking and bicycling fatalities** in the U.S. The same is true in Wyoming. The relative risk of pedestrian death for white persons in Wyoming is 13.3% (0.68 per 100,000 population), while the figure for non-whites is 23.3% (1.30). **The relative risk is 1.93, the 12th highest in the United States.** While **Native Americans** make up only 2.0% of Wyoming's total population, they represented **16.3% of all pedestrian deaths** in the state between 2005 and 2014. Higher risks are evident for people over 65 years old, as well.

Source: Smart Growth America, "Dangerous by Design", 2016, p. 10.

**The PDI is "the rate of pedestrian deaths relative to the number of people who walked to work in the region [or state, according to] the U.S. Census Bureau's 2014 American Community Survey."*

On the part of the bicyclists, who often have fewer facilities than pedestrians, "No Improper Action" accounts for 36.8% of actions previous to the crash, with the remaining most common included below.



Outcomes and Benefits

Studies show that installing pedestrian and bicycle facilities within and near roadway networks directly **improves safety by reducing the risk of pedestrian-automobile and bicycle-automobile crashes**. Corresponding fatality rates are generally lower in places where more people begin their commutes by walking or bicycling. This is in contrast to critics' fears of higher crash rates when more bicyclists and pedestrians are using on- and off-street systems.[12] **Streets with bike lanes** (compared to streets with no bicycle

12 Alliance for Biking and Walking. *2016 Benchmarking Report*. http://www.bikewalkalliance.org/resources/benchmarking. 2016

Funding

Two of Wyoming's principal funding sources for improving safety, below, are **opportunities to fund infrastructure and program improvements** for people walking and bicycling. Improving the analysis of bicycling and walking crashes; understanding the trends, rates, and contributing factors (and appropriate mitigations strategies) of those crashes; and, enhancing the usage and effectiveness of these funding would help to effectively remedy principal issues in the State.

- **Section 402.** These federal funds, originally introduced in 1966, are administered by the National Highway Traffic Safety Administration (NHTSA) at the federal level and by the WYDOT Highway Safety Office/Program at the state level. They provide federal aid to states, territories, and the Indian Nations for implementing traffic safety projects at the state and local levels. A call for projects are normally initiated during the later part of January or early February. These funds support programs that are designed to reduce crashes and resulting deaths, injuries, and property damage. At least 40% of these funds must be used by or to **address local traffic safety issues**, including excessive speeds; driver impairment; records and trends investigation; and crashes involving school buses, teen drivers, motorcycles, and bicyclists and pedestrians.

- **Highway Safety Improvement Program (HSIP).** A Federal Highway Safety program focused on the reduction of fatal and serious injury crashes. The purpose of this program, which is aided by federal funding, is to reduce fatalities and serious injuries to all users on public roads through **infrastructure, implementation, assessment, and programs**. HSIP can fund many different types of safety improvements, including low cost or systemic improvements. These improvements should align with the performance targets of the state through the use of the WYDOT Safety Management System (SMS) and the Strategic Highway Safety Plan. Projects are selected by the various WYDOT districts in light of available data and in working with University of Wyoming researchers. The District Engineer in each WYDOT District balances all the needs of the system in each District to the available funding. Coordination with the District Engineer is the **best method to address the various needs** of people bicycling and walking in Wyoming.

- facilities) have been shown to be **safer not just for bicyclists, but also for pedestrians and motorists**, by increasing predictability, slowing speeds in some cases, increasing separation between cars and more vulnerable users, and encouraging a more deliberate and attentive use of the roadway system.[13]

- Designing shared use natural surface trail systems that accommodate and provide safe spaces for operation by equestrians and people walking, hiking, and bicycling can help to improve off-street user safety.

- Researchers have concluded that "the type and quality of... infrastructure matter. It is crucial to provide physical separation from fast-moving, high-volume motor vehicle traffic [wherever possible]. **More and better infrastructure and safer cycling** would encourage Americans to make more of their daily trips by bicycle and, thus, help raise the currently low physical activity levels."[14]

- There is also a **"safety in numbers"** effect of active transportation. When walking and bicycling rates double, pedestrian-motorist collision risk can **decrease by as much as 34%**[15], in addition to the increase in safety and comfort from proper lighting, safe sidewalks, and equitable access.



13 Ewing, R. and Dumbaugh, E. (2010). The Built Environment and Traffic Safety: A Review of Empirical Evidence. Injury Prevention 16: 211-212.

14 Pucher, J and Buehler, R. (December 2016). Safer Cycling Through Improved Infrastructure. American Journal of Public Health, Vol 106, No. 12.

15 Jacobson, P. (2003). Safety in Numbers: More Walkers and Bicyclists, Safer Walking and Bicycling. Injury Prevention 9: 205-209.



Mountain biking groups in Cody

Part 2

Recommendations



Downtown Rawlins

Introduction

Many of Wyoming's economic, development, health, and safety issues can be benefited, in part, by bicycling and walking, and following the guidance and recommendations found in the previous five chapters of Part 1 as well as Part 2: Recommendations.

This second part of the report is perhaps the most critical. It contains a clear and comprehensive list of **recommendations for selected relevant implementing agencies and entities** in Wyoming, including local, non-profit, state, and federal groups and agencies.

- Wyoming State Legislature
- Office of the Governor
- Wyoming Department of Transportation (WYDOT)
- Wyoming Business Council (WBC)
- Wyoming Office of Tourism (WOT)
- Wyoming Department of Health (WDH)
- Wyoming State Parks
- Wyoming Office of State Lands and Investments
- Wyoming Department of Education
- Wyoming Law Enforcement Academy
- Pathway and Trail Non-Profit & Advocacy Organizations
- Federal Lands Agencies
    - National Forest Service
    - National Park Service (Yellowstone NP, Grand Teton NP)
    - Bureau of Land Management

There is at least one page dedicated to each agency or entity, with policies or programs that they can implement to maximize active transportation and recreation accessibility, economic benefits, and community health in Wyoming. Recommendations were derived from local experience, needs, and desires, as well as national literature and regional and national case studies on safe community design, anticipated outcomes, and benefits.

indicates benefits

Working Together

Part 2 provides a myriad of recommendations specific to a variety of implementing agencies and entities. While these recommendations appear to be presented separately, there are vast opportunities for partnerships where multiple groups/agencies may work together for greater efficacy. Each group/agency has its own unique mission with the greatest overall success being achieved when each recommendation is led by the group/agency whose mission is most appropriate. This will streamline implementation and leverage existing expertise and knowledge.

State agencies should work together and collaborate where appropriate.



Bicycle racks in Downtown Casper

State Legislature

Statute Review (Section S)

SL S.1 Develop legislation, and provide funding and direction to state agencies to prepare a comprehensive and quantitative study of the health, safety, economic, and other benefits of walking and bicycling in Wyoming. Direct state agencies to coordinate expertise on the study development and use, including Wyoming Department of Health, Wyoming Business Council, WYDOT, and the Wyom Office of Tourism.



SL S.2 Create an Interim Study to evaluate Wyo. Stat. § 31-5-601 et. seq. (Pedestrians) and Wyo. Stat. § 31-5-701 et. seq. (Bicycles), and related statutes including Title 24 Highways, to explore legislative opportunities to improve and update statutes to meet Wyoming's safety and accommodation goals for these two travel modes.

The Interim Study recommended should include the following issues for potential legislation:

SL S.2a Assess the statutes that requires drivers yield to pedestrians in the crosswalk, and evaluate if requiring drivers of motor vehicles to stop would improve pedestrian safety (Wyo. Stat. § 31-5-602).



SL S.2b Add a proactive statement on pedestrians' right to travel afoot along any public right of way, similar to the existing Wyo. Stat. § 31-5-702 for bicyclists.

SL S.2c Consider creating a mode shift goal such as a doubling of biking and walking trips by a target year.

SL S.2d Change state statute to clarify motorist can, when safe to do so, cross double yellow centerline stripes to more safely pass bicyclists and pedestrians in the roadway.

SL S.2e Develop legislation to consider a "Wyoming Bicycle Yield Law". Allow bicyclists, when it is safe to do so, to treat stop signs as yield signs, but still require a full stop when it is necessary.

Examples: Idaho (since 1982); Delaware (since 2017)

State Legislature

SL S.2f Consider legislation to define types and allowed uses of electric bicycles (also known as "e-bikes") on highways, roads, and non-motorized pathways in Wyoming. Together with this consideration of legislation, define specific technologies and whether they should be allowed or disallowed on bicycle infrastructure, both on- and off-street (e.g., e-bikes, motorized scooters, motor vehicles, golf carts, gasoline-powered bicycles, segways).

SL S.2g Consider legislation updating equipment requirements for reflectors, lights, brakes on bicycles to reflect current technology and use.

SL S.2h Consider enhancing a state distracted driver law, such as to require hands free calling.

SL S.2i Consider legislation for a vulnerable road user law that increases penalties for a motorist that harasses, injures, or kills a bicyclist or pedestrian. Click here for model language.

- Harassment may include dangerous driving, intentional swerving or brake checking, blowing exhaust, sexual harassment, provocation, other dangerous behavior by motorists or other users.
- Encourage state agencies conduct an accompanying vulnerable roadway user safety campaign utilizing similar media and funding mechanisms as the State's August campaigns focused on motorcycle safety. Messaging can be crafted to encourage people to share the road; recognize that vulnerable users are neighbors, friends, and community leaders; and to be aware of one's surroundings. Work with the Wyoming Department of Transportation (WYDOT) on implementation and analysis of this campaign.



SL S.3 Consider establishing an on-going state-level bicycle and pedestrian board. Either continue the existing Bicycle and Pedestrian System Task Force and update its duties, or create a new state board appointed by the Governor. The Task Force representation should include local government, non-governmental organizations (NGO), state agencies, business and tourism, and other key stakeholders.



State Legislature

Funding (Section F)

SL F.1 As financially feasible, create and fund a statewide bicycle and pedestrian infrastructure and education initiative to address identified needs in Wyoming communities for walkable main streets, community pathways, rural cycling routes, and natural surface trails. Leverage state and federal infrastructure grants with local government and private matching investments. Include and coordinate non-infrastructure programs for safety education, tourism promotion, and active living health encouragement campaigns.

Recommended $10 Million annual funding level goal for 5-year initiative:

Walkable Main Streets	$2.4 million
Community Pathways	$5 m
Rural Bicycle Routes	$1 m
Natural Surface Trails	$1 m
Safety Education	$100k
Health Encouragement	$500k

SL F.2 Request a report from **WYDOT** to evaluate opportunities to improve use of existing federal and state funding programs for bicycle and pedestrian infrastructure, including recommendations on project prioritization criteria that incentivize bicycle and pedestrian projects and accommodations. Seek to increase the overall size of the Transportation Alternatives Program (TAP) using other eligible federal and state funding sources. TAP is currently only about $2M per year and is highly oversubscribed, and Wyoming is currently among the lowest in the nation for percentage of federal transportation dollars spent on bicycling and walking.

- The League of American Bicyclists' Bicycle Friendly State report card for Wyoming in 2017 recommended that at least 2% of federal transportation funds be spent on bicycle and pedestrian projects.
- If spending were to match existing commute-only mode shares (as collected by the Census Bureau), Wyoming would be spending 4.7% on walking and bicycling currently.

Investments have Benefits

Benefits have been documented in many states where investments in active transportation and recreation have been made. Benefits could be quantified in Wyoming as:

- Economic
- Health
- Quality of Life
- Safety

This report recommends the State Legislature prepare a comprehensive and quantitative study of the health, safety, economic, and other benefits of walking and bicycling in Wyoming (SL S.1)

State Legislature

- If the State wished to establish a walk and bike mode share goal (e.g., 7%), then increasing funding for bicycling and walking projects, education, and maintenance to 7% in order to meet that goal.

SL F.3 Direct the Legislative Services office to prepare a report for and provide guidance to cities, towns, and counties, to improve the understanding and utility of the existing local option sales taxes available for local government to construct pedestrian and bicycle infrastructure, including examples of successful use around Wyoming.

SL F.4 Clarify to **WYDOT** and local agencies that existing Wyoming state fuel tax funds may be used for bicycle and pedestrian facilities as part of larger transportation projects, or as stand-alone projects, especially those focused on safety, eliminating gaps in bicycle and pedestrian systems, improving access for bicycle and pedestrian modes, implementing local bicycle/pedestrian plans, and to leverage federal funding.

SL F.5 Consider adding a "pedestrian and bicycle enhancements" category in eligible activities under the gasoline and diesel fuel tax statutes, defined as capital or maintenance for bicycle or pedestrian projects on Wyoming main streets, community pathways, safe routes to school, or other. Clarify that the multi-lane highway account Wyo. Stat. § 39-17-211(g) in a diesel fuel tax section, also allows for including pedestrian and bicycle facilities in the list of eligible enhancements.

Example: Oregon's "Bike Bill", OR § 366.514, has required that the state, a county or a city must spend at least 1 percent of money received from the state highway fund on bike facilities and sidewalks that are within a road's right-of-way.



State Legislature



SL F.6 Consider a funding initiative to enhance safety and function of long distance bicycle tourism routes, designed to fund improvements such as shoulder widening or sidewalk upgrades along dedicated state bike routes/active transportation routes. Example projects could include wider shoulders where missing on the TransAmerica route, and to construct a section of the proposed Great American Rail Trail along the North Platte connecting Casper to neighboring communities.

Stating in the law that these routes get priority funding could be a good way to ensure designated routes get improvements. The state routes likely will run through downtowns of smaller communities throughout the state. In downtowns, funding could be used to upgrade sidewalks to Americans with Disabilities Act (ADA) standards.

Examples: New York State's statewide Empire State Trail funding; Colorado's $100 million initiative for Colorado's bicycle infrastructure

SL F.8 Consider providing direction to the Business Council on augmenting the project selection criteria and scoring to provide more emphasis for close-to-home natural surface trail infrastructure in the Business Council's Community Enhancement Program. Alternatively, consider creating a separate funding program, either through the WBC or State Parks and Cultural Resources, dedicated to trail infrastructure as a quality of life and an economic development amenity and tool that creates and fosters business-ready communities. Work with the Wyoming Business Council (WBC) to these ends.

SL F.9 Explore legislation that would enact the Nonmotorized Trail User Fee concept proposed by Governor Mead's Outdoor Recreation Task Force – which recommended that "Any person 18-years or older that utilizes an enrolled nonmotorized recreational trail in the state of Wyoming shall, upon filing of an application, pay a user fee of $5.00; the fees received...shall be expended by the department for the administration of the nonmotorized recreational trails program."

State Legislature

SL F.10 Consider appropriating State funds to the Wyoming State Parks and Trails Program as match for the federal Recreational Trails Program (RTP) nonmotorized category.

Federal Lands Issues and Resolutions Recommended



SL G.1 The Legislature should consider a Resolution to the Wyoming Delegation and federal lane agencies regarding the chronic and severe trail maintenance funding shortfall that is impacting public use and enjoyment of US Forest Service and Bureau of Land Management (BLM) trail systems, including the lack of adequate trail crews to address the problem, and the need for Congress to provide sufficient funding for the public land agencies to better maintain nonmotorized trails for the public's use and enjoyment.

SL G.2 The Legislature should consider a Resolution to the National Park Service (NPS) to petition to prioritize completion of the Grand Teton National Park Pathways System, including to approve and construct a pathway along the Moose Wilson Road between Moose and the SW park entry. (To follow up to Wyoming's House Enrolled Joint Resolution 2, passed in 2016)

SL G.3 The Legislature should consider a Resolution to the NPS to petition to allow park visitors to use fat bikes (bicycles designed for travel on groomed snow) on Yellowstone National Park's groomed roads that are open to snowmobiles and snow coaches.



SL G.4 The Legislature should consider a Resolution to the National Park Service to petition to change the restrictive federal rule that mandates bicyclists shall ride single file on all roads and pathways. The rule currently applies in Yellowstone and Grand Teton National Park, even when the road or pathway is closed to motor vehicles. The Legislature should recommend the same rules as Wyo. Stat. § 31-5-704, that is, "to ride as far to the right as practicable…no more than two abreast" on National Park Service roads. One additional strategy is a resolution to Wyoming's Delegation to encourage them to include a rule change in next Transportation Act reauthorization.

State Legislature

Potential Funding Concepts from Other States' Initiatives

SL FC.1 Fund maintenance of shared use paths and for bicycle/pedestrian education through a $5.00 opt-in (or opt-out) fee on vehicle registrations

Example: Montana

SL FC.2 Allocate a portion of lottery funds for infrastructure, safety, education, encouragement for active transportation.

Example: Great Outdoors Colorado (GOCO) Grant Programs

SL FC.3 Annual dedication of $2.00 from the car title transfer tax, which generate additional funding for statewide active transportation programs and/or provide state-provided matches for federal and private grants.

Example: Illinois's $2.00 tax raises more than $7 million annually for the Illinois Bicycle Path program, with 50% match on active transportation (AT) projects

SL FC.4 Active transportation program funding can provide monies annually for planning, design, and construction.

Example: California's Active Transportation Program (ATP)

SL FC.5 Small and urban city sidewalk programs to fund deferred maintenance and installation of sidewalk gaps.

Example: Washington State's small city and urban city sidewalk programs

SL FC.6 Dedicate the existing sales tax on bikes and bike parts to support active transportation infrastructure.

Example: A proposed law in Minnesota

Funding Ideas - NOT Recommended

SL Fc.7 Flat rate tax on bicycle sales would be inequitable and likely not profitable in Wyoming.

Example: Oregon's bicycle sales tax bill (2017)

SL FC.8 Bicycle registration, licensing, or license plates - unlikely to raise more than such programs would cost to administer. They also create difficult enforcement challenges, could reduce bike use, and negatively impact public health.

SL FC.9 Pedestrian Sneaker Tax, as it is impractical and not advised to charge people a fee to walk along public ways.

Office of the Governor



GOV 1 Evaluate agency initiatives recommended in the Wyoming Bicycle & Pedestrian System Report, and work with state agencies to incorporate appropriate changes into budgets and work plans.

GOV 2 Continue to support the State of Wyoming's participation in the Recreational Trail Program (RTP).

GOV 3 Contact and persuade the Wyoming Delegation and Federal Land agencies regarding the serious federal land trail maintenance backlog on public trails in Wyoming, and the need for sufficient trail crew budgets and proper trail planning on National Forests, Bureau of Land Management (BLM), and National Park Service lands in Wyoming.

GOV 4 Consider a visible public campaign in support of Wyoming's trails, sidewalks, and other walking and bicycling infrastructure.

Example: Colorado Governor Hickenlooper's "16 in 2016" campaign to prioritize and raise awareness of trails

GOV 5 Assist the Legislature with establishing an on-going state-level bicycle and pedestrian board. Either continue the existing Bicycle and Pedestrian System Task Force and update its duties, or create a new state board. The Task Force representation should continue to include local government, non-governmental organizations (NGO), state agencies, business and tourism, and other key stakeholders.



Governor Matt Mead signs SF-8

Wyoming Department of Transportation (WYDOT)

Administration & Organization (Section AO)

DOT AO.1

Consider creating a WYDOT Office of Bicycle and Pedestrian Transportation, with an appropriate level of organization support to address the transportation needs of people bicycling and walking, and to realize the transportation and community benefits and opportunities outlined in this report. Consider the recommendations in the League of American Bicyclists 2017 Bicycle Friendly State Report, which ranked Wyoming as the 42nd most Bicycle Friendly State in October 2017.



Examples: Utah's (UDOT) Active Transportation Program; Washington State's (WSDOT) Active Transportation Division; Oregon's (ODOT) Bicycle and Pedestrian Program; Vermont's (VTrans) Bicycle and Pedestrian Program; Minnesota's (MNDOT) Bicycle Program and Pedestrian Program

Engineering & Planning (Section EP)

DOT EP.1

Consider adopting a statewide Complete Streets or similar policy, that applies to all non-Interstate State Highway System road and highway projects, including community main streets. The policy would be based on the project design principle of evaluating and addressing the safety and access needs of all users, including, where appropriate, the needs of bicyclists and pedestrians. WYDOT should encourage Wyoming's counties and cities to adopt similar, compatible policies.



Resource: The National Complete Streets Coalition's "State-Level Complete Streets Policies" Guide

DOT EP.2

Confirm correct routing, then formalize US Bike Routes 76 and 40 through Wyoming, as defined by American Association of State Highway Transportation Officials (AASHTO) and the Adventure Cycling Association (ACA). Ensure that the final alignments reflect the most desirable routes, including access to food, water, recreation, scenery, and lodging. Prioritize these for

Wyoming Department of Transportation (WYDOT)

shoulder enhancements when projects along the routes are conducted.

Resource: Adventure Cycling Association's (ACA) U.S. Bicycle Route System Webpage

DOT EP.3 Partner with the **Wyoming Office of Tourism (WOT)** and **State Parks** to develop, fund, and place TransAmerica US National Bicycle Route 76 signs along the route. Evaluate signage needs for other long-distance routes, including the Great Divide Mountain Bike Route when along state highways, and provide route guidance. Signage could be funded through **WOT** Technical Assistance Co-op Program (TACP) funds.

DOT EP.4 Evaluate and consider the current best-practices for active transportation design standards to provide additional guidance and flexibility to Wyoming cities and towns (e.g., bollards on pathways, separated bike lanes, pedestrian crossings, lane width options for downtowns and on roadways with lower speed limits). In addition, review and evaluate policies, design guidelines and standards in order to make rural walking and bicycling safer and more comfortable (see Chapter 3 of this report).



Example: FHWA's Small Town and Rural Multimodal Networks guide; NACTO's Design Guidance

DOT EP.5 Update and adopt the WYDOT draft Wyoming State Bicycle and Pedestrian Plan, to incorporate the recommendations of this report, as well as an implementation action plan and performance measures to gauge success.

DOT EP.6 Assess and provide appropriate bicycle accommodation in transportation projects, as feasible, especially along long-distance and rural bicycling routes (e.g., safe shoulder widths, rumble strip style and placement) and in urban projects (e.g., bike lanes and pathways).

Wyoming Department of Transportation (WYDOT)



DOT EP.7 Evaluate warrants used for pedestrian and/or bicycle crossings of State Highway routes in urban areas, and incorporate methodology that allows meaningful new crossings where latent demand exists. Consider including language for maximum distances between crossings, which could allow more mid-block crossings.

Resource: Institute of Transportation Engineers's (ITE) "Designing Walkable Urban Thoroughfares: A Context Sensitive Approach"

DOT EP.8 To assist Wyoming communities with implementing new transportation technologies, pursue statewide interim approvals from FHWA for new traffic control devices that may be beneficial in select Wyoming locations to (e.g., hybrid beacons, bicycle turn boxes, bike boxes, bicycle signal faces).

DOT EP.9 Consider alternative measures along with vehicle Level of Service (LOS) standards in downtowns and on Wyoming main streets. Balance LOS goals for extra capacity with the economic performance, viability, and vitality of a downtown. As appropriate, incorporate alternative measures of delay, like overall trip time, level of comfort for bicyclists and pedestrians, and economic health scores for local businesses.

Example: Colorado Main Street Program Manual (2016)

DOT EP.10 Standardize pedestrian and bicycle data collection methods consistent with the Federal Highway Administration (FHWA) Traffic Monitoring Guide (TMG). Establish baseline counts and gather data on bicycle and pedestrian trips and miles traveled; partner with local agencies on data collection; and leverage improvements in counting technology to improve data over time.

DOT EP.11 Partner with non-profit organizations, such as WAM and WCCA, to create a Project Planning guidebook/ webinar to assist citizens, local towns, cities, and counties to better participate in WYDOT's project planning for proposed highway and main street projects.

Wyoming Department of Transportation (WYDOT)

DOT EP.12 Improve highway bypass guidelines to better support preserving the downtown/main street economic and cultural aesthetic needed to make towns and cities of any size thrive. Include provisions that allow speed reductions where highways pass through downtowns. Work with local communities on this effort.

Example: Leadville, Colorado Main Street projects funded by the Colorado Department of Transportation (CDOT)

Example: CO-135 25 mph speed limit through Crested Butte, CO, and other communities



Funding (Section F)

DOT F.1 When developing future State Transportation Improvement Programs (STIP), consider increasing investments of Wyoming's federal transportation funding for walking and bicycling projects, using existing program authority in the FAST Act and state statute. Incorporate project selection criteria based on community plans, mode share, crash history and safety, and recommendations included in this Report.

DOT F.2 Consider increasing investments of existing state fuel taxes (gasoline and diesel) to help leverage federal funds and to further invest in Wyoming communities' main streets and bicycle and pedestrian system infrastructure needs.

- The League of American Bicyclists' Bicycle Friendly State report card for Wyoming in 2017 recommended that at least 2% of federal transportation funds be spent on bicycle and pedestrian projects, which is the current average of all DOTs.
- If spending were to match existing commute-only mode shares (as collected by the Census Bureau), Wyoming would be spending 4.7% on walking and bicycling currently.
- If the State wished to establish a walk and bike mode share goal (e.g., 7%), then increasing funding for bicycling and walking projects, education, and maintenance to 7% in order to meet that goal.

Wyoming Department of Transportation (WYDOT)

DOT F.3 Where practical, coordinate WYDOT's highway improvement projects with business-related community enhancement and Wyoming Main Streets programs.



DOT F.4 Consider increasing the maximum Transportation Alternatives Program (TAP) funding per project request amount to allow for larger projects, especially those capital/construction projects that are not feasible to phase using the current maximum amount.

DOT F.5 Consider a vulnerable roadway user campaign. Develop a statewide pedestrian and bicycle safety education program using federal funding through the National Highway Traffic Safety Administration's Section 402 NHTSA non-infrastructure safety programs, with education messages with the goal of improving awareness of key preventative measures such as minimum 3' safe bicycle passing, yielding to pedestrians, and similar strategies based on crash history in Wyoming. Messaging should be crafted to encourage people to share the road and to recognize that vulnerable users are neighbors, friends, and community leaders. Partner with local jurisdictions, law enforcement agencies, and **non-profits** to implement the program.

DOT F.6 Develop and maintain a bicyclist and pedestrian crash review and reduction program. Provide guidance to local jurisdictions and law enforcement. Promote the implementation of proven safety countermeasures with appropriate levels of Highway Safety Improvement Program (HSIP) funding investment.

Wyoming Department of Transportation (WYDOT)

Safety & Education (Section SE)

DOT SE.1 Partner with the **Wyoming Department of Health (WDH)**, on collaborative programs to encourage biking and walking and make it safer, potentially leveraging federal Highway Safety funds from the Section 402 program with federal CDC chronic disease prevention funding.

DOT SE.2 Request WYDOT Driver Services add and/or bolster active transportation education and test questions in driver training.

Example: VTrans (Vermont) regularly updates the drivers manual to include new and additional questions regarding active transportation for new and renewing drivers



DOT SE.3 Consider ways to provide support for local bicycle and pedestrian safety and education projects, such as Safe Routes to School programs.

DOT SE.4 Improve bicycle and pedestrian crash forms for law enforcement and other first responders to bicycle/pedestrian/motor vehicle collisions. Require all crash data to be accurately geocoded.

DOT SE.5 Coordinate with the **Office of Tourism** on creation of a state website with resources on bicycle commuting, touring, state bike routes, planning documents, and other relevant information.

DOT SE.6 Assist in a State of Wyoming study of the health and economic benefits of active transportation, as proposed in the State Legislature recommendation section.

Examples: Utah; Michigan; Wisconsin; Colorado

DOT SE.7 Consider a Vision Zero or similar policy and program for bicyclists and pedestrians, with specific goals to seek to eliminate bicycle and pedestrian crashes on state highways. Achieving zero bicyclist and pedestrian fatalities is possible in Wyoming. Track progress. The 2017 update of the Wyoming Strategic Highway Safety Plan calls for "Moving to Zero" fatalities, and now includes bicycle and pedestrian safety as a focus area.

Examples: CDOT's and Denver's Vision Zero Programs; Utah's Zero Fatalities Program

Wyoming Department of Transportation (WYDOT)

Training (Section T)

DOT T.1 Institutionalize annual bicycle and pedestrian facility design trainings (e.g., NACTO, or a statewide course curriculum tailored to Wyoming), renewed at least every 3-5 years for WYDOT staff engineers and planners.

Example: Colorado DOT's (CDOT) Policy Directive 1602 "Elevating Bicycle and Pedestrian Opportunities in Colorado"



Maintenance (Section M)

DOT M.1 As feasible, enhance shoulder maintenance (sweeping and patching) along major bike routes and high bicycle use areas identified in Chapter 3 of this report and the draft Wyoming Bicycle & Pedestrian Transportation Plan. Continue to update these priority routes as usage data and needs are collected and analyzed.



DOT M.2 Test high-power air-blower method of shoulder debris clearing. If more economical and effective, expand to all districts and focus on long distance routes and known bicycle travel corridors.

DOT M.3 Continue to evaluate bicycle-friendly shoulder sealing and appropriate maintenance in the roadway resurfacing projects in order to maintain the shoulder surface and provide comfortable facilities for bicyclists (as well as pedestrians in rural communities).

Example: California's statewide walking and bicycling plan, "Toward an Active California: State Bicycle + Pedestrian Plan", includes a case study about San Luis Obispo's paving strategies



Platte River Trail in Casper

Wyoming Business Council (WBC)

WBC 1

If enacted and supported by the legislature, (see State Legislature section SL S.1), collaborate with the **Wyoming Department of Health (WDH), the State Legislature,** and other agencies to perform a comprehensive and quantitative study of the health and economic benefits of active transportation. This study, like Utah's and several other states', should provide data and calculators for determining estimated return on investment (ROI) for bicycling and walking projects. Such a report will improve the understanding of the benefits of these projects, impact funding, and outcomes in the state.

Examples: Utah; Michigan; Wisconsin; Colorado

WBC 2

Continue and seek to increase Business Ready Community (BRC) and other funding programs. Reexamine the guidelines for WBC programs, like the Main Street program, to improve Wyoming's business-readiness and competitiveness to attract young entrepreneurs as envisioned in the "Economically Needed Diversity Options for Wyoming" (ENDOW) Initiative.



WBC 3

Consider augmenting the WBC Community Enhancement Program's project selection criteria to provide *greater emphasis and higher scoring* for main street projects and close-to-home natural surface trail infrastructure that directly enhance economic development opportunities through improvements to the "community's aesthetic character or quality of life in order to make itself more attractive for business development or workforce attraction and/or retention under a specific strategy or plan of action..." (BRC Rules, Section 5(c)). Consider also creating a separate funding program dedicated to trail infrastructure as a quality of life and an economic development amenity and tool that creates and fosters business-ready communities. Work with the **State Legislature** to these ends.

Wyoming Business Council (WBC)

WBC 4 Continue to work with the **Wyoming Department of Transportation (WYDOT)** to combine business-related programs from the WBC and highway improvement projects, particularly as they involve cross-department collaboration, like WBC Main Streets and **WYDOT** highway projects.

WBC 5 Continue and enhance the Wyoming Main Street program to offer incentives, funding, and technical support that is relevant to communities of all sizes.

WBC 6 Provide additional technical assistance for main street improvements in smaller communities (as part of WBC's Main Streets program or a similar or new program).



WBC 7 Encourage communities to follow the guidance in Chapter 2, namely: perform an initial assessment to identify potential improvements, create an advisory group, commission a professional corridor study, and pursue funding.

WBC 8 Consider creating a technical assistance program to assist communities with coordinating land use and transportation decision making to better achieve ENDOW and community goals for economic prosperity.

Example: Utah's Wasatch Front Regional Council (WFRC) Transportation and Land Use Connection Program

WBC 9 Leverage federal funding programs, such as the Community Development Block Grant (CDBG) and those administered by the Department of Housing and Urban Development (HUD), with WBC and state sources as feasible, particularly for main streets. Eligible projects will remain focused on providing benefit to low- and moderate-income families, eliminating slums and blight, and meeting urgent community development needs that pose serious or immediate threats to health or welfare.

Wyoming Office of Tourism (WOT)

WOT 1

Partner with local communities, **local pathway and trail organizations**, **WBC** and **State Parks** to help promote and advertise walkable main street communities, trail systems, community pathways, bicycle routes, and long-distance trails as an experience targeted towards out-of-state visitors.

WOT 2

Consider increased marketing of bicycle events and other cycling opportunities to regional markets that have easy driving access to Wyoming. Use WOT marketing channels to highlight easy multi-day bicycle adventures that encompass several trail systems in Wyoming communities.



WOT 3

Partner and assist the **Wyoming Department of Transportation (WYDOT)** on a project to confirm correct routing, then formalize US Bike Routes 40 and 76 through Wyoming, as defined by the American Association of State Highway Transportation Officials (AASHTO) and the Adventure Cycling Association (ACA). Ensure that the final alignments reflect the most desirable routes, including access to food, water, recreation, scenery, and lodging. Develop unique Wyoming route signs and assist in installation. Evaluate signage needs for other long-distance routes, such as Continental Divide Route, and Great American Rail Trail, as well.

WOT 4

In collaboration with other state agencies (State Parks, WYDOT, WBC), work with existing Wyoming road and trail apps to ensure that their data and functionality is included, up-to-date, and promoted. Consider a statewide online and smart phone "app" that makes all available trail and amenity information available. App could provide nearest trails, nearby amenities, restaurants, grocery locations, camping, potable water locations, showers, etc. In addition, ensure that all existing pathways, trails, bike lanes, and routes are available on the key online mapping websites and apps (e.g., Google Maps, Trailforks, MTB Project).

Example: Iowa Natural Heritage Foundation's smart phone app



Wyoming Office of Tourism (WOT)

WOT 5 Promote long distance bicycling opportunities in Wyoming, and provide information on key bicycle touring amenities for visitors like hotels, campsites, Main Street communities, water, food, scenery, and historical sites. This should be in collaboration with **State Parks**, **WBC**, other agencies, and could build off of the existing **WYDOT** bicycle map, which includes rest areas, camping sites, showers, picnic sites, mountain biking areas, bike shops, food and water, and average daily traffic on principal roadways.

WOT 6 Work with the **WBC** and local county tourism leaders to help communities identify a checklist of necessary support infrastructure for long distance routes to enhance tourism activities. Provide marketing assistance as feasible to assist rural communities with promoting their facilities for bicycle tourists.



WOT 7 Collaborate with Main Street communities and the **WBC** to educate travel and tourism industries and economic interests on the benefits of walkability communities to help support existing local businesses and to encourage hotel and restaurant development in downtowns.

WOT 8 Coordinate and support bicycle and trail events hosted by local community, chamber and other entities; help to leverage marketing support for high-profile walking and bicycling events in the state (e.g., triathlons, Tour Divide, marathons) to promote Wyoming as a destination for sports and adventure events.

WOT 9 Consider utilizing **WOT's** Technical Assistance Co-op Program (TACP) to fund tourism-related projects, programs, and other agencies' recommendations.



WOT 10 In collaboration with the **WBC**, **State Parks** and **WYDOT**, act as an in-state communicator regarding the value of pathways to the Wyoming tourism industry and the state legislature. In this communication, encourage tourism businesses to support local and regional pathway development as a way to build upon the state tourism industry.

WOT 11 Continue Travel and Tourism research efforts to quantify the value of pathways and their development to the state's economy, and if enacted, assist in the economic and health study proposed in the State Legislature section of this report.

Wyoming Department of Health (WDH)

Wyoming Department of Health



WDH 1 If enacted and supported by the legislature, (see State Legislature section SL S.1), collaborate with the **Wyoming Business Council (WBC), the State Legislature,** and other agencies to perform a comprehensive and quantitative study of the health and economic benefits of active transportation. This study, like Utah's and several other states', should provide data and calculators for determining estimated return on investment (ROI) for bicycling and walking projects. Such a report will improve the understanding of the benefits of these projects, impact funding, and outcomes in the state.

Examples: Utah; Michigan; Wisconsin; Colorado

WDH 2 Partner with **County Health Offices**, **the Wyoming Department of Transportation (WYDOT)**, and **local pathway and trail non-profit organizations** to promote physical activity and active transportation in worksites, schools (Safe Routes to School Program), and community settings by improving and creating pedestrian- and bicycle-friendly environments. This can be funded using federal transportation 402 Safety Program and other federal and state health funding (e.g., Centers for Disease Control (CDC) State Public Health Actions to Prevent and Control Diabetes, Heart Disease, Obesity, and Associated Risk Factors; Prevention Program). The current cooperative agreement with CDC ends in July 2018, after which grant requirements may change.

WDH 3 As part of the State Health Assessment being conducted by WDH, collect public feedback about barriers to physical activity and active transportation in their communities and potential solutions to these barriers, as well as success stories.

Wyoming Department of Health (WDH)

WDH 4 Ensure that the most recent and available health-related data is shared with planners, engineers, decision makers, other applicable professionals, and the public through online databases and reports.

Example: Utah's IBIS-based public health data resource



WDH 5 Contact the **Western Central Chapter of the American Planning Association** to explore the possibility of securing a Planners4Health grant (cohort 4 or 5), and work with the chapter to identify the state's purpose and benefits. The grant would help bring planners, engineers, politicians, and public health professionals together to improve professional capacity to improve health through the build environment. Wyoming is one of only a handful of states not included in the first three rounds of funding. Applications are typically due in fall.

WDH 6 Develop walking programs for elderly residents and senior centers in rural communities, with a focus on comfort and safety and social connection building.

Example: Montana's Trails Rx Program

WDH 7 Evaluate feasibility of method to incorporate serious bicycle crashes and bicycle fatalities that do not involve a motor vehicle into the official highway safety crash database so that counter measures can be considered. Currently, non-motor vehicle-related bike crashes are not tracked in the database. Work with **WYDOT** and the **State Legislature** to modify the statute that dictates the collection and maintenance of the Motor Vehicle Crash Database.

Wyoming State Parks



SP 1 Complete a system-wide non-motorized trail plan for Wyoming State Parks and Historic Sites, prioritizing the trail building projects to be completed, such as:

- A destination-quality trail system in Keyhole State Park;
- Expanding, promoting the trail system opportunities in Hot Springs State Park;
- A purpose-built interpretive mountain bike/hike trail at Fort Phil Kearny;
- Expanding and improving the Bear River State Park trail system and adjacent public land trails serving Evanston; and,
- Enhancing trails at Sinks Canyon State Park and partner with the Shoshone National Forest Washakie Ranger District on an interconnected trail system for Lander area.

SP 2 Explore natural surface trail partnership opportunities with federal land managers on high priority National Forest and Bureau of Land Management (BLM) trails, building on the successful snowmobile and off-road vehicle (ORV) programs.

SP 3 Consider changing current State Parks policy in order to ensure that Recreational Trails Program (RTP) funding is best addressing the diverse trail needs in Wyoming. This may include allowing diversified non-motorized projects (e.g. hiking and mountain biking) to be eligible to apply for funding from the 40% "Diversified" RTP category in addition to the 30% non-motorized category.

SP 4 Assist the **Office of State Lands and Investments** with trail planning and building opportunities for close to home trail systems, such as the new Schoolyard Trail System in Laramie, North Cheyenne Park and the Bus Loops in Lander.

SP 5 Assist **Wyoming Department of Transportation (WYDOT)** in surveying potential trail alignments along their ROW, where necessary.

Wyoming State Parks

SP 6 Coordinate with the **Wyoming Office of Tourism (WOT)** on enhanced trail promotion opportunities, ensure State Park campgrounds have "guaranteed tent camping" for bicycle tourists, and update trail system maps regularly.



SP 7 Assess Wyoming's Historic Trails (e.g., Oregon Trail) for opportunities to create bikepacking or bicycle touring routes along portions of historic routes, or combined with other long distance trails. Partner with **land managing agencies** on route planning, and with **NGOs** for promotion.

SP 8 Expand the Wyoming Trails Program's non-motorized staff capacity to help implement the trail recommendations from this report and other planning efforts.

SP 9 Assist Wyoming communities with natural surface trail planning and building assistance.

SP 10 Lead the state effort to develop Great American Rail Trail through Wyoming; partner with Wyoming communities and the Rails to Trails Conservancy (RTC) on concept and feasibility plans for the Wyoming section of the Trail. Seek and support ways to fund this project using existing or future (proposed) state funds. Encourage the **Governor** and the **State Legislature** to become vocal champions of the project.



SP 11 Ensure that existing trail facilities, projects and usage data are available to other entities to promote the State Park trail systems.

SP 12 Incorporate best practices in trail education and user ethics into trail information materials.

Wyoming Office of State Lands and Investments



LAND 1 Identify potential opportunities on State Trust Lands and other lands managed by the State of Wyoming to support enhanced "close to home" trail systems, such as the Bus Loops near Lander, Red Grade Trails in Sheridan, and North Park in Cheyenne.

LAND 2 Within the constitutional restrictions on the use of State Trust Lands, develop creative solutions to provide enhanced recreational trails through community partnerships that protect State Lands from abuse, and develop creative ways to generate sufficient fees for public trail use, and for assistance to help construct and maintain the trails.

LAND 3 Seek new partnerships with the Bureau of Land Management (BLM) where connected state and BLM lands can provide high quality community trail systems (e.g., the Bus Loops area in Lander).

LAND 4 Make the application, lease, and/or acquisition process easier for non-profit entities seeking to apply for easements for trails through and on state lands. For example, the State could ease the requirement that such an entity purchase or lease the easement for fair market value if it can be shown that the trail is beneficial to tourism, education, local economies, preservation, conservation, etc.

LAND 5 Develop partnerships with **local pathway and trail organizations** to assist in protection and stewardship of State Trust Lands.

Department of Education

ED 1 Partner with **local communities**, **school districts**, **transportation entities**, and **non-governmental organizations (NGO)** programs that encourage increased, safe biking and walking to school. SRTS curriculum is free and readily available online and through the SRTS National Partnership. If time within congested school schedules is a constraint, consider encouraging "Safety Towns", which are an effective way to educate children about how to walk and ride a bike safely in a controlled, low-consequence environment.

Example: California, Minnesota, Washington



ED 2 Encourage local community organizations to fund and implement Safe Routes to School programs at the school district level, and collaborate with **WYDOT** to develop a state-level Safe Routes to School Coordinator position and program.

Example: Utah Department of Transportation's (UDOT) Safe Routes to School Coordinator position, SNAP plans, and safety audit funding through its Traffic & Safety programs



ED 3 Elevate the importance of SRTS in new school siting evaluations. Include criteria to recognize the importance and health benefits of easy access for walking and biking to school in the decision-making process for new school locations and designs.

ED 4 If enacted and supported by the legislature, (see **State Legislature** section SL P.3) collaborate with the **Wyoming Department of Health**, **WBC**, and other agencies to perform a comprehensive and quantitative study of the health and economic benefits of active transportation. Include the school-age and lifelong benefits of walking and bicycling to school in the proposed Health and Economic Benefits Study.

Wyoming Law Enforcement Academy

LE 1 Develop a Police Officer Standards and Training (POST) curriculum for bicycling and walking enforcement both for new officers and continuing education. Focus on laws related to bicyclists and pedestrians, interactions between all modes, and bicycle and pedestrian collision investigation.





Hiking Independence Rock near Alcova

Pathway and Trail Nonprofit & Advocacy Organizations



NGO 1 Help distribute the *Wyoming Bicycle & Pedestrian System Report* to the public and members of local and state user groups. Encourage state and local government to adopt its recommendations (Part 2). Encourage the establishment of local task forces to implement the report's recommendations.

Help other **local organizations**, **the Wyoming Association of Municipalities**, cities, counties, and state and federal agencies, to read, understand, distribute, and implement this report, particularly the recommendations in Part 2. Help partners by publicizing this report's availability, funding sources, and suggestions, as well as the associated benefits of improving walking and bicycling in Wyoming.

NGO 2 Promote examples, stories, recommendations from this report and encourage planners, engineers, trail builders, and politicians to use it as a resource.



NGO 3 Provide private funding and leverage public funding for maintenance needs, perhaps as partnerships with cities, towns, and counties to increase impact.

NGO 4 Consider creating a guidebook or a recorded webinar outlining steps needed to be taken by citizens, local towns, cities and counties to create new pathways, trails, or complete street projects. This effort would ideally have participation from **WYDOT**.

NGO 5 Create a guidebook for bicyclists and pedestrians, with relevant statutes, safety rules, and tips for traveling by bicycle and on foot in the state. This effort would ideally have participation from **WYDOT**.

Example: Oregon's "Pedal Power: A Legal Guide for Oregon Bicyclists"

NGO 6 Continue to inform and encourage the **Wyoming State Legislature** to take action on this report's recommendations and follow through on the goals established alongside the Task Force and this report.

NGO 7 Track legislation proposed for or that would potentially affect bicycling and walking. Help educate and inform local communities and members of the **State Legislature** at key times in the legislative process.

Federal Lands Agencies

National Forest Service (Section NFS)

FL FS.1 Complete District-level trails assessments for all 26 Ranger Districts in Wyoming, with prioritized trail improvement plans.

FL FS.2 Increase federal funding for trails crews to address trail maintenance backlog.

FL FS.3 Provide training for NFS staff and partners in trail system planning, design, construction, and maintenance.

FL FS.4 Foster enhanced partnerships with communities using Challenge Cost Share (CCS) agreements and leverage NFS trail crews in order to improve front country trail systems that serve Wyoming's recreational trail needs.

FL FS.5 Work with local "Friends" groups (e.g., Pole Mountain Resource Group) to tackle the significant backlog of trail maintenance projects.



National Park Service (Section NPS)

Yellowstone National Park

FL NPS.1 Update the 1992 Parkwide Road Improvement Plan to include modern best design practices for bicycle compatible shoulders with road projects within the parks. Include minimum 5' shoulder on major road reconstruction projects, where feasible, to provide park road typical widths of 32', with 11' lanes/5' shoulders.

FL NPS.2 Change Park rules to allow bicyclists to ride two abreast, similar to Wyoming State law.



Federal Lands Agencies



FL NPS.3 Improve bicycle safety on existing roads with "Shared Roads" education campaign.

FL NPS.4 Evaluate potential bicycle use of additional off-highway pathways and trails in the Park.

FL NPS.5 Evaluate the feasibility of allowing people on fat bikes to ride in winter on groomed park roads open to snow coaches and snowmobiles.



FL NPS.6 Expand groomed non-motorized trail systems for ski, snowshoe, and fat bike use.

FL NPS.7 Explore opportunities to allow mountain bikes on appropriate sections of natural surface trails.

FL NPS.8 Improve data collection to better understand bicycle visitation; conduct social science studies from bicycle visitor experience and perspective.

Grand Teton National Park



FL NPS.9 Prioritize funding requests and complete the remaining pathways approved in the 2007 GRTE Transportation Plan and Environmental Impact Statement (EIS) Decision.

FL NPS.10 Reconsider the Moose-Wilson Pathway and construct a bicycle and pedestrian pathway from Moose to Teton Village.

FL NPS.11 Plan and construct a pathway along Gros Ventre Road from the junction of US 89 to the Gros Ventre Campground and Town of Kelly.

FL NPS.12 Explore opportunities to allow mountain bikes on appropriate sections of natural surface trails, while protecting resources and enhancing visitor experience.

Federal Lands Agencies

FL NPS.13 Include minimum 5′ shoulder on road reconstruction projects, increase new park road typical widths from 30′ to 32′, with 11′ lanes/5′ shoulders, especially projects along the TransAmerica National Bicycle Route 76.

FL NPS.14 Improve data collection to better understand bicycle visitation.

Other NPS Units in Wyoming

FL NPS.15 Explore opportunities to enhance bicycling, walking and hiking trails in smaller park units in Wyoming, and pursue partnerships to connect local communities with NPS properties and historic sites, such as the City of Guernesey and NPS Guernsey Ruts.

The other NPS managed areas include Bighorn Canyon, Devils Tower, Fort Laramie, and Fossil Butte.



Bureau of Land Management (Section BLM)

FL BLM.1 Complete field office-level nonmotorized trails assessments for BLM lands in Wyoming.

FL BLM.2 Identify opportunities on BLM lands for "close to home" trail systems, such as the Bus Loops and Johnny Behind the Rocks near Lander, Red Grade Trails in Sheridan, Dubois Rodeo area trails, and North Park in Cheyenne. Work toward developing them sustainably, with community partnership support.

FL BLM.3 Partner with the **Wyoming Office of State Lands and Investments** on these efforts.

FL BLM.4 Work with **local pathway and trail organizations** to plan and implement purpose-built trail systems.



This report was made possible by public-private partnerships and the generous in-kind and financial contributions of many people and organizations in Wyoming. The State of Wyoming thanks the following organizations for their tremendous help with producing this report:





















