Pathways Master Plan

THE TOWN OF JACKSON & TETON COUNTY, WYOMING

















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I. EXECUTIVE SUMMARY

Master Plan Overview

Imagine using "human power" to move through the Jackson Hole landscape on a smooth surface, lined by wildflowers and native plantings, through conservation areas and neighborhoods, connecting schools, resorts, work and recreation, with custom designed benches, rest areas, and works of art designed to connect the heritage and culture of Jackson Hole...Imagine being able to redefine the connection between the human and natural environments, and to build a "green infrastructure" that reduces fossil fuel consumption, enables freedom of mobility, encourages more physical activity, allows children to walk or bike to school, reduces traffic congestion, and makes it possible to create economic growth at the same time...This is the Jackson Hole Community Pathways System.

"This we know: The earth does not belong to man; man belongs to the earth. All things are connected. Whatever befalls the earth befalls the sons of the earth. Man does not weave the web of life, he is merely a strand in it. Whatever he does to the web, he does to himself."

- Chief Seattle, of the Dwamish People, (1855) in a letter to U.S. President Franklin Pierce

Much of the core for this system is already on the ground or in development, and the missing links and future Complete Street and pathway corridors prioritized for the next five years are identified in this Master Plan. Teton County and the Town of Jackson have constructed more than 25 miles of paved shared-use paths in the past decade, and these facilities are being connected to improved sidewalks, on-street bikeways, and the region's START transit system. The terms "Pathways" and "Complete Streets" have become part of the community's identity, representing a wide range of interests, user groups, and facility types that are being brought together to create an integrated multi-modal system for transportation and recreation.

The Jackson Hole Pathways System has the potential to be a world-class model for sustainable development. There is significant community support for Complete Streets and pathways, and the Town and County Comprehensive Plan includes a goal for "...the enhancement of the pedestrian and bicycle environment to achieve modal shares of 13 percent and 10 percent respectively, as well as to reduce pedestrian and non-motorized vehicle accidents by 10 percent." It will still take a substantial and continued effort to achieve a fully unified, connected system that can realize this goal. The Pathways Master Plan provides the "trail map" to get there.

The Town Councilors and County Commissioners have charged a group of appointed citizens to guide this process. The Pathways Task Force is comprised of community leaders committed to achieving the vision of:

"Improving and enhancing non-motorized opportunities for transportation and recreation..."

Bicycling, walking, hiking, Nordic skiing, and equestrian travel are all popular activities in Jackson Hole both for recreation and transportation. As the system develops, many of the pathways, bikeways and sidewalks are achieving the over-arching goal of "connecting people and places" so that more utilitarian travel and trips combined with links to the Southern Teton Area Rapid Transit (START) services contribute to a more

¹ In this document, the term "Pathways" generally refers to separated shared-use paths, while "Pathways System" refers to the entire collection of multi-modal facilities including sidewalks, on-street bikeways, separated shared-use paths, transit connections, improved roadways, trails, equestrian paths, and groomed Nordic trails.

² "Complete Streets" is a policy model that calls for design, construction, and maintenance of safe facilities for all modes of transportation. See Section 3.8 Proposed Policy Recommendations for a detailed description.

sustainable community. By developing an integrated network of sidewalks, bike lanes, shared-use paths, transit connections, and enhanced roadways, Jackson Hole will create a balanced approach that allows people the freedom to choose the mode of travel that is appropriate to their needs.

The Pathways System has more than 27 miles of paved shared-use paths and 20 miles of sidewalks in place today. The complete system will be more than 75-80 miles long, and will connect to a growing regional network. Pathways can link to trails in the Bridger-Teton National Forest and other public lands. The system will also connect to the network of shared-use paths in Grand Teton National Park as outlined in the Park's Transportation Plan - Final EIS approved in 2007. The capital construction of the next generation of pathways will be accomplished through publicly funded capital projects (using state, federal and local funding), integrating Complete Streets and pathways into new development projects and highway projects, and through partnerships with the non-profit and private sectors. At the same time, the physical infrastructure needs to be complemented by a re-organized administrative system, with clearly structured operations, programming, and maintenance functions.

Benefits and Challenges

As part of the planning process, public input, focus groups, and community workshops were held to articulate some of the issues regarding the development of the Pathways program in Jackson Hole. These are summarized as benefits and challenges in the following section:

Benefits: Why are Pathways important to Jackson Hole?

Bicycling and walking are important to Jackson Hole residents, visitors, and businesses for a variety of reasons:

Bicycling and walking are a necessary part of the transportation system in Teton County.

Pedestrians and bicyclists are an integral element of a balanced transportation system. Practically every trip includes a pedestrian element, and the valley's flat topography and spectacular scenery is attractive for bicycling. Sidewalks, crossings, bike lanes, paved shoulders, and shared-use paths can provide a growing share of the community's mobility needs.

Safety is a significant issue.

Already, significant numbers of people are walking and bicycling in locations that are not safe. Improving intersections, completing sidewalks, creating on-street bikeways, and providing safe crossings will reduce the potential for bicycle and pedestrian fatalities and injuries from crashes with motor vehicles.

Pathways can play a vital role in improving the health of residents and visitors to Jackson Hole.

Our nation is facing a national obesity epidemic, and increased physical activity is part of the solution. People are more likely to be physically active if they can walk or bike as part of their daily routine. The Pathways System can create opportunities for people to replace driving trips with active transportation. This is especially important for children, who will be able to walk and bike to school more often as a result of the Pathways program.

The Pathways System will contribute to a sustainable environment for all residents of Jackson Hole, including both human and wildlife populations.

The natural resources of Jackson Hole are a national treasure. Every effort must be made to ensure that the Pathways program is a model for creating a more positive way to connect people and nature. The Master Plan provides innovative tools for balancing conservation, environmental, and human concerns.

Developing shared-use paths, single track trails, bikeways, enhanced roadways, equestrian trails, and more walkable communities makes good economic sense for Jackson Hole.

Jackson Hole's economy is supported by its quality of life. As more people are able to choose where they live, work, and play, it is important to maintain Jackson Hole's leadership as an outdoor recreation oriented destination community. The Pathways System supports outdoors recreation businesses, provides a substantial amenity for visitors and residents, and can create additional real estate value. At the same time, walking and bicycling can provide an affordable transportation alternative for residents and employees who are challenged to afford the region's high cost of living.

Bicycling and walking can improve the overall quality-of-life of Jackson Hole residents.

Providing a livable, walkable and bikeable community is a necessary part of attracting and retaining businesses and residents. Bicycling and walking are integral to the image of Jackson Hole as a safe and welcoming community. The ability to safely travel by biking and walking is a cornerstone of the "Town as Heart" concept cited in the Jackson/Teton County Comprehensive Plan.

<u>Challenges: What are some of the issues that must be overcome to create the Pathways System?</u>

Growth: Jackson Hole's dramatic population growth in recent years has included new development in areas not served by the existing network of non-motorized transportation and recreation.

Priorities and Funding: With the region's growth, other projects and programs have to compete for resources, and it has taken time to build the level of support that now exists for pathways and other multi-modal transportation facilities.

Connectivity: Expansion of the bicycle, pedestrian, and equestrian network has not achieved a level of connectivity so that bicycling or walking is a safe or convenient option.

System Management: Current agencies responsible for maintaining and operating Jackson Hole's infrastructure have experienced the demands of the growing system of sidewalks, bikeways, and shared-use paths.

Congestion: Growth of the road network has not kept pace with development or visitor pressures, creating traffic congestion and air pollution. At some point, the community (and its partners in State and Federal agencies) must recognize that road widening is only one way to solve this problem, and that Complete Streets and pathways are a part of the solution.

Natural Resources: Development in Jackson Hole adversely impacts the region's natural resources. The Pathways System must minimize potential impacts and maximize benefits through appropriate design and management, with particular attention given to wildlife habitat and important migration corridors.

Equity: The region's growth has had an impact on residents who are unable to drive or cannot afford to own and operate an automobile, especially in light of the region's high real estate values.

Program Focus: The historical focus of the Pathways program was primarily on the shared-use path network. The Pathways program's initial phases were oriented to create the valley's first paved shared-use paths. As the program continues to evolve, new partnerships are necessary to include a broader definition of "Pathways" that includes a wide range of projects, programs, and policies that support non-motorized transportation and recreation.

In response to these benefits and challenges, this Plan identifies a balanced approach to developing the plans, programs, and policies that support non-motorized travel. There are many locations that are in need of improvements such as new sidewalks, bike lanes, shared-use paths, and intersection crossing improvements. The Plan calls for the development of more and better connectivity of all non-motorized facilities in the Town of Jackson, Teton County, and other unincorporated towns, resorts, and population centers throughout the valley. The plan also identifies a variety of other programs that support and encourage more bicycling and walking. For example, more people will bicycle and walk for short trips if mixed-use development becomes more common, secure bike parking is provided at destinations, and bike safety and promotion programs are developed. As new bike lanes and sidewalks are built throughout the valley, school-based pedestrian safety, bicycle safety, and traffic law enforcement programs will also be needed to teach users how to share the road safely. Promotional programs will encourage more people to choose to travel without their automobiles. This plan provides the framework for making the community's goals into reality.

Master Plan Components

The original intent of the Master Plan was to present a vision for the fully developed system implemented during the next 25 years. The Pathways Master Plan Consultant Team, led by Alta Planning + Design, and assisted by sub-consultant team members from The Greenway Team and Jorgensen Associates, has researched the Pathways program, and conducted over a dozen workshops between 2005 and 2007 to develop this Plan. During this time, the team has reviewed numerous documents, including the Jackson/Teton County Comprehensive Plan, the 1992 and 2001 versions of the Pathways Conceptual Plans, and conducted extensive site visits and interviews to understand the present operating practices, policies, procedures, and character of the existing Pathways System. In the course of the public approval process for the 2007 Pathways Master Plan, the Jackson Town Council and Teton County Board of Commissioners voted to reduce the scope of the Plan's vision from a 25-year completed system vision to a 5-year system priority vision.

Jackson Hole has the potential to create a world-class system of Complete Streets, pathways and trails, rivaled by few other communities, and to be a model for sustainable transportation and development. The Comprehensive Plan calls for the development of this system as a key component of the valley's transportation system, and other Chapters refer to the recreational, cultural, and community character benefits upon completion.

The Pathways Master Plan is subdivided into three sections: the Policy Plan; Strategic Plan; and Implementation Plan. These sections are specific to accomplishing the vision of the Pathways Task Force,

and mission of the Pathways program, for effectively and efficiently completing and managing the Pathways System as it continues to grow toward completion. It is subdivided as below:

Policy Plan: Defines the existing conditions, programs and policies that support the Jackson Hole Pathways System, including:

- Project Overview, Purpose and Need
- Existing Pathways System
- Administration and Policy
- Operations and Programming
- System Maintenance
- Design Guidelines and Construction Specifications

Strategic Plan: Articulates when and where we are going, and implementation priorities for achieving the vision, including:

- Major Maintenance Priorities
- New Project Priorities

Implementation Plan: Describes the process of benchmarking the program's development, and recommends future actions, including:

- Performance Measures
- Recommendations
- Next Steps

Included in Section 8. New Project Priorities is the Capital Project 5-Year Priority List developed by the Pathways Task Force and the Pathways program. The projects listed below will guide the planning and construction efforts of the program for the immediate future.

Capital Project 5-Year Priorities

- 1. Complete Streets
- 2. WY22 Pathway
- 3. South Park Loop Pathway
- 4. High School Road
- 5. Karns Meadow Pathway
- 6. North Jackson
- 7. Teton Science School Connector
- 8. North 89 Pathway
- 9. WY22 Wilson School Connector
- 10. South 89 Pathway

Creating and managing the Pathways System is a challenging task. However, the community has repeatedly expressed its support for developing the Pathways program in a timely and efficient manner. The

responsibility for accomplishing these tasks rests with the Jackson Hole Community Pathways program, in partnership with local agencies (especially the Town of Jackson Department of Public Works, the Department of Parks and Recreation, and the County Engineering Department, along with Friends of Pathways and numerous non-profit, regional, state, and federal partners). This Master Plan document will provide the guidance for continued Pathways program system development and management. In response to the significant community support of the Jackson Hole Community Pathways program, the consultant team has developed the Key Recommendations listed below, which identify tools for the successful implementation of a sustainable non-motorized transportation and recreation system for the residents and visitors of Jackson and Teton County.

Key Recommendations for Implementing this Plan

- 1. Integrate the Pathways program throughout the transportation planning and land development review processes to ensure that non-motorized transportation system connectivity is accomplished as a routine element of capital and maintenance projects.
- 2. Develop a sustainable, long-term funding mechanism to ensure successful completion and operation of the Pathways System as a community asset. It is recommended that the Pathways program, in cooperation with non-profit and private sector support, establish a maintenance endowment or other permanent funding source.
- 3. The JHCP program should ultimately have staff or partner program support specifically responsible for Operations and Programming, so that education, outreach, encouragement, and safety initiatives can be provided as a high-quality community service.
- 4. In order to systematically maintain the Pathways System, an "Owners Manual" should be created with a codified set of maintenance guidelines and procedures that are formally documented and adopted.
- 5. A JHCP Design Manual should be developed to guide design and construction of shared-use paths and amenities, including typical sections, material specifications, wildlife guidelines, and design types.
- 6. Adopt a "Complete Streets and Pathways Policy." "Complete Streets" is a new national policy model that integrates facilities for bicyclists, pedestrians, and pathways into routine transportation, infrastructure, and public works projects and programs. The current Jackson/Teton County Comprehensive Plan includes a version of this policy type that can be enhanced.
- 7. The Pathways program should implement a safety review process that includes systematic risk management assessment, inter-agency design review for all proposed improvements, user education, and accident and crime reporting.
- 8. Develop supplemental pedestrian and sidewalk plans for the Town of Jackson and primary Teton County development nodes, including the Aspens, Teton Village, Hoback Junction, and Wilson, and other developed nodes as needed.
- Ensure that the Pathways program provides a balanced approach that includes the full range of nonmotorized facilities, including shared-use paths, single track trails, on-street bikeways, sidewalks, safe crossings, bicycle parking and transit connections.

- 10. The Jackson Hole Community Pathways program administration should be reorganized to meet the scale and need of the system as it moves towards completion. This reorganization should include a clearly organized structure for management of capital projects, operations, programming and maintenance, and to recognize the significant roles played by partner agencies and organizations.
- 11. The JHCP program should develop an Asset Management System using GIS/GPS technologies to locate, map and manage the non-motorized transportation and recreation system that it is implementing.
- 12. There is a clear need for a balanced, rational approach that recognizes the benefits of building pathways that appropriately and sensitively connect people and the environment. Procedures to incorporate wildlife professionals and advocates as active partners in the development of the Pathways System should be developed to help ensure that the preservation of natural resources is addressed as a routine element of pathways planning, construction, and management.
- 13. The Pathways program will include landowners as early as possible in the planning process for pathways that may affect their property. The primary approach to gaining public access privileges will continue to be through cooperation with landowners to grant voluntary easements. Users of the Pathways System will be encouraged to respect private property and the rights of landowners.

With the adopted Pathways Master Plan, Jackson Hole can ensure that bicycle and pedestrian accommodations will be more fully integrated into local, state, and regional transportation improvements. State and federal transportation policy with regard to bicycle and pedestrian accommodations continues to evolve and improve, creating new priorities and opportunities for funding. A clear articulation of local bicycle and pedestrian needs is vital to ensure that our transportation investments will improve and expand opportunities for bicycling, walking, and other forms of non-motorized travel in Jackson and Teton County.

The past decade has seen the creation of a significant Pathways movement in Jackson Hole. This effort has not been without its growing pains, but that is part of the creation of any new initiative. Jackson Hole has positioned itself to be a premier community for non-motorized transportation and recreation. With continued support from throughout the community, with the resources available from the public and non-profit sectors, and with the vision established by this Pathways Master Plan, Jackson Hole is well on its way to an exciting future.



Pathways are a key to enhancing the quality of life in Jackson Hole.

POLICY PLAN

1. PROJECT OVERVIEW, PURPOSE, AND NEED

1.1 Overview

The 2007 Jackson Hole Community Pathways (JHCP) Master Plan is a document that will guide the development of bicycle, pedestrian, and supporting multi-modal infrastructure, including shared-use paths, trails, sidewalks, transit interfaces, and all elements that comprise a "complete streets" approach to transportation system implementation in Jackson Hole for the next 5 years. This plan is the continuation of a community-wide effort that began in the late 1980's and is evolving into a world-class system of human-powered transportation and recreation. The mission of this plan is described in the original request for proposals issued by Teton County and the Town of Jackson, which states:

"The Pathways Master Plan will guide planning, development, management, and operations of existing and future bicycle, pedestrian, and multi-modal / recreational transportation infrastructure within both jurisdictions. It will ultimately be adopted as a supplement to the Jackson/Teton County Comprehensive Plan – Chapter 8 Transportation; and address strategies for achieving the Chapter 8 modal distribution goals, as adopted in 2001."

Jackson Hole is an outdoor, recreation-oriented community of approximately 18,000 year-round residents, and is the southern gateway to Grand Teton & Yellowstone National Parks, with an annual visitor/seasonal population of 3 million visitors. The last Pathways Conceptual Plan was created in 1992 and resulted in the high quality Pathways System that exists today. The process for creating this new Pathways Master Plan included research and data collection regarding the existing system, and over two years of coordinated planning and public input to identify implementation priorities, including work with citizen and technical advisory committees, more than a dozen public meetings between July 2005 and December 2006, review and approval by the Town of Jackson and Teton County Planning Commissions and the Pathways Task Force, and multiple public presentations of the various drafts of the Plan. This plan envisions the future of the Pathways System for the next 5 years.



An aerial view of Jackson Hole



Pedestrian mobility is important to the region's quality of life. Safe crossings are important in the town and village centers of Jackson Hole.



Sidewalks are missing in many locations along the community's streets and roadways, as shown in this school zone in the Town of Jackson.

1.2 Goals and Objectives

The goals and objectives of the JHCP program form the foundation of the Pathways Master Plan. This foundation is built upon the vision of the Pathways program, which is stated as follows:

Broad Program Objectives - Jackson Hole Community Pathways Program³

- Meet needs of all levels of bicyclists. Create a comprehensive network of on-road and off-road facilities that connects neighborhoods and provides safe, convenient access to schools, employment centers, and other destinations, and that is integrated with the roadway and transit systems.
- Meet needs of pedestrians, including persons with disabilities. Make all streets and intersections "pedestrian-friendly" and accessible.
- Meet needs of equestrians. Create a network of trails and trail access points that connect horse friendly areas of the County with public land and provide safe, convenient access to major equestrian destinations.
- Meet needs of Nordic skiers. Create a network of winter Nordic trails and trail access points that provides close to home Nordic skiing opportunities on public and private lands.
- Increase safety through promoting education and enforcement. Play a constructive role in facilitating the creation of education programs by providing teacher training, curriculum materials, and other support services. Play a constructive role in facilitating enforcement programs with law enforcement officials, the public, and decision makers.
- Encourage and Promote bicycling and walking. Achieve modal distributions of 13% for walking and 10% for cycling by the year 2020.

1.3 Historical Overview of JHCP Program

From the historic Native American routes that traversed the area, to the development of Grand Teton National Park, to the efforts of advocates, volunteers, and community leaders of the 1980's and '90's, trails have played a significant role in the region. The Town of Jackson and Teton County have a solid history in developing the Pathways program. In 1991, the Town and County initiated the Jackson Hole Community Pathways program to develop new trails for walking, bicycling, and other non-motorized travel. By spring 1992, a working document entitled "Pathways in Jackson Hole: A Conceptual Plan" was created to guide decision making for the program through the year 2012 and is referenced in the 1994 Jackson/Teton County Comprehensive Plan. An independent Pathways Department with a full time Pathways Director position was created to manage the program starting in 1993, and the first paved shared-use path was built in 1995. Through partnerships with Town and County departments, WYDOT, and federal agencies, the program has received significant federal and local funds to help construct over 27 miles of pathways.

A key to the development of the Jackson Hole system is the program's ongoing public-private partnership with the Friends of Pathways (FOP) organization. FOP is a 501 (c) 3 non-profit that works to advocate, promote and facilitate non-motorized transportation and recreation in Jackson Hole. The FOP Mission Statement states:

"Friends of Pathways advocates funding, construction, and the use of pathways, trails, sidewalks, and Complete Streets through public-private partnerships. We connect the community in and around Jackson Hole by promoting safe and convenient non-motorized transportation and recreation."

³ Source: http://tetonwyo.org/Pathways/mission.asp

Friends of Pathways cultivates community support that, in turn, solidifies local government support of the Pathways System. FOP is able to create opportunities that complement the JHCP program, including education, advocacy, and fundraising. A good example of this partnership is the Jackson Hole Pathways Gift Catalogue, which offers benches, kiosks, adopt-a-mile and other items for sale as fundraisers for the Pathways System. Having a non-profit Friends group provides opportunities to secure additional funding, to work with other non-profit conservation and environmental partners, and to develop innovative new programs. As the Pathways System develops in the future, the ongoing partnership between public, private, non-profit, and philanthropic sectors will be a key to success.

The Pathways System is enhanced by dozens of private land easements that have been dedicated by landowners over the past 15 years. These range from small easements of a few square feet to major pathway easements like the 2-mile Von Gontard Melody Ranch Trail. Many easements have been acquired through negotiations with landowners during the planning review of major land development projects. Homeowners associations in existing subdivisions have also granted easements, such as in Rafter J and along the Moose-Wilson Road. Additionally, landowners have voluntarily granted easements to the Pathways program without having developments under review, simply wishing to improve opportunities for non-motorized mobility and to benefit their community. During the construction of new pathways, neighboring properties have been enhanced through the installation of trees, berms, fencing, and other landscape treatments. Jackson Hole Community Pathways has a strong record of cooperation and partnership with private landowners to acquire easements, and JHCP will continue to be a good neighbor to landowners in Teton County.

From its origins in the 1990's, the Pathways System has steadily grown to include miles of paved paths, sidewalks, bike lanes, trails, underpasses, and bridges. The existing pathways have been well received by the community and are experiencing high levels of use. Demand exists for expansion and overall connectivity of the system, new programs, enhanced maintenance and management. Connectivity is the key to encouraging and ensuring maximum efficiency, the safest facilities, and greatest overall public benefit from the implementation of and completion of the Pathways System.

1.4 Relationship to Other Planning Documents

The JHCP goals and objectives are more advanced than what many communities achieve at the end of a planning process. The JHCP program is fortunate to have integrated the Pathways vision throughout the planning and policy documents for the Town and County.⁴ These include:

- The Jackson/Teton County Comprehensive Plan (1994)
- Comprehensive Plan Chapter 1: Community Vision; Chapter 3: Community Character; Chapter 4: Scenic Resources; Chapter 7: Recreational Facilities; and Chapter 8: Transportation (Revised December, 2003)
- Town of Jackson/Teton County Land Development Regulations (LDRs) Article III: Natural, Scenic, Agricultural, and Tourism Resources and Article IV: Development Standards: Teton County
- Town of Jackson Municipal Code
- Federal agency plans, including the National Park Service, U.S. Forest Service, and U.S. Fish and Wildlife Service

⁴ For a more comprehensive review of existing planning documents and codes, refer to the Task 1 Report: Existing Documents, prepared as a background paper for the Pathways Master Plan

 Resort Master Plans and Design Charrettes, including the Teton Village Master Plan, the SRA Teton Village Resort Expansion Master Plan, and the Wilson Design Charrette

The Comprehensive Plan includes three land use strategies – Town as Heart of Region, Mixed-use Villages, and Continued Conservation Acquisitions – that shape the region's development pattern. This land use vision is supported by a transportation plan that includes the following key statement:

"Alternative Modes and Programs Implementation Strategies⁵

It is the strategy of the Town, County, and WYDOT to place significant emphasis on the development of 'alternative modes' – public transit, walking, bicycling – over the next twenty years."

The Comprehensive Plan goes on to detail the policies for integrating walking, bicycling, and pathways into infrastructure development at the Town, County, State, and Federal levels. Chapter 8 confirms that the community's transportation goal "...includes the enhancement of the pedestrian and bicycle environment to achieve modal shares of 13 percent and 10 percent respectively, as well as to reduce pedestrian and non-motorized vehicle accidents by 10 percent." In order to achieve this goal, the Plan includes the following statement:

"The Town, County, and WYDOT will continue to support development of a system of non-motorized pathways based on the Pathways in the Jackson Hole Conceptual Plan and the pathway system map exhibits. In order to be a viable choice to the automobile, the Pathways System must connect main nodes of development in Teton County such as the Town of Jackson, schools, the South Park area, Wilson, Teton Village, and Moose. The Town and County will continue to support a joint Town/County Pathways Department, which will be charged with the detailed development and financial management of the system. Maintenance on the Town and County pathways will be provided by the Teton County/Jackson Parks and Recreation Department. Maintenance on other Pathways, such as State or Federal, will be determined by the specific project. The design of pathways will include modern standards, be attractive to users, and fit the character of the area in which they are placed." ⁶

The Pathways program is integrated throughout the other key planning documents for the Town and County. The Comprehensive Plan includes "Complete Streets" language that supports including facilities for walking, bicycling, and shared-use paths into roadway, private development, and resort infrastructure projects. Development Standards and local code documents are more advanced than in most U.S. communities, and modest recommended changes in the Administration and Policy section of this document can supplement the existing policy support for the Pathways program.

1.5 System Need and Benefits Overview

Pathways have a wide range of benefits for residents and visitors of Jackson Hole. These include, but are not limited to: non-motorized transportation, recreation, health/fitness, environment, economic development, tourism, and quality of life. Implementing the Pathways Master Plan will help the Town of Jackson and Teton County meet their goal of achieving a world-class transportation and recreation system. Improvements to trails



Residents and visitors of all ages and abilities use the existing shared-use paths in Jackson Hole.

⁵ Source: Comprehensive Plan - Chapter 8: Transportation, p.8.30.

⁶ Source: Comprehensive Plan - Chapter 8: Transportation, p.8.32-3.

facilities result in expanded recreation and mobility options for residents and visitors, especially those who seek to integrate a healthy lifestyle into their daily activities.

Incorporating shared-use pathways, sidewalks, bikeways, and trails is fundamental to enhancing the character of Jackson Hole as an "active lifestyle" community. They are critical community assets within the Town of Jackson and Teton County for multi-modal transportation, economic development, recreation, exercise, and mobility. Pathways, bikeways, and sidewalks are as important as roads and utilities for connecting people and places.

Safe sidewalks, bikeways, shared-use paths and trails connect:

- Homes of friends and extended family
- Neighborhoods and work centers
- Schools, libraries, parks, playgrounds, and athletic fields
- Community activity centers and commercial areas
- Federal land trails and outdoor destinations; and
- Ranches to rodeo and fair grounds

Residents in Teton County have repeatedly and overwhelmingly voiced their support for a connected, accessible system of pathways, bikeways, and pedestrian facilities that are built and maintained to high levels of service and quality. The results of Specific Purpose Excise Tax (SPET) ballots clearly demonstrate the importance that the community places on pathways and sidewalk projects in Teton County, with non-motorized facility infrastructure projects consistently earning among the highest amount of voter support in special elections. Voters approved the Moose-Wilson pathway project in 2001 with 69% support (the highest percentage of any project), and the South Park Loop Road pathways improvement projects in 2006 with 75% support (the second highest support). Two additional SPET-funded pedestrian sidewalk projects in the Town of Jackson have also been approved by strong voter support.

The Teton County National Citizen Survey (October 2006) and the Jackson/Teton County Parks and Recreation Survey (July 2005) both indicate extremely strong community support for increasing the amount of non-motorized facilities in Jackson Hole. In the National Citizen Survey report of open-ended questions which asked respondents' opinion of the most important issues Teton County leaders need to know about, traffic/public transit/bike and recreation paths ranked third behind affordable housing/cost of living and planning/rate of growth. Over 95% of the comments that mentioned paths, trails, or pedestrian and bicycle facilities were in favor of improving opportunities for non-motorized travel.

Similarly, the results of the Parks and Recreation survey conducted by Leisure Vision/ETC Institute show that the highest percentage of respondents considered "paved walking and bicycling pathways" as the most important recreation facility when asked to select from 26 choices. By a two to one margin, Teton County residents selected the "Number of walking/bicycling trails and pathways" as the service that should receive the most attention over the next two years. The results from both of these surveys and the recent SPET ballots reinforce the importance and need for the connected system of non-motorized transportation facilities that are addressed in the Master Plan.

Given the scenic beauty of the area, pathways offer important recreational opportunities that can create important connections between developed and natural environments. Access to trail systems and natural

environments provides opportunities for environmental education and the establishment of a conservation and stewardship ethic. Cooperative efforts such as the partnership with the Wyoming Game and Fish Department to place seasonal "Bear Aware" signs along the Pathways System leverage the popularity of pathways to reach an extended audience for education and outreach programs. An understanding of one's natural environment leads to the future preservation of lands that are both ecologically important and essential to a tourism industry that specifically relies on the presence of high quality open spaces and wilderness areas.

Pathways, when located in greenway corridors adjacent to stream valleys, steep slopes, and public lands, provide a resource for enjoying the special outdoor characteristics of Jackson Hole. Well-designed pathways:

- Act as linear open space;
- Protect wildlife habitat and migratory corridors;
- Buffer ranchlands and other environmentally sensitive areas from development;
- Direct outdoor enthusiasts towards appropriate corridors and away from sensitive habitat;
- Provide opportunities for habitat enhancement when combined with restoration projects; and
- Provide people with safe access to enjoy the outdoors.

Widespread concern over national health issues and rates of obesity make opportunities for recreation increasingly important within the minds of individuals, communities, and governmental organizations. Given Teton County's existing population of outdoor enthusiasts, the area has the potential to become a premier destination for those wishing to pursue a healthy lifestyle.

The Robert Woods Johnson Foundation's Active Living by Design research program selected Jackson Hole as one of its first national pilot projects. The funding was provided to JHCP to develop an ongoing partnership focused on continuing to encourage healthy/active lifestyle choices. This project is a significant step towards the Pathway's program goals to create increased and enhanced opportunities for active lifestyle habits, and addresses the removal of obstacles – such as missing links and gaps in the community's bicycle, pedestrian, and trails systems.

Studies show that frequency of trail use is directly proportional to the distance that one lives from trail access points, and that significant health benefits are found among those who utilize trail systems on a regular basis. It logically follows that communities with greater access to trail systems and recreational opportunities will have healthier populations.

With over 40% of all trips in the United States being two miles or less (FHWA, National Personal Transportation Survey, 1995), walking or bicycling can serve as an important mobility option. Nationally, the number of vehicle miles traveled (VMT), rates of car ownership, and trips have continued to grow, which has increasingly stressed transportation systems (primarily roadways) and contributed to congestion (NPTS, 2003). However, Teton County's Pathways System, transit, and town-centered development appear to be countering these national trends. While walking and bicycling to work accounts for approximately 3.4% of national commuter travel, Table 1 on page 18 shows that the number in Teton County is 8.6% - nearly triple the national level.

The JHCP system is complemented by Jackson Hole's START bus transit system. Ridership on START has grown steadily in recent years. A recent summary report of START ridership stated that in 2004,

approximately 248,000 Equivalent Vehicle Number Reduction (EVNR) trips were taken on the START system, an increase of 20% from the previous year. The report puts this data into a graphic perspective as follows: "The Smith's Grocery parking lot has a capacity of 305 vehicles. The K-Mart parking lot has a capacity of 373 vehicles. The daily average of vehicles not using the Teton County Road system as a result of the START system is equivalent to both of these lots being totally full." The continued integration of shared-use paths, sidewalks, bicycle accommodations, transit shelters, and other improvements will continue to improve the community's range of transportation choices.⁷

The transportation and recreation benefits of Complete Streets and pathways are important for all Jackson Hole residents and visitors. People choosing to ride, glide, or walk rather than drive are typically replacing short automobile trips that contribute disproportionately high amounts of pollutant emissions. Since bicycling, skiing, horseback riding, and walking reduce pollution, save fossil fuels, and promote efficient land use, they effectively move people from one place to another without adverse environmental impacts. This makes the Pathways System a vital alternative transportation component for Jackson Hole, which is faced with the challenge of how to accommodate more people who want to live and visit this beautiful place, while at the same time preserving the environment for future generations in a manner that is consistent with the principles of sustainability.

These numbers are significant because every trip made by "human power" is solving multiple problems and creating multiple benefits: conserving fossil fuels, making people healthier, and contributing to the community's quality of life. People often don't think about these issues, and there are many other benefits as well. Bicycling, horseback riding, and walking require less space and infrastructure when compared to automobile facilities. Improvements made for bicyclists often result in better conditions for other transportation users as well. For instance, paved shoulders, wide curb lanes, and bicycle lanes not only provide improved conditions for bicyclists, but also often contribute to safer conditions for motorists and a reduction in roadway maintenance costs as well.



Bicycling improves health, conserves fossil fuels, and contributes to quality of life.

Walking and bicycling are also good choices for families. A bicycle enables people, especially children, to explore their neighborhoods, visit places without being driven by adults, and experience the freedom of personal decision-making. More trips by children on bicycle and on foot means fewer trips by motorists, which in turn, means less traffic congestion around schools and in the community, and less time spent by parents driving kids around. This "free time" can create more opportunities to speak to neighbors and more "eyes on the street" to discourage crime and violence. It is no accident that communities with low crime rates and high levels of walking and bicycling are generally attractive and friendly places to live.

The extent of bicycling and walking in a community has been described as a barometer of how well a community is advancing its citizens' quality of life. Communities that are busy with bicyclists and walkers are considered to be environments that work at a human scale and foster a heightened sense of place. These

⁷ Source: Memorandum: START Ridership Analysis on Teton County Road Network System, April, 2005, C. Jackson, P.E., County Engineer.

benefits are difficult to quantify, but when asked to identify civic places that they are most proud of, residents will most often name places where walking and bicycling are common, such as a popular greenway, riverfront project, neighborhood market, Main Street, or downtown.

An integrated and consistent Pathways System can further result in significant economic benefits to Teton County communities. This includes improvements in real estate values for homes near quality facilities and "pedestrian-friendly" areas, retention and attraction of quality employees for businesses, and direct expenditures from visitors touring on expanded pedestrian, bicycle, ski, and equestrian routes. As technology enables more people and businesses to live and work where they choose, quality of life elements such as pathways can play a complementary role in economic development. This is especially true for the growing numbers of people who work at home, because pathways can make it possible to do their errands, go out to lunch, or recreate in addition to not commuting.

Table 1 - Teton County Selected Characteristics By Place of Work, 1990 and 20008

Geographic Area: Working in Teton County, Wyoming U.S. Census Transportation Planning Package (CTPP)

Selected Characteristics	19	90	2000			
(Universe: All Workers)	Number Percent		Number	Percent		
Mode to work						
Drove alone	5,027	69.4	8,685	63.9		
2-person carpool	848	11.7	1,765	13.0		
3-or-more-person carpool	198	2.7	860	6.3		
Bus or trolley bus	59	0.8	245	1.8		
All other transit ¹	4	0.1	8	0.1		
Bicycle or walked	716	9.9	1,175	8.6		
Taxicab, motorcycle, or other mode	49	0.7	80	0.6		
Worked at home	339	4.7	775	5.7		

NOTE: It is important to note that the Census data counts only trips to work, and that walking and bicycling for other travel purposes (trips to school, recreation, shopping and for other utilitarian purposes) would indicate even greater use of non-motorized travel in Jackson Hole.

Table 2 - National Mode to Work by Travel Type, 1990 and 2000

	Share of Work Trips	
	1990	2000
Drive Alone	73.2%	75.7%
Carpool	13.4%	12.2%
Transit	5.3%	4.7%
Walk	3.9%	2.9%
Bicycle	0.41%	0.44%*
Work at Home	3.0%	3.3%

^{*}From the 2000 Census Supplementary Survey.

Census data show the trends in commuter transportation for the decade from 1990 – 2000. 9

18

⁸ Source: http://ctpp.transportation.org/part2/56039.xls

⁹ Source: Surface Transportation Policy Project (STPP), http://www.transact.org/library/reports_pdfs/censusdecoder.pdf

1.6 Desired Pathway User/Visitor Experience

There are wide ranges of pathway users and experiences available in Jackson Hole. Users vary by facility type, as well as by age, experience, and by when they are using pathways and who they may be traveling with. Individuals may fall into multiple categories at different times of day, or at different times in their lives. A "typical" Pathways System user might bike to work in the morning, walk their children home from school, go for a mountain bike ride with friends on the weekend, go horseback riding, and cross-country ski in the winter. A visitor could be a guest at a business meeting who goes jogging in the afternoon or an "ecotourist" who comes to Jackson Hole to experience the Valley on a weeklong bike tour. These diverse users share common interests in the following areas:

- 1. **Safety**: The Pathways System should be safe for all users, providing alternatives to traveling along and across roadways, waterways and other barriers.
- 2. **Easy to Use**: The System should be user friendly, with signage, maps, and wayfinding information that is available in language-free and multilingual formats.
- 3. **Well Maintained**: The System should be maintained with surfaces that are smooth, well groomed, and free of debris and litter.

Individual trail user groups also have specific concerns, including:

- 1. **Pedestrians**: Prefer smooth walking surface, clearly delineated crossings, benches and shade for resting, and facilities close to residential areas for frequent use over short distances.
- 2. **Runners**: Often prefer soft shoulders as an alternative to running on asphalt or concrete. Runners are generally recreational users and do not commute to work via running. Therefore, they are less likely than bicyclists to commute to work on the Pathways System.
- 3. **Disabled**: Require smooth, firm, ADA compliant pathways and sidewalks, with rest areas on steep grades, maximum 2% cross slope, barrier free facilities, and accessibility information at trailheads.
- 4. Bicyclists: Include several types of skill levels, from children and seniors who ride between 8-12 mph to highly skilled cyclists capable of sustaining speeds of more than 20 mph, to mountain bicyclists who may use pathways and bikeways for access to more rugged single track trails. All require smooth, firm surfaces free of cracks, seams, or other surface imperfections.
- 5. **In-Line Skaters**: Require both a very smooth surface and wider pathway due to their lateral motion. Prefer asphalt pathways 10 ft. wide.
- 6. **Equestrians**: Concerned with multiple-use conflicts, especially with bicyclists, since horses can react suddenly to them. Able to ride on "natural" surfaces with minimal maintenance, require adequate height clearances.
- 7. **Winter Users**: Cross-country skiers (both skating and track skiers), snowshoers, and walkers, all requiring different groomed surfaces. Snow trail users can operate over frozen sections that may not be accessible year-round.

8. **Transit Customers**: Passengers who use the START transit system are pedestrians, bicyclists, skiers, and others who choose to travel in Jackson Hole without using a private motor vehicle.

1.6.1 Visitor Interpretive Themes

Creating a series of themes helps define the identity of a trails system, and can provide the basis of its design vocabulary and interpretive program. The Jackson Hole Pathways System is still under development, so now is a good time to develop the "branding" of the system so that the themes can become integrated into ongoing projects. Potential examples of Pathway themes include:

The Healthiest Place in the West

The JHCP system could be promoted as part of a community that provides opportunities for all residents and visitors to be physically active every day. This would include exercise stations, calorie-counter mile points, sports training programs, and involvement with the healthcare community to monitor trail users' fitness levels.

Activity	Speed	Calories/Mile	Minute/Mile		
Walking					
Easy (strolling/talking)	3.0 mph	~80 cal/mile	20 min/mile		
Brisk (purposeful, to get somewhere)	4.0 mph	~100 cal/mile	15 min/mile		
Bicycling					
Easy (fun, recreational)	8-10 mph	30 cal/mile	6-7 min/mile		
Quick (pedaling to get somewhere)	12-18 mph*	35 cal/mile	3.5-5 min/mile		
Run/Jog	5-8 mph	125 cal/mile	6-12 min/mile		

Table 3 - Calories Burned Per Activity¹⁰

People and Nature Together

This theme would focus on the connection between the built and natural environment in Jackson Hole. Making the Pathways System into a linear outdoor education center could connect interpretation of energy use, land conservation, rare ecosystems and species, geological and human history.

Freedom of Transportation Choice

A patriotic theme could encourage more use of alternative transportation by clearly defining human powered transport stations, access points, route identification, and signage linked to an image of Pathways that is as clear and easy to use as a European public transit system.

1.6.2 Pathways Survey Data¹¹

As part of the JHCP Master Plan process, Friends of Pathways conducted a study of shared-use path users and public opinion in Jackson Hole. The following are a list of the key results from the survey:

^{*} May ride as fast as 20-25 mph

¹⁰ Source: Mark Fenton. Add 30% more calories burned for terrain/hill.

¹¹ Source: http://www.tetonwyo.org/Pathways/docs/2005-JHCP-MasterPlanSurvey.pdf

- There is an overwhelming support for Pathways.
- Biking and walking are currently the most common activities on the shared-use paths for both adults and children.
- Although most trips on the shared-use pathways are currently recreational, there is a definite interest in using pathways for more utilitarian purposes, including getting to work and going shopping.
- Most path users agree that they would do more utilitarian trips if the pathways were expanded and more connected to residential communities and the downtown areas.
- The majority of path users do not travel more than a mile (and most of that group travels even less than half a mile) to access the facility.
- Close to 75% of all path users are meeting or exceeding the US government's recommendation of getting at least 30 minutes of physical exercise at least 5 days a week.
- Pathway users own considerably more bikes than automobiles.

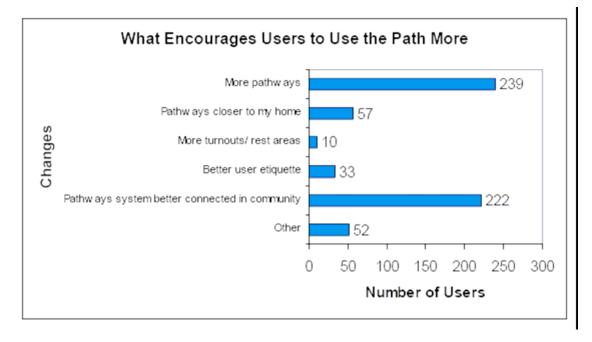


Table 4 - Factors Influencing Pathways Usage, 2005 Pathways Survey

The 2005 Pathways survey showed that trail users would use the JHCP system more if it were better connected throughout the community, with pathways closer to home.

1.6.3 Parks and Recreation Survey Data

In July 2005, the Teton County/Jackson Parks and Recreation Department and Leisure Vision / ETC Institute conducted a survey on the paved shared-use paths in Jackson Hole. The survey indicated that walking/jogging is the activity with the highest percentage of respondents (70% of households) followed by bicycling (64%). Other popular uses included dog walking (12%), cross-country skiing (5%), nature watching (5%), in-line skating (5%), and horseback riding (1%). More than 50% of respondents said they used the paths several times per week and 96% of the people surveyed said they used the paved paths at least once a month. Exercise/fitness was rated as the top purpose for respondents using the paths (50%), followed by

enjoying the outdoors/nature (20%), recreational enjoyment (18%), and transportation (10%). These data show continued support and use of the system, and show that while the current system is not fully connected to serve utilitarian transportation needs to all destinations in the community, there are significant levels of use and potential demand for new facilities.

1.7 Key Issue: Pathways and the Environment

A significant issue in Jackson Hole is the challenge of balancing the development of the Pathways System with the increasing concerns for the conservation of wildlife and natural habitat in the Greater Yellowstone Ecosystem. It is important that conservation and Pathways advocates recognize that both groups share a common interest in creating a more sustainable community. In general, Pathways advocates consider themselves to be environmentalists, and environmentalists believe in the kind of sustainable solutions that pathways can provide. Unfortunately, a tension exists between these potential natural allies in Jackson Hole as the result of the following conditions:

- 1. There is a common belief that people and nature are separate things, and that "natural" areas have to be separated from the built environment. While true wilderness is clearly a necessity, there is also a need to integrate the "human" and "natural" environments in order to create sustainable solutions. In his landmark book, "The End of Nature" author Bill McKibbens wrote that because of humankind's ability to change the earth's ecosystems, people are an integral part of nature. This concept can serve as an underlying foundation for the coexistence of environmental and pathways interests.
- 2. Because of the belief identified in #1, building anything new is often considered a threat to the "natural" ecosystem. This is especially true in places like Jackson Hole where people and wilderness are so close together. At the same time, new solutions are needed to lessen the impacts of inevitable growth in our region. We are faced with a choice: eliminate existing and future impacts by removing human presence from natural areas (which is unlikely), or move forward with new ideas that create common ground and offer opportunities to reduce our impacts on the environment.
- 3. Pathways are built features in the landscape and their accompanying usage patterns can have adverse effects on wildlife and habitat. Pathways advocates believe that facilities that encourage walking, bicycling, and other non-motorized travel are inherently good especially because they can reduce the negative environmental impacts of our current fossil-fuel based transport system, and because they can bring people in contact with nature in a positive way. The facilities must be carefully planned, designed and managed to ensure that the benefits outweigh the impacts.
- 4. The current transportation and development patterns in Jackson Hole are not sustainable and that is why the community has a goal of increasing the amount of walking and bicycling. Motor vehicles continue to kill wildlife, including elk, deer, and moose. Roads and parking lots have been built across the landscape of our National Parks and public lands. Pollution, habitat loss, wildlife, and human safety are already major issues along the region's highways. The current impacts of existing roads may be much more significant than the potential future impacts of pathways without the potential benefits that pathways provide.
- 5. Some human created facilities can have positive ecological benefits. Existing "natural" areas, such as Jackson Lake in Grand Teton National Park and the Centennial Trail wetlands area in Wilson are, in fact, man-made features. The understanding that the "preservation" of these areas is a paradox provides a perspective for realizing that people can build things that create a sustainable legacy. The

potential benefits of pathways to enhance habitat, provide appropriate connections of humans and nature, and reduce negative impacts of humans on the environment should be considered when evaluating the Pathways System.

Recommendation:

There is a clear need for a balanced, rational approach that recognizes the benefits of building pathways that appropriately and sensitively connect people and the environment. The Jackson Hole Community Pathways program is based on the belief that creating an ecologically smart Pathways System is a vital element for making Jackson Hole a place where people and nature live together. The Pathways System can be a model of sustainable development by offering alternative forms of human mobility, designed and managed in accordance with ecological principles.

2. EXISTING SYSTEM FACILITIES

The existing JHCP system includes 27 miles of paved shared-use paths, with an additional 20 miles under development and proposed. With anticipated future mileage constructed, the system will be more than 42 miles by 2010. The existing and proposed shared-use pathways are summarized in the table below, and then discussed in detail in the following sections.

Table 5 - Existing Shared-Use Paths, 2007

North Passage - Town to GTNP	Jackson Hole Community Pathways												
School Campus Trails													
School Campus Trails	Trail	Segment Miles	Date Constructed	Pavement Condition	December-02	December-03	December-04	December-05	December-06	Funded for 2007	Proposed SPET Funded for 2007 - 2010	Proposed WYDOT/Other Funded for 2007 - 2010	Future
Crabree Spur 0.1 1996 Sealed 2004	Garaman Trail				1	1	1	1	1				
School Campus Trails	Post Office to WY 26/89	0.9	1996	Sealed 2004									
March Marc	Crabtree Spur	0.1	1996	Sealed 2004									
Blair Drive & Middle School Spurf 12	School Campus Trails				2.4	3.2	3.2	3.2	3.2				
Merritt Trail	WY 26/89 to Athletic Fields	0.4	1996	Seal in 2007									
Gregory Lane, High School Rdiff East), Middle School Rd 0.8 2003 Sealed 2006	Blair Drive & Middle School Spur	1.2	1996	Seal in 2007									
High School, Blair Drive & South Park Connectors 1.2 196 Sealed 2004 1.2			1996	Sealed 2006									
Indian Springs Trail	Gregory Lane; High School Rd(East); Middle School Rd	8.0	2003	Sealed 2006									
Martin M											1.5		
Martin M	Indian Springs Trail	1.2	1996	Sealed 2004	1.2	1.2	1.2	1.2	1.2				
Wilson Centennial Trail													1.1
Hardeman Meadows 1.2 1998 Sealed 2004	North Passage - Town to GTNP											4.2	
Silison Spur 0.1 1998 Sealed 2004	Wilson Centennial Trail				1.6	1.6	1.6	1.6	1.6				
Merritt Trail	Hardeman Meadows	1.2	1998	Sealed 2004									
Merritt Trail	Stilson Spur	0.1	1998	Sealed 2004									
Agekson South 3.2 1999 Sealed 2004	HHR - Spur	0.3	1998	Sealed 2004									
Melody Ranch Trailhead Spur 0.1 2003 Sealed 2004	Merritt Trail				3.4	3.4	3.4	3.4	3.4				
Smith's Spur 0.1 2002 Sealed 2004	Jackson South	3.2	1999	Sealed 2004									
Von Gontard Trail 2 Sealed 2006 2 2 2 2 2 3 5.6	Melody Ranch Trailhead Spur	0.1	2003										
Jackson South - Hoback Extension Rafter J Trails Big Trails Drive 1.5 2004 Sealed 2006	Smith's Spur	0.1	2002	Sealed 2004									
Rafter J Trails	Von Gontard Trail	2		Sealed 2006	2	2	2	2	2				
Big Trails Drive 1.5 2004 Sealed 2006	Jackson South - Hoback Extension											5.6	
Big Trails Drive 1.5 2004 Sealed 2006					0.2	0.2	2.3	2.3	2.3				
Ten Sleep Drive 0.6 2004 Sealed 2006		1.5	2004	Sealed 2006									
Assisted Living Center Spur 0.2 1999 Sealed 2004	·												
South Park Trail 3 Creek Ranch 2.3 2.004 Seal in 2007 2.3 2.3 2.3 2.3 3 3 3 3 3 3 3 3 3									1				
3 Creek Ranch 2.3 2.004 Seal in 2007 2.3 2.3 2.3													
Indian Springs Connector Spur		2.3	2004	Seal in 2007			2.3	2.3	2.3				
Melody to 3 Creek Connection Melody Ranch Connector Melody Ranch			200.	00011112001							0.6		
Melody Ranch Connector Rafter J Connector Spur Spring Gulch Trail JH Golf and Tennis 1.1 2005													
Rafter J Connector Spur 1.2 1.1 1.1 1.1 1.1 5.5 5.9	,									1			
Spring Gulch Trail	·									<u> </u>			1.2
Moose-Wilson Trail	,							1.1	1.1				5.9
Moose-Wilson Trail	-	1.1	2005										
Stilson (Southern Section) 1 2004 Sealed 2005					1	5.6	7.7	7.7	7.7				
Teton Pines (Firehouse to Aspens) 1 1998 Sealed 2005		1	2004	Sealed 2005	<u> </u>		· · · ·		†				
Aspens to Village 4.6 2003 Sealed 2005									1				
Village to GTNP (North Section) 1.1 2004 Sealed 2005 0.7 WY 22 - Science School Connector 0.7 0.8 WY 22 - Wilson School Safe Routes 0.8 0.8 WY 22 Town to Wilson 0.2 0.2 1.3 Teton Pass Millennium Trail 0.2 0.2 0.2 1.3 WY 22 Wilson Connector 1.1 2006 Seal in 2007 0.2 0.2 1.3 Wijson-Fall Creek Spur 0.2 2004 Seal in 2007 0.2 0.2 2.1 0.2 Existing Paved Trail Mileage Total 12.8 18.4 24.9 26 27.1 27.1 Miles Added to System 5.6 6.5 1.1 1.1 1.7 3.9 9.8 14.3									1				
WY 22 - Science School Connector 0.7 WY 22 - Wilson School Safe Routes 0.8 WY 22 Town to Wilson 5.2 Teton Pass Millennium Trail 0.2 0.2 0.2 1.3 Old Pass Road (USFS*) *3 1960 Rough *3 WY 22 Wilson Connector 1.1 2006 Seal in 2007 *3 Wilson-Fall Creek Spur 0.2 2004 Seal in 2007 *3 Existing Paved Trail Mileage Total 12.8 18.4 24.9 26 27.1 Miles Added to System 5.6 6.5 1.1 1.1 1.7 3.9 9.8 14.3									1				
WY 22 - Wilson School Safe Routes 0.8 WY 22 Town to Wilson 5.2 Teton Pass Millennium Trail 0.2 0.2 0.2 1.3 Old Pass Road (USFS*) *3 1960 Rough 8 1.3 1.3 WY 22 Wilson Connector Wilson-Fall Creek Spur 1.1 2006 Seal in 2007 1.1 1.2 3.9 9.8 14.1	9 7								Ì	0.7			
WY 22 Town to Wilson 5.2 Teton Pass Millennium Trail 0.2 0.2 0.2 1.3 Old Pass Road (USFS*) *3 1960 Rough													0.8
Teton Pass Millennium Trail									1				
Old Pass Road (USFS*) *3 1960 Rough						0.2	0.2	0.2	13				
WY 22 Wilson Connector 1.1 2006 Seal in 2007		*3	1960	Rough		0.2	0.2	V.Z					
Wilson-Fall Creek Spur 0.2 2004 Seal in 2007 8 8 9 9 9 9 8 14.3 Existing Paved Trail Mileage Total 12.8 18.4 24.9 26 27.1 27	, ,								 				
Existing Paved Trail Mileage Total 12.8 18.4 24.9 26 27.1 Miles Added to System 5.6 6.5 1.1 1.1 1.7 3.9 9.8 14.3					1				1				
Miles Added to System 5.6 6.5 1.1 1.7 3.9 9.8 14.		0.2	2007	3001 III 2007	12 8	18 4	24 9	26	27 1				
					12.0				_	17	2.0	٥٥	14.2
Total Miles of Paved Surface Trail (with anticipated future mileage constructed) 28.8 32.7 42.5 56.	Total Miles of Paved Surface Trail (with anticipated future miles			4		0.0	0.5	1.1	1.7				56.7

2.1 Asset Management Inventory

The current system as identified in the preceding existing conditions spreadsheet is the beginning of a comprehensive Asset Management system that can locate, document, and assess all of the infrastructure elements of the Pathways System. Using Global Positioning Systems (GPS), physical elements can be located in the field and then converted to a database and mapped using Geographic Information Systems (GIS). Using the current data set as a baseline, the database will include the following factors for each existing and proposed pathway:

- Trail Name
- Location
- Surface Type
- Surface Condition
- Property Boundaries
- Adjacent Land Owners
- Missing Links / Gaps
- Trailheads
- Rest Areas
- Restrooms
- Water Fountains

- Bicycle Parking
- Kiosks and Wayfinding Signage Locations
- Mutt-Mitt Stations / Pet Use
- Drainage / Culvert Locations
- Maintenance Schedule
- Transit Access Points
- Pocket Park / Rest Areas
- Mile Markers
- Total Length
- Destination / Mile Signage

- Recommended "User" Category
- Terrain Gradient / ADA Access Into
- Length of Trail
- Connectivity
 Opportunities to
 Other Pathways
- Traffic Counts

Recommendation:

JHCP should develop a Pathways Management System using GIS/GPS technologies to locate, map, and manage the Pathways System.

2.2 Classification of Infrastructure

The term "Pathways System" is used in Jackson Hole to include a wide range of facilities that support walking, bicycling, and non-motorized trail use. These facilities include:

Shared-use Paths

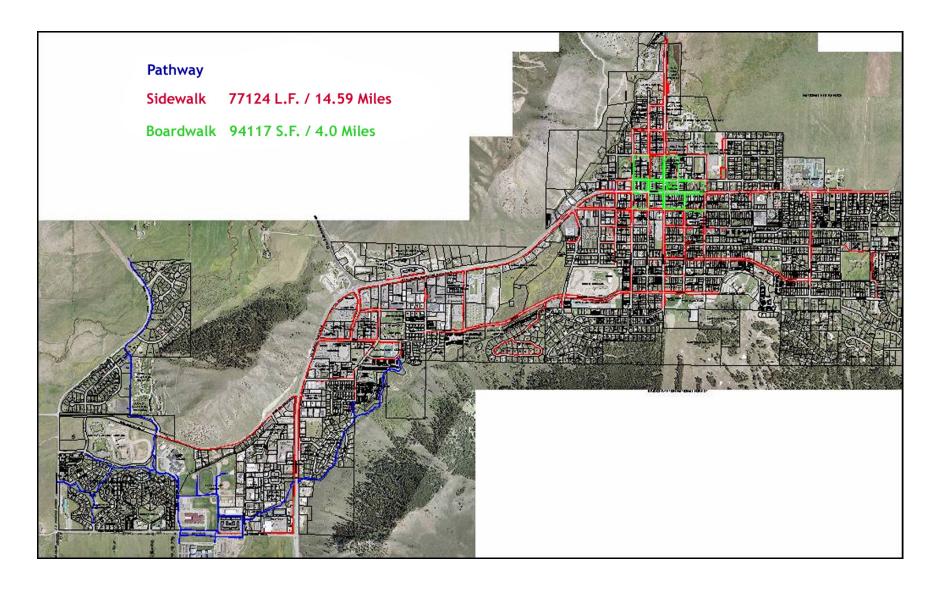
These facilities are the most common pathway type. They are generally 10 feet wide with stabilized shoulders and a firm, smooth paved surface, which can be shared by bicyclists, pedestrians, and other non-motorized trail users. A separate equestrian trail may accompany the paved trail. Shared-use paths are what many people in Jackson Hole commonly refer to as the Pathways System.

Pedestrian Infrastructure

Sidewalks, crossings, ADA accessibility features, traffic calming, streetscape design, and transit connections are all part of the pedestrian infrastructure (see Map 1 on page 26). These facilities are primarily located in town and village centers, as well as major destinations and resorts.

Recommendation:

Develop supplemental pedestrian and sidewalk plans for the Town of Jackson and primary Teton County development nodes, including the Aspens, Teton Village, Hoback Junction, and Wilson, and other developed nodes as needed.



Map 1 - Existing Sidewalks in the Town of Jackson

On-Road Bicycling/Shared-Use Roads

Experienced bicyclists who are capable of sharing the road with motorists require paved shoulders, bike lanes, wide curb lanes, signage, markings, responsive traffic signals, and bicycle parking as part of the roadway environment. Teton County could adopt a roadway policy that provides a minimum five-foot paved shoulder on County roadways, unless there are environmental, cost, or right-of-way constraints (as suggested in the "Complete Streets" policy recommendation on page 37). In the Town of Jackson, onstreet bikeways (bike lanes, "sharrows," signed routes, etc.) should be provided on appropriate local streets and roads.

Equestrian Trails

These facilities are designed exclusively for horseback riding, and generally have a narrow width and soft surface. The current equestrian trails in Jackson Hole do not form a complete "system," and horses share the Shared-use Pathways System, along with a few trails that are equestrian-only. Over time, a network of dedicated routes could be developed exclusively for equestrian use.

Nordic Trails

Nordic (cross-country skiing and snowshoeing) trails are currently provided as a recreational program by grooming the shared-use paths and other rights-of-way for skating and track skiing. It is important to note that each winter use creates a different track in the snow, so skaters, track skiers, and snowshoers generally prefer to use separate or parallel tracks. These uses are currently recreational in nature (users drive from home to a trail to ski), but it is possible that the winter Pathways network could be expanded to allow more people to ski from home to other destinations, similar to the way the system is currently used for bicycling. A key issue for winter trail use is the designation of winter closure areas for wildlife. Winter trail use must be managed to avoid conflicts with these areas. The Pathways System is groomed for winter trail use at the following locations:

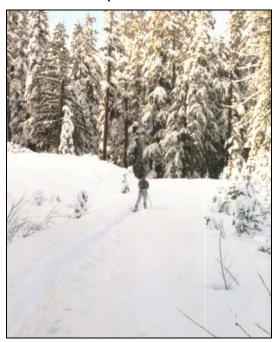
- Cache Creek Trail
- Garaman & School Trails
- Van Gontard Trail
- Wilson Centennial Trail



Bicycle boulevard markings in Berkeley, CA



Equestrian trail



Cross-Country Skiing on a Nordic trail

- Emily's Pond Levee
- Game Creek
- Teton Canyon (Alta)

Hiking Trails (Single Track)

Hiking trails are designed specifically for people walking and are generally associated with a wilderness or backcountry experience. The National Park, Forest Service, and other public lands in Jackson Hole have an extensive network of hiking trails. Several of these trails are connected to the Pathways System so that more people can start and end their hikes from within the community. Ongoing goals for the completion of the system are to increase these pathway/trail interfaces and increase the number of opportunities for these mixed trips. This model follows the tradition of the English Lake District National Park, where trailheads are generally located within established town centers. Another opportunity is the "Urban Cultural Park" concept that was originated in New York State, with in-town routes identified for pedestrian-oriented tourism, fitness, and exploration. Cache Creek is a potential example of an "urban" interpretive walking trail within the Town of Jackson.

Mountain Bike Trails (Single Track)

Mountain bike trails are designed for people who are capable of riding their bicycles in rugged terrain with minimal modifications to the natural trail route. These trails require careful design to minimize erosion and maintain trail surfaces for the long term. As with the hiking and equestrian systems, the Jackson Hole mountain bike network is connected to the Pathways System, and additional opportunities are anticipated as the system is completed. These connections enhance the experience of getting to and from the trails without using a motor vehicle. Bridger-Teton National Forest has the majority of the region's mountain bike trails, and bicycles are currently not allowed on trails in Grand Teton National Park.

Levees

The flood control system along the Snake River offers potentially unique opportunities for trails along the levees. Emily's Pond Levee is an existing example, with a trailhead on the east bank of the river along WY 22. These trails can provide excellent access for fishing, boating, wildlife viewing, and year round trail use. Careful consideration must be given to adjacent landowners, as well as maintenance of the levee's primary function for flood control.

Water Trails

Water trails provide for travel by non-motorized boats, including kayaks, canoes, fishing drift boats, rafting, and rowing. Significant opportunities exist for this kind of "blueway" trail along the Snake River in Jackson Hole. River trips are already a very popular activity, and there are several good access points and public land areas along the river. It is possible to develop a Snake River Water Trail that could be designed for both day use and limited overnight camping – all within Teton County. Additional connections to river access points and parks will be sought as the Pathways System grows.

Transit Connections

Clearly marked transit stops and shelters, user information including schedules and maps, and a network of sidewalks, safe crossings, bike lanes and parking, and shared-use pathway connections are a high priority, and will continue to be an integral part of the Pathways System as its development is completed.

2.3 Inventory of Town, County, and Regional Resources

Transportation Origins and Destinations: Schools, Parks, Commercial/Employment Centers, Resorts, and Tourist Destinations

Jackson Hole is a well-defined land area with historic town centers and key origins and destinations that are readily identified. The development nodes of Wilson, Jackson, Teton Village, Moose (in Grand Teton National Park), and Hoback Junction define the north and south boundaries of the developed area. New residential developments in the South Park / Melody Ranch area have expanded the developed area in recent years. The National Elk Refuge, Bridger Teton National Forest and other public lands form the community's perimeter. Most travel within the community is for relatively short distances, and the START transit system provides connections for inter-nodal travel, with major park & ride hubs at the Teton Village Transit Center and Jackson Town Square.

Natural Resource / Management Issues: Outstanding Natural Features, Winter Range/Critical Wildlife Habitat

The Jackson Hole Valley is a remarkable ecosystem with habitats ranging from the Snake River riparian zone to the high alpine areas of the Tetons. The diverse vegetation and topography supports a world-class wildlife resource of over 60 species of mammals and 300 species of birds, including bear, moose, elk, and bald eagle. As human development within the valley continues to occur, a critical issue is how Jackson Hole can achieve a balanced approach to land management, conservation, access, development, and the connection between people and nature. This is not an issue that is likely to be resolved by any single decision or action, but is instead the result of cumulative decisions made over time. Pathways can play a key role in this process by creating places where people can appropriately co-exist with the natural environment.

Cultural and Historic Sites

The heritage and culture of the American west are evident throughout Jackson Hole. The National Museum of Wildlife Art, the Rodeo Grounds, the World Famous Cowboy Bar, Grand Teton Music Festival, and the regional landscape of ranches are essential elements of the Jackson Hole "sense of place." By integrating context-sensitive design using elements such as log benches and a vernacular design vocabulary, the Pathways System can become part of the culture and heritage of Jackson Hole.

2.4 Opportunities and Constraints Identified by Public Involvement

There are a number of key issues that are central to the success of the JHCP System. Opportunities include the fact that significant elements of the proposed system already exist, and that there is demonstrated community support for completing the Pathways System. Constraints include the limitations of available funding, inadequate staffing level (one full-time staff), and the current administration of the Pathways

program, which is not structured in a way that will support the full build-out and operation of the system. Concerns raised during the project planning process include the following:

Completing Missing Links: The critical next step in the evolution of the Pathways System is to connect the existing sections of local pathways into a complete system that provides cohesive transportation and recreation routes and loops throughout the community.

Connectivity to Regional/NPS & Public Lands: There is tremendous potential to link the Town and County Pathways into a regional network that extends throughout the Jackson Hole Valley. This will require close involvement and participation with a range of local, state and federal agencies and partners.

Seasonal Multi-Use: Walking, bicycling, in-line skating, equestrians, cross-country skiing and other uses share the Pathways System. The planning process will address ways to provide for these multiple uses in safe, user-friendly ways.

System Operation and Management: Maintaining a sustainable system requires life cycle costing of key elements and services as an integral part of the planning process. This will ensure that the system we plan today is enjoyed by future generations. The Pathways program needs staffing levels and resources commensurate with the growth of the system, and operational and administrative responsibilities for properly operating and maintaining the system.

Balance of On- and Off-Road Projects: A complete system of non-motorized transportation requires both off-road trails and on-road bike lanes, and other "complete streets" improvements for pedestrians and cyclists. Recognizing these complementary elements will enhance the Pathways System.

Transit System Integration: The transportation value of pathways and sidewalks is greatly enhanced when complemented by a strong transit system. Connecting people and places is the essence of the Pathways System, and the Southern Teton Area Rapid Transit (START) system is a critical partner in achieving this goal. The START buses are equipped with bike and ski carriers, providing people the opportunity to use transit for both commuting and recreational access. START bus routes can shorten longer distance trips, and provide alternatives in adverse weather and during the winter season when rural pathways are snow-covered and less accessible. This is especially important in Jackson Hole, where tourism and the economic viability of the community depend upon visitors accessing and enjoying the outdoor recreational activities, cultural resources, and commercial enterprises that attract them here.

3. Administration and Policy

3.1 Town and County Program Description

The JHCP Pathways program is responsible for all aspects of the Pathways System management. Planning, operations, and maintenance of shared-use paths, bikeways and sidewalks are coordinated with the County Engineering, Town & County Planning, Town Public Works, County Parks and Recreation, and Road & Levee Departments. Numerous other partners include the WY Department of Transportation (WYDOT), Southern Teton Area Rapid Transit (START), Federal Highway Administration (FHWA), US Forest Service, WY Game & Fish Department, and other involved agencies. Several key non-governmental partners include the Friends of Pathways, PAWS of Jackson Hole, Rotary Club of Jackson Hole, and other partners. The Pathways program is currently located in the Town of Jackson Administration Department, and is jointly funded by the Town and Teton County. The structure of the program's administrative functions is an important issue for a Pathways System that has doubled in length since 2003; and has the potential to grow another 300%, from 27 existing miles to more than 75 miles of shared-use paths, trails, and bike lanes in the next five-ten years.

3.2 Existing Staffing and Program Financing

The JHCP program administration is described in The Jackson/Teton County Comprehensive Plan as follows:

"Jackson Hole Community Pathways is a joint Town and County department managed by the Pathways Director. The Town and County first adopted a Pathways Plan in 1994, and a Non-Motorized Transportation Improvement Program (TIP) is prepared annually listing projects to be initiated each year. The Non-Motorized TIP is forwarded annually to WYDOT as the community's request for consideration in WYDOT's State Transportation Improvement Program (STIP)."¹²

This description is inaccurate, as the Pathways program has been reorganized twice in the past four years, and is no longer an independent department. The current structure was established in July 2003, and was intended as an interim solution until the local elected officials made a decision as to the most appropriate organizational structure for the growing program.

The current Pathways program has one full-time staff person. Through cooperative efforts with other agencies (Engineering, Road & Levee, Public Works, and Parks & Recreation staff) the Pathways Coordinator is able to extend the program's reach and scope. For example, the Engineering Department provides contract document preparation, bidding, and construction administration services. Public Works provides sidewalk and pedestrian crossing programs. Parks and Recreation provides path maintenance, and Road and Levee maintains County roadways. The current program depends upon a team approach, as shown in the organization chart in Figure 1 on page 32. The current administrative budget for the Pathways Coordinator is approximately \$100,000-\$125,000 per year and is financed jointly by the Town and County. It is important to note that over the past several years, this represents a significant decline in funding, at a time when the system is growing. The administration budget was more than \$200,000 and included two FTE staff in 2001.

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¹² Source: http://www.townofjackson.com/compplan/Chapter8.pdf, p.8.20

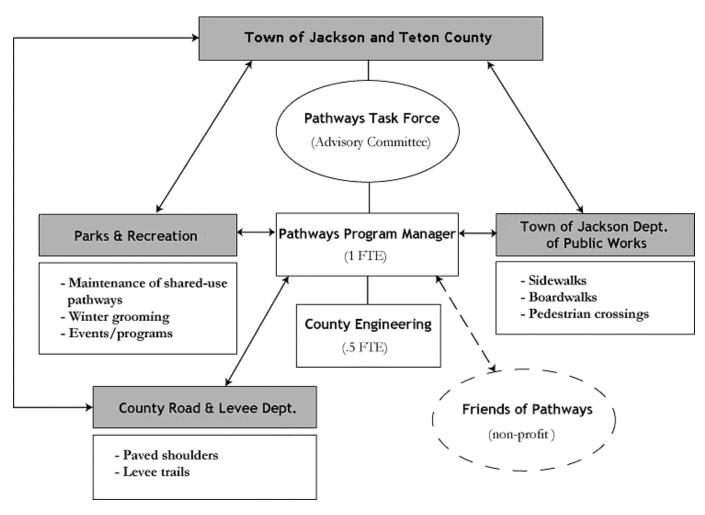


Figure 1 - Existing Organization

3.3 Existing Town and County Legislative Support

The Pathways program enjoys considerable support in existing local legislation. With few exceptions, the existing Town and County planning documents and development regulations support the development of the Pathways System. A review of existing documents that support the Pathways program includes:

- Jackson/Teton County Comprehensive Plan http://www.townofjackson.com/buldplan1.htm
- Jackson/Teton County Comprehensive Plan Chapter 8, Transportation http://www.townofjackson.com/compplan/Chapter8.pdf
- LDR Article IV: Development Standards Teton County http://tetonwyo.org/plan/docs/ComprehensivePlan/LDR-ArticleIV-2006Oct06.pdf
- Town of Jackson Municipal Code
 Title 12: Streets and Other Public Places
 Title 10: Vehicles and Traffic
 http://www.townofjackson.com/muncodes

- Grand Teton National Park Final Transportation Plan/Environmental Impact Statement¹³
 http://parkplanning.nps.gov/document.cfm?parkID=68&projectId=10940&documentID=16829
- Bridger-Teton National Forest <u>http://www.fs.fed.us/btnf/</u>
- U.S. Fish and Wildlife Service National Elk Refuge http://nationalelkrefuge.fws.gov/

3.4 Pathways Task Force

The Pathways Task Force (PTF) is an advisory group of citizens whose mission is to "improve and enhance non-motorized opportunities for transportation and recreation within Teton County." The group meets monthly to coordinate efforts among Friends of Pathways, JHCP, and other partners. As the system evolves, an effective citizen input process will be of great value to implement programs, develop new partnerships, and identify resources for the Pathways System. In 2004, the Jackson Hole Community Pathways Task force refined these broad program goals to establish their mission and goal statements. These are described as follows:

Pathways Task Force - Mission & Goal Statements¹⁴

Mission: To improve and enhance non-motorized opportunities for transportation and recreation within Teton County.



Goals & Objectives:

Goal I. Implement the Jackson Hole Community Pathways Program

- 1. Complete the Pathways System as depicted on the Pathways Task Force Maps;
- 2. Identify needs for additional pathways and sidewalks within Teton County and add them to the Pathways program system maps;
- 3. Advocate for Pathway needs in all new development proposed within the County;
- 4. Identify and implement ADA needs within the Pathways Transportation System.

Goal II. Coordinate Partnerships to Achieve the Mission of the Pathways Program

- 1. Collaborate with the Wyoming Department of Transportation, Forest Service, Grand Teton National Park, Teton Valley Trails and Pathways, and other State and regional entities regarding Pathways;
- 2. Partner with Friends of Pathways, individuals, businesses, and others to provide enhancements to the Pathways System;
- 3. Partner with START to enhance connectivity between bus routes and Pathways, bike lanes and pedestrian facilities;

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¹³ Document currently under review through March 2007.

¹⁴ Adopted: March 3, 2004.

4. Partner with business, community, and other groups to fund maintenance needs.

Goal III. Improve the Pathways System with Enhancements and Amenities

- 1. Place Wayfinding Signage on the Pathways System throughout the County;
- 2. Establish signed bike routes throughout the County;
- 3. Place information kiosks at relevant locations;
- 4. Identify areas of need and install bike racks and horse ties throughout the County;
- 5. Install rest areas and pocket parks along the Pathways System.

Goal IV. Provide Community Outreach Resources & Educational Programs

- 1. Provide bi-lingual Pathways System maps and trail user educational materials in English and Spanish;
- 2. Place Pathways maps at transit stops and waiting areas;
- 3. Make Pathways System maps available for inclusion in local publications;
- 4. Develop informational packets to be given to local accommodations;
- 5. Make presentations to local civic, religious, school and business organizations;
- 6. Have the Pathways System added to commercial Jackson Hole area maps.

The "Pathways System" refers to all modes of non-motorized transportation and pedestrian/cyclist accommodations in Teton County. Teton County is inclusive of the Town of Jackson and all unincorporated towns and villages.

3.5 Proposed Program Administration Alternatives

There are several alternatives for creating an administration structure that matches the scale and vision of the JHCP Pathways program. These include:

Alternative 1: Enhanced Existing Team Approach

In this scenario, the program will continue within the current administrative framework, with a Coordinator, potentially a second staff person, and routine maintenance provided by the Parks & Recreation Department, support from the Department of Public Works, the Road and Levee Department, and other agencies and special programs based on available funding, grants, and partnerships. Design and system planning can be contracted services provided by private sector firms. The member-based Friends of Pathways organization would continue as the primary non-profit partner, with a primary focus on outreach, information, and education programs. This current system is stretched to its limits with the existing Pathways System, and would require changes to accommodate the system's growth. Roles and responsibilities should be defined by interagency agreements. The local Development Review Team processes should be utilized to improve communications.

Alternative 2: Increased Private Sector Capacity

In this alternative, an increased number of pathways-related tasks would be contracted to private sector entities, including design, construction and system planning, and potentially also routine maintenance, event programming, capital maintenance, system management, and data collection. This would allow for very explicit contract performance measures to be set, and would reduce the need to hire public sector staff through local funds. The weakness of this alternative is the lack of continuity due to potential private sector staff turnover, the lack of true "ownership" of the system by consultants and contractors, and the limitations of management oversight for outsourced tasks. A variation of this alternative would be the creation of a quasi-public Pathways authority (similar to a transit agency), which could potentially have the ability to issue bonds for development of the system.

Alternative 3: New Mobility Department

A new Jackson Mobility Department with staff responsible for system planning, engineering, operations, maintenance and programming for all modes of travel could be centralized within one entity. This would streamline the efficiency of program staff, increase accountability for performance benchmarks, and centralize management decision-making. While this alternative would require significant changes in the responsibilities of existing agencies, it would not preclude ongoing partnership arrangements between partner organizations. A change to this type of management structure would support the multi-jurisdictional nature of the Pathways System, both in terms of land owners and trail types, but also in terms of functional responsibilities, which range from event planning to construction management.

Recommendation: The Jackson Hole Community Pathways program administration should be

reorganized to meet the scale and need of the system as it moves towards completion. This reorganization should include a clearly organized structure for management of

capital projects, operations, programming, and maintenance.

In the short term, the existing Team approach to the Pathways program should be enhanced. In the long term, a hybrid of alternatives identified in the Plan should be developed to meet the needs of the growing program.

3.6 Funding Options

There are a variety of potential funding options for the Pathways program. A primary goal is to identify, secure, and maintain a long-term sustainable revenue stream. The Appendix of this document includes examples from other similar programs. With a proposed 50-mile paved path system, a benchmark revenue goal of \$600,000 annually is suggested, based on an average \$7,000/mile annual operations cost (for the paved shared-use paths) and a \$250,000 annual staff and programming budget.

Recommendation: A sustainable, long-term funding mechanism should be developed to ensure successful completion and operation of the Pathways System as a community asset.

3.7 Private Lands Policy

The majority of the existing shared-use paths in the Pathways System parallel or cross private land, as do most of the proposed alignments originally included in the 25-year vision for the completed system (Note: the 25-

year complete vision was reduced to a 5-year priority vision for the 2007 version of the Master Plan). Every shared-use path in Teton County that has been built on private land has been accomplished through the cooperation of landowners by granting easements for public access. Only through the contributions of these landowners has the creation of the existing system been possible. To ensure the ongoing success and community support of the Pathways program, it is important that the rights and contributions of private landowners be respected and recognized.

Easements

An easement is a non-possessory interest in property granted by the landowner to another party, which, for pathways purposes, generally allows for the construction and maintenance of the pathway and permission to travel over private land. The landowner retains the use and title of the land (subject to any restrictions in the easement) and also receives certain liability protections. As mentioned above, the Pathways program has benefited from the granting of dozens of easements that have helped create the current system at a greatly reduced cost than would be possible through other means of land acquisition. Easements must be written to address the issues specific to each property, which include:

- Location and width of the easement
- Permitted and restricted uses
- Allowable uses and rights retained by the landowner
- Responsibilities and rights borne by the holder (e.g. monitoring, maintenance, enforcement)
- Ability to amend the easement
- Liability protection and tax benefits for the landowner

It is the continuing policy of the Jackson Hole Community Pathways program that the primary approach to gaining public access privileges to private land is by working with landowners to grant voluntary easements. JHCP shall pursue fairly acquired public access easements and land necessary for pathways, sidewalks, and public land-access trailheads.

Proposed Pathway Alignments

The Pathways Master Plan development process has been guided by input and ideas from community members, landowners, the Pathways Task Force, elected officials, and staff from local organizations in an attempt to create a vision for the overall completed Pathways System. This process has elicited significant response and concerns from all sides of the issue, and has demonstrated the importance of actively involving all parties in the planning process. Many of the proposed alignments identified in this process offer significant challenges in that they transect difficult terrain, natural resource areas, or private lands. This vision originally depicted a conceptual view of what the completed system might look like, and was in no way intended to suggest that any assumption had been made about the intent of the landowners for the use of their land. As part of the effort to involve landowners in the Master Plan development process, proposed pathway alignments that cross private property have been omitted from the Vision Maps. Additionally, it should be

made clear that any pathways that cross private land will require easement negotiations with the landowner(s), land purchase, or other access strategies prior to determination of a final alignment.

Impacts of Pathways on Adjacent Private Lands

In trail building projects around the country, frequent concerns of the citizens living near the proposed trails are that they will experience a loss of privacy, threats to their safety and security, trespassing, increased liability, litter, and a general reduction in quality of life. A number of studies over the past 20 years reveal that the actual effects of trails for adjacent landowners are, in fact, much healthier and overwhelmingly positive. It has been shown that:

- Relative proximity to trails and paths typically increases property values;
- A large majority of landowners view trails as a highly desirable feature;
- Prospective homebuyers rate trails as an important factor in their home-purchasing decision, and;
- Most homeowners feel that it will be easier to sell their home because it is near a trail.

Trespassing is generally not a problem for landowners, and has not been an issue in the Teton County Pathways System. JHCP has worked with dozens of landowners to enhance the privacy of their property by installing berms, trees, fencing, and other landscape treatments. Data collected from over 370 trails across the nation have shown that trails have either no discernible effect on crime or a positive overall effect on the safety and security of residents and users. In many cases, a large majority of adjacent landowners feel that the trail has improved their quality of life. By and large, trail users are responsible and respectful citizens that behave in an appropriate manner, and evidence suggests that trail users promote good behavior by others simply by their presence and "eyes on the trail." While it is impossible to guarantee everyone's behavior, it is JHCP's policy to promote responsible use and to respond quickly to concerns of adjacent landowners.

Recommendation:

The Pathways program will include landowners as early as possible in the planning process for pathways that may affect their property. The primary approach to gaining public access privileges will continue to be through cooperation with landowners to grant voluntary easements. Users of the Pathways System will be encouraged to respect private property and the rights of landowners.

3.8 Proposed Policy Recommendations

Based on a review of existing policy documents and public input provided during the planning process, the following policy recommendations are suggested:

1. Recommendation: Adopt a "Complete Streets and Pathways Policy"

"Complete Streets" is a national policy model that integrates facilities for bicyclists, pedestrians, and shareduse paths into routine transportation, infrastructure, and public works projects and programs. The current Jackson/Teton County Comprehensive Plan includes a version of this policy type that can be enhanced.

¹⁵Tammy Tracy and Hugh Morris, Rail-Trails and Safe Communities, (Rails-to-Trails Conservancy, National Park Service, 1998)

The existing text reads as follows:

Pedestrian and Bicycle Facilities Strategy Statement: 16

"The Town, County, and WYDOT street and roadway systems will be designed to safely accommodate and encourage pedestrian and bicycle use as important modes of travel. A system of separated Pathways connecting major origins and destinations in Teton County will be incorporated into the transportation system."

The recommended new text is based on the nationally accepted model policy developed by the USDOT, and is proposed to be included in Chapter 8 as follows:

Proposed "Complete Streets and Pathways" Policy¹⁷

- 1. Bicycle, pedestrian, and Pathways facilities shall be established in new construction, reconstruction and maintenance projects unless one or more of three conditions are met:
 - Bicyclists and pedestrians are prohibited by law from using the roadway. Currently, bicyclists and pedestrians have legal access to all roads in Teton County.
 - The cost of establishing bikeways or walkways would be excessively disproportionate to the need or probable use. Excessively disproportionate is defined as exceeding twenty percent of the cost of the larger transportation project.
 - Where lack of population or other factors indicate an absence of need, or where there are severe topographic or natural resource constraints.
- 2. In rural areas, five-foot wide paved shoulders shall be included in all new construction and reconstruction projects on roadways used by more than 1,000 vehicles per day, subject to the same constraints identified in item 1 above. Paved shoulders have safety and operational advantages for all road users in addition to providing a place for bicyclists and pedestrians to operate. Rumble strips are discouraged where bicyclists use shoulders unless a proven hazard is shown to exist and there is a minimum clear path of five feet in which a bicycle may safely operate.
- 3. Sidewalks, shared-use paths, street crossings (including over- and undercrossings), pedestrian signals, signs, street furniture, transit stops, and facilities shall be designed, constructed, operated, and maintained so that people of all ages and abilities can safely use them, including people with disabilities.
- 4. The design and development of the transportation infrastructure shall improve conditions for bicycling and walking through the following additional steps:
 - Planning projects for the long-term. Transportation facilities are long-term investments that remain in place for many years. The design and construction of new facilities that meet the criteria in item 1) above should anticipate likely future demand for bicycling and walking facilities and not preclude the provision of future improvements. For example, a bridge that is likely to remain in place for 50 years might be built with sufficient width for safe bicycle and pedestrian use in

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¹⁶ Source: Chapter 8, p.33

¹⁷ Source: http://www.fhwa.dot.gov/environment/bikeped/Design.htm

anticipation that facilities will be available at either end of the bridge even if that is not currently the case.

- Addressing the need for bicyclists and pedestrians to cross corridors as well as travel along them. Even where bicyclists and pedestrians may not commonly use a particular travel corridor that is being improved or constructed, they will likely need to be able to cross that corridor safely and conveniently. Therefore, the design of intersections and interchanges shall accommodate bicyclists and pedestrians in a manner that is safe, accessible, and convenient.
- Getting exceptions approved at a senior level. Exceptions for the non-inclusion of bikeways should be documented with supporting data that indicates the basis for the decision.
- Designing facilities to the best currently available standards and guidelines. The design of facilities for bicyclists and pedestrians should follow design guidelines and standards that are commonly used, such as the AASHTO Guide for the Development of Bicycle Facilities, AASHTO's A Policy on Geometric Design of Highways and Streets, the AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities, and the ITE Recommended Practice "Design and Safety of Pedestrian Facilities".

2. Recommendation: Integrate the Pathways program throughout the transportation planning and land development review processes.

The Pathways program should be a member of the Town of Jackson Development Review Team and the Teton County Plan Review Committee. This will ensure that non-motorized transportation system connectivity is accomplished as a routine element of capital and maintenance projects for transportation planning and land development. A proposed "Pathways Facility Planning Checklist" is provided in the appendix of this document.

3. Redefine the Pathways Administration.

The Pathways program's organizational structure and mission are defined in the Comprehensive Plan. The existing program description should be modified to reflect the changes recommended in the Pathways Master Plan.

Existing Text, Chapter 8, p. 20

"Jackson Hole Community Pathways is a joint Town and County department managed by the Pathways Director. The Town and County first adopted a Pathways Plan in 1994, and a Non-Motorized Transportation Improvement Program (TIP) is prepared annually listing projects to be initiated each year. The Non-Motorized TIP is forwarded annually to WYDOT as the community's request for consideration in WYDOT's State Transportation Improvement Program (STIP)."

Recommended Text:

"Jackson Hole Community Pathways is a joint Town and County **program** managed by the **Pathways Coordinator**. The Town and County adopted a Pathways Master Plan in **2007**, and a Non-Motorized Transportation Improvement Program (TIP) is prepared annually listing projects to be initiated each year. The Non-Motorized TIP is forwarded annually to WYDOT as the community's request for consideration in WYDOT's State Transportation Improvement Program (STIP)."

4. OPERATIONS AND PROGRAMMING

4.1 Existing Operations Organization

The primary focus of the existing Pathways program is on interagency coordination and capital project management, with routine maintenance conducted by the Parks and Recreation Department and event programming handled in cooperation with public and non-profit partners. Most of the cost of tasks associated with events and outreach programs are provided by one-time grants or resources outside of the Pathways program.

Operations addresses the program management, specific day-to-day tasks, and programs provided to assure resources and facilities are kept in good usable condition, that outreach efforts are supported, and that efforts are coordinated amongst all JHCP partners. This begins with sound design, durable components and a comprehensive management plan. The Plan should be embraced by the responsible entities at the beginning of the implementation process. Programs and protocols should be instituted—including training of field and supervisory personnel, and user groups—so that they will endure. In addition, community groups, residents, visitors, businesses, developers, and other stakeholders should be engaged in the long-term stewardship of the resources preserved and enhanced by this Plan.

Functional Areas of Operations and Programming

An effective Operations plan should include the following areas:

- Interagency / Partnership Coordination
- System Management
- Law Enforcement
- Safety / EMT Services
- Planning & Design
- Staff Training
- Volunteer Coordination
- Trail User Education
- Communications
- Program Promotion
- Event Management
- Resource Stewardship
- System Data Collection
- Fundraising and Development

4.2 Public Education & Outreach Programs

There are a number of innovative education and outreach programs in progress in the Jackson Hole region. These include:

Be Today's Solution

Be Today's Solution is a summer educational campaign to encourage non-motorized transportation choices, including banners, advertising in local media, and distribution of more than 15,000 maps to residents and visitors. This effort is one of a series of partnerships with the Chamber of Commerce, Jackson Hole Mountain Resort, and Teton Village Association to promote START, and encourage increased interfaces between the transit system and pathways infrastructure.



Safe Routes to Schools

Safe Routes to School (SRTS) is a growing national initiative to encourage children to walk and bike to school. JHCP is developing a local educational program within all the valley's schools to promote safe walking and biking among school-aged children, teachers, and support staff. SRTS projects include physical improvements such as pathways, safe crossings, and bike parking, as well as education and promotional activities. More than \$600 million dollars for SRTS was included in the 2005 federal SAFETEA transportation legislation, and WYDOT will set up a statewide program to allocate its share of this new funding source.

Active Living by Design

The Pathways program received a \$10,000 grant from the Robert Wood Johnson Foundation's prestigious Active Living by Design program. Jackson Hole is one of only 31 other communities in the United States to participate in this community improvement program. The program creates a collaborative partnership among Town and County agencies, the health care community, Teton County School District, and numerous non-governmental organizations, for the purposes of: 1) social marketing to encourage active lifestyles that are less auto-dependent; 2) evaluate community infrastructure and recommend remedies for creating greater opportunities to incorporate exercise and healthy lifestyle choices into routine activities; and, 3) review and critique local, regional, and state regulations that either encourage or discourage the success of the first two goals. As this program develops, the opportunity exists to have mile markers that include distances traveled in miles, kilometers and steps, as well as "calorie counters" that measure energy used for various trail segments.

Tourism and Visitor Outreach

The Pathways program can use local media to reach tourists and visitors. For example, the Pathways System map can be included in existing publications such as the Jackson Hole Visitor's guide, newspapers, and utility bill inserts, as well as via links to related websites for resorts and businesses. The Chamber of Commerce can play an important role in these efforts.

Jackson Pathways Patrol

The National Ski Patrol, Volunteer Fire, and EMS services could be a potential model for volunteer safety patrols on the Pathways System. A Jackson Pathways Patrol could involve citizen volunteers equipped with mobile phones, first aid kits, and basic maintenance tools as a public service program along the Pathways System.

"Green Teams" - Environmental Education & Stewardship

Jackson Hole has the opportunity to be on the leading edge of interpreting the connection between the natural and human environments. As the Pathways System develops, this concept could be the subject of an annual conference. The Town of Jackson has created a "Green Team" that integrates recycling, energy conservation, environmental education, and land stewardship into a coordinated program. The Wyoming Game and Fish Department has partnered with JHCP to place seasonal wildlife awareness messages on the Pathways System.

Community Bikes Program

The Jackson Hole Community Bikes Program is a new initiative started by the Teton County Facilities Department, Friends of Pathways, and area businesses to "recycle" bicycles for free use within the community. The program is modeled on successful programs throughout the U.S. Opportunities exist to teach people basic bicycle repair, safety skills, and business management as the program develops.

Special Events

Jackson Hole has a year-round schedule of special events with opportunities to encourage more people to walk, bicycle, and use the Pathways System, including:

- Grand Teton National Park Road "Opening" each Spring, the Teton Park Road north of Moose is plowed and allowed to dry for several weeks before the park is opened to motor vehicles. This has created a "car free" road that is used by cyclists, skiers, and pedestrians each spring.
- Community Healthy Lifestyles Weekend / St. John's Medical Center's Community Health Fair -Annual Event, May (National Bike Month)
- National Trails Day Annual Event, first Saturday in June, in conjunction with the U.S. Forest Service, Backcountry Horsemen of America, Friends of Pathways, and other interested users.
- Gabriella's Ride Annual event, late July, memorial ride for Gabriella Axelrad, a young cyclist who was killed in 1999 by a motorist while riding with her family in Grand Teton National Park.
- Teton County Fair Annual Event, last week in July
- International Walk to School Day Annual Event, first week in October, encourages kids to walk, bike, or ride the bus to school.
- Old Bill's Fun Run Annual Event, September, provides a fundraising opportunity for a wide range of non-profit organizations, including Friends of Pathways.
- Bike to Work Week Annual Event, partnership with the business community, Town and County Governments, and Friends of Pathways. It encourages local employees to bike to work.

4.3 Recommended Operations Organization

The non-motorized and alternative transportation system of Jackson/Teton County includes an array of varied components from paved trails to sidewalks and streets. Ideally, these should be integrated and operated as seamlessly as possible, offering citizens and visitors a first class system. Because there are multiple agencies with different but complementary missions, coordination and cost-effective management and function are essential. This can be challenging, and sorting out priorities will require concerted effort and clear leadership. To help achieve a more sustainable operations program, the following actions are suggested:

• The agencies should work together with a written "Owners Manual" (see Section 5.8 JHCP Owners Manual) with a specific listing of all functions, frequency of tasks, quality standards, and estimated

unit costs and/or staffing requirements. This should be translated into an annual budget that anticipates build-out in five-year increments;

- The program must be cost-effective with sustainable funding sources identified;
- The program must be goal-oriented and missionfocused based on the written and agreed to policies and guidelines;
- The elected bodies should designate an individual or committee to serve as liaison/advocate for the alternative transportation system;
- The program should have a discrete and adequate funding allocation for the Pathways System based on the program manual and annual budget;
- A lead person, with trails development and management skills should be designated who will have management authority over the Pathways System. This Director, or a designated Pathways Manager, should "contract" with the appropriate departments and/or outside private contractors as appropriate to carry out the various operations, management, and programming functions per the written manual.

Guiding Principles for an Effective Operations Program

The following guiding principles will help assure the preservation of a first class system:

- Good maintenance begins with sound planning and design.
- Foremost, protect life, property and the environment.
- Promote and maintain a quality outdoor recreation experience.
- Develop a management plan that is reviewed and updated annually with tasks, operational policies, standards, and routine and remedial maintenance goals.
- Maintain quality control and conduct regular inspection.
- Include field crews, police, and fire/rescue personnel in both the design review and on-going management process.
- Maintain an effective, responsive public feedback system and promote public participation.
- Be a good neighbor to adjacent properties.
- The lead person should also work cooperatively with other department heads, non-profit and private sector partners, and agency staff to assure a coordinated effort amongst all of the alternative modes including: shared-use paths, sidewalks, on-street bicycling, and transit services.

Teton County and the Town of Jackson have a range of alternatives for developing an operations program to support the growing Pathways System. Other successful communities that have implemented similar systems have made significant investments in their operations programs. A review of several examples is provided in the Appendix of this document.

Recommendation:

The JHCP Pathways program should have staff specifically responsible for Operations and Programming, so that education, outreach, encouragement, and safety initiatives can be provided as a high-quality community service.

It is estimated that with the full build-out of the Pathways System, annual operations and programming would include the following responsibilities and tasks:

- 1. Special Events Planning
- 2. Volunteer Coordination
- 3. Environmental Education
- 4. Outreach Programming
- 5. Program Development
- 6. Safe Routes to Schools Coordination
- 7. Health and Fitness Coordination
- 8. Trail Patrol Coordination

- 9. Trail Patrol Staff/Volunteers
- 10. System Engineering/Planning
- 11. Conservation Stewardship

5. SYSTEM MAINTENANCE

The quality and condition of the shared-use paths, sidewalks and on-street bicycling system are essential to the long-term success of the Pathways System. *System Maintenance* refers to the care, upkeep and smooth functioning of the off-road paths, on-street bicycling, and sidewalk infrastructure of Teton County and the Town of Jackson. The Pathways System is a key component of the infrastructure of a world-class visitor destination and community. The design of the trails already in place is of very high quality. If the system is well maintained and cared for, it will assure both the safety and enjoyment of the residents and visitors who use it.

A proper maintenance program will reduce long-term costs by extending the life of the components and it will also win the continued support of the residents, homeowners, and businesses. People with foresight recognized the necessity for the Pathways System in Teton County and Jackson when they planned and built it. It is also true that the community needs to invest over the long term in a quality maintenance program. Indeed, the community cannot afford to not make that investment. This chapter lays out a strategy for achieving a high-quality maintenance program worthy of the world-class system it will support.

Facilities Maintained

The Pathways maintenance program should coordinate maintenance for the following elements:

- Off-Street Shared-Use Pathways
- Natural Surface / Primitive Trails (part of a future integrated system)
- Trail-Related Corridors (landscaped and open space areas associated with trails and greenways including streams and conservation areas)
- On-Street Bicycle Routes (bike lanes, bike routes, and streets used for biking)
- Trailheads
- Sidewalks and Streetscapes including the Boardwalks
- Wayfinding Signage, Fixtures and Furnishings (on-street and off-street)
- Regulatory and Safety Signage
- Tunnels, Pedestrian Bridges, Underpasses, and At-Grade Street Crossings
- Trail-Related Parks and Features
- Access Parking and Maintenance Roads
- Rest Areas

5.1 Existing Maintenance Program

The current annual JHCP maintenance budget consists of a planned and budgeted annual maintenance program, as well as the need to respond to requested maintenance needs. Some items are scheduled for routine actions (litter removal, sweeping, and mowing) and other items treated on an as-needed basis. Annual maintenance costs ranged from \$ 32,219 in 2003 to \$39,650 in 2004. It should be noted that current maintenance is shared by multiple agencies. As the JHCP system develops into a complete regional network, the need for ongoing routine and major maintenance will increase.

Routine Maintenance refers to the day-to-day regimen of litter pick-up, trash and debris removal, weed and dust control; trail sweeping, sign replacement, tree and shrub trimming, and other regularly scheduled activities. Routine maintenance also includes minor repairs and replacements such as fixing cracks and potholes or repairing a broken section of fence. These tasks differ from *major maintenance*, which includes regularly scheduled improvements and upgrades to the Pathways System, which are covered under Chapter 7.

Currently, the Teton County/Jackson Pathways System (in place and scheduled for completion in 2007) consists of 28.8 miles of paved, shared-use 10-foot-wide asphalt pathways. In addition, there are associated rest areas, trailheads, and safety, wayfinding and interpretive signage. The system is popular and receives continuous usage. While the predominant use in winter is cross-country skiing and walking, the shared-use

paths are maintained for bicycle use from March to October. Current planning anticipates expanding the shared-use asphalt pathway network to 42.5 miles by 2010.

In addition to the shared-use paths, there are 14.5 miles of sidewalk, including 3.5 miles of wood boardwalk serving the downtown and tourist-oriented district of Jackson. Significant portions of the street system in Town and the road system in the County may be suitable for on-street bicycle travel and may require a higher level of maintenance to adequately facilitate usage. The START bus system supplements the non-motorized transportation network with potential complementary points of interface both operationally and administratively. Table 6 below highlights current and anticipated non-motorized facilities.

Facility Type	2006 Mileage	2010 Mileage	2020 Mileage	Current Key Operations and Maintenance Entity
Shared-Use Paved Pathways	27.1	42.5	75	Teton County/Jackson Parks and Recreation Department
Wood Boardwalks	3.5	4	5	Jackson Public Works
Paved Sidewalks	14.5	16	25	Jackson Public Works, Teton County/Jackson Parks and Recreation Department
Streets (Town)	35	40	45	Jackson Public Works
Roads (County / State)	86 / 144	86 / 144	86 / 144	County Road & Levee Department, and WYDOT for State Highways
Single Track Trails	> 100	> 100	> 100	U.S Forest Service, others
Nordic Trails (Grooming Program)	20.1	25	30	Teton County/Jackson Parks and Recreation Department

Table 6 - Pathways Maintenance Responsibilities in Teton County and the Town of Jackson

The Pathways program is charged with planning, implementation, and management functions associated with the shared-use system and budgeted expenses are shared equally between the Town of Jackson and Teton County. The Teton County/Jackson Parks and Recreation Department provides routine maintenance on behalf of the Pathways program. Major remedial/capital improvements are funded 100% by the respective jurisdiction depending on location.

Current recommended annual maintenance includes:

- Sweeping of the pathways after the spring snow pack melts;
- Two shoulder mowing and sweeping operations, one in late Spring and one mid-Summer;
- Weed control handled by contract arrangement with the Parks & Recreation Department; Sweeping
 of County road shoulders for cyclist/pedestrian use managed by the County Road & Levee
 Department, as directed by the Pathways Coordinator.
- Major maintenance and repairs—managed by the Pathways Coordinator—including seal coating of pathway surfaces (approximately every 4-5 years on a rotating basis) striping, signage, benches, bike racks, and installation of safety fencing, safety signage, and devices, etc.
- Springtime snow plowing
- Painting and staining of bridges
- Bench, mile marker, and kiosk maintenance
- Trash removal
- Tree and vegetation trimming

Crack sealing and repair

The existing allocation of responsibilities as summarized by JHCP staff is as follows:

- Pathway operations are the responsibility of the Pathways Coordinator;
- The daily (routine) maintenance including mowing, weed control, sweeping, trash removal, Nordic grooming, and recreational programming is the joint responsibility of the Pathways program and Parks & Recreation Department's Parks Division Superintendent, in coordination with the Pathways program;
- There are currently no formal maintenance plans, standards or levels of service to measure success/failure;
- Installation of amenities are also the responsibility of the Pathways Coordinator;
- In general, the Pathways program is under the direction of the Town Administrator; with responsibility for system planning, capital improvement plan updates, project/program design, and development project review, and major maintenance projects.

Inter-agency maintenance agreements are based on a memorandum of understanding (M.O.U.) that was signed between the Town of Jackson and Teton County on September 8, 2003 that "establishes the working relationships and responsibilities of each agency relative to non-motorized transportation." With the M.O.U., the Town and County agreed to the 50/50 cost sharing agreement. This M.O.U. was amended in January 2004 to further clarify management and maintenance responsibilities.

Key administrative challenges identified by agency staff and the public involvement process include:

- Increasing trail mileage not complemented by a commensurate increase in maintenance budget;
- Not having a formal maintenance plan, standards or levels of service to measure success/failure;
- Not having a system of large enough scale to have its own operational district;
- Equipment that must be shared;
- Not having crews dedicated exclusively to pathways maintenance;
- Task of achieving a cost-effective, coordinated, mission-oriented system management program amongst several partnering agencies and jurisdictions.

¹⁸ Source: Memorandum of Understanding, Town of Jackson and Teton County, September 8, 2003 and revised January 5, 2004.

The table below shows the current levels of maintenance funding:

Table 7 - Current Maintenance Funding¹⁹

Annual Maintenance Expenses	(Estimates Provided by Park & Recreation Department)							
Description	Actual FY2001	Actual FY2002	Actual FY2003*	Actual FY2004*	FY2005 Budget	FY2005 Estimate	FY2006 Requested	
General Labor - Park & Rec Staff Salaries	Not available	Not available	\$7,500	\$9,000		\$9,000	\$ -	
Seasonal Labor - Weekly Patrol - Litter/trash	n/a	n/a	\$1,100	\$1,900		\$1,900	\$ -	
Seasonal Labor - Sweeping	n/a	n/a	\$2,400	\$4,000		\$4,000	\$ -	
Seasonal Labor - Grass Mowing	n/a	n/a	\$1,400	\$2,300		\$2,300	\$ -	
Seasonal - Weed & Pest Control	n/a	n/a	\$1,100	\$1,800		\$2,500	\$2,500	
Maintenance - Crack filling	n/a	n/a	\$2,400	\$2,600		\$2,750	\$2,750	
Maintenance - Asphalt Patching Maintenance - Staining and oil	n/a	n/a	\$400	\$600		\$650	\$650	
preservative	-	-	-	-		\$600	\$600	
Maintenance - Root and Sucker Cutting	n/a	n/a	n/a	n/a		\$500	\$500	
Maintenance - Line Painting - Safety issues	Moved to Operations		-	-		-	-	
Major Maintenance - Repair, Materials & Supplies	Moved to Operations		-	-		-	-	
Amenities - repair, replace benches, mutt mitt stands	n/a	n/a	\$1,000	\$1,000		\$1,000	\$1,000	
Supplies - trash liners, mutt mitts, etc	n/a	n/a	\$2,500	\$3,500		\$1,400	\$1,400	
Signage - repair and replacement	Moved to Operations		-	-		-	-	
Water & Sewer - restrooms, water fountains, irrigation	n/a	n/a	\$2,100	\$2,100		\$800	\$800	
Restroom cleaning - contracted	Not Budgeted for FY2005		\$5,100	\$5,100		-	-	
Misc Fees	n/a	n/a	\$750	\$750		-	-	
Nordic Trail Grooming (NRTF Grant) - Local Match	Moved to Parks & Rec - Operations		\$4,469	\$5,000		-	-	
Total - Maintenance Expenses	\$ -	\$ -	\$32,219	\$39,650		\$27,400	\$10,200	

Discussions with key agency staff and data from other communities suggest an anticipated annual maintenance budget of \$7,000-\$9,000 per mile including seal coating, re-striping and associated administrative costs. This would achieve a level of maintenance quality consistent with community needs. This suggests an

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¹⁹ Source: JHCP Staff

annual total maintenance requirement of \$190,000 to \$245,000 for the current 27.1-mile system and \$300,000 to \$385,000 for the proposed 42.5-mile system anticipated by 2010.

One of the reasons that the current Pathways program is able to continue operating the growing system is the partnerships and agreements that exist between public sector and non-profit partners. These partnerships are outlined as follows:

5.1.1 Adopt - a - Trail Partnerships

JHCP and Friends of Pathways currently manage an "Adopt a Trail" program for segments of the existing system. This program allows local individuals and organizations to be involved in routine maintenance (such as litter removal) either through donations of time or funding. In exchange, participating sponsor organizations are posted on signs along the section of trail. This program can be expanded as an integrated element of all new Pathways projects, with a continued goal of having each mile of pathway adopted.



The existing adopt-a-pathway program is a model that can be expanded as the system develops.

5.1.2 Parks & Recreation - Internal Services

The Parks & Recreation Department plays the lead role in the current maintenance program, providing the staff and resources for routine maintenance including mowing, snow removal, rest area cleaning, signage repair, crack filling and sweeping. These services are conducted within the budget of the agency and are part of the larger program that is also responsible for maintaining traditional parks and recreation facilities such as playing fields and the recreation center. Parks & Recreation also manages the Nordic trail-grooming program.

5.1.3 Road & Levee - Internal Services

Teton County's road and levee department is responsible for maintaining key multi-modal elements including on-road bicycling facilities and trails along the levee system. The majority of this work involves the paved shoulders on County roadways, including plowing, sweeping, debris removal, signage, striping, and crack repair.

5.1.4 Sidewalk & Pedestrian Infrastructure

Sidewalks and pedestrian crossings are maintained by multiple agencies and private property owners. The Town of Jackson Department of Public Works manages the sidewalk and crossings on Town streets and roadways. The range of concrete, asphalt, and wooden boardwalk sections requires different snow and ice removal techniques, and there also are a wide range of crosswalk materials and signage installations that are maintained by the jurisdictions responsible for each section of roadway. These overlapping needs also include ADA compliance and transit shelters for the START bus system.

5.1.5 Routine Inspection and Public Safety

The Parks & Recreation Department currently conducts routine inspections on the shared-use paths. The police and sheriff's departments provide law enforcement and emergency response.

5.2 Risk Management

All public facilities require a careful effort to maximize public safety and minimize exposure to liability. For the Pathways System, this includes high-quality design and ongoing maintenance, as well as municipal liability protection provided by the Town and County's existing policies. New sections of pathways generally do not add significant cost to liability insurance costs since these policies are generally written based on land area, and pathways are long, narrow corridors of public rights-of-way that do not account for significant acreage when compared to larger public lands and facilities. However, the best practice to minimize potential legal actions is to manage the Pathways System in a coordinated program that identifies safety issues and acts to remedy them efficiently.



Risk management includes identifying safety issues and providing appropriate solutions.

5.3 Managing Multiple Use

A key safety issue on shared-use paths is managing multiple uses, including bicyclists, pedestrians, skaters, runners, equestrians and others. As the system grows and usage increases, there will be a continued need to ensure that all trail users are safely enjoying the system. In addition, on-road facilities require motorists to "share the road" with bicyclists and pedestrians. The following section offers guidelines for managing multiple uses.

Recommendations: Maintaining Safety and Managing Liability

- The Pathways program should implement a safety program that includes systematic risk management assessment, inter-agency design review for all proposed improvements and accident and crime reporting. In addition to department managers, planners, designers and engineers, police, sheriff and fire/rescue and field maintenance personnel should be consulted in the design and review process.
- Implement an emergency response protocol working with law enforcement, EMS agencies, and fire and rescue departments that includes mapping of trail and open space access points, design of trails and access roads (to accommodate up to 6.5 tons), an "address system" such as mile markers to identify locations and, where appropriate, 911 emergency phones in remote areas.
- Implement a data base management system in cooperation with law enforcement agencies for tracking specific locations and circumstances of all crashes, crime incidents and safety reports, and create a safety follow-up task force to address any problems that develop.
- Implement a user education program in the schools and cycling clubs to teach safe behavior and conflict prevention.
- Routinely inspect for safety hazards, defective structures, missing safety signs, etc.
- Post and enforce safe user behavior and pathway speed limits (in congested and risk areas).
- Tree/brush/tall grass trimming to address sight distance issues.



"Share the Road and Trail" t-shirts communicate safe multiple use on Pathways and roads.

Friends of Pathways 2001 Safety Bell Project

Funds were granted by the Community Foundation of Jackson Hole to purchase 1,500 bike bells, which were distributed to the public in an effort to promote awareness and safety along Jackson's pathway and trail systems. Use of the Pathways and trails system increased with our population and conflicts between users became more frequent. Bike bells, which are used to alert recreators on foot or on horseback to approaching cyclists, can help avoid dangerous conflicts and collisions on busy routes. The bells were distributed to cyclists through four public events in 2001-2002.

Source: http://www.cfjacksonhole.org/grants_summer2001.htm

Managing Multiple Use

- Plan, design and manage to reduce conflicts among users, with adjacent properties including: reckless and unsafe behavior; incompatible uses and values; trespass; disturbances and adverse environmental impacts.
- Recognize the different goals of different users, such as equestrians and bicycles, and separate uses where feasible.
- Provide user education through signage, patrol, volunteers, brochures, and media.
- Provide adequate trail mileage and open space acreage to accommodate user populations.
- Solicit input from user groups.
- Monitor, document and log problem areas and address problems through design and management.
- Promote trail etiquette.
- Educate bicyclists and hikers on how to pass horses.
- Avoid excessive regulatory signage and "heavy handed" enforcement.
- Employ temporary closure of facilities when conditions dictate or for resource recovery.
- In addition to having trail users 'share the trail' with each other, it is equally important for them to respect adjacent property owners and managers. Many sections of the Pathways System are located on or near significant resource areas, private property and businesses. The following section offers guidelines for making trails and adjacent properties good neighbors.

Sources: Pauline Gambill, Roger Moore—American Trails Library documents

Reducing Conflicts with Trail Neighbors

- Provide contact information for reporting problems.
- Maintain facilities regularly.
- Distribute or publish (on the Internet) maintenance schedule.
- Respond to illegal or disturbing activity quickly.
- Meet periodically with neighbors and provide other feedback means.
- Respond promptly and effectively to complaints, concerns and suggestions.

Source: Flink, Searns and Olka—Trails for the 21st Century



Trail users must respect adjacent landowners and properties.



The Pathways System can become a linear garden throughout the community, potentially in partnership with local garden clubs and service organizations.



5.4 Seasonal Management Issues

Jackson Hole's year-round, four-season Pathways System requires a special level of management. Specific concerns include winter trail grooming, seasonal wildlife habitat (especially winter range for moose and elk), freeze/thaw cycles, springtime runoff of sand and gravel at trail/roadway sections, and flooding conditions in both spring and summer. These concerns are combined with a limited construction and maintenance season that limits trail projects to approximately six months of the year. These "issues" can also be seen as opportunities, especially since residents and visitors are able to enjoy the pathways in different ways, with a variety of experiences throughout the seasons.

5.5 Proposed Maintenance Endowment

In the long term, it is recommended that the Pathways program establish a maintenance endowment for sustainable support of the system. This is a common practice for land trusts, which often include an endowment contribution as part of the acceptance of a new parcel or easement. A possible model of a trail system endowment in a situation similar to Jackson Hole is the Friends of Acadia National Park (FOA), who created the Acadia Trails Forever endowment. With the philanthropic support of a private \$5 million donation, FOA and its partners were able to establish an endowment that generates income to maintain the more than 60-mile carriage road and trails system at Acadia. A similar endowment can be developed in Jackson Hole, both as an element of individual projects, and as an overall program in partnership with public, private and non-profit interests.



Friends of Acadia, the National Park Service and partners announce the Acadia Trails Forever endowment, Summer, 2000.

5.6 Recommended Maintenance Guidelines

The Jackson Hole Community Pathways program should coordinate maintenance of roadways, shared-use paths, and sidewalks in order to provide safe and accessible walking, biking, equestrian, and winter-use conditions. The policies that will determine the expected levels of service for ensuring a well-maintained Pathways System have not been formally established and will require cooperation with the affected agencies (Parks and Recreation, Public Works, Road and Levee, and WYDOT) for development and approval. These maintenance policies should include expectations and goals for sweeping, snow removal, snow storage, monitoring, incident reporting, and information services.

Recommendation:

In order to systematically maintain the Pathways System, an "Owners Manual" should be created with a codified set of maintenance guidelines and procedures that are formally documented and adopted.

Recommended Maintenance Tasks

Table 8 below is a summary of typical recommended routine maintenance tasks for the JHCP system. It should be noted that these tasks are performed by several different agencies. For example, the Teton County/Jackson Parks and Recreation Department maintains trails in the Town and County, while the USFS

is responsible for trail maintenance in the National Forest, and the Town of Jackson Public Works Department maintains sidewalks, boardwalks and crosswalks. The "Owners Manual" of maintenance policies for the Pathways System should include guidelines and procedures for the tasks in Table 8.

Table 8 - Recommended Routine Maintenance Tasks by Trail Type

Maintenance Task	Pathways and Related Corridors	Trailheads and Amenities	On-Street (Bike Routes and Lanes)	Sidewalks, Boardwalks, Streetscape	All-Terrain Trails
Inspection and citizen response	~	>	'	✓	'
Surface repair	~	✓	~	~	~
Vegetation management	~	~	~	~	~
Litter and trash removal	~	~	~	~	~
Address detours/disruption	~	~	~	~	~
Accident and incident data tracking	~	~	~	~	~
Graffiti and vandalism control	~	✓	~	~	~
Snow removal and grooming	~	✓	~	~	~
Sweeping	~	✓	~	~	
Repaving and pavement overlays	~	✓	~	~	
Trail structures/fixtures/erosion repair	~	~		~	~
Signage, striping, and lighting	~	V	V		
Irrigation systems (where applicable)	~	~			~
Rest areas, shelters, and water stations	~	~			~
Patrol, security, enforcement, safety hazard reduction	~		~		~
Education and enforcement	~		V		V
Remedy "social trails" (shortcuts)	~				~
Special event policies and permitting	~				~
Dust reduction	~				~
Toilet facility service	~				~
Maintain connecting on-street and sidewalk routes	~				

5.7 Natural Resources Management

A well-designed trail system can be an effective management tool that helps reduce the impacts of people on wildlife and the environment. The Pathways System will be developed, operated, and maintained to benefit people and nature while minimizing the potential adverse effects of facilities on Jackson's natural resources. This will require an integrated approach to planning, design, and operation of the system. Specific recommendations for the system include:

1. To the maximum extent possible, avoid the location of pathways in critical habitat areas, including winter range and riparian corridors.

- 2. Locate pathways along existing development, roadway, utility, or other impacted corridors and use pathway setbacks within the "zone of influence" for wildlife to reduce conflicts and habitat reduction.
- 3. Minimize the creation of "social trails" off of the main trail alignment by providing overlooks, trail access controls (including fencing where appropriate), rest areas, and interpretive installations.
- 4. Minimize lighting along pathways, especially in areas where wildlife are active during nighttime hours.
- 5. Consider temporary restrictions on pathways use during migration periods and other times of concern in identified corridors.
- 6. Utilize landscape buffers, visual screening, strategic placement of rest areas, bear resistant garbage containers, and location of waste disposal away from seasonal and daily wildlife areas and movement corridors.
- 7. Modify design guidelines for trail width, surface type, and other features where appropriate to minimize the "footprint" of paved areas and impervious surfaces where possible.
- 8. Integrate recycling, solar energy, wind power, the use of "green" design, and a positive environmental ethic into pathways facilities, information, and interpretation.
- 9. Periodically analyze before and after impacts and benefits of the Pathways System to ensure best practices are developed and problems are corrected within reason.



Radiating out from every trail is a zone of influence, the width of which varies with local conditions over the length of the trail. Planning a trail with this in mind can greatly help anticipate the future interactions of the trail and wildlife.



The Wilson Centennial Trail integrates the human and natural environments, and was developed in cooperation with the Jackson Hole Land Trust.

- 10. Involve stakeholders and wildlife professionals in the planning and management processes to help identify issues, develop broad-based support, and create a sense of ownership for the trail.
- 11. Include community goals and the benefits that the public will receive from the trail as part of the evaluation process.
- 12. Develop and consider alternatives for location and design of trails, trailheads, and associated facilities.
- 13. Actively seek partnership opportunities for complementary conservation, restoration, and habitat enhancement projects.
- 14. Incorporate an adaptive management plan to develop and update pathways design and management guidelines that reflect the latest available natural resource management information.

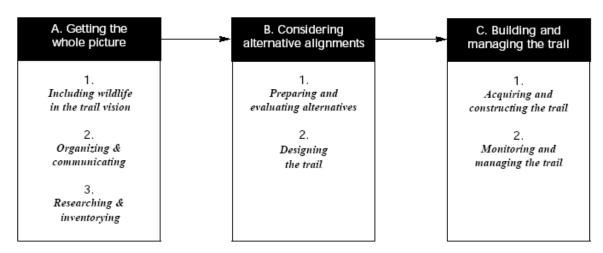
In order to create a Pathways System that achieves the community's goals of sustainable solutions for both people and wildlife, pathways must be developed with consideration of natural resources as part of every project. Wildlife professionals and advocates should be included in the planning, fundraising, and management of pathways. Additionally, the wildlife community should be involved in the creation of habitat enhancements designed to offset potential degradation and improve the quality of the environment associated with the Pathways System. This will help Pathways enthusiasts connect with and understand the Jackson Hole ecosystem as stewards and stakeholders as well as users.

Recommendation:

Incorporate wildlife professionals and advocates as active partners in the development of the Pathways System to help ensure that the preservation of natural resources is addressed as a routine element of pathways planning, construction, and management.

Figure 2 - Wildlife and Trails Checklist

Wildlife and Trails Checklist



Source: Planning Trails with Wildlife in Mind: A Handbook for Trail Planners, Colorado State Parks, 1998 http://americantrails.org/resources/wildlife/Primer.PDF

5.8 JHCP Owners Manual

Section Reserved for Future Use

6. DESIGN GUIDELINES AND CONSTRUCTION SPECIFICATIONS

6.1 Typical Shared-Use Path Sections and Amenities

The existing Pathways System features a high-quality approach to design that is both functional and well connected to the Jackson Hole image. Throughout the existing system, care has been exercised to ensure that attention to detail, material choices, and the aesthetics of the pathways are clearly expressed in every project. The existing "typical" sections have evolved over the past decade into a set of dimensions, materials, and details that will form an excellent foundation for future development of the system.

Recommendation:

A JHCP Design Manual should be developed to guide design and construction of shared-use paths and amenities, including typical sections, material specifications, wildlife guidelines, and design types.

The following are examples of existing designs that can be used as models for the next generation of projects.

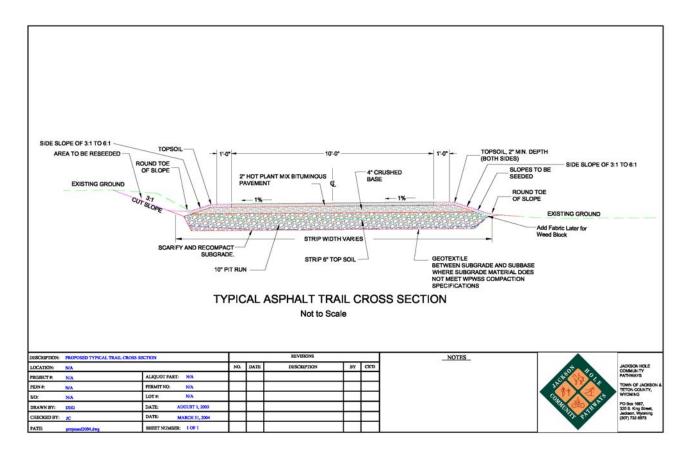


Figure 3 - Typical Shared-Use Path Cross-Section

Typical paved path cross-section, including a 10-foot trail surface and 1-foot shoulders.

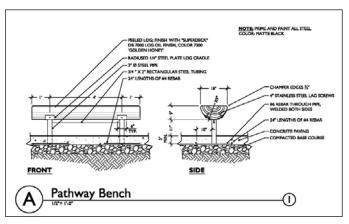


Pathways kiosk design features native materials and locations for interpretive materials. Signage should include multi-lingual and ADA accessibility information.



Above: Context-sensitive fencing enhances the Pathways landscape.

Right: The Wilson Centennial Trail is integrated into the landscape, with both new housing and conservation lands along the pathway.



Benches can be custom designs, and should be field located to capture the best views, solar orientation, and shade.



The existing Pathways bollards are a good example of trail information and functional design that matches the local Jackson Hole context.





Context sensitive design details are visible throughout the community – including this railing at Teton Village.



The new Rotary Club rest area is a great example of high quality design, including signage, seating, and bicycle parking.

6.2 State and National Design Guidelines

At the State and National levels, there are existing guidelines that apply to shared-use paths, pedestrian and bicycle facilities. While these documents are not absolute standards, many public agencies require projects to meet these guidelines as a minimum condition for key dimensions including slope, horizontal and vertical clearances, surface condition, signage, and pavement markings. The key documents published by The American Association of State Highway and Transportation Officials (AASHTO), the U.S. Department of Transportation (USDOT), and others include:

AASHTO Guidelines for the Development of Bicycle Facilities

The most recent version of this nationally recognized document is the 3rd Edition, dated 1999. The guide is described by AASHTO as follows:

"The guide is designed to provide information on the development of facilities to enhance and encourage safe bicycle travel. The majority of bicycling will take place on ordinary roads with no dedicated space for bicyclists. Bicyclists can be expected to ride on almost all roadways as well as separated shared-use paths and even sidewalks, where permitted to meet special conditions. This guide provides information to help accommodate bicycle traffic in most riding environments. It is not intended to set forth strict standards, but, rather, to present sound guidelines that will be valuable in attaining good design sensitive to the needs of both bicyclists and other highway users."²⁰

AASHTO Guidelines for the Development of Pedestrian Facilities

The pedestrian guide was published in late 2004 and is described by AASHTO as follows:

²⁰ Source: https://www.transportation.org/publications/bookstore.nsf

"The purpose of this guide is to provide guidance on the planning, design, and operation of pedestrian facilities along streets and highways. Specifically, the guide focuses on identifying effective measures for accommodating pedestrians on public rights-of-way. Appropriate methods for accommodating pedestrians, which vary among roadway and facility types, are described in this guide. The primary audiences for this manual are planners, roadway designers, and transportation engineers, whether at the state or local level, the majority of whom make decisions on a daily basis that affect pedestrians. This guide also recognizes the profound effect that land use planning and site design have on pedestrian mobility and addresses these topics as well."

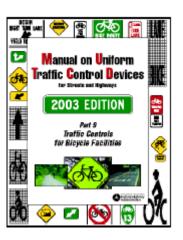
Manual of Uniform Traffic Control Devices (MUTCD)

The 2003 Federal MUTCD includes Part 9: Traffic Controls for Bicycle Facilities, along with detailed guidelines for pedestrian facilities crossings available, and is available on-line at

http://mutcd.fhwa.dot.gov/pdfs/2003/pdf-index.htm.

Wyoming Department of Transportation (WYDOT)

For projects that involve state highways, or that are funded through WYDOT, the Department of Transportation Road Design Manual, Bicycle and Pedestrian Plan and Wyoming Public Works Standard Specifications serve as reference documents. These guidelines include the following:



Wyoming Department of Transportation Road Design Manual

"This manual, along with the latest AASHTO "A Policy on Geometric Design of Highways and Streets", the AASHTO Roadside Design Guide, WYDOT Basic and Operating Policy, and other referenced WYDOT (Wyoming Department of Transportation) publications, represents the latest "state of the practice" information for road designers in preparation of contract plans and documents for WYDOT projects." ²²

Wyoming Bicycle and Pedestrian Plan, 2002

"This Plan provides guidance on how the Wyoming Department of Transportation (WYDOT) will address the issue of accommodating non-motorized transportation. WYDOT intends to integrate consideration of the needs of pedestrians and bicyclists in its planning and project development processes to produce a transportation system with true modal choices. This plan will not propose specific improvement projects to better accommodate bicycling and walking in the Wyoming transportation system.

The WYDOT website

(http://www.dot.state.wy.us/Default.jsp?sCode=infbk) includes the following important section of State law, which gives bicyclists the right to 'share the road' in the State of Wyoming:

Wyoming State Statutes, Title 31, Chapter 5, Article 731-5-702.

General rights and duties of riders.

"Every person propelling a vehicle by human power or riding a bicycle has all of the rights and all of the duties applicable to the driver of any vehicle under this act."

Source

http://www.dot.state.fl.us/safety/ped_bike/handbooks_ and_research/TRAILINT.PDF

²¹ Source: https://www.transportation.org/publications/bookstore.nsf

²² Source: http://www.dot.state.wy.us/Default.jsp?sCode=infrd

Instead, it provides general principles and guidance for WYDOT to provide for and improve bicycle and pedestrian transportation. This plan also provides guidance for local governments in Wyoming for developing their own bicycle and pedestrian plans and facilities. This plan concentrates on the three "Es" (engineering, education and enforcement) to improve bicycle and pedestrian transportation. The plan identifies the State's existing roadway system as the basic network for bicycle travel, although it recognizes that most bicyclist travel will occur within and around cities and towns. The needs of bicycle tourists are addressed by identifying long distance cycling routes. The plan also recognizes that most pedestrian trips are short and that local governments can have the greatest influence on creating viable pedestrian transportation networks. Continuous sidewalks are recognized as the basic network for urban pedestrian transportation."²³

The State and National guidelines cover most, but not all design issues for the Pathways System. Innovation and creative design are still a vital part of every project. One example is the design of shared-use pathway / road crossings, which are not clearly defined in the national guidelines. An excellent reference for this subject is the Trail Intersection Design Handbook, which was produced by the UNC Highway Safety Research Center for the Florida Department of Transportation. This document provides a rational approach for the design of shared-use pathway / road crossings, and is useful supplement for the national guidelines. In addition, the Jackson/Teton County Parks & Recreation Department has developed guidelines for shared-use pathway maintenance, forestry, irrigation, amenities, and cross-sections.

6.3 Natural Resource Design Guidelines

The natural resources found in Jackson Hole are one of the area's most treasured assets and the Pathways program must consider the impacts of trails on wildlife and other resources in the design and management of the Pathways System. The unique natural resources and wildlife of Teton County have been identified along with Pathways as a core value in our community character in the Jackson/Teton County Comprehensive Plan and Land Development Regulations. There is a need to balance the benefits of creating trails with responsible stewardship of nature and wildlife.

Town of Jackson and Teton County Land Development Regulations

Pathways, sidewalks, and other non-motorized facility construction projects are legally defined as development in Section 8300 of the Jackson and Teton County Land Development Regulations and are required to meet all development standards as outlined in Section 1300.

National Environmental Policy Act

The Federal Highway Administration requires that any Pathways project that is funded wholly or in part by federal funds comply with the National Environmental Policy Act of 1969 (NEPA). This law established a national environmental policy focused on Federal activities and requires consideration, documentation, and public review of potential environmental consequences for federal projects. The Council on Environmental Quality (CEQ) is the agency in charge of implementing NEPA and regulating compliance with the act. Depending on the level of impact, the requirements range from preparation of a categorical exclusion (CE), environmental assessment (EA), and/or an environmental impact statement (EIS).

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²³ Source: http://ntl.bts.gov/card_view.cfm?docid=23506

The Federal Highway Administration (FHWA) and NEPA²⁴

"NEPA requires, to the fullest extent possible, that the policies, regulations, and laws of the Federal Government be interpreted and administered in accordance with its environmental protection goals. NEPA also requires Federal agencies to use an interdisciplinary approach in planning and decisionmaking for any action that adversely impacts the environment."

"NEPA requires and FHWA is committed to the examination and avoidance of potential impacts to the social and natural environment when considering approval of proposed transportation projects. In addition to evaluating the potential environmental effects, we must also take into account the transportation needs of the public in reaching a decision that is in the best overall public interest. The FHWA NEPA project development process is an approach to balanced transportation decisionmaking that takes into account the potential impacts on the human and natural environment and the public's need for safe and efficient transportation."

It is FHWA's policy that (23 CFR § 771.105):

- To the fullest extent possible, all environmental investigations, reviews, and consultations be coordinated as a single process, and compliance with all applicable environmental requirements be reflected in the environmental document required by this regulation.
- Alternative courses of action be evaluated and decisions be made in the best overall public interest based upon a balanced consideration of the need for safe and efficient transportation; of the social, economic, and environmental impacts of the proposed transportation improvement; and of national, state, and local environmental protection goals.
- Public involvement and a systematic interdisciplinary approach be essential parts of the development process for proposed actions.
- Measures necessary to mitigate adverse impacts be incorporated into the action.

Planning Trails with Wildlife in Mind: A Handbook for Trail Planners

The 1998 guide was developed by the Colorado State Parks program in conjunction with the Trails and Wildlife Task Force to identify critical issues and sources of information about trails and wildlife and to serve as a checklist and guide for trail planners. The document offers a detailed discussion of important wildlife and environmental issues, and suggests a variety of strategies for wildlife-sensitive trail planning. It is referenced in Section 5.7 Natural Resources Management, and was used to develop the list of wildlife recommendations in that section. Among the key concepts covered in the guide that should be considered in designing the Jackson Hole Pathways System are:

- The Zone of Influence associated with trails;
- Habitat fragmentation;
- Habitat type and quality, and the importance of riparian areas;

²⁴ http://www.environment.fhwa.dot.gov/projdev/index.asp

- Existing impacts;
- Species-specific behavior and response to trails;
- Vegetation impacts;
- Understanding the implications of choosing to build a trail;
- Investigating alternatives;
- Avoid, minimize, mitigate impacts;
- Developing a management plan ahead of time;
- Balancing impacts with public benefits.

The Pathways program will use this document as a guide for including wildlife concerns in all Pathways projects.

American Trails and National Trails Training Partnership

Jackson Hole Community Pathways is a member of these two groups, which offer extensive resources on trail and greenway planning, design, and operation. American Trails promotes the creation, conservation, and enjoyment of quality trails and greenways through education, partnerships, and information resources. The organization includes government agencies, wildlife and trails advocacy groups, technical professionals, local trail management groups, and individual members. National Trails Training Partnerships is a group of federal agencies, education partners, and national organizations that promote opportunities for trails activists to learn up-to-date techniques in trail planning, design, development, maintenance, and volunteer management. Resources are available on-line at http://www.americantrails.org.

6.4 Context Sensitive Design

Context Sensitive Design is the practice of integrating local culture and heritage into infrastructure projects. For the Pathways System, there are a number of unique Jackson Hole themes, icons and details that will make the trails inviting and unique. The use of native materials including stone and timber, and vernacular design based on the ranches, landscape and history of Jackson Hole can be a defining part of all Pathways projects. The following pictures show examples of context sensitive design solutions:



Interpretive Installations

Interpretive installations and signs can enhance the trail experience by providing information about the history of the community. Installations can also discuss local ecology, environmental concerns, and other educational information. Public health can by integrated with "calorie counter" maps that encourage physical activity along the trail.



Water Fountains and Bicycle Parking

Water fountains provide water for people (and pets, in some cases) and bicycle racks allow trail users to safely park their bikes if they wish to stop along the way, particularly at parks and other desirable destinations.



Pedestrian-Scale Lighting and Furniture

Pedestrian-scale lighting improves safety and enables the trail to be used year-round. It also enhances the aesthetic of the trail. Lighting fixtures should be consistent with other design elements, possibly emulating a historic or cultural theme.

Providing benches at key rest areas and viewpoints encourages people of all ages to use the trail by ensuring that they have a place to rest along the way. Benches can be simple (e.g., wood timbers) or more ornate (e.g., stone, wrought iron, concrete).



Maps and Signage

A comprehensive signing system makes a trail network easy to use. Informational kiosks with maps at trailheads and other destinations can provide enough information for someone to use the trail system with little introduction – perfect for both tourists and local citizens.



Art Installations

Local artists can be commissioned to provide art for the trail system, making the trail unique to its community. Many trail art installations are functional as well as aesthetic, as they may serve as mile markers and places to sit and play on.

6.5 JHCP Design Manual

Section Reserved for Future Use

STRATEGIC PLAN

LONG-TERM VISION - BUILD-OUT

The future of a complete, interconnected Pathways System throughout Jackson Hole should begin with a vision of the completed system. With that vision in mind, the steps needed to achieve the end goal can be taken as progress towards the future goal. The Master Plan set out to build upon this intent to "begin with the end in mind," using major maintenance projects and new project priorities as the building blocks for completing the system. While the long-term vision for the fully built system is not included in the 2007 Pathways Master Plan, the maintenance and construction priorities for the next 5 years are addressed in the following sections.

7. MAJOR MAINTENANCE PRIORITIES

Major Maintenance refers to correcting significant defects as well as repairing, replacing or restoring major components that have been destroyed, damaged, or significantly deteriorated during the life of the facility. Some typical items ("minor repairs") may occur on a five to ten-year cycle such as repainting, seal coating asphalt pavement or replacing signage. Major reconstruction items might occur over a longer period—up to 100 years or more—or after an event such as a flood. Examples of major reconstruction remedial maintenance include stabilization of a severely eroded hillside, repaving a trail surface or a street used for biking or replacing a footbridge. Remedial maintenance should be a consideration in formulating a long-term capital improvement plan though budgeting would be in an individual and as-needed or anticipated basis.

7.1 Pavement Resurfacing & Longevity

Shared-use pathway surfaces should be inspected annually and ranked using a pavement scoring system. Periodic sealant applications and routine maintenance can extend pavement life, but at some point all pathways sections (just like highways) will need to be resurfaced or reconstructed. Since the safety of pathway users, especially bicyclists and in-line skaters, is dependent on a continuous, smooth surface, capital maintenance should be scheduled in advance of pavement deterioration.

7.2 Drainage & Shoulder Stabilization

Pathways longevity can often be described in three words: drainage, drainage and drainage. Especially in a valley with the potential for both flooding and snow melt conditions, all drainage structures must be properly maintained, ditches kept open, and shared-use pathway shoulders kept in good condition to avoid deterioration of the trail surface.

7.3 Design Guidelines Compliance

The standard of care for liability includes compliance with appropriate design guidelines, including clearances from obstructions, ADA accommodations, safety zones, roadway crossings and other features. Periodic upgrades and retrofit projects will be required to keep these elements compliant with the current version of the AASHTO Guidelines for the Development of Bicycle Facilities and other guidelines as appropriate.

7.4 Signage / Pavement Markings / Amenities

The extensive inventory of signage (directional, information and interpretive), pavement markings (including long lines, information and crossings) and amenities (including kiosks, trailheads, benches, mile markers and rest area facilities) will all need periodic replacement. These replacements should be scheduled in the major maintenance budget.

7.5 Other

Other major maintenance items may include unscheduled capital maintenance due to storms or other damage and ongoing structural inspections to ensure integrity of bridges and tunnels. A contingency fund should be established for emergency reserves, and major repair or replacement of structural elements should be factored in as a long-term maintenance cost.

7.6 Major Maintenance Priorities

The public input received in developing the Pathways Master Plan included an emphasis on system maintenance. With the assistance of the Pathways Task Force, a prioritization matrix was developed to identify major maintenance priorities projects. Fiscal and political concerns were deliberately ignored during the evaluation in order to generate a ranking independent of those factors. The results of this matrix are provided in Table 9 below.

Table 9 - Major Maintenance Priorities

Project	ADA Compliance	Enhances Safety	Multi-Modal Connections	Quality of Life	Capacity Improve	System Longevity	Tourism Econ Dev	Totals	Rank/ Score
Suggested Relative Value	10	20	5	15	15	15	15	95	
School Zones	11	19	9.3	8.6	12.6	9.3	7.6	77.4	1
Sidewalk Missing Links	9.6	13.8	4.2	12.4	12.8	10.4	9.2	72.4	2
Tunnel-Bridge Update	7.8	14.4	3.5	11.3	10	10.7	7.6	65.3	3
AASHTO Compliance	8.7	13.1	2.8	11.4	9	12	5.7	62.7	4
ADA and Curb Ramps	9.8	13	3.3	11.1	8.3	7.6	8.1	61.2	5
Trail-Road Crossings	7.8	13.4	2.8	11.2	7.8	9.8	7.1	59.9	6
Signage Upgrades	6.3	11.3	2.4	10.4	8.9	8.4	8.8	56.5	7
Transit Stops/Shelters	9.5	6.8	4.6	10.3	9.8	5	9.8	55.8	8
On-Street Bike Lanes	6	12	3.8	9.2	10.1	8.2	6.5	55.8	9
Road Shoulders	5.4	9.4	3.4	9.3	10.4	9.6	6.6	54.1	10
Bike Racks	6.1	6.3	3.3	11.1	8.8	7.1	7.1	49.8	11
Health Mile Markers	3.5	3.2	0.7	12.2	3.2	3.1	7.1	33	12
Public Art	2	2.2	0.8	13.1	1.6	4.6	8.6	32.9	13

8. New Project Priorities

8.1 Current and Proposed Capital Improvement Projects

The public input received in developing the Pathways Master Plan included ideas for a variety of new capital projects. These ranged from an interest in focusing more effort on short-distance utilitarian travel within town centers, to completing missing links and loops for the Pathways System. With the assistance of the Pathways Task Force, a prioritization matrix was developed in 2005 to identify priority projects. The results of this matrix are provided in Table 10 below. Fiscal, feasibility, and political concerns were deliberately ignored during the evaluation process. In practice, these factors will need to be considered and the projects will be undertaken in a different order than listed in the matrix.

Table 10 - 2005 Pathways Task Force Proposed Capital Improvement Projects Note: Projects are not listed in order of actual construction priority

Project	Completing Missing Links	Enhances Safety	Multi-Modal Connections	Access to Public Lands	Allows Multiple Uses	Completes Loops	Tourism Econ Dev	Totals	Rank/ Score
Suggested Relative Value	15	20	10	10	15	15	15	100	
Complete Streets	14	17.4	10.8	4.6	11.7	12.1	14.6	85.2	1
WY 22 Pathway	14.7	18.2	8.3	6.1	11.8	12.1	13	84.2	2
Teton Village to Moose	12.4	17.6	7.1	10	11.7	9.8	9.6	78.2	3
Fish Creek Rd	11.6	15.7	6.3	8	11.9	13.6	9.5	76.6	4
Flat Creek Greenway	12.1	17.6	7	6.7	11.1	9.7	11.3	75.5	5
Town to Moose	12	17.6	6.7	9.3	11.5	7.4	10.2	74.7	6
Hoback Trail	10.6	18.8	4.1	6.8	12	9	10.5	71.8	7
South Park	12.7	15.1	6.1	2.6	11.5	13.9	9.4	71.3	8
Fall Creek Rd	9.6	14.6	6.2	8.4	12.6	9.8	9.7	70.9	9
Karns Meadow	10.1	15.6	7.1	5.7	11.7	10.5	9.1	69.8	10
Rafter J Trails	12.5	15.1	6.1	1.8	11.7	12.4	8.7	68.3	11
Trailheads	9.5	10.6	6.5	10.5	12.5	9.7	8.7	68	12
Safe Routes System	10.9	16.9	7.7	3	9.9	10.5	8.2	67.1	13
Millennium Trail	12.8	18.1	3.1	9.7	11.6	5.4	6	66.7	14
Health Trail	8.7	10.5	4.8	8	10.5	11	7.2	60.7	15
Melody Ranch	10.1	11.3	3.2	2.4	11.3	10.4	7	55.7	16
Cache Creek	6.3	7.4	5.3	8.1	9.2	7.2	8.3	51.8	17
Spring Gulch Rd	7.1	10.1	2.7	6.2	11.1	6.1	4.7	48	18
Water Trails System	4.7	4.7	4.3	9.8	5.9	2.5	8.5	40.4	19

8.2 Capital Project 5-Year Priority List

The Pathways Task Force has assisted the Pathways program in refining the projects listed in Table 10 to develop a list of 5-year capital project priorities. This list was developed by including fiscal, political, land ownership, and overall feasibility concerns in the evaluation process to generate a specific set of attainable, short-term goals for the program that will guide the Pathways program's planning and construction projects over the next 5+ years. Funding has not been acquired for some of these projects, and all of these projects will still need to address private property, engineering, and wildlife concerns before they can be implemented. As opportunities arise the priority list may change and other projects not listed here may be pursued before the current list is completed.

1. Complete Streets

Concept: Develop and implement a Complete Streets Plan for the Town of Jackson and mixed-use villages in Teton County

Funding: Funding for planning and construction of this project has not yet been acquired.

Action/Acquisition: Complete Streets improvements will generally be implemented in the existing right-of-way. However, easements may need to be acquired for some portions of this project.

Notes: See description in Section 8.3 Project Description Sheets.

2. WY22 Pathway

Concept: Connect the Town of Jackson to the Wilson Centennial Trail and the Moose-Wilson Trail with a separated pathway and a bridge crossing of the Snake River.

Funding: Funding for planning and construction of this project has not yet been acquired.

Action/Acquisition: The pathway will generally be located in the existing highway right-of-way.

However, easements and right-of-way may need to be acquired for some portions of this project. **Notes:** See description in Section 8.3 Project Description Sheets.

3. South Park Loop Pathway

Concept: Complete the network of shared-use pathways around South Park Loop Road.

Funding: In 2006, voters approved a SPET ballot measure to provide partial funding for this multiyear project. Project is eligible for TEAL and Safe Routes to School funding.

Action/Acquisition: The pathway will generally be located in the existing county road right-of-way. However, easements will need to be acquired for some portions of this project.

Notes: Portions of this network are already planned and/or under construction.

4. High School Road

Concept: Complete the bicycle and pedestrian facilities along the entire length of High School Road, and implement safety improvements at the intersection of High School Road and Highway 89.

Funding: This project qualifies for 2006 SPET funds approved by voters. Teton County School District has applied for a Safe Routes to School grant to fund a portion of these improvements. The Town of Jackson has approved additional funds for portions of this project.

Action/Acquisition: Facilities will generally be located in the existing easements and road right-of-way. Some easements may also need to be acquired.

Notes: Portions of this project are already planned and/or under construction.

5. Karns Meadow Pathway

Concept: Construct a shared-use pathway in the Karns Meadow in the Town of Jackson.

Funding: Funding for planning and construction of this project has not yet been acquired. **Action/Acquisition:** The Town of Jackson already owns the land for this project, and the conservation easement on the property allows for a paved pathway and separated trail to be constructed on either side of Flat Creek, generally connecting the southwest and northeast corners of the meadow.

6. North Jackson

Concept: Provide safe bicycling and pedestrian facilities north of Broadway in the Town of Jackson, generally providing access to the proposed North 89 pathway.

Funding: Funding for a minor portion of this project has already been acquired (North Cache).

Action/Acquisition: Improvements will generally be implemented in the existing right-of-way. However, easements may need to be acquired for some portions of this project.

Notes: The North Cache project will not fully address the needs of bicyclists and pedestrians in North Jackson. The North Jackson project should be included with the larger Complete Streets project (see Section 1. Complete Streets).

7. Teton Science School Connector

Concept: Construct a shared-use path from the existing Indian Springs Trail on the south side of WY22 to the Teton Science School campus access road on the north side of WY22, using an existing cattle tunnel as an underpass of WY22.

Funding: This project is being implemented with 2006 SPET funds approved by voters.

Action/Acquisition: Facilities will be located in the WYDOT highway right-of-way and existing easements. Some easements may also need to be acquired.

Notes: Portions of this project are already planned and/or under construction.

8. North 89 Pathway

Concept: Construct a shared-use path from the Town of Jackson to the south boundary of Grand Teton National Park on the east side of Highway 89.

Funding: The Town of Jackson has \$200,000 for planning and design from a Scenic Byways grant, and Teton County has applied for construction funds through the ATPPL grant program.

Action/Acquisition: The pathway will be located in the WYDOT highway right-of-way and federal lands managed by the National Elk Refuge.

9. WY22 Wilson School Connector

Concept: Construct a shared-use path on the south side of WY22 from Green Lane to the Wilson School.

Funding: Full funding for this project has not been approved, but funds from the Millennium Trail project could be allocated to pay for the majority of this project.

Action/Acquisition: The pathway will be located in an existing easement.

Notes: Construction of a crossing facility to the Wilson School is integral to this project.

10. South 89 Pathway

Concept: Construct a shared-use path from Game Creek to Hoback Junction.

Funding: This project may be included the WYDOT highway reconstruction.

Action/Acquisition: The pathway will be located in the existing highway right-of-way.

Notes: Project would be phased in conjunction with WYDOT road reconstruction.

8.3 Project Description Sheets

Project descriptions have not been developed for every project listed in Table 9 and Table 10, but are instead intended to provide a cross-section of the ideas and concepts that were developed by the community. The project description sheets can be used as part of ongoing efforts to advance and expand the Pathways System. Some of these projects are already in progress or have been discussed within the community, while others may be long-term efforts that will be phased in over time. There may also be some overlap between planning, capital projects, programs, and major maintenance projects.

Complete Streets/On Street Bicycle Facilities

Project Description: Provide a network of on-street bikeways and pedestrian connections throughout downtown Jackson and in the mixed-use villages in Teton County. This network may include a combination of bike lanes, signed shared roadways and "bicycle boulevards" to create a user-friendly system for utilitarian bicycling within the town center. Pedestrian needs may be met by a system of sidewalks, street crossings, pedestrian signals, street furniture, and transit connections. This project involves short-term and long-term components, and will require development of a separate Complete Streets plan.





An experiment was conducted during the public workshops in July 2005 (L) to test the dimensions of bike lanes in downtown Jackson. The existing on-street lanes in Teton Village (R) show how roadway space can be allocated for multiple uses.

Lead Agency: Town of Jackson Department of Public Works, Teton County, WYDOT **Project Cost:**

Lane striping and signage, approximately \$10,000 / mile. Sections can be implemented during maintenance pavement projects. Sidewalk construction,

approximately \$250K / mile.

Local annual budget process Potential Funding Source(s):

Maintenance / Operations: Routine maintenance including sweeping of bike lanes, striping and signage

repairs, pothole repair, sidewalk repair, sweeping, and snow removal: Town of

Notes / Other: A detailed bike lane and pedestrian plan will need to be developed with input

from the public and involved agencies.

Sidewalks: Missing Links

Project Description: There are many streets in the Town of Jackson where sidewalks are missing. The Town has a program to identify these missing links and upgrade the sidewalk system each year. A summary of the current Department of Public Works (PW) program is provided below:

Town of Jackson Sidewalks Inventory Summary:

- Sidewalk 77,124 LF or 14.59 miles of sidewalk in place.
- Estimated value \$2,610,000.00
- CIP \$140,000.00 annually for new and/or improved sidewalks.
- PW Budget \$8,000.00 for minor annual maintenance on sidewalks.
- PW 250 labor hours for repair and maintenance annually etc.



Missing sidewalks limit the mobility of people of all ages and abilities in Jackson Hole. Improving these conditions was expressed as a top priority during the development of the Pathways Master Plan.

Town of Jackson Boardwalk Inventory Summary:

- Boardwalk 94,117 SF or about 4 miles of boardwalk in place.
- Estimated value \$915,000.00
- PW Budget \$45,000.00 for annual maintenance on boardwalks.
- PW 2000 labor hours for repair & maintenance, removal & replacement, annually
- Contract out for service 65- refuse containers & 20 public ashtrays \$40,000.00 annually.
- PW annual winter snow removal on sidewalks \$50,000.00.
- Two summer-seasonal positions to cleanup and sweep downtown areas \$24,000.00 annually and 800 labor hours for cleaning.

Town of Jackson Crosswalks & Pedestrian signs Summary:

- 12 pedestrian signs placed in the street at crosswalk locations for (spring through fall)
 \$2,400.00 / yr
- Pedestrian pavement markings (tape and/or paint) \$7,000.00 annually.
- Painting curbs red/blue/yellow & painting parking stalls, springtime.
- PW 800 labor hours for installation and maintenance annually.
- Install bike racks during summer and remove in the fall.

Source: Town of Jackson Department of Public Works

Lead Agency: Town of Jackson Department of Public Works

Project Cost: \$140,000 / year Potential Funding Source(s): CIP funds

Maintenance / Operations: Town of Jackson PW

Notes / Other: Sidewalk and streetscape projects can also be integrated in private sector

developments and in roadway reconstruction projects.

Wyoming 22 Pathway

Project Description: New shared-use path connecting the Wilson Trail to the Town of Jackson. The new facility will provide a key missing link between the Wilson Centennial Trail Project, the Indian Springs Trail and the Town of Jackson on-street network. The project is proposed to be constructed by WYDOT as part of the future WY 22 roadway reconstruction and the new interchange proposed for Indian Springs Road. The opportunity also exists for Teton County to construct the pathway prior to the roadway reconstruction by WYDOT.





Bicyclist and pedestrians often use the WYDOT shoulders (L); however the increasing vehicular traffic on the road, the speed of traffic, and the connectivity of the Pathways System are important reasons to include the shared-use path in the roadway reconstruction.

Shared-Use Path Connections

Project Description: There are a variety of projects that were identified during the Master Plan process that would provide connections to missing links in the current Pathways System. These include the following potential shared-use path connections: Teton Village to Moose, Fish Creek Rd, Town to Moose, South Park, Hoback Trail, Karns Meadow, Rafter J Trails and Spring Gulch Rd. It is important to note that any connections to Moose are within Grand Teton National Park and are subject to National Park Service policies and the GTNP Transportation Plan – Final EIS record of decision. Fish Creek Road and Karns Meadow are both in environmentally sensitive areas. Each project can be advanced as an independent project and will require a detailed corridor evaluation and cooperation between public, private and non-profit partners.



There has been significant community support in Jackson Hole for connecting missing links in the Pathways System.

Safe Routes to School

Project Description: Provide improvements for walking and bicycling to schools, and encourage increased safety and physical activity for school children. This effort can include both capital projects and promotional programs. JHCP has already initiated a first phase SRTS program, and has been invited to join a new National Safe Routes to Schools advisory group. There is good potential for linkages between the shared-use paths, onstreet bikeways, and sidewalk projects of the JHCP program and the schools in the area.





Areas around schools that are missing sidewalks, crossings and bicycle facilities can be improved with a SRTS program (L). The names of students who participated in the Walk and Bike to School Day are written on these posters on the pathway near Wilson School. (R)

Lead Agency: JHCP with multiple partners

Project Cost: Varies with needs identified by each school Potential Funding Source(s): Safe Routes to Schools Program (SAFETEA)

Maintenance / Operations: Integrated with pathways partner agency responsibilities

Notes / Other: Jackson Hole has the potential to be a national model for small communities

as the U.S. SRTS program develops.

Cache Creek Interpretive Trail

Project Description: This project would create an interpretive trail along the route of the Cache Creek between Flat Creek and the Cache Creek trailhead. Since much of the Cache Creek is currently routed into culverts and drainage structures, most of the route would be along town streets, with connections to Mike Yokel Park and other locations where the Creek is still visible above grade. The project would include signage, striping, and innovative streetscape designs to indicate the location of the Creek. This trail would provide an in-town connection to an element of the natural environment that is often overlooked in the community, and could help residents and visitors better understand the relationship between the natural and built environments.





Finding the Cache Creek can be a challenge in the Town of Jackson – it is located in culverts under many streets (L); the footbridge in Mike Yokel Park is a good example of interpretation of the creek within the downtown area. (R).

Lead Agency: Town of Jackson Public Works / Parks & Recreation Departments

Project Cost: \$25,000 - \$50,000

Potential Funding Source(s): Local funding, potential partnership with conservation organizations **Maintenance / Operations**: Signage and interpretive materials; walking education programs along the

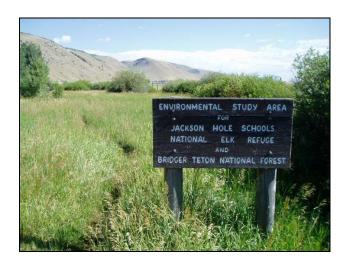
trail; could be coordinated with school environmental programs.

Notes / Other: Increased awareness of the Creek could encourage integrating the waterway

into future re-development projects in the corridor.

Jackson Health Trail

Project Description: This route would form part of a long-term loop trail around the perimeter of the Town of Jackson. The project was nicknamed the "Health Trail" because it would connect St. John's Hospital with adjacent neighborhoods, the Greater Yellowstone Visitors Center, the Elementary School, the Recreation Center, and adjacent lands along the edge of the National Elk Refuge and Bridger-Teton National Forest. It is important to note that this project is only a concept-level idea at this stage, and that a more detailed corridor study would need to be developed. The completed project would likely include a range of facility types, with connections switching between shared-use paths, sidewalks, unpaved trails, and on-street bike lanes. It is also important to note that the new wide sidewalk on the north side of Broadway between the Hospital and the Elk Refuge entrance is a step towards improving walking and bicycling in this area. There is also an existing "Environmental Study Area" trail located behind the National Forest Service office and the Elementary School.





Lead Agency: JHCP in partnership with multiple organizations

Project Cost: Long-term project; requires additional study

Potential Funding Source(s): Potentially eligible for Public Health and Safe Routes to Schools funding.

Maintenance / Operations: N/A

Notes / Other: Public meeting comments confirmed that it would take an act of Congress to

modify the existing boundary of the National Elk Refuge.

8.4 Funding Opportunities

For prior years, pathways capital improvement projects were largely shared on a 50/50 basis by both jurisdictions, and projects were contained within various Town and County departmental budgets. Per the currently executed Memorandum of Understanding between Teton County and the Town of Jackson, capital projects are now funded 100% by the respective jurisdiction, depending upon location. With a prioritized list of capital projects, the Town and County should cooperatively pursue federal, state, local, non-profit and private sector support to implement the phased capital program. Wherever possible, local funding should be leveraged as the matching component for grants and program funding. Potential funding sources include:

- SAFETEA
- Federal appropriations
- State funding
- Local Specific Purpose Excise Tax (SPET)
- Private sector/corporate support
- Non-profit fundraising
- Pathways bonds

8.5 System Vision Maps

Community members, landowners, elected officials, the Pathways Task Force, and staff from local organizations have input their ideas during the course of the Pathways Master Plan development process to help create a vision for the Pathways program. The original intent for the Pathways Master Plan was to develop a conceptual view of what this long-term vision for the completed Pathways System might look like. However, during the 2007 Master Plan public approval process, the Jackson Town Council and Teton County Board of Commissioners voted to reduce the scope of this vision to include only the next 5 years of Pathways System development. Conceptual alignments on the System Vision Maps should not be interpreted as approved based solely on the Pathways Master Plan text or Vision Maps. Each alignment must undergo independent approval prior to final route selection or construction, and all alignments are subject to change based on land ownership, environmental, engineering, and other concerns. Every pathway project requires a corridor study that takes all these factors into consideration when evaluating the feasibility, suitability and need of a new facility. Additionally, proposed alignments that cross private property have been removed from the Vision Maps. Until formally approved, all alignments are conceptual and proposals only.

5-Year County Pathways Vision: Shows existing and proposed 5-year priorities for shared-use path network for Teton County, including trailheads, water-trails, single-track trails, development nodes, and major transit-hubs. Includes pathway connections to the proposed network in Grand Teton National Park (note: GTNP facilities are the jurisdiction of the National Park Service, and are not included in the JHCP Pathways Master Plan).

5-Year Town Pathways Vision: Shows existing and proposed 5-year priorities for Complete Streets and shared-use path network for the Town of Jackson, including trailheads, community destinations (parks, schools, recreation areas, civic locations), single-track trails, bikeways, parking facilities, and sports shops.

Study Areas

Several proposed alignments identified in the Master Plan process have prompted specific concerns regarding wildlife/natural resources and private property. These alignments were included in the drafts of the Master Plan approved by the Town of Jackson Planning Commission, the Teton County Planning Commission, and the Pathways Task Force. The alignments have been omitted from the Vision Maps in the final version of the plan, but still merit mention and discussion to inform the future Pathways program and to ensure that the appropriate issues are addressed in considering these areas. It is also important to include a discussion of these alignments to inform future town and county planning staff, JHCP staff, planning commissions, volunteer boards, community members, and elected officials. All of the connections discussed below are considered "long-term" or "low-priority" in the list of capital projects.

North Jackson: The area comprised of active, livable neighborhoods located north of Broadway approximately between the "Five-Way" intersection, the Elk Refuge Road, and the northern town boundary was identified in the Master Plan development process as a possible long-term connection for a shared-use pathway supplemented by the concept of "Complete Streets." A pathway connection generally along Flat Creek was included in the drafts of the Master Plan approved by the town and county planning commissions and the Pathways Task Force, but was removed from the final version of the Master Plan at the direction of the Jackson Town Council based on concerns expressed by landowners regarding private property and wildlife. Any future study, discussion, or planning of a pathway or other non-motorized facility in this area should take great care to fully address the concerns raised by the landowners. Nonetheless, the need for bicycle and pedestrian connectivity serving the neighborhoods and businesses in the area north of Broadway should be addressed as a high priority for the Pathways program.

Snow King Hillside: The area between the Russ Garaman Park and the proposed Karns Meadow pathway along the Snow King hillside was identified in the Master Plan development process as a desired long-term connection for a shared-use path or natural surface trail. This pathway/trail would provide an off-street connection between two existing or approved pathways in the Town of Jackson. An alignment on the south side of Flat Creek would cross private property, US Forest Service land, and areas that are important for wildlife access to Flat Creek and subject to winter closure regulations. An alignment on the north side of Flat Creek is unlikely due to physical constraints of existing development within five feet of Flat Creek and the number of property owners that would be affected by a path or trail. The short-term priority for connecting the Garaman Trail and the Karns Meadow will be via on-street bikeways and pedestrian sidewalks.

Fish Creek/Teton Village Connector: A proposed connection from Teton Village to the northern portion of Fish Creek Road was identified in the Master Plan development process as a possible long-term connection for a shared-use pathway. This area is considered an important wildlife management area, and is also surrounded by development and private property with many properties carrying conservation easements. Some residents along Fish Creek Road have expressed concerns about impacts to wildlife, safety issues of increased bicycle and pedestrian use on the road, necessity of this connection, loss of privacy, the possibility of a pathway leading to a vehicular road connection to Teton Village, and potential negative landscape impacts caused by the enlargement of Fish Creek Road. This connection is identified as a long-term, low-priority for the Pathways program, and any study, discussion, or planning of a pathway or other non-motorized facility along this corridor should take great care to fully address the issues raised by the landowners.

South Park: A proposed north-south alignment generally located in the interior of South Park Loop that would connect the Melody Ranch Trail, Rafter J Trail, and the School Trail was identified in the Master Plan

development process as a possible long-term connection for a shared-use pathway. The majority of this proposed alignment crosses privately held land that is currently a family-owned ranching operation, and the landowners have not suggested any public plans for development of the property. A trail along this alignment would only be appropriate if the land were developed for residential or commercial use, and the Pathways program will not pursue any type of facility prior to that happening. It should be noted that in this, and all cases of proposed alignments that cross private property, the decision to develop or not develop land rests solely with the landowner. This connection is identified as a long-term, low priority option for the Pathways program that is contingent upon the landowners' plans for the use or development of their land.

Spring Gulch Road: The corridor along Spring Gulch Road from the intersection of Highway 22 to the existing pathway at Jackson Hole Golf and Tennis was identified in the Master Plan process as a possible long-term connection for a shared-use pathway. Multiple pathways easements exist on portions of the road, but the narrow existing right-of-way along the southern portion of this corridor limits construction of a separated pathway in the absence of connecting easements granted by the landowners. Residents along Spring Gulch Road have expressed concerns about a loss of rural character, transmission of disease to livestock, road widening, loss of privacy, and safety issues. This connection is identified as a long-term, low-priority for the Pathways program.

While the Vision Maps identify current major potential connections, factors such as new development, landuse changes, rezoning, and road construction may generate needs for new non-motorized connections. The Vision Maps should be reviewed annually and updated every five years in conjunction with the update cycle for the Master Plan.

8.6 Complete Streets and Bikeways Priority Plan

Section Reserved for Future Use

8.7 Pedestrian and Sidewalk Priority Plan

Section Reserved for Future Use

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IMPLEMENTATION PLAN

9. Performance Measures

9.1 Description of Measures

Performance measures are a means of gauging the effectiveness the Pathways System. They can be used as benchmarks to evaluate progress towards adopted goals and objectives. The performance measures should be based on the Goals and Objectives of the JHCP program, and based on the following principles:

- A process that is policy-driven and can be supported by data.
- The measures reflect the users' experience on the system.
- The measures address multi-modal considerations.
- The results are understandable to the general public.
- The application of the performance measures to programs and projects result in data that can be projected into the future.

The key to a successful benchmarking program is to have data that can be collected within the available resources, are consistently available over time, and are reported in a format that allows year-to-year comparisons. With careful planning, the data system can serve as a core tool for system management in the long term, both to track performance and to ensure that resources are available and well managed.

Types of performance measures include:

- System Performance measures to assess the impacts of the alternative investments on the system users and the transportation system itself;
- Mobility measures to assess the impacts of the alternative investments on the movement of people and goods;
- Safety measures to assess the impacts of the investments on minimizing accidents, death, and injury by the public;
- Geographic Equity measures to assess the impacts of aggregate investments on the various divisions of the State and the metropolitan areas therein as opposed to the small urban and rural areas within each division:
- Cost Effectiveness measures of costs to the user and to public agencies and private providers of capital, operating, and maintenance of transportation systems;
- Wildlife Impacts measures that address conflicts, mortality, habitat, mitigation effectiveness, and human usage patterns.
- Environmental Impacts measures that address impacts on the environment, local economic conditions, accessibility, and air quality (in terms of costs paid in relation to benefits received); and
- Community Support measures that address community support and/or opposition by the general public, special interest groups, and elected officials.

9.2 Description of Measures: "The JHCP Scorecard"

The performance measures for the Pathways System should be developed into a Pathways System Scorecard, with an annual report that summarizes the following benchmarks in a consistent, user-friendly format:

System Completion: The percentage of the system completed relative to the full build out and the number of miles completed each year that can be tracked annually.

Property Values / Tax Base: The number of new building lots located along pathways, and the increase value of properties along the Pathways System can be tracked through the tax assessment process, and evaluated every 5 years.

Bicycle / Ski / Trail Equipment Rentals: The number and dollar value of bike, ski, and trail equipment (excluding rentals for alpine ski resorts) can indicate both increasing use and economic development. This information should be collected voluntarily in cooperation with rental companies.

Safety / Crash Data: Collision data should be measured by jurisdiction as a rate against the number of people walking or bicycling to work as a primary mode of transportation from the latest U.S. Census source.

Bicycle Friendly Community (BFC) Benchmarks: The League of American Bicyclists National BFC program provides a series of education, engineering, enforcement and encouragement benchmarks that can be evaluated through a simple application format that leads to Bronze, Silver, Gold and Platinum award levels.

User Satisfaction Survey: The baseline 2005 Pathways user survey should be conducted annually, and expanded to provide a scientifically valid instrument for measuring community support and priorities.

Health / Fitness Indicators: The prevalence of heart disease, stroke, diabetes and other physical inactivity related health conditions can be measured using Teton County health data, in terms of the percentage of the local population who meet the U.S. Surgeon General's recommended 30 minutes a day of physical activity, by analyzing trends in body mass index (BMI) data, or by voluntary participation in programs such as the President's Council on Physical Fitness.

Mobility / Mode Share Data: Achieve a 5% increase annually in the mode share for bicycles and walking for utilitarian trips, work trips, school trips, transit-linked trips, and discretionary trips. The U.S. Census / National Household Survey data can be updated in 5 year increments.

Annual Traffic Counts: Achieve a 5% increase annually in bicycle and pedestrian counts at selected locations taken during time periods established in the National Bicycle and Pedestrian Documentation program.²⁵

Environmental Conditions: Using census transportation data (National Household Survey) for the percentage of people walking and bicycling, calculate the annual reduction in fossil fuel use, and improved air quality.

Transit Use: Using START system data, track annual data for total number of people using the transit system, type of passenger access (park & ride, pedestrian, and bicycle boardings).

Bicycle Parking Demand: Conduct an annual inventory of bicycle parking locations, indicating the quantity of bike racks / lockers available, the number in use, and requests for additional locations.

Trail Maintenance / Pavement Conditions: Measure the percent of the Pathways System that is in a state of good repair, based on the guidelines developed in the system "Owner's Manual."

Program Participation: Count the number of people who participate in Pathways programs, including bike safety education, nature walks, guided tours and special events.

Wildlife and Habitat Fitness: Measure the relative fitness of wildlife populations at periodic intervals and maintain an inventory of habitat reduction or expansion from pathways projects.

9.3 Monitoring Schedule and Methods

The JHCP "Scorecard" should be updated annually and posted on-line as part of the program website. While some of the data sources are not reported in current-year formats (traffic safety and public health data, for example, is often delayed for several years before reporting becomes available), initiating the benchmarking process is an integral part of the program management process. Existing partners may be able to provide resources (such as the Friends of Pathways survey conducted in 2005, or schools that may be able to provide aggregate data for BMI calculations). The key to moving this vital program element forward will be an incremental approach that can start with readily available sources and build a complete monitoring system that evolves along with the growing Pathways program.

²⁵ See the report published by Alta Planning + Design at www.altaplanning.com

10. RECOMMENDATIONS

The following recommendations have been identified throughout the Pathways Master Plan. They are consolidated in this section to make it easier to see them as an inter-related series of policies, plans, and programs for the development of the Pathways System.

- 1. Integrate the Pathways program throughout the transportation planning and land development review processes to ensure that non-motorized transportation system connectivity is accomplished as a routine element of capital and maintenance projects.
- 2. Develop a sustainable, long-term funding mechanism to ensure successful completion and operation of the Pathways System as a community asset. It is recommended that the Pathways program, in cooperation with non-profit and private sector support, establish a maintenance endowment or other permanent funding source.
- 3. The JHCP program should ultimately have staff or partner program support specifically responsible for Operations and Programming, so that education, outreach, encouragement, and safety initiatives can be provided as a high-quality community service.
- 4. In order to systematically maintain the Pathways System, an "Owners Manual" should be created with a codified set of maintenance guidelines and procedures that are formally documented and adopted.
- 5. A JHCP Design Manual should be developed to guide design and construction of shared-use paths and amenities, including typical sections, material specifications, wildlife guidelines, and design types.
- 6. Adopt a "Complete Streets and Pathways Policy." "Complete Streets" is a new national policy model that integrates facilities for bicyclists, pedestrians, and pathways into routine transportation, infrastructure, and public works projects and programs. The current Jackson/Teton County Comprehensive Plan includes a version of this policy type that can be enhanced.
- 7. The Pathways program should implement a safety review process that includes systematic risk management assessment, inter-agency design review for all proposed improvements, user education, and accident and crime reporting.
- 8. Develop supplemental pedestrian and sidewalk plans for the Town of Jackson and primary Teton County development nodes, including the Aspens, Teton Village, Hoback Junction, and Wilson, and other developed nodes as needed.
- 9. Ensure that the Pathways program provides a balanced approach that includes the full range of non-motorized facilities, including shared-use paths, single track trails, on-street bikeways, sidewalks, safe crossings, bicycle parking and transit connections.
- 10. The Jackson Hole Community Pathways program administration should be reorganized to meet the scale and need of the system as it moves towards completion. This reorganization should include a clearly organized structure for management of capital projects, operations, programming and maintenance, and to recognize the significant roles played by partner agencies and organizations.

- 11. The JHCP program should develop an Asset Management System using GIS/GPS technologies to locate, map and manage the non-motorized transportation and recreation system that it is implementing.
- 12. There is a clear need for a balanced, rational approach that recognizes the benefits of building pathways that appropriately and sensitively connect people and the environment. Procedures to incorporate wildlife professionals and advocates as active partners in the development of the Pathways System should be developed to help ensure that the preservation of natural resources is addressed as a routine element of pathways planning, construction, and management.
- 13. The Pathways program will include landowners as early as possible in the planning process for pathways that may affect their property. The primary approach to gaining public access privileges will continue to be through cooperation with landowners to grant voluntary easements. Users of the Pathways System will be encouraged to respect private property and the rights of landowners.

11. NEXT STEPS

11.1 Plan Adoption and Implementation

Successful completion of the Pathways System, as a completely integrated network of Complete Streets, pathways, and transit connections, requires interdisciplinary planning and high levels of intergovernmental relations. Building relationships among public and private sector partners will contribute to establishing connections between neighborhoods, core commercial areas, outlying resort destinations, national parks, river access parks, and forests; all of which provide the outdoor recreational opportunities desired by residents and visitors alike. The preservation of Jackson Hole's cherished western heritage, valuable natural resources, and outdoor recreational community character is paramount as new pathways, sidewalks, bikeways, recreational trails, water trails, and other multi-modal transportation and transit modes are planned and developed.

Coordination between the County, Town, and federal land managers is necessary, as are partnerships between government and the development community. Strong working relationships need to be developed among all partners responsible for planning, construction and maintenance of Jackson Hole's shared-use pathways, trails, bikeways and sidewalks. Coordinated planning of new facilities should occur with both County and Town Planning Departments to ensure connections that take maximum advantage of the LDRs in the development review process. Coordination with WYDOT officials and the County Engineering Department will facilitate the use of state and county rights-of-way when appropriate and available. Coordinating the linking of sidewalks, bikeways and shared-use paths to connect the valley's schools, parks, public facilities and commercial core areas depends on the close working relationship of the County and Town Engineering staffs and the Town Department of Public Works. Coordination with the federal land managers will provide safe access to the vast recreational opportunities that are so popular with residents and tourists.

Critical to the success of making this system of non-motorized facilities an alternative transportation asset to the community will be its coordination with the START transit system. This can be accomplished by prioritizing infrastructure connections and through public information campaigns that educate the community about the many benefits associated with using these integrated community resources. Road improvements are essential to maintain efficient mobility of traffic as Jackson/Teton County continues to experience pressure from growth and increased traffic volumes. However, as motor vehicle traffic increases (particularly large recreational vehicles and seasonal peak volumes), pedestrian and bicycle travel along major arterial roads throughout the valley may become less desirable and more dangerous. On-road facilities for pedestrians and bicyclists, as well as a complete system of separated multi-use pathways can provide a safe alternative for nonmotorized travel. The creation of greenways, linear parks, and buffer zones in conjunction with Pathways projects can offer additional recreation and transportation resources while acting to preserve or enhance environmentally sensitive lands that also serve as wildlife habitat and migration corridors. Creation of a Pathways System that connects people with natural resources like the Snake River provides recreational use of the river as a "water trail" between access points. The current planning effort to transfer ownership of BLM (Bureau of Land Management) parcels adjacent to the Snake River to other entities provides a unique opportunity to create a Snake River water trail system.

Empowering this process are the elected leadership of the Town and County, administrative staff, and their appointed Boards, Commissions, and the Pathways Task Force. This effort naturally complements the efforts of the valley's many non-profit educational and advocacy organizations that so strongly represent the importance of the environment, Pathways, and alternative transportation solutions to the community. These

partnerships all serve to provide the private sector with the needed infrastructure and services that enable successful economic opportunity and growth in Jackson Hole.

11.1.1 Adoption into Town & County Comprehensive Plan

The Town and County will adopt the Pathways Master Plan by resolution, and will revise Chapter 8 to formally include the Pathways Master Plan as follows:

"The Town, County, and WYDOT will continue to support development of a system of non-motorized transportation facilities based on the Jackson Hole Community Pathways Master Plan and the Pathways System map exhibits. In order to be a viable choice to the automobile, the Pathways System must connect main nodes of development in Teton County such as the Town of Jackson, schools, the South Park area, Wilson, Teton Village, Hoback, and Moose. The Town and County will continue to support a joint Town/County Pathways Program, which will be charged with the detailed development and financial management of the system. Maintenance on the Town and County shared-use pathways will be provided by the Teton County/Jackson Parks and Recreation Department. Maintenance on other facilities, such as State or Federal, will be determined by the specific project. The design of Pathways will include modern standards, be attractive to users, and fit the character of the area in which they are placed."

11.1.2 Integration with Regional, State and Federal Plans, As Appropriate

The Pathways Master Plan is an integral element of a regional system that includes cooperative efforts with the State of Wyoming, the Teton Valley (ID) region, multiple federal agencies including the National Parks Service, U.S. Fish and Wildlife Service, the Bureau of Land Management, the U.S. Forest Service and other agencies.

11.2 Timeline for Implementation

The Pathways System will evolve over the next 2, 5, 10, and 25-year periods from a concept plan into a fully functioning green infrastructure that connects throughout Jackson Hole. If the timeframe from 1995 – 2005 is considered the first phase of growth, the next 25 years will be the phase of system completion, followed by a long lifetime of maturity in the years that follow. Since this system is such a significant element of the community's legacy for the future, it is suggested that the Pathways System be completed in time for the 200th Celebration of Jackson Hole, which will occur in the year 2029.

11.3 Project Partnership

Ultimately, the key to the success of the Jackson Hole Community Pathways program will be a sustained partnership between public, private and non-profit sectors.

Jackson Hole 1829-2029

Fur trader William Sublette named the valley for his partner, David Jackson, in 1829. To such men, a valley so rimmed by high mountains was called a "hole" - hence the second part of Jackson Hole's name. The year 2029 will present an important time for the community to celebrate the completed Pathways System.

1990 - Initial Concept

1995 - Pathways Program Created, initial concept Plan

2000 - First 10 Miles Completed

2005 - 25 Total Miles Completed

2007 - Pathways Master Plan Adopted

2009 - 2 year Priority Actions benchmark

2009 - SAFETEA Federal Transportation Bill Re-Authorization

2012 - 5 year plan completed

2017 - 10 year plan completed

2029 - Complete Pathways System (200th anniversary of Jackson Hole)

2032 - Full implementation of 25-year plan

Source:

http://www.americanparknetwork.com/parkinfo/gt/history/

The Pathways System that exists today has been created through teamwork and cooperation over the past decade. While individuals and organizations may change over time, the Pathways vision remains a unifying element in the community. As the system evolves, so will the partnership that creates it.

11.4 Plan Update Cycle

It is recommended that the plan be reviewed annually, and that every five years the plan be updated to allow for new opportunities for the Pathways System.

APPENDIX

Proposed Jackson Hole Pathways Facility Planning Checklist

Funding Sources

Pathways Program Operations Budget Data

Comparable Maintenance Costs for Other Communities

PROPOSED JACKSON HOLE PATHWAYS FACILITY PLANNING CHECKLIST

The Comprehensive Plan and Town of Jackson and Teton County Land Development Regulations provide a strong scheme for requiring bicycle and pedestrian facilities in new developments. Support for requiring bicycle and pedestrian facilities may be found in the provisions set forth below.

Is the development consistent with the Jackson/Teton County Comprehensive Plan?

Chapter 8 Pedestrian and Bicycle Facilities Strategy Statement: The Town, County and WYDOT street and roadway systems will be designed to safely accommodate and encourage pedestrian and bicycle use as important modes of travel. A system of separated Pathways connecting major origins and destination in Teton County will be incorporated into the transportation system.

Is the development consistent with the purpose of the Land Development Regulations? (Same for Town of Jackson and Teton County)

Section 1200.E.4: Reduce the danger and congestion of traffic on roads and highways by both limiting the number of friction points, such as intersections and driveways, and minimizing other traffic-related hazards.

Section 1200.E.5: Protect and enhance a pattern of streets, highways, transit, and Pathways that produce a unified, safe, and efficient system for movement within the [Town/County].

Is the development a Planned Unit Development submitted under TOJ Section 2170?

Section 2170.J.8: Safe and adequate access shall be provided to all areas of the proposed development, either directly or indirectly, by a public right-of-way, private vehicular or pedestrian way, or a commonly-held easement. Points of access shall be located and designed to maximize vehicle and pedestrian safety.

Section 2170.J.12: Walkways shall form a logical, safe, and convenient system for pedestrian access to all dwelling units, appropriate project facilities, and principal off-site pedestrian destinations. Provision shall be made for pedestrian and bicycle travel in accordance with <u>Pathways in Jackson Hole, A Conceptual Plan (March 1992)</u>. Linkages to schools, parks, public lands, and pathways existing on adjacent properties shall be provided.

Section 2170.K.4: That streets and intersections serving the project will not be reduced to unacceptable levels of service, nor will the safety of motorists, pedestrians, and cyclists be jeopardized.

Is the development a Planned Residential Development submitted under Section 2320 (TOJ and Teton County)?

Section 2320.B.8 (TOJ) and 2320.B.6 (Teton County): Safe and adequate access shall be provided to all areas of the proposed development, either directly or indirectly, by a public right-of-way, private vehicular or pedestrian way, or a commonly held easement.

Section 2320.B.12.a (TOJ) and 2320.B.9.a (Teton County): Principal vehicular access points shall be designed to provide smooth traffic flow with controlled turning movements and minimum hazards to vehicular or pedestrian traffic.

Section 2320.B.12.e (TOJ) and 2320.B.9.e (Teton County): Provision shall be made for pedestrian and bicycle travel in accordance with Pathways in Jackson Hole, A Conceptual Plan (March 1992). Linkages to schools, parks, public lands, and Pathways existing on adjacent properties shall be provided.

Section 2320.B.14 (TOJ) and 2320.B.11 (Teton County): Walkways shall form a logical, safe, and convenient system for pedestrian access to all dwelling units, appropriate project facilities, and principal off-site pedestrian destinations.

Section 2320.C.3 (TOJ): That streets and intersections serving the project will not be reduced to unacceptable levels of service, nor will the safety of motorists, pedestrians, and cyclists be jeopardized.

Is the development a Planned Unit Development District for Affordable Housing submitted under Section 2540 (Teton County)?

Section 2540.A.3.D: A high degree of interconnectivity among areas within the neighborhood and the adjoining developments, particularly pedestrian-friendly and pedestrian-safe connections.

Section 2540.A.3.G: Minimize vehicular trip-making and promote internal trip capture within the neighborhood, and increase use of transit service and other alternative forms of travel.

Section 2540.A.3.H: Roads, pathways and utilities that are coordinated with similar facilities off-site.

Section 2540.B.5: Accessible to an existing or planned community pathway route, or in an area that is a logical extension of the existing regional pathway system.

Section 2540.D.2.d: Pathways shall be provided within the PUD that connect parks, civic spaces and residential areas. Mid-block pedestrian paths may be required in order [to] provide acceptable connectivity. The pathway network for the PUD shall provide connections to existing regional or neighboring pathway systems; when no neighboring pathway system exists, the PUD pathway network shall provide for future connections at logical locations.

Is the development a Planned Unit Development for Planned Resort submitted under Section 2500 (TOJ) or 2550 (Teton County)?

Section 2510.E (TOJ) and 2550.A.5 (Teton County): Ensure that resort plans incorporate a mix of land uses, promote alternative modes of transportation, and provide a pedestrian-oriented community in order to alleviate traffic-related impacts.

Section 2550.G.6.d (TOJ) and 2550.D.6.f.4 (Teton County): Pathways and pedestrian facilities, including access for the disabled, shall be integral components of the site design. The site shall

provide an attractive, outdoor atmosphere that encourages use and reliance upon pathways and walkways. Pathway and pedestrian systems shall provide safe, convenient, and direct access throughout the resort, to public lands, transit facilities and the existing or planned community pathway system, when adjacent to the resort. Pathways shall be provided for nonmotorized transportation, except motorized wheelchairs for the disabled shall be permitted. Bicycle racks, ski racks, etc., shall be provided at various destination points within the resort.

Section 2550.H (TOJ) and 2550.D.7 (Teton County): The Planned Resort master plan shall have a transportation element to ensure that resort development does not produce an amount of vehicular traffic that undermines the community's character, and endangers the public health, safety and welfare (i.e., noise, air quality and traffic impacts.) The Planned Resort master plan shall provide an optimum mix of automobile, transit, and pathway facilities within the resort, encourage coordination of all resort transportation facilities with the County-wide transportation system, promote design and management which encourages shifts from single-occupancy vehicle trips to multi-occupancy trips, or other transportation modes, and provide equitable cost sharing for facilities and services.

Section 2550.H.1 (TOJ) and 2550.D.7.a (Teton County): A traffic impact and access analysis is required. At a minimum, this analysis shall contain: Projections of external vehicle trips generated by the Planned Resort; Analysis of levels of service (LOS) impacts on roadway system segments and intersections serving the Planned Resort; Specification of any improvements needed to roadway system segments and intersections as a result of increased traffic from the Planned Resort. NOTE: This is a potential section for amendment. It shall also include how the proposed development will provide for multi-modal transportation opportunities, including bicycling, walking, START bus interface, consistent with the goals and objectives of the JHCP Master Plan.

Section 2550.H.2 (TOJ) and 2550.D.7.b (Teton County): The Planned Resort master plan shall include a Transportation Demand Management Plan that demonstrates how the travel behavior of resort visitors and employees will be managed to minimize the number of vehicle trips on the roadway network resulting from the resort development. Potential mechanisms for managing travel behavior may include shifting vehicular trips to walking, bicycling and other non-motorized means.

Section 2550.I (TOJ) and 2550.D.8 (Teton County): The master plan must have capital improvements element that identifies service providers, analyzes impacts, and proposes a capital improvements plan for facilities and services needed by the resort. Those facilities and services may include transportation (including Pathways). An impact analysis must be provided for these facilities, including capacity and demand.

Section 2560 (TOJ) and 2550.E (Teton County): As a finding for approval, the Planned Resort master plan must be consistent with the Comprehensive Plan, the purpose and intent of the planned resort regulations (which is to incorporate a mix of land uses, promote alternative modes of transportation, and provide a pedestrian-oriented community in order to alleviate traffic-related impacts, and contain a traffic impact analysis and transportation demand management plan that promotes multimodal forms of transportation consistent with the Comprehensive Plan.

Is the development a residential development for which an open space ratio is specified in Section 4330 (Teton County)?

Section 4330.A: Open space required in return for higher density shall be configured and located to protect, or provide space for public pathways as depicted in the Pathways in Jackson Hole, A Conceptual Plan.

Section 4330.C.2: Pathways are permitted in open space if they are deemed consistent with the areas of public benefit on the subject property.

Does the development contain streets, roads, Pathways, or other transportation facilities that are defined under Section 4700 (TOJ and Teton County)?

Section 4730.C.1 (TOJ): Adequate vehicular, bicycle, and pedestrian access shall be provided to all parcels.

Section 4730.F.1 (TOJ): Except for courts and cul-de-sacs, streets and pathways shall connect with those already dedicated in adjoining or adjacent subdivisions, or provide for future connections to adjoining unsubdivided tracts, or shall be a reasonable projection of streets in the nearest subdivided tracts.

Section 4730.G.1 (TOJ): Street right-of-way must be sufficient to accommodate vehicular traffic; bicycles; pedestrians; all public and other required utilities; snow storage; on-street parking where provided and in some cases, pathways, special storm-drainage facilities, or other special treatments such as medians or traffic channelization.

Table 4730.G (TOJ): Minimum right-of-way widths for streets, alleys, and pedestrian ways.

Section 4730.H.1.b (TOJ): Off-street pedestrian ways shall have minimum pavement width of five (5) feet.

Section 4730.H.1.d (TOJ): Bicycle ways shall have a minimum pavement width of eight (8) feet. Where bicycles and pedestrian paths are combined, the minimum width is ten (10) feet.

Section 4740.A (TOJ): All new development, redevelopment and infill development in the Lodging Overlay and Town Square Overlay zones shall provide a minimum setback of ten (10) feet from the back of curb to the closest point on the building. Such space shall be clear space unencumbered by doors, windows, bay windows or any other building projections except for required canopies. New development shall provide amenities in this space. Those amenities may include sidewalks, boardwalks, canopies, benches, bike racks, snow storage, landscaping, bus stops or any other reasonable and appropriate amenity.

Section 4740.E (Teton County): The Planning Director shall maintain an official map and supporting documents describing the location, functional class, right-of-way width and applicable standards of all existing and proposed roads, roadway corridors, equestrian trails, and pathways in the County. Any new location for a federal, state, county, or local road, scenic road, highway corridor, equestrian trail, or bikeway not indicated on the map as of the date of these regulations, except for proposed streets, equestrian trails, and pathways within approved subdivisions or other projects, or roads on federal or state lands, shall require adoption by the Board of County Commissioners pursuant to the requirements for amendments specified in these Land Development Regulations.

Section 4740.G.1 (Teton County): Road, bicycle, equestrian, and pedestrian facilities and circulation patterns shall be compatible with the Teton County Transportation Master Plan.

Section 4740.G.3 (Teton County): Road layout and design shall provide for the safety of motorists, bicyclists, pedestrians, equestrians, and residents of abutting properties.

Section 4740.G.8 (Teton County): Pedestrians, bicycle, equestrian, and vehicular traffic shall be separated where desirable for safety.

Section 4740.I (Teton County): Proposed subdivisions or other developments which will generate more than 1000 vehicle trips per day shall conduct a traffic impact study. The study will normally include estimates of bicycle and pedestrian movements.

Table 4740.K (Teton County): Minimum planning and design standards for roads, bike lanes pedestrian/equestrian trails, etc.

Does the subdivision or development require a Teton County development permit and accompanying easement dedication under Section 4750 (Teton County)?

Section 4750.A: Required rights-of-way for any arterial, major collector, or pathway shown on the Transportation Master Plan Map and supporting documents, insofar as they may lie on or adjacent to the site of the proposed subdivision or development, shall be dedicated to Teton County or to the State of Wyoming, as appropriate, for use as County or State roads, highways or Pathways, based on the amount of demand created by the proposed development.

Section 4750.B.3: Sidewalk or walkway easements may be required to be provided when pedestrian facilities are not within a dedicated street right-of-way. Minimum easement width shall be six (6) feet, though wider easements are encouraged to allow for landscaping, walkway curvature and an enhanced visual experience for pedestrians

Section 4750.B.4: Pathway easements shall be provided when such facilities, when required, are not proposed to be located within a dedicated road right-of-way. The minimum easement width shall be twelve (12) feet, though wider are encouraged. The amount of participation by the developer or landowner in the easement will be determined by the demand created by the proposed development.

Has a Development Plan application been submitted per Section 51200 (TOJ and Teton County)?

Section 51200.D.1.n (TOJ) and 51200.F.4.h.2 (Teton County): Development plan applications must show existing and proposed easements and rights-of-way for utilities, pathways, drainage, public or private access, or other purposes.

Section 51200.D.2.q (TOJ) and 51200.F.4.e.6 (Teton County): The final development plan application must be accompanied by a site plan depicting the location of off-site Pathways within 200 feet of the project, along with a depiction of the internal pathway system and proposed method of connection and/or access to the nearest off-site system.

Section 51200.D.2.d (TOJ) and 51200.F.4.i.3 (Teton County): The development plan must be accompanied by an analysis of street intersections, sight distance, road speed, and pedestrian movements as well as the number of trips generated by the proposed development and the capacity of

the existing road system serving the proposed development. The Planning Director may require a traffic impact study.

Is a Subdivision Improvements Agreement being submitted with a Final Plat in accordance with Section 6140 (TOJ and Teton County)?

Section 6140.A.1: The construction of roads, streets, and alleys, and sidewalks or Pathways in accordance with the adopted standards shall be the responsibility of the developer.

FUNDING SOURCES

Table 11 - Potential Pathways Funding Sources

Revenue Source	Example	Likely Annual Funds	Pros and Cons
Public Funding			
Annual appropriation from general funds.	Town of Jackson and Teton County budget cycle	Current levels do not support proposed system.	Most likely revenue source without special ballot, fundraising effort, etc.
			Communities are increasingly strapped for revenue and trails may fall to a lower priority position, leading to chronic underfunding.
Specific Purpose Excise Tax (SPET)	Current proposal for high school area pathways.		
SAFETEA-LU/Federal	 Safe Routes to Schools 		
Transportation Funding	Enhancements		
	 Public lands highways 		
	 Recreational trails 		
Creation of a special overlay district or county open space and trail program funded by	Jefferson County, CO has a ½ cent sales tax for a dedicated open space and trails program.	Check Teton County tax base to determine potential available funding and elasticity.	May facilitate "regionalization" of the program for more efficient services and equitable funding.
property, real estate transfer, gross receipts tax or other earmarked fund.	Eagle County, CO has a similar program for the "ECO Program" for transit and trails.	If tax base is adequate and politically accepted this would likely provide sustainable adequate funding.	Might be combined with an overall trails and opens space program or broader alternative transportation program.
		Verify Wyoming law on taxation as applicable	Would require voter approval and possible state enabling legislation. Conduct professional opinion investigation to determine political acceptance.
			Might require a larger system to assure broader population base acceptance.
Parking Revenues	Niagara Parkway system, Ontario,	May provide a portion of the	Potential sustainable source of funding.
Collections for meters and municipal lots is allocated to the trails, bike lane, and sidewalk programs.	Canada.	revenue.	Paid parking can be inconvenient and have other adverse impacts.
Correctional Labor and Community Service	Many communities and State of Wyoming may offer.	May provide a portion of the "revenue"	Limited reliability and quality of service. Requires coordination.
	Sections of the East Coast Greenway in CT and RI were built as a National Guard training exercise.		
Private Sector			
Homeowner Association	Ken Caryl Ranch, Colorado	Provides a portion of the	Potential sustainable source of funding.
Management (HOAs manage segments of trail that pass through their		revenue depending on mileage passing through developments.	May not be accepted by some developments.
boundaries.)			Trail must be open to the public to pass through development.

Revenue Source	Example	Likely Annual Funds	Pros and Cons
Business Associations Self assessed fees support the trail (and sidewalk) system.	Potential \$1 voluntary donation from bike / ski rental companies, lodgings and other businesses	Provides a portion of the revenue.	Potential sustainable source of funding. May not be accepted by some developments.
Utility Infrastructure Leases A right of way lease payment is assessed for locating private utilities in public rights of way, including trails.	Niagara River trail and the W&OD trail corridor in Virginia receive several hundred thousand dollars annually in lease revenue for telecommunications cable license fees.	Provides all or a portion of the revenue depending on extent of system.	Potential source of sustainable funding. May not be a broad enough market for such leases remaining in Teton County.
Health/Physical Activity	Robert Wood Johnson Active Living program	Potential support from health care sector	Obesity is a significant national issue.
Advertising Revenues Businesses sponsor a segment of the trail in return for tasteful sponsorship acknowledgement.	Tourism-related businesses could advertise on the Pathways Map	May provide a portion of the revenue depending on sales.	May not be a broad enough market for sufficient revenues. Requires sales, maintenance of signs, and coordination. Some may find advertising signs offensive.
Volunteerism such as an Adopt-a-Trail Program where individuals, business or organizations assist with trail maintenance.	Summit County, CO Friends of Pathways and JHCP currently support the Adopt-a- Pathway program.	Can help with litter pickup, patrol and spotting problems, some debris sweep-up, and vegetation management.	Builds community pride and "ownership" sense in the trail. Form of advertising for some businesses. Limited scope of services. Requires coordination.
Trail Concessions Could include equipment rentals, tours, pedi-cab rides, horseback rides, etc.	Local youth groups could operate refreshment stands along the trail. The Grand Canyon Greenway project includes a rental concession to be operated by a non-profit, which will in turn create a maintenance fund with a percent of the rental income.	May generate a portion of funds depending on the market.	Provides support services to trail users. May clutter and "commercialize" the trail experience. Requires Land Development regulation revision.
User Fees Trail users purchase a trail pass at dispensing machines or an annual pass for locals. Might also be associated with equipment rentals or sales. Could also include permit sales for events such as races and fun-rides.	lowa Heritage Trail System collects revenue from user fees. Colorado Springs has a \$4 tax on bicycle sales (26" or larger) that raises over \$100,000 annually for trail improvements. Cannon Falls, MN raises funds through a "Wheel Pass " program where users purchase a user permit providing funds for trails maintenance. Saratoga Mountain Bike Association (SMBA) in Saratoga, NY subsidizes trail ownership and operations on land leased from a timber company.	May provide a meaningful portion of the costs. Perhaps a private concessionaire operates collections and maintenance services.	Public may resist. May be difficult to administer and coordinate collections. May want to make it voluntary.

Revenue Source	Example	Likely Annual Funds	Pros and Cons
Philanthropic Annual fundraising events, memorial sponsorships, endowments.	Acadia National Park, where Friends of Acadia and private donors have worked to establish a \$5 million dollar "Acadia Trails Forever" endowment.	Could provide all or part of the needed revenue. For example a \$15,000,000 endowment could fund a \$500k annual program at an interest rate of 3.3%	Could be an ideal, sustainable resource. Could be difficult to raise the endowment within the existing fundraising mechanism.
	The Greenway Foundation in Denver, CO has raised several million for its endowment.		
	Yakima River Greenway in Washington has an endowment with a goal of \$10 Million by 2005. In 2002 after 4-5 years, they had raised \$2 Million.		
	Friends of Pathways produced a "Holiday Gift Catalogue" with trail amenities that could be donated as 'gifts.'		

PATHWAYS PROGRAM OPERATIONS BUDGET DATA

Source: JHCP Program Staff

Table 12 - JHCP Operations Budget, FY2001-FY2005

Jackson Hole Community Pathways Operations Budget										
Pathway Program Operations - Historica	l Budget I	nforma	ation							
Jurisdiction	FY2001 50/50 Budget Model	FY2002 Trails	FY2002 50/50 Budget Model	FY2003 Trails	FY2003 P&R Budget	FY2004 Trails	FY2004 50/50 Budget Model	FY2005 Trails	FY2005 50/50 Budget Model	
Total Budget (With Maintenance Added)	\$ 222,212		\$ 197,196		\$ 43,280		\$ 105,927		\$ 95,600	
	(Two FTE's)		P&R Overs	ight Fron	n FY02-FY0	3	(One FTE i	n ToJ)		
Operations & Administration*	\$ 222,212		\$ 197,196		\$ 43,280		\$ 105,927		\$ 95,600	
Annual Maintenance**	n/a		n/a		n/a		n/a		n/a	
Town Capital Maintenance										
County Capital Maintenance										
Pathways Total Capital Maintenance										
Town of Jackson Trail Mileage & Percentage	31.0%	4.0	31.0%	4.0	22.0%	4.8	25.0%	4.8	19.0%	
Actual % -Split Contribution Model	\$ 68,886		\$ 61,131		\$ 9,522		\$ 26,482		\$ 18,164	
70/30 % -Split Contribution Model	\$ 66,664		\$ 59,159		\$ 12,984		\$ 31,778		\$ 28,680	
50/50 Contribution	\$ 111,106		\$ 98,598		\$ 21,640		\$ 40,016		\$ 47,800	
					(TransCh i	n Admin)	(*No TransC	h Contrib	tribution from ToJ)	
Difference in Contributions Actual %	\$ 42,220		\$ 37,467		\$ 12,118		\$ 13,534		\$ 29,636	
Difference in Contributions 70/30 %	\$ 44,442		\$ 39,439		\$ 8,656		\$ 8,238		\$ 19,120	
Teton County Trail Mileage & Percentage	69.0%	8.8	69.0%	14.4	78.0%	14.4	75.0%	20.1	81.0%	
Actual % -Split Contribution Model			\$ 136,065		\$ 33,758		\$ 79,445		\$ 77,436	
70/30 % -Split Contribution Model	\$ 155,548		\$ 138,037		\$ 30,296		\$ 74,149		\$ 66,920	
50/50 Contribution	\$ 111,106		\$ 98,598		\$ 21,640		\$ 65,912		\$ 47,800	
			(Moose-Wilson	Trail - Eng	-					
Difference in Contributions Actual %	\$ (42,220)		\$ (37,467)		\$ (12,118)		\$ (13,533)		\$ (29,636)	
Difference in Contributions 70/30 %	\$ (44,442)		\$ (39,439)		\$ (8,656)		\$ (8,237)		\$ (19,120)	
Total Pathway Trail Mileage		12.8		18.4		19.2		24.9		

Table 13 - JHCP Operations Budget, FY2006-FY2010

Jackson Hole Community Pathways Operations Budget												
Pathway Program Operations - Future Budget Information												
Jurisdiction	Present versus History	FY2006 Future Trails	FY2006 %- Split Budget Model	FY2007 Future Trails	FY2007 %- Split Budget Model	FY2008 Future Trails	FY2008 %- Split Budget Model	FY2009 Future Trails	FY2009 %- Split Budget Model	FY2010 Future Trails	FY2010 %- Split Budget Model	Extension
Total Budget (With Maintenance Added)			\$ 163,180		\$ 182,920		\$ 214,840		\$ 236,250		\$ 246,250	\$ 1,139,040
				n TC - wi	th Engineerin	g Assista		pt Staff)				
Operations & Administration*			\$ 102,000		\$ 109,000		\$ 115,000		\$ 122,000		\$ 127,000	\$ 670,600
Annual Maintenance**			\$ 61,180		\$ 73,920		\$ 99,840		\$ 114,250		\$ 119,250	\$ 468,440
Town Capital Maintenance												
County Capital Maintenance												
Pathways Total Capital Maintenance												
			(** With Tran	sfer of M	Maintenance E	Budget fro	om P&R)					
Town of Jackson Trail Mileage & Percentage		4.8	18.0%	5.9	19.0%	5.9	14.0%	5.9	13.0%	5.9	12.0%	
Actual %-Split Contribution Model	\$ 184,184		\$ 29,372		\$ 34,755		\$ 30,078		\$ 30,713		\$ 29,550	\$ 172,631
70/30 % -Split Contribution Model	\$ 199,265		\$ 48,954		\$ 54,876		\$ 64,452		\$ 70,875		\$ 73,875	\$ 341,712
50/50 Contribution	\$ 319,160		\$ 81,590		\$ 91,460		\$ 107,420		\$ 118,125		\$ 123,125	\$ 569,520
Difference in Contributions Actual %	\$ 134,976		\$ 52,218		\$ 56,705		\$ 77,342		\$ 87,413		\$ 93,575	\$ 396,889
Difference in Contributions 70/30 %	\$ 119,896		\$ 32,636		\$ 36,584		\$ 42,968		\$ 47,250		\$ 49,250	\$ 227,808
Teton County Trail Mileage & Percentage		21.2	82.0%	22.8	81.0%	33.6	86.0%	39.8	87.0%	41.8	88.0%	
Actual %-Split Contribution Model	\$ 480,031		\$ 133,808		\$ 148,165		\$ 184,762		\$ 205,538		\$ 216,700	\$ 966,409
70/30 % -Split Contribution Model	\$ 464,951		\$ 114,226		\$ 128,044		\$ 150,388		\$ 165,375		\$ 172,375	\$ 797,328
50/50 Contribution	\$ 345,056		\$ 81,590		\$ 91,460		\$ 107,420		\$ 118,125		\$ 123,125	\$ 569,520
Difference in Contributions Actual %	\$ (134,975)		\$ (52,218)		\$ (56,705)		\$ (77,342)		\$ (87,413)		\$ (93,575)	\$ (396,889)
Difference in Contributions 70/30 %	\$ (119,895)		\$ (32,636)		\$ (36,584)		\$ (42,968)		\$ (47,250)		\$ (49,250)	\$ (227,808)
Total Pathway Trail Mileage	,	26.0		28.7		39.5		45.7		47.7		363%

COMPARABLE MAINTENANCE COSTS FOR OTHER **COMMUNITIES**

One way to determine a perspective on operations and maintenance costs is to look at comparable programs in other communities. A recent review of several jurisdictions nation-wide yielded the results shown in the table below. While these programs to not provide exactly the same the expenditure format as JCHP, this data may be helpful in understanding the scale of costs for these types of programs.²⁶

Table 14 - Comparable Maintenance Costs for Other Communities

Entity	Facilities	Acreage	Annual O&M Budget and Source
Jefferson County Open Space Golden, CO	Mostly natural open space with all- terrain trails, trailheads and minimal amenities. (450,000 residents in jurisdiction/2 million annual visits	51,000	\$ 6 million (1/2 cent sales tax)
South Suburban Parks and Recreation District Littleton, CO	Mix of Parks, paved and crusher fine trails (111 miles), open spaces. Metro Denver (160,000 residents in district)	3,200	\$5 million (property tax)
City of Albuquerque Open Space Program	Mostly natural open space (mountains, arroyos and river bottomlands with all-terrain trails, trailheads and minimal amenities— 450,000 residents in jurisdiction. Includes administration, resource management, law enforcement and visitor services	28,000	\$ 3.5 million (1/4 cent gross receipts tax)

²⁶ Source: Bob Searns, The Greenway Team, 2005.

SYSTEM VISION MAPS APPENDIX

5-Year County Pathways Vision

5-Year Town Pathways Vision