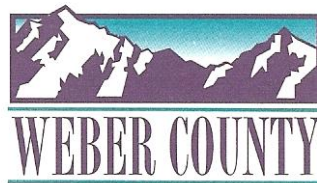




Weber County Cooperative Pathways Master Plan

WEBER COUNTY COOPERATIVE PATHWAYS MASTER PLAN

May 2010



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INTRODUCTION

BACKGROUND

Current pathway planning and development in Weber County is fragmented among municipalities, Weber Pathways, the County, and various agencies, such as Utah Department of Transportation (UDOT), Utah Transit Authority (UTA), Wasatch Front Regional Council, and United States Forest Service (USFS). In an effort to form a unified pathway master plan, and following approval from Weber County Commissioners and endorsement from the Weber Area Council of Governments (WACOG), Weber County planners and Weber Pathways¹ representatives began unified work to inventory existing pathways throughout Weber County. They gathered together representatives from the various jurisdictions and agencies to create the Weber Pathways Planning Committee.

PROCESS

In order to develop a county-wide pathway master plan, it was necessary to receive an endorsement and participation from all municipalities in Weber County. A committee of representatives from municipalities and several other government agencies, the Weber Pathways Planning Committee (WPPC), was formed by the end of May 2009. The WPPC included representatives from each of the 15 municipalities, plus representatives from the United States Forest Service (USFS), United States National Park Service (NPS), Utah Division of Wildlife Resources (UDWR), Utah Department of Transportation (UDOT), Wasatch Front Regional Council (WFRC), Utah Transit Authority (UTA), Weber County, and Weber Pathways. See [Appendix A](#) for participants.

The charge of the WPPC was to oversee the development of the various work products, be a working committee that was willing to collect data, attend committee meetings, and make recommendations to the Weber Area Council of Governments (WACOG). As previously noted, the project was co-chaired by Weber County planners and Weber Pathways representatives. This project has been undertaken in three phases:

- Inventory existing pathways; planning documents and maps from all 15 municipalities within the county were compiled.
- Draft a county-wide pathway master plan, including a model ordinance and an updated county pathway map showing existing and proposed future pathways.
- Endorsement by WACOG, and consideration by participating jurisdictions.

¹ Weber Pathways is a private, non-profit organization whose mission is to promote, plan and preserve trails and open space in and around Weber County, Utah. In addition to educational programs and resources like this master plan and accompanying map, the organization is involved in a variety of projects that will create new non-motorized public pathways for the benefit of generations to come. Weber Pathways works in partnership with Weber County and local municipal representatives, but is supported by private grants and donations.

WEBER COUNTY COOPERATIVE PATHWAYS MASTER PLAN

VISION

The long-range vision for pathway development in Northern Utah is to have a seamless network of pathways that connect cities and adjoining counties.

OBJECTIVES

- **Coordinate Pathway Planning and Development:** The main objective of the Weber County Cooperative Pathways Master Plan (Plan) is to coordinate pathway planning and development within the 15 municipalities and unincorporated areas in Weber County. The Plan compiles information about existing and proposed pathways from various jurisdictions. It identifies where pathways or systems within two or more municipalities/areas could or should be linked.
- **Identify UDOT Connections and Crossings:** The second objective of the Plan is to identify Utah Department of Transportation (UDOT) connections and crossings and provide data regarding pathway plans for UDOT transportation and construction planning.
- **Funding:** The third objective is to assist municipalities, the County and pathway advocacy groups in attaining funding for pathway development and understanding maintenance costs. Cost of pathway planning, development and maintenance should be included in capital improvement plans (CIPs) and annual budgets to the extent possible. This plan will also provide a basis for preparing applications to external funding sources, e.g., grant money from Recreation, Arts, Museums and Parks (RAMP) sales tax revenue.
- **Model Ordinance:** The master planning process may better equip municipalities and the County to proactively plan for future pathways as development proposals are submitted. To that end, a model pathway ordinance has been developed for consideration by municipalities.

EXISTING PATHWAY SYSTEMS

For the purposes of this master plan, pathways are loosely defined as all non-motorized routes ranging from less improved surface single-track to paved urban walkways and bike routes. A table and brief description of existing pathways are found in [Appendix B](#).

THE NORTHERN WASATCH FRONT PATHWAY SYSTEM

At the heart of the Wasatch Front pathway system lies the Centennial Trail Loop consisting of the Bonneville Shoreline Trail, Ogden River Parkway, and Weber River Parkway which, when joined together will form a 26-mile loop. Connecting pathways from surrounding municipalities

that provide access to any part of the Centennial Loop should receive consideration, but may be secondary to the completion of the main loop.

While no quantitative studies have been conducted on pathway use in the county, the Bonneville Shoreline Trail in the Ogden area is expected to receive some of the heaviest use of any pathway in the County. The Ogden River Parkway, classified as an “arterial urban pathway” for planning purposes, experiences some of the greatest pedestrian and bicycle traffic of all the urban pathways in the region. The recent connection of the Ogden River Parkway to the Weber River Parkway in Riverdale will increase the use of both these pathways. A key connecting pathway that feeds into the Centennial Loop Trail is the West Haven Trail.

Perhaps the most popular trail in the Ogden area, the Waterfall Canyon trail, attracts visitors from surrounding cities, counties and beyond. During peak holiday use, e.g., Memorial Day weekend, parked vehicles overflow from the 29th St. trailhead parking area in Ogden for one to two city blocks to the north and west.

NORTHERN WASATCH BACK

The east side of the Wasatch Mountains is known as the Wasatch Back, and, in Weber County, consists of the Ogden Valley with the surrounding hills and mountains. An Ogden Valley pathway master plan was prepared in 2002 and was adopted as part of the Ogden Valley General Plan in 2004. See www.ovpathways.org.

The pathways hub in the Ogden Valley includes the Eden Trail, Pineview West Trail, and Pineview Loop West. It is envisioned that the existing Pineview West Trail will soon be part of an entire loop around the reservoir. Though currently incomplete, it is planned that a pathway will continue north from the Eden Trail to connect to the North Fork Park system.

The Wheeler Creek Trail, used to access all the pathways east of Snowbasin, is quite possibly the second most heavily used pathway in the county, with the North and South Skyline Trails likely following at a close third. It should be noted that the Skyline Trail is considered by many to be the premier single track mountain bike ride in Northern Utah. Pathway maintenance and trailhead parking will likely become an increasing challenge for both the Skyline and Wheeler Creek Trails. Indeed, Forest Service officials are well aware of the parking shortage at the Wheeler Creek Trailhead at the top of Ogden Canyon, but expanded trailhead development has been impeded by exorbitant land values.

Pathways that connect to the Skyline Trail, Wheeler Creek and Snow Basin pathways are important access routes to more remote pathways in National Forest land. Given the growing popularity of these pathways, a connection between the Pineview West Trail, trailhead for the Skyline Trail South (a.k.a. Windsurfer Beach) parking area, and Wheeler Creek should be given priority. The greatest obstacle for establishment of this route is the safety concern of crossing the narrow roadway over Pineview Dam. Other existing pathways such as the Pioneer Trail in North Ogden are essential for connecting the urban areas to the mountains. The Pioneer Trail is an essential connection between Ogden Valley, the Skyline Trail and North Ogden pathways. The east end of the trail near Wolf Mountain ski resort is obscure due to private property issues, but signed to discourage motorized vehicle use. Wolf Mountain now has a network of mountain bike trails that are on private property that require an entry fee.

MISSING PATHWAY LINKS

A pathway connection through Ogden Canyon is considered by many to be the major missing link between main pathways on the Wasatch Front and the Ogden Valley. Similarly, a pathway in Weber Canyon is needed to make connections to the Morgan Valley from both Weber and Davis Counties. These two pathways are discussed in greater detail under Proposed Pathways.

BICYCLE ROUTES AND FACILITIES

Bicycles are used for recreation and transportation. There are many existing pathways and on-street bicycle facilities in Weber County and many proposed as shown on the Plan maps. There are four classifications of bicycle facilities, below.

Separate Facility (Class I)

A non-motorized facility, paved or unpaved, physically separated from motorized vehicular traffic by an open space or barrier. Also called Bicycle Path, Bike Trail, Non-motorized Trail, Multi-purpose Trail or some combination thereof.

Bike Lane (Class II)

A portion of a roadway that is designated by striping, signing and pavement markings for the preferential or exclusive use of bicyclists. Most often these are done in couplets, each one being one way and adjacent to the outside through travel lane.

Bike Route (Class III)

A segment of road designated with appropriate directional and informational signing and/or markers, but without clear boundary striping, signing and pavement markings for the preferential or exclusive use of bicyclists.

Bike Friendly (Class IV)

A roadway not designated by directional and informational markers, striping, signing nor pavement markings for the preferential or exclusive use of bicyclists, but containing appropriate bicycle-friendly design standards such as wide-curb lanes and bicycle safe drain grates.

THE PLAN

This section of the Plan provides brief descriptions of proposed pathways that are being considered throughout Weber County. Please note that some of the proposed routes are tentative and may not be feasible given current land ownership or issues of right of way. Particular attention is given to proposed pathways that create or facilitate county-wide inter-connections.

In cases where proposed pathways cross private property, it is essential to designate pathways as “proposed” in the planning process (during public meetings, in planning documents and maps) to respect private property rights. Designation of proposed pathways will help to insure pathway construction as easements and/or as land becomes available.

The model pathways ordinance ([Appendix D](#)) and progressive subdivision ordinances can be used to insure that planned pathways are included in the subdivision development approval processes. Plain City has already adopted a pathway plan as an element of the municipal general plan.

PROPOSED MAIN PATHWAYS AND CONNECTIONS

The following proposed pathways are not listed in order of prioritization, but there is some sense among planners that completion of the main backbone routes in the upper Ogden Valley, e.g., Pineview Loop, and along the Wasatch Front, e.g., Centennial Loop, should be given close attention. Similarly, connections between the Wasatch Back and Wasatch Front, e.g., Ogden Canyon, will be essential to establishing a complete pathway network in the County. Each main pathway or pathway segment, as well as important connecting routes are discussed with some mention of the key challenges that planners and builders will face. Additional features involving natural hazards, historical significance, aesthetics, wildlife habitat, etc. are also noted.

Continuation of the Bonneville Shoreline Trail should receive support given the scope of the trail’s north-south continuity and its heavy use along the Wasatch Front. We refer to the Bonneville Shoreline Trail (BST) south of Ogden Canyon as the BST South and north of Ogden Canyon as the BST North. As noted in the Introduction, two main loop pathways in the “lower valley” that incorporate the BST are envisioned. The first is the Centennial Loop which is close to completion, but still needs work along the Weber River toward the mouth of Weber Canyon. This loop is currently being connected to the BST South by way of the Uintah Loop and the BST Connector bike route along Skyline Drive to the Beus Canyon trailhead. The second is another 25-30 mile loop including the BST North, the Rail Trail in Plain City, and a proposed pathway along the Weber River west of I-15.

Bonneville Shoreline Trail South to Burch Creek Trail

This short segment of the BST will connect the Beus Canyon Trail and Trailhead to the Burch Creek Trail. The trail will leave Beus Creek at the first bridge where the BST enters Beus Canyon from the north (approximately ¼ mile upstream from the Beus Canyon Trailhead).

Bonneville Shoreline Trail from Burch Creek to Weber Canyon and BST Davis County

Continuation of the BST south from Burch Creek presents some significant challenges due to private property holdings that extend east to elevations well above the Bonneville Shoreline. The

slopes from Burch Creek to Weber Canyon are very steep and will require careful design and construction. Clearly, crossing above or below I-84 in Weber Canyon will be difficult, but will be necessary for a direct connection to the BST further south in Davis County (an indirect connection will be provided by the BST Connector bike route, Uintah Loop, and Weber River Parkway).

Weber River Parkway

Continuation of the Weber River Parkway from Riverdale through South Weber to Uintah and the mouth of Weber Canyon will be completed in phases. The section between Riverdale City and the Uintah Bridge will be constructed during 2010-2011. The section from the Uintah Bridge to near the mouth of Weber Canyon will actually be located mostly in South Weber City in Davis County. It will ultimately connect to the Bonneville Shoreline bicycle connector through Uintah and South Ogden.

Bonneville Shoreline Trail Ogden Canyon to Pioneer Trail (North Ogden Divide)

While much of the BST North has been completed both north and south of the North Ogden Divide Road, there is a short segment south of the Divide that is incomplete due to private property issues.

Cherry Way Trail

The Cherry Way Trail is a proposed loop pathway in North Ogden that will connect to most of the parks and schools within the city. The McGriff Trail is the northern part of the loop and is already complete. The Cherry Way Trail will serve as the hub to the rest of the area's pathways, making connections to the Bonneville Shoreline Trail, as well as the adjacent pathways in Pleasant View and Harrisville.

Rohmer Park Trail

The Rohmer Park Trail is a proposed loop pathway in Washington Terrace that will travel around Rohmer Park connecting the surrounding neighborhoods. The trail will connect playgrounds, sports fields, parks, and restrooms while overlooking Riverdale and southern Weber County. It will serve as a feature trail within the City for walkers, exercise, and bikes.

Ogden Canyon Pathway

Long considered a critical segment of the County pathway system, the proposed Ogden Canyon Pathway has met with concerns from private property owners in the canyon as well as the Pineview Water board (officially known as the Ogden River Water Users Association) which dictates use of the water line on the north side of the canyon as a possible pathway. Needless to say, the Ogden Canyon Pathway will remain a high priority for future pathway development as opportunities to attain easements or other arrangements arise.

Pineview West Trail and Skyline Trail connection to Wheeler Creek Trailhead

A continuation of the Pineview West Trail from the Pineview West Trailhead, a.k.a., "Windsurfer Beach," will be an important segment of the Pineview Loop Trail, and will provide a critical connection to the Wheeler Creek Trail. Creating a safe crossing of the Pineview Dam will be necessary.

West Davis-Weber Transportation (Legacy) Corridor

As study of the western Weber County transportation needs proceeds, Weber County, Hooper, West Haven, and Plain City must work closely with UDOT and WFRC officials to ensure that any extension north from the existing Legacy Parkway in Davis County includes pathways. New pathways should be available to use by pedestrians, cyclists and equestrians alike, and will create a vital connection to the Rail Trail and BST.

Weber River West Pathway

Extension of a pathway west of I-15 along the Weber River is another important connection between the Ogden River Parkway/Centennial Trail and the Rail Trail in Plain City. A pathway should be developed either in Marriott-Slaterville on the northeast side of the river, or in Weber County on the southwest side of the river.

Weber Canyon Trail

Although a utility easement exists on the south side of the Weber River in Weber Canyon (in Davis County), a pathway could be designed and constructed above the railroad on the north side of the canyon. This would create a vital link between the Morgan Valley and potential loop through the Ogden Valley and Ogden Canyon. Such a pathway would be a formidable undertaking. The terrain above the railroad is extremely steep and prone to landslides. A pathway might have to be so high that it would really be a mountain peak pathway, not a connection through the canyon.

Rail Trail to Bonneville Shoreline Trail North

A connection through southern Box Elder County is proposed between the Rail Trail in Plain City and the BST North.

Denver and Rio Grande Western (D&RGW) Rail Trail

The D&RGW Rail Trail will create a pathway through Roy and West Haven. It will be desirable to connect it to the Centennial Trail loop, perhaps by means of a bike route or bike lanes on Midland Drive. It will also be a connection between Weber County and Davis County communities, going south to connect to the Jordan River Parkway in Salt Lake County and Utah County.

PROPOSED TRAILHEADS

While many of the municipalities and the County have well established trailheads, few have restrooms equipped with toilets and drinking water fountains. Cities and Weber County should establish trailheads adjoining parks that already have adequate restroom and parking facilities, where possible. Restroom facilities and pathways should be ADA compliant. Trailheads should include adequate bicycle parking areas with racks. Table 1 (*next page*) shows locations where major trailheads are currently undeveloped or lacking adequate facilities.

Table 1. Proposed Trailheads and Restroom Facilities for Main Pathways

LOCATION	RECOMMENDED PARKING	RESTROOM RECOMMENDED
Marriott-Slaterville: Confluence Park, 1700 So.	30 stalls	Yes
Plain City: Rail Trail, 5100 West, Equestrian Park	20 stalls	Yes
Pleasant View: BST, 900 West	30 stalls	Yes
Uintah: Weber River Parkway, 6850 South	20 stalls	Yes
West Haven/Ogden: Midland Dr. & 1900 West	30 stalls	No
West Haven/Marriott-Slaterville: Weber River Parkway, 1200 South	20 stalls	Yes
Wolf Creek/Middle Fork Equestrian: Ogden Valley	30 stalls	Yes

UTAH DEPARTMENT OF TRANSPORTATION (UDOT) CROSSINGS

Pathway planners from the County, cities and advocacy groups need to maintain close communications with UDOT Planning and Pre-construction officials so that pathways can be added to projects during the concept phase and before the design of these projects have been completed. If pathways and trails are to be included in road projects, it is critical to include elements prior to any environmental work being done and before funding for these projects is allocated. Identification of UDOT connections and crossings, such as non-motorized bridges/underpasses to cross major roads and highways will be critical to the success of county-wide pathway development and safety. Table 2 shows UDOT highway or roadway project locations where highway construction plans, including possible connections or crossings, should be monitored closely to ensure pathway development. Some of the more critical crossings or connections occur where Interstate 15, Interstate 84, US Highway 89, and State Route 39 converge with pathways. In some instances, Union Pacific rail line crossings can also be achieved via UDOT connections or crossings.

The next phases of transportation planning by UDOT and WFRC are scheduled as follows: Phase 1, 2011-2020; Phase 2, 2021-2031; and Phase 3, 2031-2040. Currently no major capacity improvement projects are scheduled for Weber County in Phase 1. Phase 2 plans include widening of State Road (SR)-158, from SR-39 (Pineview Dam) to Elkridge (6.3 miles at cost of \$33 million). Close monitoring of the design of this route will be critical to continued development of the Pineview Reservoir Loop pathway, particularly where the road crosses Pineview Dam (as noted in Section 2.1). There are two very important projects scheduled for Phase 3, both are along SR-39. The first project is widening of the road in Ogden Canyon from the mouth of the canyon to the Pineview Dam (4.8 miles at a cost of \$34 million). An off road pathway up Ogden Canyon is emphasized in this Plan as the most desirable and likely scenario. But, if no pathways have been developed in the canyon prior to 2031 and plans for widening SR-39 go forward, there may be an opportunity to include a roadside pathway. The second project is widening of SR-39 from the Pineview Dam to the mouth of the South Fork of the Ogden River. Inclusion of a Class I bike route (physically separated from the roadway) would be justifiable given the popularity of this bike route.

Table 2. Critical UDOT Connections and Crossings

UDOT PROJECT LOCATION	UDOT PLANNING PHASE/DATE
I-84 and SR-89 interchange re-design (Specifically the southbound on-ramp)	Phase 2, 2021-2030
SR158, widening, west side of Pineview Reservoir	Phase 2, 2021-2030
SR 39, widening, Ogden Canyon	Phase 3, 2031-2040

More immediate projects include a pathway crossing at the intersection of I-84 and SR-89. This crossing forms an essential link in the Weber River Parkway near Uintah. Development of this crossing, along with a pedestrian bridge over the Weber River in Uintah, will enable the current BST Connector route along Skyline Drive to connect to the BST at the mouth of Weber Canyon and subsequently to the BST in Davis County. The SR-89 crossing at Skyline Drive for the BST/Uintah connector bike route is an area of concern even though the traffic light cycle and pedestrian crossing signals are adequate. If pathway use increases, some pedestrian crossing warning signage may be necessary on SR-89.

MODEL PATHWAYS ORDINANCE

The Plan provides a slightly revised version of the Ogden Valley Pathway Ordinance. See [Appendix C](#). Revisions to the ordinance are based on experience gained from its use by the Ogden Valley Planning Commission. In an effort to plan proactively, municipalities are encouraged to draft and adopt an ordinance similar to the model ordinance provided here. Note that the Ordinance includes pathway construction guidelines based on American Association of State Highway and Transportation Officials (AASHTO) standards.

MAP

For purposes of this planning document, two county-wide maps were created. The complex of on-street bicycle routes (Classes II & III) is shown as a separate map from all other pathways. However, the two maps need to be understood as one system of pathways and routes. Notations on each map refer to connections made by pathways or bicycle routes that are shown on the other map.

Digital maps of existing and proposed pathways can be viewed at the Weber County Planning Division Website. www.co.weber.ut.us/planning_commission/map. The map software is interactive, allowing for viewing of data layers separately or combined. Zooming in will allow for viewing of specific areas of interest in more detail. Separate printable files showing the detail of some areas have been created and are also available on the website.

Ongoing coordination and map data sharing will continue among agencies and the digital map will be updated from time to time.

BUILDING AND MAINTAINING PATHWAYS

PATHWAY CONSTRUCTION

PROCESS OF DEVELOPMENT

While the specific processes of pathway development may vary among jurisdictions, there is a general course of procedure that prevails. The figure on the right illustrates a process flow chart. It is based on experiences from the North Ogden Trail Committee and may be followed by most trail advocacy groups and governments.

LIMITATION OF LANDOWNER LIABILITY

Efforts to resolve issues of pathway land use conflict that extend beyond pathway user conflict have recently been instituted to ease concerns of litigation against public and private property owners where pathway users may be exposed to hazards such as open canals. Utah State legislators passed the Limitation of Landowner Liability - Public Recreation Act “to encourage public and private owners of land to make land and water areas available to the public for recreational purposes by limiting the owners’ liability toward persons entering the land and water areas for those purposes” (Utah Code Title 57, Chapter 14). Reference to the Act is made in the model pathways ordinance.

City and County officials are encouraged to contact canal companies directly to negotiate pathway development along canals where liability concerns have been particularly problematic. In most cases, canal company representatives or water district board members have been amenable to allowing recreational easements along closed canals or earthen canals. Concrete or other impermeable surfaced waterways can present a greater hazard that may require fencing or other means of protecting public pathway users.

PATHWAY COSTS

Estimating pathway development costs and identifying potential funding opportunities form the essential “next step” in bringing pathways to fruition. Generating adequate funding for well designed pathways and the preservation of pathway corridors is an ongoing necessity. Maintenance of pathways is another key factor of funding and budgetary planning. Proper pathway design standards result in long term cost savings; hence all pathways should be properly drained to prevent erosion and inundation. Paved pathways should have a

PATHWAY DEVELOPMENT PROCESS

Pathways Advocacy Group and/or Trails Committee propose(s) Pathway Corridor



Description of pathway corridors and pathways map are added to the General Plan after being approved by County Commission or City Council



For each new subdivision, the Planning Commission checks to see if it intersects any pathway corridors. If yes...



The Planning Commission and the Pathways Committee work with developers to accommodate pathways during development reviews



A member of the Pathways Committee signs off on the subdivision plan



The county or city’s Land Use Authority approves the subdivision.



Pathway is constructed by developer, government and/or volunteers

minimum of 3-inch deep asphalt paving with graded road base beneath. Another critical factor to account for when estimating pathways costs is the establishment of adequate pathway corridors. When calculating the costs of pathway development the purchase of property or easements can obviously vary greatly. Open space corridors for pathways should be a *minimum* of 100 feet in width, i.e., 50 feet on both sides of the pathway or pathway to provide privacy and promote urban forestry.

City and county officials must be committed to budgeting for pathway and trailhead maintenance, preferably at the time of pathway, trailhead or paved pathway construction. Funds generated from impact fees can be used to construct pathways, but cannot be used for maintenance. Itemized budgets should include items such as: maintenance equipment purchases, equipment maintenance, staff time (labor), and materials. Materials can range from asphalt for repaving to restroom supplies for facilities at trailheads. The more detailed the budget, the more likely city and county staff will have adequate time, equipment and materials for pathway maintenance. Each jurisdiction should be responsible for maintenance of their pathways. In the case of multi-jurisdictional pathways, inter-local agreements should be established for detailed cost sharing arrangements.

While local jurisdictions may rely on volunteer help, consistent maintenance can be a challenge. Currently, Weber Pathways and the Ogden Trails Network rely heavily upon volunteers for pathway construction and maintenance. Weber Pathways can assist the County and municipalities with organizing volunteers for pathway construction and maintenance. In most cases it is beneficial to have local governments sign maintenance agreements and partner with Weber Pathways. Another solution is to develop Adopt-A-Trail programs whereby local businesses and non-profit groups such as Boy Scouts/Girl Scouts of America commit to maintenance agreements. Some maintenance using inmate labor can be conducted by contacting the Weber County Sheriff's Department.

Though it is difficult to estimate pathway construction and maintenance costs due to rising costs of asphalt and other petroleum-based products, information from local contractors has revealed some points of reference. Maintenance costs for pathways will vary significantly given the quality of initial construction and the characteristics of the local terrain. Proper design standards result in long term cost savings. Unpaved pathway construction and maintenance costs also vary widely and will depend on the extent of volunteer labor. Maintenance costs of paved pathways vary widely depending on whether or not pathways are plowed during winter months. Weed control on all pathways is another highly variable cost. Occasionally special permits need to be obtained or special techniques might need to be used to minimize impacts to sensitive resources (stream channel alteration permits, wetland fill permits, etc.).

Estimates in Table 3 (*next page*) are based on the following: minimum 3-inch deep asphalt paving with 3 inches of road base, \$3.00/square foot (materials and labor); grading and road base only, \$1.00/square foot (materials and labor). Annual maintenance estimates in Table 3 are based on "typical" repairs, such as crack sealing, and debris clearance. Pathway planners may be interested to know that pathway "paving for bicycling and strollers" (as well as implied wheelchair accessibility) was ranked by survey respondents in Plain City (2007) as the most important improvement to pathways.

Table 3. Estimated Costs for Pathway and Facilities Construction and Maintenance (2009)*

PATHWAY TYPE OR FACILITY	CONSTRUCTION	ANNUAL MAINTENANCE
Unpaved pathway, minimum 4 foot width	\$5000/mile	\$500-\$1000
Moderately improved (road base), 10 foot width	\$50,000/mile	\$2000-\$2500
Paved pathway, minimum 10 foot width	\$150,000/mile	\$5000-\$7500
Trailhead paved parking lot, 20 stalls, 5000 sq. ft.	\$15,000-\$20,000	\$5000-\$7500
Trailhead facilities: sign kiosk and restroom	\$75,000-\$85,000	\$15,000

*Not including land acquisition and right-of-way costs

Trailheads should have adequate signage (see [Appendix D](#)) and parking. While parking lot sizes are recommended to be kept to a minimum to encourage alternative modes of transportation, ample paved areas should be maintained for vehicle passenger drop-off and emergency vehicle access. As a broad point of reference, it is recommended that trailhead parking areas not exceed 15,000 square feet, or a cost of \$50,000 with drainage. Locating where snow will be placed upon removal is important. Also, if salt is used in the parking lot to melt snow and then subsequently pushed off the lot into vegetation during the next snow event, the salts could harm vegetation on the edge of the parking lot; consider setting aside an area of no or minimal vegetation to accommodate snow storage. Low maintenance equipment is the key to long term savings in trailheads, e.g., trailhead entry kiosks for signs, maps, etc. should have quality roof coverings whenever possible with properly poured and drained concrete foundations or pads. Landscaping should be designed to conserve water and minimize motorized maintenance, i.e., xeriscaping, mulching, or leaving as much land as possible in a natural condition, is recommended over conventional grass lawn landscaping. Estimates in Table 3 are based on the following: roof structures and concrete pads \$10,000/kiosk area, bathroom facilities, including water hook-up \$75,000. Again, the survey conducted in Plain City (2007) revealed an important insight: survey respondents ranked restrooms as the most important park amenity.

AMERICANS WITH DISABILITIES ACT COMPLIANCE FOR PATHWAYS

While pathway construction guidelines are provided in the Model Pathways Ordinance of this master plan, municipal officials should assure also follow standards for the Americans with



Disabilities Act (ADA). Some basic guidelines for ADA compliance for most pathways and trailhead facilities; restrooms at trailheads that are paved should be equipped with wheelchair ramps and railings and all pathways and pathways should be cleared of branches and debris that can be hazardous, particularly to those with visual impairments. For more information see [Appendix E](#); an excerpt from an address given by Stuart MacDonald, Chair of the National Association of State Trail Administrators, including citations for additional sources of information.

FUNDING

Whenever possible, pathway planning and development should be coordinated between two or more municipalities, Weber County, Weber Pathways, and/or other pathway advocacy groups. For some funding sources cooperative applications are given preference. Larger scale projects requiring significant resources may benefit from UDOT and WFRC funding which taps into federal assistance monies.

Federal and State Funding Sources

Transportation Enhancement (TE) Program

The Transportation Enhancement (TE) program stems from the federal highway bill known as the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). The program is subject to reauthorization each fiscal year, and projects are reviewed by UDOT for approval. TE projects require a 20% matching source of funding from the local entity applying for 80% of the total project costs covered by the Federal Highway Administration.

Congestion Mitigation/Air Quality (CMAQ) Program – Commuter transportation

Federal CMAQ funds are available for not only mass transit projects, but also for “bicycle and pedestrian facilities.” Since Weber County has failed to meet National Ambient Air Quality standards, i.e., is classified as a “non-attainment area,” the County is eligible to receive CMAQ funding. For more information contact WFRC.

Safe Routes to School (SR2S) Program

In August 2005, federal legislation was passed authorizing states to make grants available for bicycle and pedestrian safety and traffic calming measures in the vicinity of public schools (excluding high schools). The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) purposes are:

- 1) to enable and encourage children, including those with disabilities, to walk and bicycle to school;
- 2) to make bicycling and walking to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age; and,
- 3) to facilitate the planning, development and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of schools.

SR2S projects should include the “5 Es”: education, engineering, enforcement, encouragement, and evaluation. In order to receive an SR2S UDOT grant, schools must have a Student Neighborhood Action Plan (SNAP) in place. Infrastructure projects are limited to \$150,000, while non-infrastructure projects are limited to \$75,000; no matching funds are required.

State of Utah Recreational Trails Program (RTP)

The Recreational Trails Program, administered by the Utah State Division of Parks and Recreation, provides funding for the development and maintenance of trails and trail related

facilities. Projects may include the development of trailheads and restroom facilities. For more information call (801)538-7220, or email parkcomment@utah.gov.

[*Safe Sidewalks Program*](#)

State funds are available for construction of new sidewalks adjacent to state routes where sidewalks do not currently exist and are not planned as part of reconstruction for the next 10 or more years. Funding by this program requires a 25% match by local a local government sponsor.

[*LeRay McAllister Critical Land Conservation Fund*](#)

The LeRay McAllister Critical Land Conservation Fund targets lands that are deemed important to the community such as agricultural lands, wildlife habitat, watershed protection, and other culturally or historically unique landscapes. Money from the Fund must be used to preserve or restore open lands and agricultural lands. Generally, active recreation areas are not critical lands, however land that meets the critical land definition may have or allow for pathways, particularly to provide access to public lands. Funding is typically available to: Utah counties, cities, towns, the Utah Department of Natural Resources, the Utah Department of Agriculture and Food, and charitable organizations that qualify as tax exempt under Section 501(c)(3) of the Internal Revenue Code. The LeRay McAllister Fund can only provide up to 50% of a project's total cost. For more information call (801) 538-1696 or email jbenett@utah.gov.

[*Weber County Recreation, Arts, Museums and Parks \(RAMP\)*](#)

RAMP funds are generated from a local sales- and use-tax of one-tenth of one percent (one cent for every \$10 purchase) to assist in financially supporting recreational facilities and cultural facilities and organizations in Weber County (approximately \$3 million annually). Although RAMP funds have been awarded for the development of pathways, including walking, biking, equestrian and cross-country trails, applicants are competing with a wide variety of projects that span from public art projects, to festivals, sporting events, museum displays, etc. The total amount of grant for any Major Project for any given year will not exceed a third of the RAMP tax collections for the preceding year. The minimum grant request for a Major Project should be for no less than \$200,000. Multiple year grants may be awarded provided they are within the RAMP Tax authorization period. Further details on eligibility, criteria for funding, and the application review process are available on the internet at www.co.weber.ut.us/ramp/index.htm

[*Private Foundations*](#)

Aside from local business sponsors, of which there are too many to list here, there are also numerous private foundations that accept applications for pathway funding. Weber Pathways and other advocacy groups can be contacted for further information.

[*Municipal Capital Improvement Funds and Impact Fees*](#)

Municipality officials are encouraged to develop a budget for pathways, trailheads and other pathway facilities as part of their capital improvement plans (CIPs). Some cities set aside money specifically for pathway development, while others allot a portion of their parks and recreation budget to pathways. It is increasingly common for city governments to charge developers impact

fees that are earmarked for pathways. It should be noted that impact fee expenditures are restricted by State Code 11-36-201 which specifies that fees cannot be used for “operation and maintenance of public facilities.” An analysis specific to the city must be conducted justifying any fee before its enactment, e.g., Weber County hired a consultant to do an analysis prior to establishing a pathway impact fee.

MAINTENANCE

County and municipal roadway budgets often include maintenance that can be extended to bike routes and trailhead parking areas. The removal of snow and rocks from the road, and street sweeping for removal of sand in the springtime should extend to most Class III bike routes. Paved pathways that are used for commuting such as the Ogden and Weber River Parkways (Class I bike routes) should be funded for winter maintenance as well. Ogden City regularly plows the Ogden River Parkway already. Trailheads receiving winter use should be cleared of snow, such as the parking area at the top of the North Ogden Divide Road. This will not only eliminate the hazard of winter recreationists parking on the roadside, but will provide a turn-around area for maintenance and emergency vehicles. Additional maintenance such as striping and re-striping of bike lanes should be incorporated into annual budgets for roadway maintenance.

SIGNAGE

TYPES

The following sign types were identified:

- The trailhead/access point signs provide information on a diverse set of information, e.g., current location, maps, pathway rules, distance, degree of difficulty, and allowed users, etc.
- Intersection signs are those placed along the pathway where two pathways intersect. Mileage to the next destination point or location, directions, and GPS coordinate information can be shown.
- Mile marker signs are challenging to install because it is difficult to establish a center point for all mile markers. However, having periodic signs at appropriate interval locations with GPS coordinates and distance information to points of interest could be displayed.
- Directional to street and/or trailheads.
- Regulatory (e.g., uses allowed/not allowed and dog waste pick up)
- Warning (e.g. crossing and hazards)
- Informational, point of interest (e.g., historical) and interpretative signage information.



SIGN DESIGN

It is important to establish standards for location, height, and materials, using uniform symbols and guidelines for content. There are standardized trail sign symbols that should be used when possible, and ordering standard signs in large quantities will lead to economies of scale. Signs should be located at trailheads, trail junctions, points of interest or danger, and places where the trail route may be unclear.

PATHWAY USES

Weber County pathways are dedicated to various users, including walking, biking, hiking, snow skiing, and equestrian. It is important to identify which pathways are open to which users. See [Appendix D](#).

JURISDICTION / INTER-JURISDICTIONAL SIGNS

It is recommended that standardized signage be used for inter-jurisdictional signs. Localized pathways should have the flexibility to have their own unique signs. There may be an economy of scale in using the same sign designs.

FLEXIBILITY WITH MATERIALS

There are a number of sign materials available. Signs should be selected on the basis of durability, sturdiness, materials, being vandal proof, visibility, and readability.

CONFLICTS AMONG PATHWAY USERS

Municipalities and community organizations are encouraged to promote education of vital safety concerns and pathway use etiquette, either through signage at trailheads and/or safety workshops. In most cases, there is standard signage that can be easily posted at minimal cost. Pathway safety concerns, pathway use etiquette, and signage guidelines are found in [Appendix D](#). The standard “yield triangle” sign indicating that bicyclists must yield to pedestrians, and both pedestrians and bicyclists must yield to equestrians should be used by all municipalities. Mountain bikers in particular must be educated to follow proper etiquette to allow continued pathway use. Local bike shops play a key role in educating cyclists.

As pathways become more heavily used by pedestrians, cyclists and horseback riders, it's inevitable that conflicts will arise. Jurisdictions are encouraged to anticipate pathway use conflicts and proactively plan for separate route designation where possible. In some instances, pathways may have a designation that prohibits use by cyclists or equestrians, but it is obviously impractical to have separate pathways for differing uses in all areas. One commonly used strategy is to have even/odd day alternation for different users, e.g., Wasatch Crest Trail in the Central Wasatch Mountains where cyclists can share pathways with hikers and runners every other day of the week. Fines and enforcement of regulations are often an unfortunate part of expanding pathway use. Some cities, such as Boulder, Colorado, reached a point of conflict where mountain bikers were effectively banned from nearly all pathways in the heavily used foothill pathway system.

IMPLEMENTING THE PLAN

The charge of the WPPC was to oversee the development of the various work products, be a working committee that was willing to collect data, attend committee meetings, and make recommendations to the Weber Area Council of Governments (WACOG). The Plan will be presented to WACOG for their input and recommendation.

It is recommended that the WPPC continue to act as a resource to assist jurisdictions in coordinating pathway planning and development within the 15 municipalities and unincorporated areas in Weber County. Elements of this master plan may be adopted into the jurisdictions General Plan under the Recreation or Transportation element. Using this Plan as a reference, jurisdictions are encouraged to develop more detailed individual pathway plans, maps and ordinances that will be used in evaluating future development proposals. The County, municipalities, Weber Pathways and other organizations will continue to work with UDOT officials to incorporate crossings and connections into official UDOT plans.

CONCLUSIONS AND FUTURE CONSIDERATIONS

The purpose of this Plan for pathway planning and development is to foster ongoing coordination among municipalities and the County. WACOG will play an important role by endorsing this master plan and supporting individual pathway projects. While municipal officials are encouraged to develop pathway and open space master plans, such as the Plain City Parks, Trails and Open Space Master Plan, they may also choose an approach of requiring these amenities as each subdivision is developed. We emphasize that the master planning approach can assist city officials in anticipating budgeting, construction, and planning of pathways before development occurs.

Master plans are an essential tool for proactive planning needed to avoid purely reactive planning. Experience in pathway planning has shown that infrastructure costs for trailheads, paved pathways and other amenities are significantly lower when such amenities are constructed during the development process rather than retroactively. The use of impact fees to fund pathways and other public “facilities” such as restrooms at trailheads is far more likely to succeed when a master plan is in place to guide the development process. As illustrated in Figure 7 of the previous section of this master plan, pathway and open space planning must be part of the subdivision or commercial development review process in order to plan proactively.

Continued revisions to the Pathways Ordinance will be necessary to assure continued pathway development. More to the point, municipal officials are encouraged to develop detailed pathway ordinances and pathway maps. Subdivision ordinances may need to be amended to include specific reference to pathway corridor easements, pathway construction, and maintenance. The Weber County Planning Division can assist municipal officials who are interested in enacting an ordinance and, or designing a process whereby the ordinance would be implemented. Updating of the Weber County Pathway Map will also be essential for continued long range planning and construction of pathways. Indeed, the same can be said for pathway corridor and open space preservation along future pathways. Pathways are only as attractive as the areas immediately surrounding the route.

Continued pathway planning and development requires not only wide spread political support, but greater financial backing. There is a clear need to conduct surveys or establish pathway registers to begin to quantify pathway use throughout the County. In order to prioritize pathway funding and construction, such data would be invaluable. Finally, it is recommended that the Weber Pathways Planning Committee that was formed to develop this master plan remain intact and continue to meet on an as-needed basis. Even if no new pathways are being developed, maintenance and its funding for existing pathways will require ongoing support and coordination. Much can be learned from those groups and cities which have been most successful in developing an effective and well maintained pathway system.

APPENDIX A: LIST OF WEBER PATHWAYS PLANNING COMMITTEE (WPCC) MEMBERS

City/Organization	Representative(s)
Davis County	Scott Hess
Farr West	Mike Lunt
Harrisville	Bill Morris Shanna Edwards
Hooper	Cindy Gooch
Huntsville	James McKay Alan Wheelwright
Marriott-Slaterville	Randy Phipps
North Ogden	Joel Grasmeyer Becca Godfrey
Ogden City	Josh Jones
Plain City	LaFray Kelly Beth Koford
Pleasant View	Bruce Talbot
Riverdale	Shawn Douglas Lynn Moulding
Roy	Jared Hall
South Ogden	Scott Darrington Wil DeHart Ken Jones
Utah Department of Transportation	Rex Harris Vic Saunders Bret Slater Sharon Briggs Evelyn Tuddenham

City/Organization	Representative(s)
Utah Division of Wildlife Resources	Pam Kramer
Uintah	Gary Laird
United States Forest Service	Rick Vallejos
United States National Park Service	Marcy DeMillion
Utah Transit Authority	Joe Olsen Devon Moore
Washington Terrace	Mark Christensen Nate Ormsby Dustin Robinson Tom Powell
Weber County	Robert Scott Nate Pierce Justin Morris
Weber Pathways	Mark Bedel Brian Dorsey Geoff Ellis Marcia Harris Helene Liebman
West Haven	Steve Anderson Dawnell Musselman
Wasatch Front Regional Council	Jory Johner Ben Wuthrich

APPENDIX B: EXISTING PATHWAY DESCRIPTIONS AND INFORMATION

Pathways

Every effort was made to ensure accuracy of the following pathway table information; however, we cannot guarantee the exact location, condition or current state of any pathway or bike route.

Name	Length	Elevation	Difficulty	Surface	Municipality or nearest community/landmark
Cutler Trail and Bicentennial Trail	2.8 miles, one way	5,800' to 8,100'	difficult	dirt	North Fork Park, Ogden Valley
North Fork Park Trail	2.5 miles, one way	5,440' to 5,800'	easy	gravel and asphalt	North Fork Park, Ogden Valley
Mule's Ear Trail	2.5 miles, one way		easy	dirt	North Fork Park, Ogden Valley
Mule's Shoe Trail	2.5 miles, one way		easy	dirt	North Fork Park, Ogden Valley
Ben Lomond Trail	7.6 miles, one way	5,760' to 9,712'	difficult	dirt	North Fork Park, Ogden Valley
North Skyline Trail	11.4 miles, one way	6,180' to 9,764'	difficult	dirt	North Ogden Canyon Road
Bonneville Shoreline Trail (Ben Lomond Section)	5.8 miles, one way	4,780' to 5,820'	moderate	dirt and gravel	North Ogden
McGriff Park Trail	3.2 miles, one way	4,710' to 4,720'	easy	paved and gravel	North Ogden
Pioneer Trail	4.3 miles, one way	4,760' to 6,180'	difficult	dirt	North Ogden/Liberty
Bonneville Shoreline Trail (Lewis Peak Section)	3.5 miles, one way	4,400' to 4,840'	moderate	dirt	Ogden
South Skyline Trail	9.5 miles, one way	4,920' to 8,100'	difficult	dirt	Pineview Reservoir, west side
Lewis Peak Trail	2.5 miles, one way	7,900' to 8,030'	difficult	dirt	North Ogden/Liberty
Eden Trail and Parson Trail	1.5 miles, one way	4,910' to 5,000'	easy	asphalt	Eden
Pineview West Trail	3.1 miles, one way	4,910' to 4,960'	easy	dirt and gravel	Pineview Reservoir, west side
North Arm Wildlife Trail	0.8 mile loop	4,910'	easy	boardwalk, soil, cement	Eden
Pineview Loop Trail (West Section)	1.3 miles	4,900' to 5,000'	easy	asphalt	Eden
Wolf Canyon Trail	3 miles, one way	6,020' to 7,600'	moderate	gravel and dirt	Eden
Powder Mountain Ski Area Trails	varies with route	6,900' to 8,890'	moderate	dirt	Eden
Flat Top And White Pine Basin Trails	4 miles, one way	8,000' to 8,890'	moderate	dirt	Eden
Geertsen Canyon Trail and Shupe Canyon Trail	6 miles, one way	5,040' to 7,840'	difficult	dirt	Eden
Power Line Trail	5 miles, total	5,200' to 5,800'	moderate	dirt	Huntsville
Middle Fork Trail	6 miles, one way	5,040' to 6,300'	moderate	dirt	Huntsville
Brown's Hole Trail	2.5 miles, one way	5,660' to 7,820'	difficult	dirt	Huntsville
Sunridge Vista Loop Trail	13.5 miles	6,190' to 8,220'	difficult	dirt and gravel	Eden
Wheatgrass Canyon and Bear Hollow Trails	3 miles, one way	5,700' to 6,800'	moderate	dirt	Causey Reservoir
Skin Toe Trail	one mile, one way	5,700'	easy	dirt	Causey Reservoir
Baldy Ridge Trail	7 miles, one way	5,700' to 7,728'	difficult	dirt	Causey Reservoir
Skull Crack Trail	2.4 miles, one way	5,700' to 6,040'	moderate	dirt	Causey Reservoir
Pineview Loop Trail (East Section)	1.5 miles, one way	4,900' to 4,920'	easy	asphalt and dirt	Huntsville
Winter's Grove Nature Trails	0.4 and 0.5 miles	4,900'	easy	gravel and asphalt	Huntsville

Old Trappers Loop Road	2 miles, one way	4,960' to 5,900'	moderate	gravel	Huntsville
Wheeler Creek Trail	1.8 miles, one way	4,840' to 5,480'	easy	gravel	Pineview Dam
East Fork Wheeler Creek Trail	2.5 miles, one way	5,480' to 6,320'	moderate	dirt	Pineview Dam/Snowbasin
Middle Fork Wheeler Creek Trail	3.3 miles, one way	5,480' to 6,320'	moderate	dirt	Pineview Dam/Snowbasin
Upper Wheeler Creek Trail	2.9 miles, one way	5,200' to 6,240'	moderate	dirt	Pineview Dam/Snowbasin
Ogden Canyon Overlook trail	1.6 miles, one way	6,240' to 6,872'	moderate	dirt	Snowbasin
Green Pond Trail	2.5 miles, one way	6,320' to 6,680'	easy	dirt	Snowbasin
Mt. Ogden Trail	4.5 miles, one way	6,560' to 9,572'	moderate	gravel and dirt	Snowbasin
Beus Canyon Trail	5.6 miles, one way	5,100' to 9,572'	difficult	dirt	Ogden
Burch Creek Trail	1 mile, one way	5,200' to 5,860'	moderate	dirt	Ogden
Weber State Parcourse	0.9 mile loop	4,800'	easy	wood chips, dirt	Ogden
Mt. Ogden Park Trail	2.5 mile loop	4,600' to 4,900'	easy	wood chips, dirt	Ogden
Bonneville Shoreline Trail (Mt. Ogden Section)	6.4 miles total	4,400' to 5,680'	moderate	dirt	Ogden
Waterfall Canyon Trail	1.2 miles	4,760' to 5,800'	difficult	dirt	Ogden
Malan's Peak Trail	2 miles	5,520' to 6,980'	difficult	dirt	Ogden
Taylor Canyon Trail	1.5 miles, one way	4,840' to 6,400'	moderate	dirt	Ogden
Hidden Valley Trail	1.4 miles, one way	5,080' to 6,760'	difficult	dirt	Ogden
Indian Trail	4.3 miles, one way	4,840' to 5,560'	moderate	dirt	Ogden
Cold Water Canyon Trail	1.3 miles, one way	4,620' to 4,650'	moderate	dirt	Ogden Canyon
Birdsong Trail	1 mile	4,420' to 4,650'	moderate	dirt	Ogden
Ogden River Parkway	4.4 miles, one way	4,300' to 4,400'	easy	asphalt	Ogden
21st st. Pond Trail	about a 1 mile loop	4,280'	easy	recycled asphalt	Ogden
West Haven Trail	2.2 miles in all	4,260'	easy	asphalt	West Haven
Centennial Trail (North Weber River Section)	1.5 mile, one way	4,300'	easy	asphalt, gravel	Ogden/West Haven
Riverdale Weber River Parkway	2.2 miles, one way	4,300'	easy	asphalt	Riverdale
Weber Pathways Rail Trail	10 miles, one way	4,210' to 4,230'	easy	gravel	Plain City
Vanleeuwen Park Trail	0.25 mile loop	4,540'	easy	concrete	Washington Terrace
Mountain View Park Pathway	0.5 miles, one way	4,260'	easy	asphalt	Farr West
Millennium Park Pathway	0.4 mile loop	4,310'	easy	asphalt	Harrisville
Independence Park Pathway	0.6 mile loop	4,300'	easy	asphalt	Harrisville

Bike Routes

Ogden City has the most extensive bike route system of any municipality in the County. Most trailheads along the western edge of the Wasatch Range in Ogden can be accessed by Class III bike routes. Main east-west arterial routes include 2nd St., 9th St., west end of 17th St., 22nd St., 24th St. viaduct on the west side of town (Class I but with a set of stairs on the eastern end of the route), 26th St., 28th to 29th St., and 36th St. Although 36th is a designated bike route, it has narrow shoulders, poor pavement conditions and heavy traffic volume. The Ogden River Parkway serves as the main east-west Class I route at a length of approximately 4.4 miles. Main north-south arterial routes include Fillmore Ave., Tyler Ave., Harrison Blvd. north of 9th St. (south of 9th St. is not a designated bike route due to very heavy, high speed traffic), Monroe Blvd. to Jackson Ave., Jefferson

Ave., Grant Ave., and a segment of Washington Blvd., which is a Class II bike route in the central business district. Where 17th St. intersects 1200 West there is a proposed bike route running north on 1200 West. This proposed route would provide an important connection between Harrisville, Farr West, Marriott-Slaterville, West Haven and the Ogden River Parkway, which is used by many cyclists and pedestrians.

In the southeast of Ogden, the “BST Connector” bike route has been recently established (autumn, 2009) to connect the BST with the Uintah Connector Trail. Use extreme caution when crossing both Combe Road and Highway 89 where the Connector route crosses each. It is recommended that Weber County officials establish pedestrian crossing signs and striping at the intersection of Combe Road and Regency Drive. An important proposed Class I bike route connecting Old Post Rd. to Wasatch Drive in South Ogden would provide an alternative to using Harrison Blvd. (very dangerous, no shoulder, 50 mph speed limit).

There are numerous proposed bike routes in North Ogden and cities to the west of Ogden, but few, if any have been designated as such with signs or striping on roadways. Similarly, to the east in Ogden Valley there are routes ridden by cyclists, but signage is still lacking. The Pineview Loop Bike Route and Middle Fork Bike Route make for a pleasant ride around the reservoir with few hills to climb. A portion of the loop on the north and east sides of the reservoir is a Class I route (paved pathway separate from the roadway) which extends into Eden as far as the Snowcrest Jr. H.S. The remainder of the loop is either on a roadway (Highway 39) without much of a shoulder and high speed traffic, or dirt, single track (Pineview West Trail). The latter should be ridden with caution due to sharp turns and heavy pedestrian use.

Other popular rides in the eastern part of the County include hill climbs and descents along the Old Snow Basin Road and Trappers Loop Bike Route (Highway 167). The two are joined together by the “new” Snowbasin Road (Highway 226) and Highway 39 to form a loop. There are two other rides that are frequented by road cyclists, the Monastery Bike Route loop and the Monte Cristo Bike Route (see map).

Winter Sports

In addition to its three downhill ski resorts, Weber County offers several fine locations for cross-country skiing. The Utah Nordic Alliance (TUNA) grooms the trails in North Fork Park, with over three miles of easy to moderate skiing. They ask for a \$5.00 donation per use or \$75.00 for a season pass to cover their maintenance costs (more information can be found at www.utahnordic.com). Snowbasin Ski Area grooms the trails in the old Maples Campground area and opens them to the public free of charge. A Nordic trail map is available at the Grizzly Center at Snowbasin.

Anderson Cove Campground on Highway 39 west of Huntsville is open for cross-country skiing in the winter. It is at a relatively low elevation, so the snow doesn’t last as long, but it offers some flat, easy skiing in midwinter. In a cold, snowy year, the Mount Ogden Golf Course is a good place for casual skiing, but a mild winter will typically leave it bare. Nordic ski equipment can be rented at the Grizzly Center at Snowbasin, Diamond Peak Mountain Sports in Eden, and the Weber State University Wilderness Recreation Center.

Good locations for snowshoeing include the Nordic ski areas mentioned above (please keep to the side so as not to mark up the groomed tracks), as well as the North and South Skyline Trails, Wolf Canyon, and Wheatgrass Canyon. Also, when the snow is deep enough, you might try the Pineview West Trail or any of the canyons of the Wasatch Front.

APPENDIX C: MODEL PATHWAYS ORDINANCE

I. Purpose and Intent.

This pathways ordinance was developed to promote, plan and protect non-motorized public pathways, and to maintain and enhance the local beauty, pastoral atmosphere, rural lifestyle, outdoor recreational opportunities and sense of community. The vision is to establish a network of pathways to enable residents, visitors and their children to travel in safety on foot, bicycle, horseback, skates, snowshoes or skis, to a wide variety of destinations throughout the community.

II. General Categories of Pathways.

Pathways shall be designated for non-motorized use only except as used for law enforcement officers and other authorized personnel in the course of their duties. There are two general categories of pathways:

- A. A community-wide pathway network as shown on the Master Pathways Map.
- B. Pathways to connect individual neighborhoods or subdivisions to the network.

III. Locating Pathways.

Wherever possible, pathways shall be located in corridors that have been or will be preserved as natural or green space, thus creating a “greenway” and not a standard sidewalk or alley. The Master Pathways Map is adopted as a guide, and is not intended to define the exact route of every pathway.

Each Pathway, as shown on the Master Pathways Map, as well as other pathways which may be proposed in the future, shall be constructed or designated for public use in one or a combination of the following locations:

- A. On currently existing public rights-of-way.
- B. On rights-of-way or easement corridors acquired from willing landowners, who may grant or sell a portion of their property, an easement, or a license for use.
- C. As sidewalks or side paths (see IV.A.3) developed as part of a subdivision and providing access to the pathway network.
- D. As part of a greenway, as described above.

IV. Pathway Types and Development Standards.

Pathways will be used by a wide variety of non-motorized user groups; therefore multiple-use pathways can often provide the greatest benefit to the most users. In some cases, a pathway suitable for one user group may be unsuitable for another, due to inherent conditions such as surface or location.

A. Pathway types:

1. Unpaved Trails. Typically located in parks or undeveloped areas, these pathways are suitable for equestrians, hikers, walkers, joggers, and mountain bikes. They shall be a minimum of four (4) feet in width, except in the back country, where they shall conform to USDA Forest Service standard trail specifications for desired and expected user types. Unpaved trails shall be constructed of native material or surfaced with crushed rock or similar material when necessary to prevent erosion or mud conditions. Whenever possible, where unpaved trails parallel a roadway, the trails shall be separated from the roadway by a barrier or by a swath of open space or landscaping at least ten (10) feet wide (see Figure 1).

2. Bike Paths. Also called “shared use paths” or “Class I Bikeways,” these pathways are suitable for walkers, joggers, skaters, and others, as well as children and casual bicyclists. Bike Paths shall be paved with asphalt, concrete, or a compacted surface such as roto-mill or crushed rock and, whenever possible, shall be separated from roadways by a barrier or by a swath of open space or landscaping at least ten (10) feet wide. Certain trails may be designated as unpaved trails with the agreement/expectation that they will later be converted to bike paths as funds become available. Bike paths shall be a minimum ten (10) feet in width and designed to American

Association of State Highway Transportation Officials (AASHTO) standards for shared use paths, as shown in Figure 2.

Bollards or gates may be placed at the entrance to a bike path in order to prevent unauthorized use by motor vehicles. Bollards, when used, shall be placed a minimum of five (5) feet apart, with one bollard on the centerline of the bike path in order to show two-way traffic directions. Approved signs shall be installed to designate the purpose and use of the bike path.

3. Side Paths. Side paths are designed to run alongside a roadway and are intended primarily for pedestrian use. Side paths shall be paved with concrete, asphalt, road base or crushed rock, with a minimum of five (5) foot width, and located a minimum of ten (10) feet from the roadway, where feasible. The ten (10) foot open space shall preserve the naturally occurring vegetation or shall be landscaped with grass or other plants. See Figures 3 and 4.

4. Shared Roadways. Shared roadways are minor or dead-end streets, typically local roads, loop roads and cul-de-sacs which are no more than 800 feet in length and serve no more than 14 dwelling units, where it is safe to walk or bike in the roadway, with no requirement for a separate pathway. Shared roadways are not appropriate for highways, areas of high motor vehicle speeds or commercial areas.

5. Bike Lanes. Bike lanes are roadway lanes which shall be striped, marked and signed for the use of bicycles and are also known as “Class II Bikeways” designed to AASHTO standards, with a Bike Lane on each side of the roadway. Roads with an actual or expected average daily traffic count of 1,000 or more shall, when undergoing reconstruction or alteration over ½ mile or more, be constructed with bike lanes of a minimum five (5) feet in width, as shown in Figure 5. Where terrain precludes a minimum five (5) foot width, highway shoulders shall be widened as much as practical.

The design of grates for storm water catch basins is also critical to bicycle safety on all roadways. Grates with parallel bars pose a special danger to bicyclists, whose tires can easily slip between the bars. Other types of grates have been designed that effectively carry away storm water and are also safe for bicycles. A “bicycle-safe” grate such as that shown in Figure 6 shall be specified.

Because of safety concerns, side paths and sidewalks shall not be designated as bikeways.

B. Development

Pathways shall be required in all subdivisions, although some pathways may be of the shared roadway type described in IV.A.4. Minor subdivisions and individual parcel owners shall be required to provide pathway easements, and shall be encouraged to provide road base surface for pathways. The Planning Commission shall consider the Master Pathways Map and determine whether a pathway corridor and/or trailhead should be set aside; and what the exact route and width of the corridor should be, and/or dimensions of trailhead areas should be. Land set aside in this manner shall count toward the provision of open space for clustering and other requirements. Density bonuses may be used to encourage developers to provide pathways and trailheads.

Planning of pathways that are part of, or provide connections to, the broader pathway network shall be required during subdivision approval processes. Subdivision ordinances that make note of “improvements” pertaining to pathways shall be coordinated with the county-wide pathway general plan.

A proposed local pathway system that is not shown on the Master Pathways Map, but serves a particular development and is designed to tie into the general pathway network, shall also be considered by the Planning Commission for acceptance.

Trailheads shall be located so as to minimize impact on the local community and complement the rural setting, while maintaining access to the general public.

Unpaved trails may be used to link a development to Forest Service or other recreational land. Analysis shall be made by the developer during the approval process as to which pathway types are

most appropriate and their location, with emphasis on safety, aesthetics and design that is tailored to the local topography and conditions.

C. Signage and Facilities

Standard and consistent signs shall be used to designate trail heads, pathway uses, directional information, educational information and historical information along the pathways.

Vehicle and bicycle parking, restrooms, drinking water, trail information and hitching posts shall be provided at the direction of the Planning Commission at the time of review and approval process, as not all facilities will be necessary and/or required. Restroom facilities and paved pathways should be equipped with wheelchair ramps and railings that meet new requirements as part of the Americans with Disabilities Act (ADA).

Roadway crossing shall be accomplished by means of a signed and “zebra” striped crosswalk for most effective vehicular visibility. Tunnels or bridges may be constructed under/over high-traffic roads with recommendation from the Planning Commission. Tunnels shall conform to AASHTO standards.

D. Utilities

Any digging and filling of utility trenches on or along a pathway by utility, construction and excavation companies shall require restoration of the pathway to its original condition or better.

Utility lines running parallel to the pathway shall be installed under the trail bed in order to minimize site disturbance. Laterals and lines perpendicular to the pathway shall be located to minimize site disturbance and removal of significant vegetation. Physical obstructions shall be located away from the pathway and access points such as manhole covers shall be located flush with the pathway surface to avoid hazards. A financial guaranty may be required to ensure pathway restoration.

If a utility line of any significant distance is proposed to be trenched, the Planning Commission shall determine whether or not the utility route could reasonably be used for a pathway as described in this Ordinance, the General Plan or the Master Pathways Map. If it is determined that the utility easement would be a desirable pathway, the utility company shall, in their restoration of the contours, restore to a level surface and grade which would be usable as a pathway.

E. Maintenance

Prior to construction of a pathway, the entity to be responsible for maintenance shall sign a maintenance agreement to be approved by this municipality’s attorney and governing body. Privately owned pathways, such as one in a gated community, shall be the sole responsibility of the Homeowner’s Association. Maintenance of a pathway on privately owned land over which a public easement is granted shall be determined by agreement between this municipality and the landowner. In cases where the landowner does not take the lead initiative in establishing a maintenance agreement, this municipality shall present shared maintenance options.

Volunteers from trail-advocacy organizations shall monitor the pathway system to report necessary maintenance issues. In addition, volunteer efforts, by groups such as the Boy Scouts and various trail users, may be used for simple maintenance tasks. An adopt-a-trail program may be initiated.

F. Environmentally Sensitive Areas

Impacts of pathways on wildlife can be positive or negative and shall be determined by the Planning Commission during the review and approval process. In order to minimize negative effects on critical habitat, the following shall be considered:

1. Pathways on public land in critical winter range shall be closed seasonally during such dates as recommended by the DWR. Locked gates, with signage explaining the importance of the habitat and the reason for the closure, shall be installed at the trail heads or other appropriate locations.

2. Any pathway near a river or stream shall be constructed so as not to adversely affect the water quality or riparian vegetation of the stream or to impair the natural processes of the stream, such as spring flooding.

3. When any pathway is planned for a designated wetland area, the Corps of Engineers shall be contacted for a 404 Permit or for information regarding building a boardwalk above the wetland such that the wetland will not be filled. This would negate the need for a 404 permit.

4. Pathways shall not be routed through the middle of large undisturbed areas of natural vegetation, but shall be located on the edge of such areas or in places already disturbed by human activities.

5. Pathways shall not be routed continuously along stream banks, depriving wildlife of important undisturbed habitat, but shall provide a reasonable number of access points to the stream, so that the public will not be tempted to create unauthorized or "social" trails to reach the water.

6. Where appropriate, pathways shall be used to improve habitat through the consolidation of many "social" trails into one well-designed pathway. The "social" trails shall be revegetated with species that are native or beneficial to wildlife.

7. The applicable leash laws shall be strictly enforced.

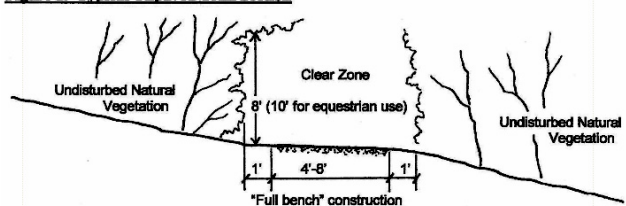
V. Landowner Relations.

Respect for private property rights is an essential aspect of the Pathways program. As shown on the Master Pathways Map, the scenarios under which pathways are to be constructed or designated for public use invite the cooperation of private property owners and the expression of their opinions and concerns. Furthermore, whenever a pathway is constructed along a pre-existing corridor formerly used for a different purpose, such as a canal or a power line, any pre-existing rights held by adjacent landowners concerning drainage, ditch maintenance, crossing and access, and other matters will continue to be honored.

Trespassing and liability are of concern to property owners adjacent to trails. While trespassing from pathways, just as trespassing from roadways, cannot be absolutely prevented, signs shall be posted at all trail heads reminding users to respect private property by staying on the trail. Access shall not be allowed or provided from a pathway onto private property without the permission of the landowner. Landowners adjacent to a pathway may, and are encouraged to create their own access paths to connect to the pathway.

The question of liability cannot be solved by this ordinance; however, it should be emphasized that the potential liability incurred by property adjacent to a pathway is no greater than that experienced adjacent to a roadway. Furthermore, the State of Utah has adopted a Limitation of Landowner Liability Public Recreation Act (Section 57-14-1 et seq.). This act specifically protects landowners who allow the public onto their property free of charge for recreational purposes.

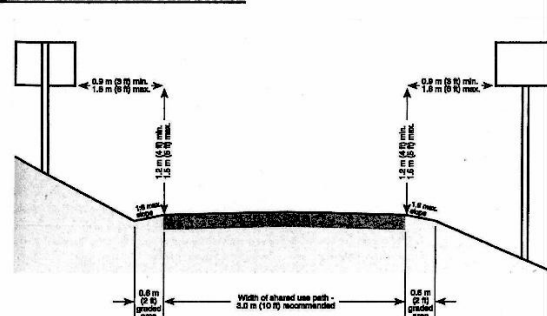
Figure 1. Typical Unpaved Trail Section



*Must be at least 10' wide if planned for later conversion to a bike path. May be less than 4' wide in the back country, but must conform to USDA Forest Service standard trail specifications for desired and expected user types.

Surfacing, when used, shall be 1"-minus crushed rock, shall consist of no less than 50% clay, and shall be compacted to "hard" condition. Drainage shall be by means of rolling dips rather than waterbars.

Figure 2. Standard Bike Path Section



Asphalt paving shall be no less than 3" in thickness, over a sub-base of at least 6" of compacted road base or equivalent.

Adapted from AASHTO, 1999, *Guide for the Development of Bicycle Facilities*, p. 35

Diagram illustrating the cross-section of a road with various widths and features:

- R.O.W WIDTH AS IN CURRENT COUNTY STDS. 60' SHOWN** (Total Right-of-Way Width)
- SHOULDER WIDTH 4' SHOWN**
- SIDE PATH**
- SURFACE COURSE WIDTH** (Indicated by a bracket)
- Dimensions (from left to right):**
 - 1' (Side Path)
 - 5' (Surface Course)
 - 10' (Surface Course)
 - 4' (Surface Course)
 - 4' (Surface Course)
 - 6' (Surface Course)
 - 18' (Surface Course)
- Storm Drain** (Indicated by a circle with a cross)
- Sanitary Sewer** (Indicated by a circle with a cross)
- 10'** (Distance between Storm Drain and Sanitary Sewer)

The diagram illustrates a survey monument (SM) located at the intersection of two streets. The streets are labeled "CROSSWALK" and "SIDE PATH". The monument is represented by a circle with a dot in the center. The monument is located on the "SIDE PATH" street, between the "CROSSWALK" and the "EDGE OF BITUMINOUS SURFACE COURSE". The "EDGE OF BITUMINOUS SURFACE COURSE" is indicated by a dashed line. The "PROPERTY LINE" is also shown. The diagram includes various symbols for surveying, such as arrows, circles, and lines, and text labels for "CROSSWALK", "SIDE PATH", "SURVEY MON.", "EDGE OF BITUMINOUS SURFACE COURSE", and "PROPERTY LINE". A note in the bottom left corner states: "SIDE PATH MAY BE ON NORTH OR SOUTH, EAST OR WEST SIDE OF ROADWAY TO SUIT LOCAL CONDITIONS".

Diagram illustrating the layout of a 34' wide surface course, divided into lanes and marked with pavement markings. The total width is 34'.

The layout includes the following lanes and dimensions:

- BIKE LANE** (5' wide)
- STRIPE** (5' wide)
- TRAVEL LANE** (12' wide)
- CENTER STRIPE** (5' wide)
- TRAVEL LANE** (12' wide)
- STRIPE** (5' wide)
- BIKE LANE** (5' wide)

Pavement markings are shown for the Bike Lanes and Travel Lanes, including a bicycle symbol and a straight-ahead arrow.

Legend: $\square = 0.1 \text{ m} \times 0.1 \text{ m}$ (4 in x 4 in)

[illegible]

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APPENDIX D: PATHWAY SAFETY, ETIQUETTE, REGULATION AND SIGNAGE GUIDELINES

Note: The philosophy of the Weber Pathways Trails Advisory Group (TAG) is to provide guidelines only; no enforcement. People are encouraged and empowered to make positive decisions for the love of the trails, with the idea of making each other's trail experience a happy one!

For example, proper dog etiquette and even clinics should be encouraged. Enforcement will only create increased tension on trails, and dog owners will not be as cooperative to comply with guidelines if they are forced to comply with laws.

Pathway Use Etiquette, Regulation and Enforcement

1) Bicyclists must yield to hikers and horses, and hikers must yield to horses (see triangular yield sign on next page).

2) Please clean up after your pets and keep them on a leash. Leash laws and pet waste management neglect should be enforced with citations and fines, particularly in riparian areas and watersheds. Fines typically run from \$50 to \$100.

3) Leave no trace! Please help keep our pathways free of litter. Fines for littering in parks should extend to pathways and open space. Again, typical fines run from \$50 to \$100 or more.

4) Please stay on the pathways! Cutting across switchbacks causes unnecessary erosion and maintenance problems. Note: during pathway planning and construction, use natural obstructions to prevent short-cuts.

5) When encountering horses, greet the riders and talk to them. If you surprise a horse from outside their view, it may think you are a wild animal and try to bolt, but if you speak, it will often recognize you as a human and calm down.

6) Do not trespass or camp in restricted areas. Respect private property owners' rights by asking permission to cross their land. Around Pineview Reservoir and up the South Fork of the Ogden River, camping is allowed only on approved U.S. Forest Service sites and campgrounds. There are no restrictions on camping on other National Forest lands, but fire restrictions may be posted in certain seasons.

7) Respect wildlife closures. Citations can be administered to violators.

Equestrians:

1) Please wait until pathways are dry before setting out on them. Hooves can badly damage a muddy pathway for months and even years to come.

2) When tying horses to graze, keep them away from water sources and do not damage trees.

3) Clean up manure and hay at trailheads and scatter manure so that it will decompose faster.

Mountain Bikers:

1) Mountain bikers MUST be aware that as congestion on pathways continues to increase, following proper etiquette is essential to allow continued access to pathways.

2) Downhill riders MUST yield to uphill riders as well as to other pathway users. Control your speed, so that you can stop when necessary, and be cautious at blind corners. Use a bicycle bell.

3) Call out "Passing on your left (or right)," when overtaking someone else.

4) Avoid muddy pathways. The ruts you create ruin the pathway surface and make it less safe.

Road Bikers:

1) Always ride on the right side of the road and obey ALL traffic laws. Some of the bike routes in Weber County have narrow shoulders, speeding cars, or both. Some motorists may not yet understand that bicyclists have a legal right to use the roads and may harass you or try to harm you. Record license plate numbers and report any such encounters to the proper authorities.

2) Always wear a helmet. Know your skill level and be very careful around traffic.

Pathway Safety

1) Always bring plenty of water or a filter for drinking stream water, as any stream may be infested by the giardia parasite. Annual high temperatures can lead to dehydration while exercising outdoors.

2) Always bring extra clothing for bad weather. Temperatures are generally cooler at higher altitudes, where the weather can change quite rapidly at any time of the year. Even a clear day can suddenly turn stormy on the mountain peaks. To keep warm, wear or bring along wool or synthetic clothing, plus a waterproof outer layer and hat, when the weather threatens to be cold or rainy.

3) Avoid lightning by keeping an eye on developing storms and seeking shelter in lower areas and away from tall, lone trees.

4) Carry first aid and other supplies on extended hikes, and always let someone know where you're going and when you plan to be back.

5) Stay on the pathway, and keep aware of your surroundings. Rattlesnakes can be found in most parts of the county and are active during the warmer months. Mountain lions, bears, and even moose have also been known to pose a danger to humans in Northern Utah. Read the warning signs posted at certain trailheads, and stay away from these animals if you see them.

Pathway Sign Guidelines

Pathway signs at trailheads may include far more information than simple pathway signs at junctions or other locations where there is no established trailhead. Types of information printed on pathway signs may include the following:

- Name of trail or pathway
- Destination of pathway, e.g., to 29th St. Trailhead
- Restrictions on use and, or pathway closure dates, e.g., closures for wildlife protection
- Pathway hazards, e.g., sharp turns, falling rock, stairs, etc.
- Pathway safety/etiquette (see figure below from International Mountain Bicycling Association)

Trailhead signage may include maps and additional information such as:

- Length of pathway
- Start and finish elevations
- Difficulty rating of pathway (difficult, moderate, or easy)

Trailhead kiosks with a small roof structure offer clear trailhead landmark designation, a place to retreat from precipitation and some protection of postings from weathering. The following guidelines have been established by the Ogden Trail Network group and should be adopted where possible.

- Use nationally and locally accepted pathway symbols and logos, e.g., hiker symbol, biker symbol, Bonneville Shoreline Trail logo. The USFS has standard symbols for off-road vehicle restrictions, etc.

- Use standard sign post and sign logos for the entire pathway system where possible, particularly where the same pathway crosses municipal or county boundaries, e.g., Ogden area pathways use a heavy wooden totem design. City logos may be added where municipal boundaries change.
- Trail maps should use USGS topographic map or aerial photo backgrounds with standard symbols, scale, and cardinal directions (i.e., north should be at top of map). If possible, print maps using waterproof, UV-proof ink on Tyvek, then cover with Plexiglass or Lexan (not as soft as plexiglass and cuts better than plexiglass).

The size, height and location of signs all require careful consideration:

- On-street signs must follow the Manual of Uniform Traffic Control Devices (MUTCD) guidelines, e.g., bike route signs are green with white symbols and lettering. Location of signs from corners and height of signs are strictly regulated and should conform to MUTCD standards.
- Size and height of signs may vary slightly depending on location. A rule of thumb is to keep signs just below line of sight, e.g., 4 to 5 feet high, but do not obstruct view of hazards such as pathway or roadway crossings, sharp corners, etc.

APPENDIX E: AMERICANS WITH DISABILITIES ACT INFORMATION

The Americans with Disabilities Act (ADA) requires us to make trails accessible, but doesn't specify how. New regulations being finalized will, however, affect all of us who plan and design trails. The final report of the Regulatory Negotiation Committee on Accessibility Guidelines for Outdoor Developed Areas includes soon to be proposed ADA Accessibility Guidelines (ADAAG) for trails, outdoor recreational access routes, beach access routes, and picnic and camping facilities. Currently the report is undergoing a regulatory assessment by the Access Board, an independent federal agency responsible for developing minimum accessibility guidelines under the ADA. The following questions and answers cover the highlights of the trail guidelines:

First, what exactly is a trail according to proposed ADA accessibility guidelines? A trail is "a route that is designed, designated, or constructed for recreational pedestrian use or provided as a pedestrian alternative to vehicular routes within a transportation system."

What kinds of trails are subject to the proposed ADA accessibility guidelines? The accessibility guidelines apply to those trails which are designed and constructed for pedestrian use. These guidelines are not applicable to trails primarily designed and constructed for recreational use by equestrians, mountain bicyclists, snowmobile users, or off-highway vehicle users, even if pedestrians may occasionally use the same trails. However, a multi-use trail specifically designed and designated for hiking and bicycling would be considered a pedestrian trail.

Does that mean an urban bikeway is a "pedestrian trail"? Accessibility guidelines apply to trails used as non-motorized transportation facilities for bicyclists and skaters as well as pedestrians. However, bicyclists and skaters have design needs which exceed the minimum guidelines for trails. In some cases, the AASHTO Guide (1999) may require a greater level of accessibility than the ADA trail guidelines. The appendix of the Access Board report compares the AASHTO guide with the ADA trail guidelines.

Will we have to bring existing trails up to ADA standards? The proposed guidelines apply only to areas of newly designed or newly constructed and altered portions of existing trails. However, for entities covered by Title II of the ADA, "program accessibility," may require accessibility to be provided on existing trails. "Program accessibility" generally means that the major elements in a recreation program need to be accessible. Clearly, though, trails involve an "experience" that is more complex than typical park facilities.

Must we improve accessibility when trail maintenance is done? The proposed guidelines state that "Routine or periodic maintenance or repair of existing trails or trail segments does not trigger the accessibility guidelines." Examples include removal of debris, reshaping trail beds, erosion control, etc.

Does an accessible trail have to be paved? What about handrails and other edge protection? Paving is not required, as long as the surface is "firm and stable." While handrails and edge protection are not required, they may be provided and should meet appropriate standards.

What about new trails that are nowhere near a road or an accessible trailhead? The proposed guidelines apply only to trails that "connect to an accessible trail" or "designated trailhead."

So what is an accessible trail?

Under the proposed guidelines, an accessible trail would meet these minimum technical provisions:

- Clear tread width: 36" minimum
- Tread Obstacles: 2" high maximum (up to 3" high where running and cross slopes are 5% or less) [i.e., avoid the use of railroad tie steps and other treads where ever possible]
- Cross Slope: 5% max.
- Running slope (trail grade) meets one or more of the following:
 - 5% or less for any distance.
 - Up to 8.33% for 200' max. Resting intervals no more than 200' apart.
 - Up to 10% for 30' max. Resting intervals 30'.
 - Up to 12.5% for 10' max. Resting intervals 10'.
- No more than 30% of the total trail length may exceed a running slope of 8.33%.
- Passing Space: provided at least every 1000' where trail width is less than 60"
- Signs: shall be provided indicating the length of the accessible trail segment.

What if building a trail to an accessible standard just isn't logical, or desirable, or even possible? While the proposed accessibility guidelines address the special circumstances where designers and operators may not be able to achieve accessibility, they are encouraged to always provide access to the greatest extent possible. Departures from specific accessibility guidelines are permitted for any portion of the trail where compliance would:

1. cause substantial harm to cultural, historic, religious, or significant natural features or characteristics;
2. substantially alter the nature of the setting or the purpose;
3. require construction methods or materials that are prohibited by Federal, State, or local regulations or statutes;
4. not be feasible due to terrain or the prevailing construction practices.

For detailed information on accessible trails, the new ADA regulations, and how they apply to specific situations, see the American Trails website: www.AmericanTrails.org. Click on the "Resources & Library" icon, then click on "Accessible Trails." The final report of the Regulatory Negotiation Committee on Accessibility Guidelines for Outdoor Developed Areas proposes ADA Accessibility Guidelines (ADAAG) for trails, outdoor recreational access routes, beach access routes, and picnic and camping facilities is available at: www.access-board.gov/PUBS/outdoor-rec-rpt.htm.

The AASHTO Guide for the Development of Bicycle Facilities is the primary guidebook for facilities built with transportation funds. The Guide (available for \$30 from AASHTO at 202-624-5800, 800-231-3475, or www.aashto.org/bookstore/a bs.html) generally provides a greater level of accessibility than the ADA trail guidelines (except running slope).