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Executive Summary

The Cache County-wide Trail and Parkway Master Plan responds to public demand for a network of pathways that connect neighborhoods to parks, schools, natural areas, commercial areas, and other desired destinations. As new development continues at a rapid pace, preserving a remnant of Cache Valley’s renowned beauty and quality of life in growth areas is of high importance. With progressive planning strategies, communities can guide development to preserve river corridors, access to public lands, and other strategic open space areas that would enhance a trails system and create regional parkways for future generations.

This plan provides two key components, including 1. An online mapping resource showing existing and proposed trails, and 2. a compendium of important historical background, legal framework, urban design strategies, and other educational resources to support local communities in trail and parkway education and implementation. With many questions, ideas and concerns raised by the public, this document is intended to provide answers and technical support to community planners and trail advocates.

Although the emphasis of this plan is on non-motorized trails, designated motorized trails are documented, with the possibility of adding additional motorized routes in the future. The plan will also be enhanced in the near future to include a bike routes plan that will also serve as the Bike/Pedestrian plan for the Cache Metropolitan Planning Organization. The bike routes plan will show roads best suited for branding as bikeways, and show the relationship to walking trails that also accommodate cycling.

Evidence for public desire for trails and parkways is seen in recent projects throughout the county. Smithfield City’s Heritage Park Trail and Logan City’s Logan River Golf Course Trail are successful examples of urban trails built as part of a broader future community trail network. The 2003 adoption of the Cache County RAPZ tax (Restaurants, Arts, Parks and Zoo) has contributed to recent trail projects at the Elk Ridge Park (North Logan City), Lions Park (Hyde Park City), Wellsville Dam Recreation Area (Wellsville City), and the Bonneville Shoreline Trail highway underpass at First Dam Park (Logan City). RAPZ funding has also been awarded to support planned projects such as the Providence Canyon trail to Von’s Park, and the Logan Boulevard Parkway Trail.

The objectives of this trail and parkway master plan are: 1) To guide trails, open space and development in a coordinated manner that creates planned recreation, open space, and alternative transportation opportunities, and 2) To improve air quality by promoting walkable development near trails and transit.

The following goals and supporting strategies should be adopted by each community to successfully implement this master plan:

Goal 1. Adopt the County-wide Trail and Parkway Master Plan – Adoption should occur as a general plan amendment, general plan update, or resolution of support. Updates should be provided to the County for trail master plan amendments as required. Zoning ordinances and development codes should be amended to encourage trail and parkway corridors in each community.

Goal 2. Educate the general public, elected officials, stake holders, and tourists – through
the development of a County-wide interactive website, and a tourism brochure map.

**Goal 3: Educate developers, land owners, utility companies and public land agencies of potential trail and parkway corridors, including unincorporated rural subdivisions along canal or rail corridors.** Zoning overlays such as planned unit development codes, cluster development or transferable development rights should be considered to encourage trail corridor and parkway preservation with minimal public expense.

**Goal 4. Coordinate trail and parkway efforts between communities and public land agencies** - by identifying projects suitable for various funding sources, and by notifying the County-wide Trails committee of intent to apply for funding. The County will support local jurisdiction representatives or committees that represent trail and recreation interests with trail and parkway county-wide plan updates, mapping, ordinance development, trail design, and other planning technical resources.

**Goal 5: Obtain funding to implement and maintain a county-wide trail and parkway system** – from federal, state, local, private, in-kind sources. An adopted trails plan will attract matching funds to leverage local funding and volunteer labor matches. Priority should be given to projects near rapidly growing areas.

**Goal 6: Increase walking and cycling trips to improve regional air quality** – by encouraging walkable development near transit stops and trails. Walkable development includes connected streets and sidewalks (no dead ends for pedestrians), a mix of uses (residential and commercial) in a more compact pattern. Communities could encourage more transit and trail trips, and comply with Utah State Code 10-9a-403 by encouraging moderate income and affordable housing neighborhoods near areas that provide transit, trail, and bikeway facilities.

This plan features county-wide trail system maps for each community and surrounding sub-region in the county. The maps are based on existing or planned trail systems of each community, public land agency, or private utility company in our region. Sensitive lands are shown on the map that might be considered for preservation as part of a parkway system.

Also provided in this plan are educational resources designed to help recreation committees and planning commissions integrate trail and parkway planning into their community general plan, zoning, and development approval processes. Topics covered include the following:

- Public feedback from a preliminary 2006 public input process
- Cache County’s 2004 Recreation Master Plan findings of public parkway demand
- An historic overview of the county’s travel routes and utility corridors that may provide future trail opportunities.
- An outline of potential parkway benefits, including public health benefits, enhanced property values, reduced automobile dependency and improved air quality, and enhanced quality of life for economic development competitiveness.
- An inventory of implementation strategies for local governments, including development guidelines for preserving strategic open space and trail corridors.
- Legal considerations for trails planning and design, such as liability, public right-of-way determination, designated motorized vehicle routes, and affordable housing (as it relates to walkable development and maximizing trail and transit use for improved air quality).
- Appendix of typical trail cross section illustrations and a table of trail funding sources.
Introduction: Trail Corridor and Strategic Open Space Opportunities

Communities in Cache County are at an important crossroads for planning the future of recreation, open space, and quality of life in our region. Cache County’s diverse landscape provides beautiful surroundings and attractive destinations that appeal to community residents and attract visitors to experience a variety of outdoor and cultural activities. As new development expands the footprint of urban development, important trail corridors, open space areas, or access to public lands and water ways could be lost without a coordinated plan in place. New development will also generate more traffic, and potentially discourage cycling for commuting or recreation.

Growth will in part be attracted to our region because of the quality of life that is currently enjoyed. With access to surrounding public forest lands, views of scenic farmland, wildlife along valley rivers and marshes, and stunning mountain backdrops, new residents will continue to desire recreational opportunities that complement our region’s unique setting.

The County’s annual growth rate has remained strong for several decades at 2.5% - which is nearly twice the national average. In 2004, the County’s population surpassed 100,000, spurring a recent wave of business and retail investments. This accelerated activity suggests that Cache County is a regional anchor for economic development, and will continue to attract new businesses, jobs and residents. The County’s 2005 population of 102,500 is expected to double in less than 30 years, and the workforce population of nearly 60,000 will likely double in 25 years.\(^1\)

The Need for Accessible Recreational and Natural Open Space

In 2003, over 47 square miles of land had been developed since the County’s first settlements took place in 1856. Applying the same per capita rate of developed land, the developed acres for the year 2030 would be 79 square miles for a residential population of 184,000 and a workforce population of 119,000. This projection of land development represents only 7% of the County’s 1,165 square mile area, and 17% of the County’s 2003 private and municipal land area (including farmland area of 383 square miles).\(^2\)

Over 478 square miles, or 42% of Cache County’s area is Federal and State owned lands that will mostly remain undeveloped. Roughly 676 square miles, or 58% is private land and municipal land that includes local city or county public right-of-ways, parks, & other public property. Additionally, there are private farmland and ranchlands protected under conservation easement (including farmland owned and operated by Utah State University). Recently added to Cache County’s public land supply in 2005 was the 604 acre Murray Farm acquisition by the U.S. Forest Service that will provide public access to the Wellsville Mountain
Wilderness area and help to facilitate the future Bonneville Shoreline Trail.

Despite the County’s large undeveloped open space areas, Cache County residents need convenient access to trails, parks and natural areas within walking or biking distance from their neighborhoods. Also needed are safe walking and biking routes to schools, shopping and work. Research documented in the 2004 County Parks and Recreation Plan revealed public desire for a region-wide trails network that provides access to recreational open space areas, and that links communities together (see Section 2). The importance of working towards this goal is especially critical as growth continues to encroach on mountain benches and river corridors near our communities.

View of Providence Canyon from the valley floor.

This plan encourages communities to work towards a regional trails system that links neighborhoods and business districts to recreation opportunities as well as day to day destinations. The plan outlines strategies for preserving strategic open space areas within our growing communities that would compliment a trails system and enhance the overall recreational experience. Also featured are methods for preserving access to adjacent public lands, creating pedestrian or bike recreation opportunities, and encourage non-automobile travel to access recreational sites.

**Trail Planning and Implementation in Cache County**

Trail efforts are well underway as evidenced by previous city trail plans from Richmond, Smithfield, North Logan, Logan, River Heights, Providence, Nibley, Hyrum, and Mendon. Additional trail plans have emerged as part of this County-wide effort for the cities of Hyde Park, Millville, and Wellsville. Trail and recreation committees are active in Smithfield, North Logan, Logan, Millville, Hyrum, Wellsville and Mendon.

A portion of the Cache County RAPZ (Restaurant, Arts, Parks, and Zoos) tax has been allocated to trail and related park projects since the sales tax increase was adopted in 2003. The projects, including funding for this master plan, are summarized below.

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Previous or current efforts to build projects and related implementation efforts include the following:

- Smithfield City’s Heritage Park Trail (from Mack Park through downtown to Forester Acres Recreation Complex).
- Smithfield easement acquisitions through development agreements for future canal trails
- Wellsville City’s current Wellsville Dam trail and park complex effort
- The Murray Farm acquisition by the U.S. Forest Service to create public access to the future Bonneville Shoreline Trail and Wellsville Mountain wilderness area.
- Providence City’s coordination with new developers for the Bonneville Shoreline Trail
- Providence City’s effort to implement a trail from Von’s Park to Providence Canyon.
- Logan Golf Course Trail and other street side trails.
Logan City’s awarding of State transportation enhancement funds for the Logan Boulevard Trail (supported by the Cache County Trails Coordinator and County RAPZ Tax funding).

Cache County and Logan City’s joint planning effort for a Logan Canyon pipeline trail (and highway underpass) from 1st Dam to Stoke’s Nature Center.

Logan and North Logan City’s implementation of the 2-mile Bonneville Shoreline Trail Segment from Logan Canyon to Green Canyon.

North Logan City’s acquisition of property near Green Canyon to support the Bonneville Shoreline Trail (BST).

North Logan City’s efforts to coordinate future BST trail and canal trails with new development.

Nibley City’s acquisition of Blacksmith Fork River Park land.

New Growth can Generate Trails and Open Space

Through the adoption of fair and thoughtful development approval guidelines, new growth can be a catalyst to create planned trail easements and important open space amenities (See Section 5.3). Without a plan, each new development presents a lost opportunity to create recreational amenities and access to the natural beauty in our region. Trail and open space amenities can be achieved in a manner that respects private property rights and allows land owners to maximize profit on the sale of their land.

County-wide Focus

This plan creates an inter-jurisdictional framework for guiding growth and development to accommodate public demand for trails and strategic open space. Built through the input of participating communities, it represents a county-wide cooperative venture rather than a top-down mandate from the county. By incorporating the plans of each community or agency into a single plan, regional perspective is gained and a greater number of county citizens are served more efficiently.

The plan serves as a reference to help communities work towards the projects that are most important to their jurisdiction, while helping to build a region-wide trail and parkway network. Implementing this plan will require consistent efforts over the coming years, including a watchful eye on annual funding sources and future land development trends and opportunities.

County Trails Coordinator

In October 2005, the new position of Cache County Trails Coordinator was created to involve each community in this planning effort and to provide assistance to coordinate and implement the plan as it applies to each local area. The Cache County-wide Trails Coordinator provides technical support to communities, including assistance with funding requests, land planning, trails design, open space preservation, and other related tasks. Each community may also request GIS mapping to support trails and parkway planning and design, or request updates to the plan as new goals are identified.

Implementation Goals

Trail movements throughout the state of Utah and nation-wide show that consistent efforts to build a trail and parkway system are required to achieve long term success. With few exceptions, the entire length of a new trail corridor is rarely built at the end of a single planning and design effort. A continual dialog between cities, landowners, developers, utility companies and public land agencies in reference to this plan will lead to gradual implementation of the plan. New ideas will likely be generated, requiring occasional updates as planning ideas evolve in the future.
Recognizing the unpredictable nature and timing of trails and parkway implementation, this plan does not prescribe a specific timeframe for completion of projects on the ground. Rather, the objectives of this plan are:

1) To guide trails, open space and development in a coordinated manner that creates identified recreation, open space, and alternative transportation opportunities, and

2) To improve air quality by promoting walkable development near trails and transit.

These objectives can be accomplished by adopting plan elements through adjustment of general plans, zoning ordinances, and development guidelines as appropriate for each community. This coordinated effort will become known to developers and land owners as they consider future development proposals. Also, communities may use the resources in this plan to involve the public through educational outreach, recreation committee involvement, and other volunteer programs.

The following goals and strategies should be achieved on a voluntary basis by participating jurisdictions within one year of the adoption of this plan. They should also be reapplied each following year to continue work towards successful long-term plan implementation. Relevant implementation strategies in this master plan are also referenced with each goal:

Goal 1. Adopt the Trail and Parkway Master Plan (or specific elements of the plan).

Strategy 1.1 - Adopt the plan as an amendment to the community’s existing general plan, or general plan update, or

Strategy 1.2 - Pass a resolution of support for the plan

Strategy 1.3 - Provide updates to the County for plan amendments as required.

Strategy 1.4 – Amend zoning ordinances and development codes to encourage trail and parkway corridors in each community (Section 5.1).

Strategy 1.5 – Obtain Right-of-Way Corridors through purchase or development agreement as occasion permits.

Goal 2. Educate the general public, elected officials, stake holders, and tourists about existing and future trail and recreational open space opportunities in Cache County.

Strategy 2.1 – Develop a County-wide Trails and Parkway interactive website that highlights public benefits, and existing and future locations of trails and recreational areas.

Strategy 2.2 – Print and distribute a trails and parkway brochure map and use information in conjunction with the Cache County Tourism office.

Goal 3: Educate land owners, developers, utility companies and public land agencies of county-wide trail and parkway opportunities.

Strategy 3.1 - Notify developers of potential trail corridors passing through proposed development areas, including unincorporated rural subdivisions along canal or rail corridors (Section 1.1 Maps).

Strategy 3.2 - Adopt zoning overlays such as cluster development or transferable development rights to create incentives for trail corridor and parkway preservation (Section 5.1).

Strategy 3.3 - Engage in regular trails and parkway dialog with utility companies and public land agencies, including canal companies, Union Pacific Railroad, Rocky Mountain Power, U.S. Forest Service, Utah Division of Wildlife Resources.
Strategy 3.4 - Each community should identify strategic sensitive lands that should be preserved from development, including flood plains, strategic canyon and bench areas, riparian and water edges, and wetlands (Section 5.1). Coordination between communities and the county should take place as part of a County-wide Open Space Study and Planning Committee, as recommended in the County Recreation master plan.

Goal 4. Engage in continued trail and parkway coordination between communities and public land agencies.

Strategy 4.1 - Identify projects suitable for various funding sources as described in Section 5.4, and notify the County-wide Trails committee of opportunity to apply for funding.

Strategy 4.2 - The Cache County Trails Committee will provide regular updates to the Cache County Regional Council.

Strategy 4.3 - The County will support local jurisdiction representatives or committees that represent trail and recreation interests in that community. Support will include county-wide plan updates, mapping, ordinance development, development reviews, and other planning technical resources.

Goal 5: Obtain funding from federal, state, county, municipal, and private funding sources to implement and maintain a county-wide trail and parkway system.

Strategy 5.1 – Adopt the County-wide Trails and Parkway Master Plan as a tool to attract funding (See Strategies 1.1 to 1.5).

Strategy 5.2 – Identify and commit volunteer and local match sources (Section 5.2).

Strategy 5.3 – Prioritize funding opportunities through inter-local coordination with the County Trails Coordinator. Priority should be given to projects near rapidly growing areas.

Strategy 5.4 – Build quality projects to generate support for trail and parkways in the region.

Goal 6: Increase walking and cycling trips to reduce traffic congestion, increase quality of life, improve regional air quality, and protect public health.

Strategy 6.1 - Recognizing the connection between community walkability and the potential to increase transit and trail use, amend general plans and development codes to encourage trail use and transit ridership through transit oriented development, improved street connectivity, and other walkable development strategies (Section 5.2).

Strategy 6.2 – To encourage maximum use of trails, transit, and bikeways, encourage communities to comply with Utah State Code 10-9a-403 by designing moderate income and affordable housing neighborhoods near areas that provide transit, trail, and bikeway facilities (See Sections 5.2 and 6.5).
1. County-Wide Trails and Parkway Plan

This section describes the general framework of the County-wide Trail and Parkway Master Plan, and provides basic definitions of various trail corridors and surface types.

The online mapping resource includes a compendium of existing and proposed trails, including County and City plans, as well as U.S. Forest Service, the Utah Division of Wildlife Resources, and Rocky Mountain Power.

Also displayed in the mapping are parks and recreational facilities, and sensitive land features that may be considered for preservation as part of a parkway trail system. These sensitive areas include FEMA floodplain areas (generally along river and stream corridors), and wetlands. Additional sensitive lands information should be researched for these areas, as well as mountain bench areas with regards to flooding, debris flow, erosion, water source and ground water recharge protection, wildlife habitat protection, urban/wildfire fringe, visual quality, and other considerations.

**Cache County Facilitation**

As facilitators of the county-wide trails plan, the county could sponsor trail segments that extend beyond the jurisdiction of local governments or federal/state public land agencies. Such trails might include unincorporated portions of the Bonneville Shoreline Trail (BST), or an east/west BST connector trail between the Bear River Mountain Range (east bench) to the Wellsville Mountains (west bench). The county could also sponsor a trail that links the Mendon to the American West Heritage Center.

**Trail and Parkway Regional Framework**

Parkways are a system of interconnected open spaces and corridors that may include trails. Parkways (also called greenways) include open space areas preserved for public access and recreation, resource conservation, or for scenic qualities. A parkway tour can provide for access to a variety of experiences and destinations, including natural areas, urban parks, schools, shopping centers, recreation centers, public land or important landmarks.

The diagram above depicts the anatomy of a Greenway.

The goal is to connect these areas through existing corridors in the community (i.e. road right-of-ways, existing trails, utility corridors, water body edges, old rail lines, and river, stream and canal corridors). Within these corridors, varying types of trails can be planned as may be appropriate for each unique setting. Some corridors segments may not be appropriate for trails, such as sensitive wetlands or private land. However, these corridors should still be preserved as important connections or visual amenities in the community parkway system.
Parkway trail types can include urban trails (paved paths), non-paved trails in natural or rural areas, bike routes (bike lane striping or wide paved road shoulders), and water courses (see Section 6.1). A variety of trail types, experiences, and destinations results in more frequent trail usage. A summary of potential corridor types is provided below, and discussed in more detail in Section 3.

**Abandoned and active rail lines**

**Canals, river and stream corridors**

**Water body edges**

**Utilities (power line & pipe line)**

**Existing road right-of-way**

**Existing animal or pedestrian trails**

The following descriptions illustrate general trail types that may be pursued as part of the future county-wide trail and parkway network. The focus is primarily on non-motorized trails (including urban, non-paved, and canoe trails), with a secondary focus on designated motorized trails. Motorized trails are general Non-paved public roads on private or public mountain terrain.

### Non-Motorized Trails

*(See Appendix H for suggested Trail Profiles)*

**Urban Trail:** A paved surface of asphalt or concrete that facilitates walking, jogging, rollerblading and cycling. The minimum width should be 10 feet to accommodate a mix of recreational activities. An urban trail is usually not desirable for cyclists pursuing higher speeds. Cycling commutes or tours are more compatible with automobile traffic than with slower paced trail activities that can be dangerous for pedestrians. However, leisure cycling, and younger cyclists are more compatible with pedestrians using a mixed use urban trail.

![Guadalupe River Park Trail, San Jose, California](image1)

![Pedestrian and Cyclist Trail as part of an existing right-of-way.](image2)

**Non-paved Trail:** A non-paved trail is ideal for walking, jogging, off-road cycling, or cross-country skiing. The surface may be crushed rock, gravel, wood chip, or even the excavated dirt and bedrock - depending on the expected frequency of use and trail budget. Non-paved trails are especially appealing to joggers because of the reduced pressure exerted on knees and other joints.

![Crushed aggregate pathway along an abandoned railway.](image3)
Trail width should be at least 10 feet near urban areas (such as the Bonneville Shoreline Trail), and may be more narrow (such as a single track trail) when located in more remote hiking, biking, or horseback riding areas.

**Non-paved Logan River Trail in Logan Canyon**

**Canoe Trail, or Blue Way**: Boating or canoeing courses primarily for non-motorized boating along navigable rivers and waterways. Blue ways do not provide for public access to adjacent river side properties except for authorized docking areas, rest areas, or designated public lands.

Although navigable water ways such as the Logan River and Bear River are open to the public, improved Blue way courses could provide mile markers, rest stop areas, camping areas, and boat launch sites with public vehicle access.

**Motorized Trail**: Designated non-paved roads for motorized or non-motorized use. Many of these roads are found along U.S. Forest Service roads, or they are public rights-of-ways traversing private land in Forest recreation areas.

**ATV off-road recreation trail**

**Floating the Bear River Bottoms, Cache Valley**
Trail and Parkway Mapping

The following maps in this section illustrate the potential trail and parkway system of each community and how it relates to the surrounding sub-region of the County. The scale of the maps (1/2 inch to the mile, or 2,640 feet) allows for an extended view of the potential linkage between communities, surrounding public lands, railways, utilities, and other potential corridors. These maps may be modified as requested by each city to reflect updated recreation planning as it evolves.

Two removable maps are also provided with this document to show the greater county area in two halves. Removable Map #1 shows the western half of Cache County with a focus on the communities located in Cache Valley, and the surrounding public land interface at the mountain base of the Bear River Range and Wellsville Mountain Range. Removable Map #2 focuses on the eastern half of Cache County with a focus on the existing motorized and non-motorized trails throughout the forested mountain areas.

Trail and Parkway maps should be compared to a city’s general plan maps and zoning maps to determine areas where trail and parkway corridors may be negotiated with land owners and developers. Sensitive land areas may also be referenced to identify greenway corridors desirable for preservation. Trail corridors and preserved open space should be negotiated as part of future annexation agreements, rezoning approvals, or development entitlements (See Section 5).

The legend below is repeated on each map, and represents the following categories:

1. **Proposed Trail Routes**: May be urban or non-paved.
2. **Built Trails**: Completed trail projects (either paved or non-paved).
3. **Bonneville Shoreline Trail Proposed Alternative Routes**: Proposed corridors from the 2002 Bonneville Shoreline Trail Study. A combination of multiple routes may be used to create trail continuity around the valley (See Section 4.2).
4. **Proposed Blue-Way Trail**: Navigable water ways that could be improved for more public use.
5. **Blue-way: Existing**: River/marsh courses with improvements such as boat launches, buoy markers, restrooms, and other facilities.
6. **Active Rail Lines**: Union Pacific Railroad lines do not currently provide public access.
7. **Municipal Boundaries**: Current boundaries of each jurisdiction.
8. **Flood Plain (Line Hatch) & Wetland Areas (Dotted Hatch)**: Flood Plains areas from FEMA (Federal Emergency Management Agency) inventory. General wetland areas from the Utah AGRC (Automated Geographic Referencing Center).
9. **Protected Land**: Private lands under a conservation easement that prevents future development of land.
10. **Federal Land (Green) & State Lands (Blue)**: Federal land represents U.S. Forest Service property, state lands include protected wildlife reserves or state parks.
11. **Municipal Parks**: A growing inventory of existing or future planned public parks. Not all parks are currently represented.
12. **USU Lands**: Property owned by Utah State University for agricultural or wildlife related research.
2. Cache County’s Trail Implementation Efforts

2.1 County Recreation Research

Cache County’s focus on a Trail and Parkway plan responds to public demand for a trails system as documented in the 2004 County Parks and Recreation Master Plan. This plan identifies public involvement efforts from 1998 to 2004 that were conducted by the county, City of Logan, Smithfield City, City of Hyrum and USU. A variety of public input methods, such as surveys, public hearings, and/or focus groups were employed to measure public demand from all jurisdictions in the county for parks and recreation services. Results from these studies revealed trails development with access to open space and parks to be the top desired recreational resources for the future.

The top desired resource priorities identified in the County Parks and Recreation Master Plan are:

1. Trails: that provide for many types of uses, interconnect communities, are scenic in nature, are clearly signed and provide appropriate trailhead parking

2. Open Space: that is carefully selected and purposely used with long range value

3. Parks: that are available for local use, providing picnic and play area resources. Consideration should be given for special use parks or areas for off leash dog use.

4. Sports Fields: that are multi-use and multi-age designed

5. ATV/ORV/Motocross: limited use area for special use that accommodates noise, dust and use restrictions (Trends, Future Resources, pg. 48)

The opportunity to integrate trail corridors with parks and open space is described in the plan’s implementation summary. The following items are recommended as funding priorities for the next five to 10 years:

TRAILS: The County should consider proposals that highlight adding to and enhancing the trail system for walking, biking, jogging, cross county skiing and equestrian purposes. The trails should interconnect the cities throughout the County and seek scenic routes. The trails should be well signed and have occasional and appropriate trail head parking stations. Efforts should be made to connect with already existing trail systems where possible.

OPEN SPACE: The County should consider programs that highlight an increase in the purchase of open space land to be used wisely in the provision of passive recreation experiences. The land must be carefully selected, and cautiously purchased with clear and specific purposes identified. A maximum cost should be established so that only a percentage of available fiscal resources go to this priority.

PARKS: The County should consider proposals that support improvements to existing parks that have certain key features such as trails throughout and interconnecting to other sites, multipurpose sport fields, playground equipment and picnic areas. Connected to this priority would be proposals that enhance and further develop parks and these associated key features.  

(Implementation, Resources, pg.55)
The Parks and Recreation plan suggests that some parks, recreation resources and facilities are currently provided. These include individual city recreation sites, private institutions (local churches with parks), schools (with playgrounds, in-door gymnasiuums, or pools), private businesses (such as fitness clubs, dancing) or volunteer groups (such as sponsors of picnic pavilions or pocket parks). The plan suggests that the county provide a facilitative role as opposed to a “direct provider role.” This strategy would maximize efficiency by reducing community planning costs, and by avoiding unnecessary duplication or competition of recreation resources.

Cache County can support existing private recreational businesses and existing municipal recreational services by helping to link these amenities through a trails system, and by assisting in preserving strategic open space areas. A successful trails system could connect trail users from neighborhoods and hotels to fitness clubs, bike and rollerblade rental shops, restaurants, entertainment venues, public services, shopping, parks and other services. Cache County should not seek to duplicate services provided by municipalities or private businesses.

2.2 Cache County’s Support of Trails and Parkways

Cache County has responded to public demand for trails and associated open space by establishing a County Trails Coordinating Committee, and by hiring a Trails Coordinator to create this master plan starting in October of 2005. One-year funding for this effort came from 2004 County RAPZ tax, and from a planning grant from the Utah Quality Growth Commission.

County-wide Trails Plan

The county-wide Trail and Parkway Master Plan is built from the direct input of each community, and is supported by extensive public comment. The plan is adoptable by each local government, and may be used as a general plan component, or as a valuable technical resource enhancement to a city’s existing trails plan. The plan may also be adopted by resolution, either in its entirety, or only specific sections that are deemed appropriate to each respective community.

RAPZ Tax Funding

To help meet the growing public demand for public recreational amenities, the Cache County Council voted to exercise a sales tax option increase of a one eight cent for Restaurant, Arts, Parks, and Zoo (RAPZ) enhancements in 2003. Trail and related open space projects have been popular requests by local governments, as summarized in the RAPZ table on page 8. This funding source can be used to leverage additional grant funding as described in Section 5.4.

Cache County Trails Committee

The Cache Trails Coordinating Committee is comprised of local citizens and public officials representing a variety of trail and open space related interests throughout the county. The committee meets monthly to discuss implementation opportunities and strategies in all jurisdictions of the County. Membership includes the following individuals:

David Rayfield – Committee Chairman, Chairman of the Cache Outdoor’s Coalition
Craig Petersen – Cache County Council
Wendell Morse – Cache County-wide Planning and Development Director
Richard Hopkins – Health Care Professional, Logan citizen volunteer
Cache County’s goal is to coordinate and support trails development efforts by combining – rather than duplicating the goals of each individual community. The County will support local community trail systems by sponsoring regional trails that connect communities to each other or to other management areas, such as the U.S. Forest Service or state lands.

As a facilitator of trails and open space corridors, the county will provide personnel services to assist with planning, coordination, grant application, and other implementation efforts to help realize recreational resources and activities for all jurisdictions. Coordinating with public and private organizations that provide related services and resources will help to implement the county-wide trail and parkway system. Such entities include the following:

**Federal Government**
U.S. Forest Service
U.S. Bureau of Reclamation

**State/Regional Government**
Bear River Association of Governments
State Parks and Recreation

State Health Department
Utah Division of Wildlife Resources
Utah Department of Transportation

**Private/Corporate**
PacifiCorp/Rocky Mountain Power

**Private Non/Profit**
The Nature Conservancy
The Trust for Public Land
Trout Unlimited

### County Liability Coverage for Trails

In response to potential concern over trail liability along utility corridors such as canals, roads, power line or rail ways, the Cache County Council voted in favor of allowing the Cache County Attorney to explore indemnification agreements with utility companies and private land owners. The county is thus positioned to indemnify other parties and propose that liability would be covered by Cache County’s road liability coverage (see section 6.1).

### Bike Routes

A comprehensive bicycle routes plan will be added in the near future as an important new chapter in this trail and parkway master plan. In April of 2006, the Cache County Metropolitan Planning Organization (CMPO) and Cache County co-sponsored public input workshops with the goal of integrating cycling routes and trails into one plan. Additional study of public comments, and shaping of a bike routes plan will be take place during 2007 with oversight from a new Cache Valley Bike Advisory Committee. The completed bike routes plan component will be offered to each community for input and potential adoption, and will serve as the CMPO’s bike and pedestrian and bicycle facilities plan update. The plan will identify key roads (and trail corridors) that should be enhanced to encourage cycling and to educate drivers of cycling rights on public roads.
2.3 Creating the 2006 Trail and Parkway Master Plan

From October 2005 to March 2006, existing trail plans from local city general plans or from recreation comities were collected and digitized into the County’s GIS mapping system. Plans were gathered from Richmond, Smithfield, Hyde Park, North Logan, Logan, River Heights, Providence, Nibley, Hyrum, Wellsville, and Mendon. Also included were conceptual trail routes suggested in the 2002 Bonneville Shoreline Master Plan, and existing trails provide by Rocky Mountain Power (formerly Utah Power), and the U.S. Forest Service. Popular cycling routes will be added in the future to integrate the trails plan with the Cache Metropolitan Planning Organization pedestrian and bicycle facilities plan.

A concept map was created showing the potential network of trail routes on one regional map of Cache Valley and adjacent mountain areas. The map showed ground detail by displaying aerial imagery, and by adding important open space and sensitive land features such as streams, wetlands, floodplains, preserved land, and parks.

Public Input

From April to September 2006, public comments were collected to guide the plan development. Research focused on the type of trail experiences desired in different communities, where desirable trail opportunities were located, or where concerns of safety or privacy were of issue. The public input workshops and questionnaire were based on previous research that measured high public demand for trails and recreational open space (see Section 2.1). Questions did not focus on the comparison of trails to other recreational amenities, and support for funding of trails was not discussed, due in part to the variety of future partnerships and funding sources that could occur once a trails master plan has been adopted, and to avoid perception that all trails will be built entirely by local tax dollars (See Section 5 for a summary of trail implementation and funding strategies. Additional study will be required to detail costs of trail construction relative to different trail types and locations in the region).

Workshops

Two public workshops were held at the Hyrum Civic Center on April 4th, and the North Logan Library on April 5th (2006).

Workshop participants were invited to make comments by placing labeled stickers or drawing trail ideas on the county-wide concept map, and then writing corresponding remarks on a comment sheet. An input questionnaire was also provided to participants with a variety of multiple choice and open ended responses.

Announcement of the workshops occurred in two feature articles on the County’s trail planning efforts prior to the workshops. Emails were sent with encouragement to forward the workshop dates to planning commissioners, council members, and planning administrators of each city. Emails were also sent to recreation committee members, planners, and other recreational
interest groups in the county. Workshops were attended by about 90 individuals (55 in North Logan and 35 in Hyrum) from communities throughout the county.

**County-wide Public Input Questionnaire**

Following the workshops, an extensive effort to collect more public input was implemented. The questionnaire was made available on the County’s website. Kiosk stations with paper questionnaires and a county-wide map were provided at three locations, including the Logan Recreational Center, the Logan Library, and the County Administration building. The Logan Library and Recreational Center kiosks helped to gather responses mostly from Logan City residents, while the County Administration building gathered input from citizens representing communities throughout the entire county.

Notices of the online survey and county kiosk display were distributed to households by Boy Scouts as part of three Eagle Scout service projects. Eagle Scout candidates contacted local troops to distribute flyers in their respective neighborhoods. This networking activity helped to provide notice to the majority of residents in Richmond, Smithfield, Hyde Park, North Logan, River Heights, Providence, and Hyrum.

The total questionnaire input amounted to 550 responses collected between April and September 2006, and over 200 other comments provided on a county-wide conceptual trails map.

**Public Input Results – Findings and Recommendations**

The results of the questionnaire show a wide variety of interests and activities associated with future trails. Although the responses vary by each community, opinions are generally consistent with the following county-wide results. Questionnaire results by community, and many other details and information may be downloaded from the Cache County website at www.cachecounty.org.

1. Please rank the desirability of the following urban or paved trail opportunities for your personal or family lifestyle (Ranked by total support level).

<table>
<thead>
<tr>
<th>Activity</th>
<th>Support Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leisure walking</td>
<td>91%</td>
</tr>
<tr>
<td>Leisure cycling</td>
<td>91%</td>
</tr>
<tr>
<td>Paths connecting schools, parks and open spaces</td>
<td>90%</td>
</tr>
<tr>
<td>Access to the open public lands in foothills and mountains</td>
<td>89%</td>
</tr>
<tr>
<td>Access to preserved natural and scenic areas</td>
<td>88%</td>
</tr>
<tr>
<td>Fitness (walking)</td>
<td>87%</td>
</tr>
<tr>
<td>Fitness (cycling)</td>
<td>85%</td>
</tr>
<tr>
<td>Walking or cycling to work</td>
<td>80%</td>
</tr>
<tr>
<td>Fitness (jogging)</td>
<td>75%</td>
</tr>
<tr>
<td>Walking or cycling to shopping areas</td>
<td>74%</td>
</tr>
<tr>
<td>Tours between communities in the valley</td>
<td>70%</td>
</tr>
<tr>
<td>Fitness (rollerblading)</td>
<td>41%</td>
</tr>
</tbody>
</table>

**Finding:** Trails and bike routes are desired primarily for recreational walking or cycling purposes, especially to access parks, natural areas, and nearby mountains. Trails are also desired for accessing work, school and shopping areas by foot or bicycle.

**Recommendation:** Plan trails to link residential neighborhoods to preserved natural areas, public lands in the mountains, and to schools, shopping, and employment centers.
2. Please rank the importance of the following non-paved trail opportunities for your personal and family lifestyle (Ranked by total support level).

- Hiking: 94%
- Access to open public lands in foothills and mountains: 93%
- Access to preserved natural and scenic areas: 93%
- Biking: 89%
- Jogging: 68%
- Tours between communities in the valley: 67%
- X-country skiing: 66%
- Canoeing trails: 51%
- Horseback riding: 29%

**Finding:** Non-paved trails are associated with public lands in the foothills and mountains above communities, or with natural areas within a community. Hiking and mountain biking activities would be pursued on these trails, as well as jogging and cross country skiing.

**Recommendation:** Work with land owners and developers by creating development incentives to help implement the Bonneville Shoreline trail as a continuous trail around the valley, and to preserve important natural areas within communities with nearby trail access (See Section 5.3).

3. Please rate the top five types of natural or scenic areas that should be preserved and remain accessible by a trails network. 1=Less Important 5=Most Important (Ranked by total support level).

- Mountain Bench: 83%
- Access to public lands: 82%
- Riparian/River Corridor: 77%
- Ridge tops: 75%
- Lake Shore (Water Bodies): 72%
- Wetlands: 64%
- Farmland in rural areas: 49%

**Findings:** Preservation of strategic mountain benches areas and ridge tops are desired to retain visual quality and to encourage pedestrian access to public lands. River corridors with associated water bodies and wetlands are also viewed as important corridors for visual or physical trail access.

**Recommendation:** Adopt zoning ordinances and development codes that encourage trail easements as part of new development, and that encourage preservation of strategic lands that allow access to a future Bonneville Shoreline trail, U.S. Forest Service trails, or public right-of-ways into private and public forest land areas. River corridors should also be preserved from development to retain parkway visibility or physical access and protect new development from flooding hazards. Development guidelines should discourage development from prominent ridge tops, water edges, and wetlands to retain visual quality, water quality, and public access to natural features (See Section 5.3).

4. To what extent do you agree or disagree with the following statements (Ranked by total support level). A trails system would ...

- Increase safety for walking, jogging & biking: 96%
- Promote family oriented recreation: 95%
- Encourage active living and reduce obesity: 94%
- Enhance value of connected recreation facilities (parks, other trails, etc.): 91%
- Encourage less driving and more walking or biking: 90%
- Connect urban/residential areas to mountains: 87%
- Increase neighboring property values: 75%
- Provide a tourist attraction: 70%
- Reduce crime through increased presence of responsible people: 60%

**Findings:** Trails are viewed as an important community feature to encourage a more active lifestyle, and better health. Trails use is recognized as a low-cost recreation activity that appeals to all ages, and could reduce local automobile trips to parks and open space areas.

**Recommendation:** Prioritize trail development that connects new and existing
neighborhoods to parks, accessible open space, recreation facilities, and other trails.

5. How frequently would you use a trail system? (Ranked by total share of responses to this question)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily</td>
<td>50%</td>
</tr>
<tr>
<td>Weekly</td>
<td>32%</td>
</tr>
<tr>
<td>Weekends</td>
<td>9%</td>
</tr>
<tr>
<td>Monthly</td>
<td>7%</td>
</tr>
<tr>
<td>Never</td>
<td>1%</td>
</tr>
</tbody>
</table>

6. Which constraints would discourage you from using the future Cache County-wide trails system? (Ranked by percentage of responses to this question)

<table>
<thead>
<tr>
<th>Constraint</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of knowledge of trail locations and trailheads</td>
<td>66%</td>
</tr>
<tr>
<td>Trails aren’t conveniently located</td>
<td>58%</td>
</tr>
<tr>
<td>Concerns about safety</td>
<td>28%</td>
</tr>
<tr>
<td>Lack of parking</td>
<td>28%</td>
</tr>
<tr>
<td>Lack of time</td>
<td>24%</td>
</tr>
<tr>
<td>Other, Please Specify</td>
<td>18%</td>
</tr>
<tr>
<td>Presence of leashed pets</td>
<td>13%</td>
</tr>
<tr>
<td>Poor health</td>
<td>7%</td>
</tr>
<tr>
<td>Lack of access for disabled</td>
<td>4%</td>
</tr>
<tr>
<td>No comment</td>
<td>4%</td>
</tr>
<tr>
<td>Lack of interest</td>
<td>2%</td>
</tr>
</tbody>
</table>

**Findings:** Current demand for trails suggests that new trails will attract users when built near residences and businesses, and when they provide linkage to a variety of recreational and commercial destinations.

**Recommendation:** Promote the benefits and opportunities of trail use through a county-wide website that displays existing and future trail opportunities throughout the region. As more trails develop, a brochure map for residents and tourists can detail all trail opportunities available to the public.

7. Would you be interested in having a designated trail system for motorized vehicles?

<table>
<thead>
<tr>
<th>Option</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>38%</td>
</tr>
<tr>
<td>No</td>
<td>62%</td>
</tr>
</tbody>
</table>

**Findings:** Over one third (or nearly two fifths) of respondents recognized local demand for designated motorized vehicle trails, and support motorized trails that are separated from non-motorized trails.

**Recommendation:** Plan for motorized vehicle parking facilities near designated motorized trail heads to encourage trailer transport of ATV’s to new facilities, and to encourage screened and orderly parking. Non-motorized trails should be marked with signs prohibiting motorized use.

8. Please indicate the features that you believe would be desirable for bike routes (Ranked by percentage of responses to this question).

<table>
<thead>
<tr>
<th>Feature</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wider paved shoulder widths</td>
<td>93%</td>
</tr>
<tr>
<td>Bike route signage</td>
<td>85%</td>
</tr>
<tr>
<td>Replacement of dangerous gutter grates</td>
<td>83%</td>
</tr>
<tr>
<td>Striped bike lanes</td>
<td>82%</td>
</tr>
<tr>
<td>Bicycle safety education program</td>
<td>65%</td>
</tr>
</tbody>
</table>

**Findings:** Cyclists’ primary safety need is sufficient road lane width along busy streets and narrow highways to share with motorists. The addition of bike route signage could help to promote cycling and educate drivers of cyclists’ rights to share road surface. Replacement of unsafe linear gutter grates with grid grates can help to prevent unnecessary accidents. Striped bike lanes and/or “sharrows” (stenciled cycling arrows that remind motorists of shared use) may be appropriate in urban areas – particularly on arterial roads with higher traffic volumes and speeds.

**Recommendation:** Add a Bike Routes plan as an additional element to this master plan. The new mapping should show trails, parkways, bikeways and blue-ways as one inter-related network.

Once this additional element is added, a uniform system of bike route signage throughout the county should be added to promote cycling, and to educate drivers of cyclists’ rights to share the paved road.
surface. Unsafe gutters should be identified and replaced on all streets in the county. Narrow highway stretches that are popular for cycling should be examined for future upgrade and pavement width addition.

9. If you would be interested in participating in general trail system development, please specify your area of interest.

<table>
<thead>
<tr>
<th>Not interested</th>
<th>25%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adopt a Trail (neighborhood litter control service)</td>
<td>47%</td>
</tr>
<tr>
<td>Adopt a Trail (neighborhood safety patrol)</td>
<td>23%</td>
</tr>
<tr>
<td>Detailed trail planning (signage, features, property owner coordination)</td>
<td>32%</td>
</tr>
<tr>
<td>Trail Construction</td>
<td>36%</td>
</tr>
<tr>
<td>Other, Please Specify</td>
<td>11%</td>
</tr>
</tbody>
</table>

**Findings:** A significant number of respondents would like to volunteer time and effort to support trails planning, design, development, and maintenance.

**Recommendation:** Create a trail volunteer’s web page that encourages additional members to sign up, and that provides email notice for volunteer work and planning opportunities.
3. Background

3.1 Historic Sketch of Trails, Utility Corridors and Open Space in Cache County

The first established travel routes in Cache County were marked by Shoshone Indians bands that followed existing animal trails, or established their own paths in search of native edible plant areas, favorable fishing locations and encampment sites. After centuries of nomadic travel to access dispersed food locations, the Shoshone culture had established a well defined network of trails that marked practical passes through mountains and the best places to cross streams.

Fur traders and explorers followed Indian trails in search of valuable beaver pelts and other animal furs. In the summer of 1824, John Henry Weber led trappers, including Jim Bridger to Cache Valley. Jim Bridger recorded his voyage down the Bear River on a bullboat that same summer, believing that the salty water of the Great Salt Lake was the Pacific Ocean.

In 1825, Peter Skene Ogden led Hudson Bay Company trappers to the present day Ogden Valley in eastern Weber County by traveling over a well-worn Indian trail out of Cache Valley. Jedediah Smith traveled south from present day Idaho through Cache Valley en route to Southern Utah and California in 1826. This route today marks HWY 91 from southern Idaho to Provo. Other trappers followed suit, and eventually held Mountain Men Rendezvous Camps in Cache Valley and the south end of Bear Lake between 1826 and 1831.

Trappers Moses “Black” Harris and Thomas “Peg Leg” Smith happened to meet Brigham Young and the Mormon Pioneers en route to the Utah Territory. The mountain men suggested that the fertile lands in Cache Valley would provide a good place for a new settlement. In 1856, Peter Maughan led a group of Mormon settlers to Cache Valley along routes reported by trappers, and established the community of Wellsville at the southwest entrance into the valley.

Regional Routes to Cache County

By 1859, about 150 families had begun a new life in Cache Valley in the settlements of Wellsville, Providence, Mendon, Logan, Richmond, and Smithfield. Travel routes were created between settlements and further established as new immigrants came to the valley.

Agricultural products from Cache Valley were transported outside of the region when gold and other metals were discovered in Montana and northern Idaho. A migration of miners, settlers, and merchants to Montana and Idaho mining camps founded cities such as Virginia City and Helena. These camps focused on precious metals rather than agriculture, creating a demand for the import of food and other agricultural
products. Heeding Brigham Young’s council to stay on their farms and avoid the pursuit of gold mining, many Cache Valley farmers exported their produce by joining freight lines between Salt Lake City and Montana. This trade generated profits that helped to stimulate the local economy.

The **Overland Stage route** entered Cache County in 1866 by passing near Collinston in Box Elder County, climbing over the hill to Cache Junction, and then crossing the Little Bear River on the Ricks Ferry before heading east to the Logan station. The stage line continued north to Idaho stations in Franklin, Preston, Swan Lake, Gentile Valley and Soda Springs.

**Local Routes, Trails, and Streets**

Prior to 1870, Cache Valley settlers were squatters on public lands in the Utah and Idaho Territories. The federal government enabled cities and towns to incorporate on public lands in 1867 which allowed settlers to claim legal title to their lots. Legal lots descriptions defined wide public right-of-ways or streets between the square blocks that were typical of Mormon Settlements.

With the opening of the federal land office in 1869, homesteading farmers were required to live on their own lands. This rule altered the Mormon settlement pattern that encouraged families to live in a village while cultivating the surrounding fields. New outlying homesteads created more travel routes to connect points of settlement to villages.

Some of these early right-of-ways and travel routes are today’s paved highways and local streets that connect communities and neighborhoods, while others remain as public or private gravel or dirt farm roads.

**Logan Canyon Scenic Byway**

The 41-mile Logan Canyon Highway (US 89) began as a trail in 1860 to harvest timber for Logan and other growing settlements. Today it connects County residents and tourists to extensive recreation opportunities such as trails and camping grounds in the Cache Wasatch National Forest, skiing at Beaver Mountain, and water sports at Bear Lake. It is also an important route to national recreation areas including Jackson Hole Wyoming and Yellowstone National Park.

![View of Logan Canyon with fall foliage.](image)

A trail through Logan Canyon to Bear Lake was completed in 1877, driven by the need to bring timber for construction of the temple and to provide railroad ties for construction of the Utah Northern Railroad line. Mail was delivered to settlements in the Bear Lake region on cross country skis through the canyon. Previously, travel through Logan Canyon to the Bear Lake Valley required passage through less direct routes such as Cub River and Strawberry Canyons in Idaho, or through Blacksmith Fork Canyon.

By the 1920’s, increased recreational demand in Logan Canyon and the growing trucking industry required significant upgrade for regular automobile travel. The County completed and paved the highway’s present alignment through the canyon in the late 1930’s with the assistance of federal and state funding. The highway was kept open
year-round for the first time in 1939 – the same year a ski tow was installed at Beaver Mountain. From that time the highway was managed by the Forest Service as a scenic strip.

The Logan Canyon Highway was designated a Scenic Byway by the Governor of Utah in the fall of 1988. In 2002, through the hard work of Forest Service and County officials, the road was designated as a National Scenic Byway, one of 99 other roads in the United States. This status increases opportunities for federal funding of trail related projects that connect to the highway (See Section 5.4 & Appendix).

Roads and Trails in the County Forest Recreation Area

With a growing demand for timber, precious metals, and with increases in the county’s sheep herds (10,000 sheep in 1870, and 300,000 sheep by 1900), trails through Cache County’s forested mountain areas were expanded. With a new rail line connecting to Logan in 1873, prospectors scoured the mountains for precious metals with hopes of selling ore to smelter companies in the Salt Lake area. The best known mining operations in Cache Valley were short lived silver rushes, including La Plata (1891 to 1894 near Weber County), and the “Amazon” silver mine near present day Beaver Mountain (1892).

Private and Public Land Matrix

Much of the ranching and mining activity was encouraged through privatization of significant amounts public domain lands (federal lands that had not been homesteaded). The Federal Land Grant Act of 1862 granted large land blocks to states or territories for the purpose of selling land and establishing a fund to support the development of an agricultural or mechanical arts college. Sale of forest area lands allowed the State of Utah to establish the Utah Agricultural College (USU) in 1888.

Also creating private land in Cache County were the Pacific Railroad Acts of 1862 and 1864 that granted land to the Pacific and Central Railroad companies. This land was not strategic for actual railways, but was rather granted to railroad companies to sell for financing of the Transcontinental Railroad – which was considered at the time to be a risky investment. The resulting checkerboard pattern of private and public land is still visible in Cache County’s forest area ownership patterns today.

Establishment of the U.S. Forest Service

Open access to timber on public domain land, overgrazing and uncontrolled forest fires made for a severely damaged regional forest by the time Utah became a state in 1896. Extensive flooding and damage to public drinking water resulted, prompting the Cache County Council to petition the United States to protect the remaining public domain and create the Logan Forest Reserve in 1903. The reserve later became part of the Cache National Forest in 1908.
Later, around 1923, a landslide between Mendon and Wellsville sent debris down onto dry farmland that was never reclaimed for crop planting. Over-use again threatened the local communities and farmers relying on mountain-fed culinary and irrigation water. The Chamber of Commerce and the Forest Service worked together to reclaim the Wellsville Mountain watershed in 1942.

Today, the Forest Service seeks public input as it creates policies to manage use of roads and trails, grazing permits, and timber harvesting in an effort to balance an array of public interests. With extensive annual visits to the forest, some routes and areas are restricted seasonally or year round to motorized vehicles (including snowmobiles, ATVs, and truck/vehicles), while other areas are encouraged for motorized use.

Two wilderness areas – Mt. Naomi and the Wellsville Mountain are off-limits to vehicles and mechanized transportation. These wilderness areas resulted from a congressional act in 1984 in response to a growing national interest in preserving National Forest areas as pristine wilderness. The wilderness areas may be accessed by foot or by horse from several single track trail routes.

**Forest Service Roads, Private Forest Roads, and County Public Right-of-Ways**

The Forest Service manages a network of motorized and non-motorized mountain roads and trails that provide incredible recreational value to this region (see Appendix, Removable Map #2). Some routes have been improved with gravel or road base, while some remain as a primitive double track road or single track trail.

Random ownership patterns of federal, state, and private land have created a complex system of roads and trails through mountain terrain. Many of the trails and roads established to access ranches, timber stands, mining claims, and hunting areas through private and public forest lands remain with us today. The status of these travel routes – whether roads are private or public – has lacked legal definition since the first trails were first established. For example, travel to a private property parcel may have required passage through a canyon or along a hillside owned by another property owner, or by the public.

Study of historic use of roads and trails will help to establish a clear definition of public right-of-ways vs. private roads. The Cache County Surveyor’s office is researching historic property records to determine the legal status of roads and trails throughout the county. Driving this research is an effort to research public rights-of-way on federal lands that were established between 1866 and 1972 under the United States’ RS-2477 law of 1866. This law encouraged settlement of the west by allowed public roads to be created on public domain or federal lands for homesteading, access to private lands, timber, mining, or grazing leases, or recreational purposes. RS-2477 was repealed by Congress in 1976 to better manage public use of federal lands under the Federal Land Management and Protection Act (FLPMA – pronounced as “Flipma”). However, FLPMA specifically stated that all existing RS-2477 rights of ways were not affected by the repeal of RS-2477, and remained valid.

Extensive research is required to determine which roads were recorded as public right of ways while RS-2477 was in effect. Cache County seeks to work with the Forest Service in a cooperative effort to determine roads or trails on Federal lands that are
county public rights-of-ways (See Section 6.3).

Protecting Natural Areas from Over Use

The legacy of roads and trails given to us by our predecessors reminds us that our safety and recreational enjoyment rely on a healthy watershed, including forests and streams in the mountains and valley. Trails and road management requires consideration of water quality, wetlands and wildlife populations, as well as regard for a variety of recreation interests.

The early degradation of the mountain forest lands diminished not only the public health and safety of communities, but also delayed the growing demand for recreation in this region. By the early 1900’s, elk and big horn sheep populations had vanished, and deer and native fish populations were greatly reduced. Wolf and grizzly bears were extirpated by hunters and ranchers to protect livestock. Elk were reintroduced in Logan Canyon from Jackson Hole, Wyoming in 1916 by the Cache Valley Boosters Club. 4

As described in Section 4, wildlife is a very important part of the American recreational experience, with more than $100 billion spent annually on related consumer goods and activities. Thanks to efforts by the Forest Service, the State Division of Wildlife Resources, and various private initiatives, Cache Valley’s forest areas and waterways support abundant wildlife.

Deer populations are declining today as urban development encroaches on south and west facing benches. These areas provide deer and elk with winter foraging range as the snow depth is reduced by direct sunlight. Preserved state and private lands intended for habitat preservation may require seasonal closure to allow for deer and elk winter and spring feeding or breeding. Riparian corridors (river-ways) in Cache Valley have traditionally provided wildlife viewing, duck hunting, non-motorized boating, and scenic outdoor quality. Communities may wish to work with land owners and partners to encourage additional land preservation to support wildlife habitat, improve water recharge areas, visual quality, trail access, and other public benefits, etc. To the extent that communities promote preservation of streams corridors through conservation-minded development, wildlife habitat and may be conserved, and new trail and recreation opportunities may be created to enhance the quality of life. Development strategies that support land preservation are summarized in Section 5.

Damaged wetlands and streams in mountain areas degrade fish habitat and drinking water quality. 5
Abandoned and Active Rail Lines

Cache County once claimed a broader network of railways than exists today. Prior to extensive automobile use, rail lines were often referred to as roads because of their regular use for freight and passenger transport. Abandoned rail grades are still visible throughout the valley, and county property records reveal traces of former railway corridors now mostly absorbed into adjacent private land ownership.

Sections of previous rail corridors could become trails if local governments are prepared to properly negotiate with land owners. Trails running parallel to active rail lines with sufficient separation may also be explored as a possibility (See conclusion of this section and Section 6.7).

Historical Railways and related agricultural industries can also be the focus of interpretive trail signage points as a cultural enrichment activity associated with trail recreation.

The Utah Northern Railroad

In 1873, the Utah Northern Railroad - a narrow gauge line branching from the transcontinental railroad (completed at Golden Spike, Box Elder County in 1869), was completed to connect Logan to Brigham City, and Ogden. The completion of this rail line sparked new trading opportunity for Cache Valley farmers who started shipping agricultural products such as butter, eggs, and wheat out of the valley. The Utah Northern Railroad was extended north to Preston, Idaho, short of its planned goal to Soda Springs. The railroad helped to standardize time in Cache Valley, which previously could vary by as much as ½ hour between communities.

The Oregon Short Line/Union Pacific

By 1890 the old Utah Northern Railroad grade was abandoned and a new standard gauge line was built from Box Elder to Cache Junction by the Oregon Short Line & Utah Northern Railway (Later the Oregon Short Line). The Oregon Short Line (O.S.L.) was controlled by Union Pacific, and was also extended to Cache Junction and Logan from Weston, Idaho.

The Logan O.S.L. train station was also started in 1890 at its present location on 6th West and Center Street in Logan. A total of three branch lines were eventually added, primarily to freight sugar beets to local refineries. One branch built in 1907 was a loop connecting Logan to Mendon, Wellsville, and Hyrum. Another branch connected Smithfield to the former “King town,” located three and a half miles northwest of Smithfield in 1924.

The Oregon Short Line became today’s Union Pacific rail system that links to Cache Valley east from Box Elder County and south from Dayton Idaho at Cache Junction. The Union Pacific line heads south from Cache Junction on a valley loop to Mendon and Wellsville, east to Hyrum, then north to Logan, Smithfield and Richmond, with a terminus in Preston, Idaho.
Electric Rail – (Utah Idaho Central Railroad)

The Logan Rapid Transit Company was created in 1910 (by David Eccles of Ogden) to link the O.S.L. train station to the Utah State Agricultural College (USU) with electric street car rail service. The line headed east on Center Street, north on Main Street, east on 400 North, and then north on 600 East to 900 North. A one block spur also ran along 700 East below Old Main Hill, dropping passengers off at the grand stair case entrance to the campus. Electric rail transit service was extended south to Providence, and north to Hyde Park and Smithfield. The original Logan Rapid Transit station building still stands at 75 North Main Street in Logan.

A new interurban electric line was built in 1914 that consolidated the Logan Rapid Transit service. The line was first called the Ogden Logan & Idaho Railroad (O.L.I.R.), and later called the Utah Idaho Central Railroad (U.I.C.R.) when service reached as far south as Payson (Utah County) in 1919.

U.I.C.R. recycled the abandoned Utah Northern Railroad line by converting the grade to electric rail. This new service helped to transport valley residents and freight from Preston, Idaho, through Smithfield, Logan, and then to Brigham City and Ogden. Branches were added to connect Logan to Providence, Wellsville, Hyrum, and Mendon. High schools in Logan, Hyrum (South Cache), and Richmond (North Cache) were completed around 1918 near electric rail corridors. Over 80 percent of U.I.C.R.’s passenger business was contracted with school districts to transport students from remote areas to these schools. The U.I.C.R. may have serviced the lowest population density for a large interurban system in the nation, with fewer than 400 people per square mile.  

Another branch line, the Eccles’ Cache Valley Railroad was built at this time to transport sugar beets to the Amalgamated Sugar Company in Quinney (Later Amalga). Other refineries included David Eccles and partners’ Logan sugar plant (1901) and the Morgan Canning Company (Later Del Monte), founded in Smithfield in 1920.

Dairy refineries in Utah started in Cache County in 1889 when Lorenzo Hansen created Utah’s first creamery and cheese factory in Wellsville. The Utah Condensed Milk Company followed in Richmond (1904) and Hyrum (1925). Other milk companies such as Borden Milk in Logan (1916) and Morning Milk in Wellsville (1923) helped the dairy industry in Cache County become the state’s third largest agricultural-based industry in the late 1920’s.

The O.L.I. and U.I.C.R. railway networks shipped the products of Cache County farmers, dairymen, and refineries to statewide and national markets, including fruits and vegetables, grains and processed flour, dairy products, sugar beets and processed sugar, gravel, brick and livestock. Products were also imported to Cache County such as coal, cement, and automobiles.
Decline of Electric Rail

Just as the electric rail system had reached its enlarged status by 1919, many residents were driving to work as automobile ownership proliferated and public highway investments made driving more attractive. U.I.C.R. Street car transit spurs in Logan were removed in 1926 and replaced with gas buses when U.I.C.R could not afford to pave their privately owned sections of urban streets. Motor bus service, known as auto stage service, gradually replaced rail service between Preston, Logan, and Ogden.

U.I.C.R. was losing passengers, competing for bulk freight business with Union Pacific, and losing freight and package express business as trucking companies became the new standard for delivering goods along a public highway network. The railroad company ended its operations in 1947 after a WWII era restriction on fuel consumption increased vehicle and truck travel on parallel roads and highways after the war. Warehouse properties were sold and right-of-way corridors were deeded to adjacent landowners and farmers.

Railway Trails

The decline of rails in Cache County has contributed to a reduction of the 300,000 railroad miles that connected our nation’s communities during the early 20th century - with less than 140,000 rail miles remaining today.6

The Rails to Trails Conservancy reports that 1,359 rail trails across America have been created from abandoned rail lines, a trend that started as early as 1939. The 28-mile Union Pacific rail trail from Park City to Echo Reservoir provides year-round trail recreation opportunity for residents and tourists. Rail trails offer a traffic-free experience, scenic views, linkages to historic places, and usually connect the countryside to urban downtown and industrial areas.

Unfortunately in Cache County, abandoned rail lines such as the former (U.I.C.R.) deeded all but a few remaining fragments of unclaimed right-of-way property to adjacent land owners. Unclaimed right-of-way pieces may be useful in negotiating a trail right-of-way along the historic railroad grade, and may help to encourage assembly of the old corridor as new development occurs.

Rails with Trails

A new trend is to explore trail opportunities alongside active rail lines. In 2001, around 60 active rail trails existed in 20 states, created over 230 miles trails along active lines.6

An active rail line with a trail sharing the Right-of-Way 6

The Federal Railroad Administration (FRA) published a best practices report to facilitate the planning, design and operation of new "Rails-with-Trails" (RWT). RWT’s could become a point of discussion between Cache County and Union Pacific with the County’s recent interest to assume liability for trails as part of its roads/trails liability coverage (See Sections 6.1 & 6.7).
Canals and Reservoirs

As more pioneers settled in Cache Valley, the need for irrigation water to support livelihoods launched the building of an extensive system of canals and ditches to bring water to homes, gardens, and farming areas. Without the water, very scanty and sometimes no crops would be grown.\(^\text{10}\) Canals were primarily built along easements on private land that allowed for the construction and maintenance of a water ditch. An adjacent road was built next to many of the canals to allow for regular inspection and maintenance.

Similar to railways, canal roads create a corridor that is virtually traffic-free through communities. Many individuals have walked along canal roads even without legal public access. Canal companies usually lack the resources to monitor public trespassing, and in many cases ignore the activity. Chapter 5 highlights opportunities to explore share use of canal roads for trails with canal companies. This section highlights some of the valley’s prominent canals to shed light on the important cultural resource and present day function that canals offer.

In 1860, the valley’s first regional canal – the Logan Hyde Park Canal, was built to divert water west from the Logan River (near 200 North and 1000 East) to the toe of temple hill at 200 East, and then north through Logan City to Hyde Park. The canal was later extended to Smithfield.

The first apple tree was carried into Cache Valley in the late winter of 1865 on snowshoes. The apple orchard industry grew to significant proportions, as did other crops between Hyde Park and Logan with the support of irrigation water.

The Logan and Richmond Canal, or the Logan Northern Canal (1865) delivered water at a higher elevation along the mountain bench, diverting water west from the Logan River near the present day state power dam at 1600 east, just below the mouth of Logan Canyon. The canal was built along a challenging stretch of steep hillside above the Logan district known as the “Island” and below present day HWY 89 and university campus. The canal turns north at 600 East, and passes below today’s university campus, en route to North Logan, Hyde Park, Smithfield, and Richmond. Despite the hillside challenge, more workers and better equipment allowed water delivery to Hyde Park after only two months of construction.\(^\text{4}\) The segment of canal road along the hillside has been used for decades by pedestrians accessing the campus and for recreational activity.

Settlers later discovered that soil quality was good above the Logan Hyde Park canal, and a plan was developed to construct the Logan Hyde Park Smithfield Canal to transport water along the upper bench. Thomas Ricks and others with previous railroad construction experience made plans and invested resources to construct along the north mountainside of Logan Canyon. The diversion from Logan River occurred about one mile up Logan Canyon, and required painstaking effort to construct the canal bed, tunnels, and a wooden flume along a solid rock embankment. The completed project introduced water to many additional farms and homesteads, and brought prosperity to an increasing number of pioneers.\(^\text{10}\) For decades, this canal has been a recreational draw for tube floating across Forest Service, the canal company, and other private properties. However, safety concerns in 2006 over dangerous road-side parking conditions have required the State Department of Transportation to close the shoulder for parking. Tubing activity is not encouraged by the canal company, and litter
and vandalism concerns have been increasingly burdensome.

Because of the limited water supply from Spring Creek, Settlers of Providence and Millville cooperated to construct a canal that would divert water from the Blacksmith Fork River. The first survey was faulty and the canal was not a success so another survey was made and a new Canal – the Milleville-Providence Canal was dug that proved successful. Later, another canal drawing water from the mouth of Blacksmith Fork Canyon, the Blacksmith Fork Providence Canal was dug with cooperation from the settlers at Millville and brought many more acres of land under irrigation in both settlements.

**Newton Dam**

After a shortage of moisture in 1870, settlers began construction on **Newton Dam**, the first large body of irrigation storage in Utah, and probably the first in the United States. The Bureau of Reclamation became involved in 1938, and completed expansion of the reservoir in 1946 by building a new dam 1.5 miles downstream of Clarkston Creek. Newton reservoir is a popular recreational destination for boating, fishing, camping, and picnicking.

**Hyrum Dam and Canals**

The Bureau of Reclamation created the **Hyrum Reservoir** in 1935 by constructing an earth-fill dam on the Little Bear River. This water body is one of Utah’s few urban reservoirs in the state, providing recreation, water storage, wetlands for birds and aquatic life, and waterfowl habitat and refuge.

Three canals divert from the reservoir, including the Hyrum Feeder Canal which delivers water north to the Hyrum Irrigation Company, the 14-mile Hyrum-Mendon Canal which carries water west to Wellsville and then north to Mendon, and the 5.4-mile Wellsville Canal. The Hyrum-Mendon Canal and the Wellsville Canal cross the Little Bear River Flood Plain through inverted siphons. A pumping plant in Wellsville allows a portion of the Wellsville Canal to deliver water to properties that lie up to 70 feet above the Hyrum Mendon Canal.

Unlike most canals in Cache Valley, the Hyrum-Mendon Canal lies on a 20-foot wide corridor of property owned by the Federal Government. All other canals in the Valley were built through an easement on private land.

**Power Line and Utility Corridors**

In the early 1890’s, Logan was one of five Utah cities that had electricity, including Salt Lake, Ogden, Provo, and Park City. With the development of new technology, more local power plants began to appear that provided more reliable power to customers. Logan City’s power plant at the mouth of Logan Canyon was established in 1904.

In 1912, Utah Power and Light (UP&L) began to acquire power stations, and consolidated isolated power plants to create a large interstate power system. Logan City retained ownership of its power plant and still provides electricity to customers today. Expanded UP&L power service enabled the development of the U.I.C.R. electric rail service, and allowed many manufacturing industries convert electric motor equipment. By 1922, UP&L served 205 communities in four states, with much of the power being generated from hydrologic power plants along the Bear River/Bear Lake hydrological system.

Utah Power and Light was eventually purchased by PacifiCorp, and as of 2006, PacifiCorp operates as Rocky Mountain
Power in Utah. The company manages the Cutler Reservoir and hydroelectric power plant in Cache County, as well as a broad network of regional power line facilities. The reservoir creates a vast system of marshes and wetlands, which requires management of water levels to support plants and animal habitats. PacifiCorp works with public and resource agencies to create and implement management plans that address the needs of sensitive species and their habitat to promote preservation. Program partners include the Briderland Audubon Society, and the Utah Division of Wildlife Resources, who jointly focus on wildlife protection, wetlands preservation, and efforts to reduce hydroelectric facility impacts on fish, and power line interactions with birds.13

**PacifiCorp/Rocky Mountain Power - Trail and Recreation Opportunities**

In addition to providing hydro electric power, storing irrigation water for agriculture, and agricultural grazing on surrounding pastures, PacifiCorp has created significant recreation opportunities throughout the reservoir/marsh system, including canoeing courses (or blue ways), boat launch docks, hunting, fishing, and bird watching (See Removable Map #1).
3.2 Trends Reflect Demand for Trails and Recreation

Several established trends in Cache County contribute an increasing demand for self-directed recreation opportunities provided by trail and parkway corridors. The applicability of these trends varies with the unique characteristics of each community in the valley.

Rapid Growth in Utah

A general trend of rapid growth to states in the inter-mountain west has occurred since the 1990’s. Utah’s annual growth rate ranks sixth in the nation at 2.40%, which is over twice the national annual growth average of 0.91%.^14

1. Arizona 3.58%
2. Nevada 3.45%
3. Idaho 2.6%
4. Georgia 2.53%
5. Texas 2.53%
6. Utah 2.40%

Cache County’s average annual growth rate from 2000 to 2005 (at 2.54%) is just above Utah’s average at 2.40%.

Much of the attraction to the intermountain west is considered to be amenity-driven as individuals and job providers seek the availability of mountains and public lands in the back yards of communities. Employers increasingly compete for an educated workforce, and consider recreation opportunities and local quality of life when evaluating a new location. Increasingly, more workers are able to live long distances from work through telecommuting arrangements that split time between a remote home office and work headquarters.

In Utah, one third of new residents migrate from other states, while two thirds of Utah’s growth occurs through the natural increase of residents. U.S. Census figures reveal that Utah’s internal growth stems from a large average family size at 3.67 (compared to 3.16 nationally) and the highest household size in the nation at 3.13 per household (compared to 2.62 nationally).

As more jobs are created in Cache County, prospective employees will compete with candidates from out of state, in state, and locally for a chance to work in this desirable area. Some from other regions may include those who left their Cache Valley home for a job elsewhere, and retained hopes of returning.

Lifestyle of a Service Workforce

Steady job growth in Cache County points to increased daily commutes between home and businesses that add to the many work hours spent each week behind a desk, computer, or assembly station. This lifestyle can lead to pensed up stress and physical energy, which converts to a demand for spontaneous recreation opportunities before or after work, or on weekends.

Demand for sports, parks, and passive recreation in America grew in the late 19th century industrial revolution period as workers from rural areas migrated into urban centers to work in factories. A growing urban work force lacked the rural connection to pastoral scenery, fishing, hunting, horseback riding and hiking activities. This trend surfaced in Logan when the population had reached over 4,000. In 1886, a petition of 74 signatures was presented to Logan City in request of a public pleasure ground. The City Council announced in December of 1887 that 160 acres was to be purchased from John Nelson for $12,000. The land became known as Willow Park, and has evolved into the recreational complex.
utilized by residents from the entire Cache Valley region.

Cache County’s regional workforce will continue to grow in service professions such as technology, information, manufacturing, retail, education, and government sectors. Although agriculture will continue to be an important industry in the rural parts of the valley, smaller family farms will likely continue to give way to larger consolidated farms that rely on large machinery and less man power. Many who live in rural towns will commute to job centers in Logan and North Logan.

Planning for a network of more public trail corridors could make rural and mountain scenery available within minutes from growth areas by walking, jogging, hiking, or biking.

_**Logan River Trail Example**_

![Bridge connecting to the Logan River Trail](image)

Public demand for spontaneous, user guided recreation is illustrated by a recent UDOT count of pedestrian use along the Logan River Golf Course Trail from August 21\textsuperscript{st} to August 29\textsuperscript{th}, 2006. Sensors placed along the trail revealed popular use hours for weekdays and weekend activity. The top three hours were between 7:00 and 8:00 p.m. on Monday the 21\textsuperscript{st} (106 people per hour), Thursday the 24\textsuperscript{th} (95 people per hour), and Sunday the 27\textsuperscript{th} (86 per hour). It should be noted that the total number of individuals per hour may be around half the number of trips counted because the trail is not a continuous loop, and users tend to return from their departure point.

Of the total 3,391 trips recorded over an eight day period, the most popular average use hours were between 7:30 a.m. and 12:30 p.m. (around 30 round trips per hour), and between 4:00 and 8:00 p.m. (between 32 and 46 round trips per hour). 7:00 p.m. was the highest average use hour with a measured 46 round trips per hour.

The Logan River trail provides an example of a natural parkway trail that draws families and individuals to recreate along a preserved natural area in an urban community. Many of the trail users are parents walking with young children while a spouse is at work, or professionals sneaking in a brief jog on a lunch break. Such trail activity might not otherwise occur without convenient access - compared to the additional time and effort required to drive to a National Forest area trail.

_**Physical and Mental Health Awareness**_

Awareness is growing in America that a healthy and active lifestyle is the best preventative cure to our nation’s struggle with obesity. Every year as many as 255,000 U.S. adults die from causes that may be attributed to physical inactivity.
alone and 300,000 from inactivity and poor diet combined; these figures do not include others who suffer from chronic disease and impaired quality of life.\textsuperscript{16}

Obesity is a national epidemic that is becoming more prevalent in children and adults. From 1990 to 2005, Utah’s obese population percentage increased from 9.3\% to 20\%.\textsuperscript{17} Utahns are also not getting enough physical activity during their workday. Currently 65\% of Utah adults (over age 18) are employed, and of that group 66\% reported mostly sitting or standing at work.\textsuperscript{18}

Physical inactivity exacts an enormous public health toll. Lack of physical activity is thought to be a primary factor in more than 25\% of all chronic disease deaths and 10\% of all deaths.\textsuperscript{19} One estimate suggests that 32-35\% of all deaths in the United States are attributed to coronary heart disease, colon cancer, and diabetes could be prevented if all members of the population were physically active.\textsuperscript{16} The Surgeon General recommends that all people over age two accumulate at least 30 minutes of endurance-type activity, of at least moderate intensity, on most- preferably all- days of the week.\textsuperscript{20}

America’s reliance on automobile travel coupled with the popularity of high fat or sugar foods, increased television, video games, reliance on personal vehicle use, along with work in employment sectors that require little or no physical activity, is contributing to this trend. Nationally, twenty five percent of trips taken are of a distance one mile or less, but 75\% of these trips are made by car.\textsuperscript{21} For most individuals, becoming moderately active can provide a meaningful health benefit, and trails are an efficient way to promote physical activity for community residents.

A trails system that connects neighborhoods to desirable destinations can help to reduce the number of local vehicle trips, and encourage walking and cycling. In addition to promoting physical activity and thus motivating individuals to maintain a healthy weight, trail exercise can reduce such health problems as diabetes, osteoporosis, depression, and heart disease, while maintaining positive mental health.

Evidence of consumer demand for a more healthy and active lifestyle can be observed in our everyday lifestyle. A surge of memberships at health clubs, participation on team sports for children and adults, purchase of home exercise equipment, and purchase of bicycles and active stroller gear, show that an active lifestyle is in strong demand.

\textbf{Reduced Safety with Growing Vehicle Traffic}

As growth continues in Cache Valley, each new home and business will generate more automobile trips to existing roads, and create demand for new roads or road upgrades with more driving lanes. Without trail corridors, pedestrian and bicycle circulation must increasingly compete with additional vehicle traffic to walk, exercise and to access recreational areas by foot or bike. Sidewalks are typically too narrow to accommodate the faster pace of recreation with normal pedestrian flow. However, a 10’ to 12’ wide trail facility can support a variety of pedestrian or bicycle travel at slower or faster paces of walking, jogging, cycling, or rollerblading.

\textbf{Rising Fuel Prices}

Rising oil prices are drastically increasing transportation costs world-wide. To the extent that other forms of transportation (such as cycling and transit routes) are made available to the public, more vehicle trips
are likely to convert to bus rides, and/or bicycle rides.

**Air Quality**
Reduced air quality due to thermal inversions and the Valley’s growing traffic threatens the health of Valley residents and increases the potential for reductions in federal aid for transportation improvements. The combination of trails, bike routes, transit and planned land uses can make walking and biking more practical between neighborhoods and communities, and entice drivers into other viable commute options. (see section 5.2, Walkable Development).

Cache County Transit District, Logan Transit District (CVTD and LTD), and the Utah State University Shuttle Service provide public transit services that could integrate more cycling and bus riding throughout Logan, and regionally between Richmond, Logan and Hyrum. Cycling to work or other destinations is supported by buses with bike racks. Bike racks encourage cycling to a bus stop, and then riding the bus to a transit stop near an end destination.

A three bike rack providing service on a first come first serve basis.  

Buses with bike racks aid cyclists in colder or wetter months when weather patterns are less predictable. Bike lanes and trails that connect residential neighborhoods to employment areas encourage commuter cycling, while parallel transit service can support cycling and promoting transit trips along trails that link parks, schools, employment and shopping areas.

**Housing Costs and Public Recreation Demand**
A statewide and national trend of increasing housing costs is evident in Cache County, and contributes to public demand for recreation. Dramatic increases in housing costs are outpacing more modest increases in personal income. This growing divide in housing affordability increases the demand for reduced lot sizes or attached housing to match household budgets. Smaller lots and attached housing generally reduces housing costs, reduces yard maintenance, and provides less yard space for outdoor activities and exercise. As the housing market shifts to a smaller average acreage unit per home, so will public demand increase for local and regional recreational opportunities.

Median home prices are rising at a much faster rate than median family income in Utah. This increasing gap in housing affordability is increasing housing market demand for homes on smaller lots or attached housing types.23

Section 5.2 outlines strategies for creating attractive, and walkable neighborhoods that provide a variety of housing types for all stages of life and income. This type of development can bolster trail use and transit ridership if located along transit and trails.
4. Trail Routes and Open Space: Fact & Fiction

This section provides general information about trails, including the advantages, typical challenges associated with a trails program, and common misperceptions about trails prior to implementation. Examples of trail projects throughout the State of Utah and the nation are referenced to illustrate various trail opportunities. Although the majority of Cache County residents are supportive of a future trails system, concerns expressed by affected land owners and nearby residents will surface. The information provided in this section may be referred to as an educational resource to address common concerns about trails, and to inspire long term support for the development of a regional trails system.

4.1 The Regional Big Picture – Quality of Life and Economic Development

A trail and parkway system will require significant long term commitments to meet public demand, yet such investments will also support the regional and local economy through quality of life enhancement. Trails are typically not a form of recreation that can justify a direct user fee to generate a profit or recuperate start up costs, but they do bring customers to adjacent businesses, and they can make an area more attractive for new business location.

A county-wide trails and parkway system would enhance Cache County's quality of life to attract good employers in our increasingly competitive economy. As outlined in Section 3.1, the residential appeal, or quality of life in a region is considered by corporations that compete for a well trained and educated workforce as they consider business headquarters or branch locations.

When selecting a new location, companies focus less on an individual city, and more on a metropolitan region where the workforce may choose to live in a variety of communities. Businesses tend to cluster in metropolitan areas where they can draw upon resources provided at the regional level, such as transportation systems, research and technology, skilled labor, and supplier networks.

Emerging research suggests that a company cannot expect people to locate to a region that is undesirable, and that desirability includes recreational activities, natural
amenities, safety, and affordable housing as attractive draws for sought-after employees. Former HP CEO Carly Fiorina suggested to governors at the 2002 National Governor’s Association Conference to “Keep your tax incentives and highway interchanges. We will go where the highly skilled people are. They will go where they want to live.”

Successful economic development in Cache County means more than competing with other cities for sales tax dollars through retail development. It requires a vision to bring more jobs with livable wages to our residents—which create more disposable income to support local retail and businesses through the exchange of goods and services.

Cache County (or the Logan, UT-ID Metropolitan Statistical Area) must compete with other metropolitan regions, such as Idaho Falls, St. George, and Fort Collins/Loveland, as well as neighboring counties such as Weber, Davis, and Utah. These other areas have closer proximity to a commuter or international airport, and a larger workforce to draw from. Communities in Cache County must capitalize on the region’s quality of life by working together to retain and enhance the inherent beauty and recreational appeal in our region.

**Trails Users and Tourists Supporting Retail**

A well developed trail system can increase opportunities for commercial growth and revitalization within a community, particularly when in proximity to trailheads and destination points along a trail network. Trail users, including visitors and residents, increase the demand for services and businesses in a community, and spend money that converts into local tax revenue. Communities with a successful trail system have seen an increase in business opportunities, decreased store vacancies, and revitalized downtowns. Harrison, Idaho, which recently implemented a Centennial Trail and extensive bike trail, attributes trails to the “economic spark” that has revived their downtown. In Dunedin, Florida store vacancy rates dropped from 35 percent in the early 1990’s to zero after a trail was built through town. Over 170,000 visitors use the 16 mile St. Marks Trail in Tallahassee, Florida, who spend an average of $11.00 each day on services such as restaurants, retail and recreation equipment stores, campgrounds and accommodations, and gas stations and food concessions.

The Cost of trail maintenance can be reduced by the increased tax base and spending in a community from trail use. A 1993 study of the 20-mile Northern Central Rail Trail near Baltimore compared the annual maintenance and operational costs of $191,893, to the direct economic inputs to the State of Maryland. The purchase of over three million dollars in goods associated with the trail returned $304,000 state taxes alone.

**Tourist Demand for Wildlife Related Recreation**

Today in the United States, more people photograph wildlife than play golf. A U.S. Fish and Wildlife Survey (1996) reports that Americans spend $102 billion annually on wildlife recreation, far exceeding the $81 billion spent for new cars each year.

Eight percent of Americans, or 17.5 million ages 16 and older participate in away-from-home birding each year, and Utah ranks 10th for birding participation per capita. Nationally, $7.8 billion was spent in 2005 on bird-related expenditures, including food,
lodging, transportation and guide fees. The U.S. Fish and Wildlife Service estimates that there are 432,700 residents and nonresidents who watch wildlife in Utah each year, including 286,400 who watch birds. There are nearly twice as many bird-watchers as hunters in Utah. One third of birders in Utah are estimated to visit from other states.

Bird Watching as a recreational activity is growing in popularity across America.

Public Safety

Trails help to increase public safety by discouraging crime through the presence of people, by reducing accident risk through separation of pedestrian routes with traffic, and by providing fire break where trails separate housing development from wildlands.

Crime Reduction

A trail system promotes social interaction of its users, and encourages activities that attract families, seniors and other responsible citizens. The presence of people actively using a designated trail decreases opportunities for crime, vandalism, littering, loitering, and other mischievous behavior.

As with any public park or street, trail users should exercise caution to accompany children, and to avoid solitary use during late night hours when other responsible citizens are less likely to use the trail. A policy of closing parks and trails to the public between 10:00 p.m. and 5:00 a.m. aims to help police or adjacent residents recognize unauthorized activity.

Trail locations that are vulnerable to crime tend to be blighted areas that were crime ridden prior to the establishment of the trail. The added presence of a trail through a blighted area is one deterrent to crime – but additional investment and redevelopment of the area may be required to further transform the environment.

A 1998 study of 372 trails conducted by the National park Service and the Rails to Trails Conservancy measured a low crime rate for trails across the country. 5 million people were estimated to use 36 Urban Trails covering 332 miles each year. The national crime rate for muggings in urban areas was 335 muggings per 100,000 inhabitants compared to only 1 per 100,000 trail users. Similar comparisons were reported for assaults, forcible rape and murder. Minor crimes such as trespassing on urban property were mentioned for only five percent of the trails. About one fourth of the trails reported problems that are commonly associated with public streets, including graffiti and littering.

Some land owners may oppose a trail going through their vacant property because of negative trespassing incidents experienced in the past. The assumption may be that more people using a trail would increase the same negative activity. “Experience with properly managed public trails elsewhere indicates that in fact the reverse is true: more of the right kind of use by the right kind of people generally tends to drive out trouble-causers who thrive on seclusion and anonymity. More use usually means fewer problems.”
After constructing the Bonneville Shoreline Trail in Ogden, previous problems in the foothills of gunfire, beer parties, campfires, transients, and 4x4 vehicles destroying vegetation disappeared. Trail installation included buckrail fences, large rock barriers, and gates to prevent vehicle access.13

**Neighborhood Trail Watch**

A neighborhood trail watch program is a low-cost, highly effective neighborhood security program that is run by adjacent property owners. The idea is to encourage multiple eyes and ears to be open and observant of any suspicious trail activity. Undesired trail activity can be discouraged by posting trail segments that are under a neighborhood watch program.

Jay Hudson, Assistant to the Mayor of Ogden City in 1996 reported a high level of satisfaction by residents along the city’s trail system who have become users, advocates, and volunteers who help to lock gates at night and keep the trails groomed. With a neighborhood watch program in place, Hudson reports that “the development of the trail system has virtually eliminated crime and unwanted behavior” along the Ogden River Parkway Trail. Only one incident along the three-mile parkway required police report in the past twelve months.13

**Traffic Safety**

A trails system will also increase the safety of children and families while biking, walking and doing other recreational activities by separating bike and pedestrian use from vehicle road use to provide safe linkages from neighborhoods to community places and public lands.14

**Fire Safety**

Trails at the urban-wildland interface offer a quick attack for fire suppression, and they offer a quick and safe escape route if the wind shifts and the fire ‘hooks’ back toward the firefighter.15

**Active Living - Health**

Residents and visitors in a community are more likely to exercise if their home or lodging is located near a trail.16 Also, if community development patterns encourage walking through a safe and convenient network of continuous sidewalks to safe desirable destinations, more individuals are likely to walk or bike to a trail (see Section 5.2 – Walkable Communities).

**Public Health Benefit:** A cost-benefit analysis of trail users in Lincoln, Nebraska measured significant health benefits to the trail users counted in the city’s 1998 Recreation Trails Census Report. Per capita annual cost of using the trails was $209.28 ($59.28 construction and maintenance, and $150 of equipment and travel), compared to the direct medical benefit of using the trails at $564.41. The ratio of 2.94 suggests that every $1 dollar invested in trails lead to $2.94 in direct medical benefit for trail users – indicating that trails are cost beneficial in reducing health care costs associated with inactivity.17

**Home Values**

Americans will pay more to live near amenities that provide for a more active lifestyle. Studies show that prospective homeowners are attracted to neighborhoods with trail or open space opportunities within a short walk or bike ride. A 2002 survey by the National Association of Realtors found that trails ranked second for the most sought after amenity in a community when purchasing property. Another survey, found that 65.7% of realtors reported that trails made the sale of a home easier.18
“Some developers (in St. George, Utah) have found that property sells faster if it is connected to the trail system. Some property values increase almost 20 percent if homes are located near a trail. Along the trail there are places where homeowners have built connecting trails from their property for easier access.” Tom Wharton in ‘St. George Open Space,’ Salt Lake Tribune, March 12, 1996

**Property Values near Open Space**

Homes near preserved open space areas and parkways typically increase in property value because of the additional aesthetic and recreational value provided.

Homes bordering the 12-mile Burke Gilman trail in Seattle, WA sold for 6 percent more than other houses of comparable size. Denver residents who said they would pay more to live near a greenbelt or park rose from 16 percent to 48 percent between 1980 and 1990. A three-mile greenbelt around Lake Merritt, near Oakland’s city center, was found to add $41 million to the surrounding property values.

A linear trail, park, or parkway contains an abundance of boundary ‘edge’ compared to a more square or circular park area. For example, a 1 mile long corridor with an average width of 30 ft. (3.64 acres) creates just over two miles of park edge for adjacent development to enjoy.

A square shaped park of the same size would create only 400 feet of park edge. To achieve the same park edge as a 1 mile long corridor, a square park would have to be close to 2600 acres. The visibility along a linear park can help to detect and monitor...
Additional Public Benefits of Strategic Open Space Preservation

Trail and parkway system open space can provide more than recreational services to a community, including benefits that translate into economic savings for the public. Planned strategically, preservation of sensitive lands, such as wetlands or buffers along riparian corridors can decrease spending for flooding and storm water mitigation infrastructure, and other vital human requirements.

Rather than increasing flooding risk by allowing building near wetlands and floodplains for example, open space could instead provide critical storm water absorption. Open space can protect water quality of streams and rivers by function as storm water retention or detention areas that filter sediments and pollutants out of surface water flows, and that allow more water to filtrate into the ground.

As communities are able to achieve multiple benefits of open space – including utility and recreation along a parkway corridor, park and storm water impact fees may be used to acquire strategic open spaces that address both public purposes. Detention areas could enhance a parkway trail given the popularity of trails along water courses – even if the presence of water is temporary after major storm events or spring runoff.

Planting trees and other vegetation in open space areas will help to draw carbon dioxide from the air, provide wildlife habitat, reduce temperatures from reflective urban development, and create a sequencing of green spaces that enhance the recreational experience. These natural services provided by green infrastructure can greatly enhance the quality of life and translate into economic savings for a community.

4.2 - Understanding Trails Opposition

Although home values and neighborhood stability are enhanced by the close proximity of a trail, trails are none the less difficult to establish through existing neighborhoods compared to relative ease of building a trail through new development.

While some existing residents might welcome a trail adjacent to their residence, others may view it as a loss of personal privacy. This is typical of neighborhoods where homes back onto a canal or river.
Many of these homes have been purchased with the idea of privacy in mind, and public access along an established back yard is not a welcomed thought. Even if the minority of established home owners oppose a trail easement along a developed corridor, the opportunity for a continuous trail may be greatly impaired or blocked altogether.

Chapter 6 discusses Section 78-34-1 of the Utah State Law that prevents use of imminent domain to establish trail corridors across private property. Section 5.1 describes methods for local governments to create incentives for vacant land owners and developers to provide a planned trail easement through new development.

Opposition to a proposed trail should be anticipated by land owners or nearby residents not familiar with the benefits of a trail system. Trail advocates and planners should take time to listen to concerns expressed by nearby residents in an effort to build a dialog, and seek opportunities to resolve concerns. Factual information and good project examples from other communities should be shared to help residents separate initial fear and negative perception from the real experiences of others. Examples of successful trail and parkways are provided below in Section 4.3, and new trails provided in Cache Valley will be featured on the County Trails website at www.cachecounty.org/trails

**Privacy from Trail User Requests**

Home owners living adjacent to a trail can post a sign that discourages trail users from stopping to ask for a drink of water, or an emergency need for use of a telephone or restroom facility. Other residents or businesses may wish to post a sign that encourages such requests, similar to a “McGruff-type” sign that identifies homes where children can go for help. A sign displayed as “Trail Users – Ask Here if You Need Help,” could help trail users avoid homes desiring full privacy.
4.3 - A Sample of Trail Programs in Utah

**Jordan River**
The Jordan River Parkway master plan was first conceptualized as a continuous regional parkway amenity over 30 years ago. The goal is to provide a trail connection from the shoreline of the Great Salt Lake to Utah Lake, and then from Utah Lake along the Provo River to Provo Canyon. The Jordan River also provides kayaking, non-motorized boating, and both rivers provide fishing opportunities. The parkway is a work in progress, with many completed trail segments and recreational amenities that attract residents from the region. Salt Lake County, Utah County, and city governments continue to coordinate efforts to manage growth and raise funding each year to advance this important project.

![](Biking on the Provo River Parkway Trail)

The Jordan River Parkway is open from 5:00 a.m. to 11:00 p.m. Motorized vehicles, fire arms, archery, and alcoholic beverages are prohibited. Pet owners must keep animals on a leash, and clean up animal waste.

**Utah County**
Utah County offers over 30 miles of trails that provide access to parks and parkways, and over 20 miles of completed Bonneville Shoreline Trail (BST). More trail connections are planned, including extension of the BST, Utah Lake trail, and other locations. Parkway trails include the Provo River, Jordan River, Hobble Creek, Skipper Bay.

![](The Jordan River Parkway in South Salt Lake County provides a natural escape from surrounding urban development)

The Utah County Engineering department reports over 1 million visits to the Provo River trail each year. The county promotes their trails program through a trails patch that can be earned by children who demonstrate use and knowledge of trails, provide service, and identify natural features found along the system.

![](Utah County Trails Patch for youth education)

**Weber Pathways**
Weber Pathways is a non-profit organization that works closely with communities in Cache County to plan and implement a network of non-motorized trails and parkways throughout Weber County. The organization promotes hiking trails, mountain biking trails, and pathways for horseback riders, cross-country skiers, snow-shoers, and other non-motorized trail users. Weber Pathway’s mission is to...
“promote, plan, and preserve a network of non-motorized public pathways and related open spaces throughout Weber County, Utah.”

**St. George City**

About 30 miles of paved or natural surface trail are available to residents and visitors of St. George. One trail is designated for horses, while dogs are allowed on leashes on all trails. In the future, the city expects the trail system to link major population centers throughout the city and provide alternative transportation in addition to recreation.

Trails in St. George City link neighborhoods to natural areas and commercial districts. Trails in St. George City accommodate a variety of non-motorized activities including walking, jogging, cycling, and skating.

**Bonneville Shoreline Trail**

The ideal alignment of the Bonneville Shoreline Trail (BST) is along mountain bench terraces formed by the eastern shoreline of ancient Lake Bonneville. Although existing development or unwilling land owners may prevent this alignment along the entire length of the trail (from Spanish Fork, UT to the Utah-Idaho border, and beyond), the goal is to seek a continuous path as close to the shoreline as possible. Sections of trail that follow motorized roads or streets should not be termed as “Bonneville Shoreline Trail” to maintain distinction between roads or bikeways and the more primitive BST experience.13

The goals of the BST are to provide the following opportunities:

- Access to the canyons, streams, mountains and other features in public lands.
- Separation between recreational walkers, runners, bicyclists and horse users from automobiles for safety and pleasing aesthetics. (Not all section of the BST may be appropriate for all uses)
- Opportunity for quiet and scenic recreational use near homes and employment.
- A fire break between the urban and wildland interface that also allows for rapid deployment of fire fighting resources to the foothills.
- Preservation of foothill aesthetics, wildlife, historic and educational values.

The Northern Bonneville Shoreline Trail (NBST) Master Plan was completed in 2002, and focus on the potential of the BST from Willard (Box Elder/Weber county border), to the Utah/Idaho border north of Cache County. This plan more than doubles the original BST vision (from Utah County to Weber County), and would likely allow for more equestrian use than the original southern portion.

The NBST Master Plan provides alternative routes that are included in this Cache County-wide Trails and Parkway Master Plan. Both Master Plans will help local governments and other organizations engage in additional trails planning dialogue with land owners, and help to generate funding for construction.31
5. Implementation Strategies

This chapter outlines a variety of planning and development strategies to support cooperative implementation of trails, parkways, and related open space. Some strategies are more appropriate for urbanized areas, while others are better suited for rural areas. Each community may choose the most appropriate course of action to support their respective long range planning and development code updates. Strategies may be referenced in general plans, zoning ordinances and development codes.

General Topics covered in this section include the following:

5.1 - Strategic Development Codes to Preserve Corridors and Open Space
- Planned Unit Development Agreements
- Cluster Development
- Conservation Easements
- Private HOA/Public Agreements
- Transfer of Development Rights (TDR)
- River Setback Requirement

5.2 - Walkable Communities

5.3 - Potential of Canal Trails, and

5.4 - Funding Strategies

5.1 - Strategic Development Codes to Preserve Corridors and Open Space

Purpose: Create development codes that encourage developers to preserve critical corridors for trail easement, recreation, or land conservation.

This section outlines strategies to encourage developers and land owners to plan for public trail and open space amenities as part of a development proposal. To avoid unnecessary confusion and legal entanglement, an important legal distinction must be made between a new parkway intended for the benefit of the whole community, verses a private park or trail created exclusively for a home owners association. A local government cannot legally require a developer to create a public trail corridor as part of the development without offering some additional incentives as part of a development agreement. This is based on case law that protects a developer from being required to provide new amenities for residents other than those that will live in the proposed development. Some services such as water delivery, sewer, arterial roads, and parks may require impact fees to reimburse the public for provision of these external services to the developer (See section 6).

Rather than requiring a public trail through a proposed development, a local government may negotiate with a developer to encourage a trail corridor or open space to be deeded to the city for public use. The following zoning techniques provide developers with two options, including 1) the option to develop without trails and open space at fewer dwelling units per acre, or 2) to develop at a greater density in exchange for the provision of public trail or open space amenities.

Planned Unit Development Agreement:

(See Appendix A)

The City of Saratoga Springs (located on the western shoreline of Utah Lake) encourages developers to build the Utah Lake Trail through its Planned Unit
Development (PUD) ordinance option. The PUD ordinance allows four (4) dwelling units per acre compared to three (3) dwelling units per acre allowed on the existing “Low Density Residential 3 Land Use Zone.” This additional unit per acre and more flexibility in lot size and configuration provide incentives for the developer to design and build a regional trail and associated open space as part of the new development.

Smithfield City recently negotiated a trail segment along the brow of a hill near the mountain bench for the Lantern Hill Subdivision. The density was negotiated to encourage a future public trail passing alongside the development.

A PUD may encourage open space that is owned and maintained by a local government, or by a home owners association (HOA). A public trail or park intended for community-wide use should be owned and maintained by the local government, whereas club houses and grounds intended for the development residents only would be owned and maintained by the HOA.

**Cluster Development:**

*(See Appendix B & C)*

Similar to a planned unit development, cluster development provides incentives for developers to preserve various types of open space, whether it is a trail corridor/greenway, natural area, or agricultural land. Cluster Development allows for significant reduction in lot size to preserve a remaining open space area on the site. Smaller lot sizes with reduced frontage widths reduce street lengths and associated infrastructure costs, including roads, sidewalks, sewer, and water lines. Additional incentive can be created by offering more dwelling units through a density bonus if the clustering option is pursued. Cluster development can be an effective tool for preserving an open space edge along a development that functions as part of a larger regional greenway, or parkway corridor.

Development of 49 1-acre lots without public access along the river corridor, and with some homes lying in a flood plain.

Cluster development on ½ acre lots with a 25% density bonus creates 61 homes while protecting homes from flooding, and preserving public access along the river.

In contrast to a PUD ordinance, cluster development usually places less emphasis on full public ownership and maintenance, which restricts public access to the open space. However, trail users would benefit by a public trail easement created next to preserved open space that allows “visual access,” as
opposed to physical access to the open space.
Cluster development ordinances may vary in density and scale, and may be applied to rural or urban settings. A number of cluster development ordinances are active in Utah communities, including Marriot Slaterville, Wellsville, Farmington, Hooper, Weber County, and Cache County.

**Clustering in Rural Areas**
Cluster development can be used to preserve agricultural lands in rural communities. This option can support farmers with an additional income source while reserving land for continued farming activity.

A lower baseline density - such as 1 unit per acre to 1 unit per 5 acre, can encourage significant land preservation if a significantly smaller lot is allowed through clustering. The resulting infrastructure cost reductions benefit not only the developer, but also the community that is responsible for road maintenance and other services.

**Securing Open Space Maintenance and Protection**
How does a community assure that preserved open space areas remain protected into perpetuity? Several methods may be required to prevent the possibility of a future land owner or legislative body from backing out of a contract to protect an area from development.

A **conservation easement** is a legal document that allows a second party to restrict development of property held by a primary party. A conservation easement may also include a third party that holds enforcement rights to the conservation easement. For example, a city might hold a conservation easement to a private land parcel, and a local land trust might hold the enforcement rights to assure that future city officials do not attempt to relinquish their ownership of the conservation easement. In Utah, a conservation easement may only be held or enforced by a private non-profit land trust or any government entity, whether it be federal, state, local, or a special service district.
A land trust organization may not be interested in holding and easement on all open space projects preserved through cluster development, or through Transfer of Development Rights (see the following section). Land trusts seek to protect land with significant value for the purpose of their organization, such as wildlife habitat, water quality or agricultural preservation.

**Private HOA and Public Development Agreements**

Development approval of a planned unit development or cluster subdivision may include the formation of a homeowner’s association (HOA) that owns and maintains the open space areas. The HOA is a private body comprised of residents in a specific development that collectively own open space or other amenities in a development. The body is established by the developer who must usually seek approval from the local government during the development permitting process. An HOA’s responsibilities are established through the development of codes, covenants and restrictions that guide the on-going care of the common amenities. Such codes typically specify a monthly fee to be paid by development residents to maintain common area facilities, including open space.

Unfortunately, it is not uncommon to hear mention of an HOA who’s ability to enforce codes and monthly fees has disintegrated over time, and the amenities have become neglected and unsightly. This could be tragic for a cluster subdivision where preserved open space, pasture or farmland is not properly maintained, and becomes an unsightly patch of weeds.

**Public Enforcement Rights**

Through some trial and error, communities have learned to establish safeguards as part of the HOA approval process. For example, Midway City requires the following language to be included in the Codes, Covenants and Restrictions for Planned Unit Developments in Midway, Utah:

"Midway City shall have the right, but not the duty, to require, and if necessary, perform, at the Association's expense, landscaping, maintenance, and snow removal within the common areas if the Association fails adequately to perform such. In the event Midway City exercises this right, the City shall be entitled to recover any associated costs and attorney fees. This section shall not be amended or deleted without the approval of Midway City."

Another example from South Jordan City states that the “City has the right, but not the duty to form, under State statutes, a Special Service District (SSD) for the purpose of ongoing maintenance or a Special Improvement District (SID) for the purpose of making needed improvements within the project. The City may take this action when either asked to take over improvements or maintenance tasks by the Home Owners Association, or by an owner. The City Council may also take one or both of these actions when it determines the need based on a historical pattern of a lack of care and maintenance.

**HOA and Public Preservation Safeguards**

As an added measure of protection, a conservation easement could be held by a local government on private HOA open space. To prevent a future elected community council from relinquishing the easement and encouraging development of the open space, the codes, covenants and restrictions should require that a majority or unanimous vote of residents in the HOA approve of the open space.
conversion. This dual protection offered by HOA and elected official vote assures that preserved open space is both desired, and protected in the long term.
Transfer of Development Rights (TDR):
(See Appendix Display D)
A transfer of development rights program may be adopted by a community to allow developers the option of purchasing additional development rights from other land owners. Additional development rights would allow a developer to increase the number of dwelling units in a proposed development while preserving sensitive lands elsewhere in the community.

Mapleton City’s TDR program has been successful in preserving much of the privately owned upper bench area next to U.S. Forest Service land. This will help to reduce service costs in the community, preserve critical winter deer habitat, and allow for development of the Bonneville Shoreline Trail. 2

A TDR program establishes areas where increased density would be appropriate (receiving zones), and areas desired for preservation (sending zones). Land owners in sending zones may choose to sell their development rights to developers if they agree to a conservation easement that would restrict future development on their property. TDR tends to equalize land values, compared to conventional zoning that designates some land as low density residential (lower value zoning), and other areas as higher density or commercial (higher value zoning). The transfer (or sale) of development rights helps to preserve strategic sensitive land areas that might otherwise be negatively impacted by homes in a cluster development (such as farming activity or wildlife habitat areas). Target preservation goals for TDR might include sensitive mountain bench areas, water shed protection, floodplains, mixed wetland and upland areas, riparian corridors, and agland.

Image a. Vacant land with sensitive land areas shown in the background.

Image b. Typical growth pattern with suburbs in foreground and low density development occurring on sensitive lands.

Image c. TDR application including more compact development in foreground, suburbs and lower density growth in the mid ground, and preserved sensitive lands in the background. 1
River Buffer or Setback
(Applied to Commercial, Multi-family, or Mixed Use Development:)
(See Appendix Display E)
A minimum development setback along sensitive rivers, streams or wetlands can help to create a trail easement while protecting water quality, and enhancing wildlife habitat. Increasing the distance between buildings or parking surfaces from a river edge can help to reduce storm water runoff into the river, and reduce surface water pollutants levels. Storm water should be diverted away from rivers and detained in swales, or in detention or retention ponds, where the water can evaporate and pollutants can settle, and even be absorbed from the soil by wetland plants. (See Section 4.1, Additional Public Benefits of Strategic Open Space Preservation).

Additionally, a native vegetation requirement along river edges can protect water quality and enhance the natural aesthetic and habitat value by creating vegetative cover and by reducing lawn fertilizers that may pollute the water.
5.2 - Walkable Communities
Purpose: Design neighborhoods to be friendly to pedestrians and cyclists, and promote non-vehicle trips to access trail and transit facilities.

The term “walkable” for a neighborhood or community suggests a variety of characteristics that make walking safe, convenient and desirable. The following description provides a checklist of items that may be considered to encourage less driving, and more walking, cycling and transit use.

a. Sidewalks – should be continuous in developed areas, especially along school routes and other popular walking areas. Where cul-de-sacs are necessary, an easement should be provided between lots to provide pedestrian linkage to another street or trail.

A sidewalk provided between homes provides pedestrian linkage to a cul-de-sac dead end street.

Rural areas without sidewalks should strive for a sidewalk on at least one side of streets, especially in areas with heavier traffic.

Sidewalk widths should increase as the intensity of land use increases. For example, lower to medium density residential sidewalks might be four to five feet wide, while sidewalks fronting commercial buildings should be eight to twelve feet wide. The Americans with Disabilities Act (ADA) requires that walks accessing public buildings or parks be at least five feet wide to accommodate two-way wheelchair passage.

b. Neighborhood Design for Pedestrians– Residential neighborhoods with smaller block sizes, continuous walkways, street trees, and pocket parks are attractive for walking. Attractive housing design with deemphasized garages can be achieved through recessed garages or alley fed garages.

A missing segment of sidewalk along a school walking route is unsafe for children, and reduces incentive to walk from homes to other destinations.

A walkway provided between homes provides pedestrian linkage to a cul-de-sac dead end street.

A new development with a continuous sidewalk and street trees (recently planted), and parking accessed from a rear alley enhances street safety and the overall neighborhood walking environment. Reduced front yard setbacks been reduced to maximize back yard area on a smaller lot.
Garages and parking fed by a single lane alley help to reduce the visual dominance of automobiles on a street, and reduce pedestrian conflicts with vehicles backing onto the street. 1

A historic residential street with narrow pavement, mature street trees, and continuous sidewalks provides a safe and comfortable walking environment. 1

Walkable development for commercial or mixed use areas encourages buildings close to the street with display windows for pedestrians, wide sidewalks, shared parking to the side or rear of buildings, transit stops, street trees, plazas, crosswalks, and traffic calming all work together to enhance the urban environment for pedestrians. Smaller blocks make on-street parking more convenient and walking between stores more likely. 1

c. Mixed Use Development and Compact Housing near Transit lines and Trails (See Appendix F)
Mixed use development promotes walking by encouraging housing, retail, and jobs to be integrated in one neighborhood, block, or building.

Mixed use development includes multiple land use types into one neighborhood. When serviced by transit, mixed use development may encourages frequent transit use and may be referred to as transit oriented development. 1

Mixed use neighborhoods are especially beneficial for walking when a transit stop is located within the development (also known as transit oriented development) that connects the neighborhood to other destinations throughout the community or region. 3

The presence of “destinations” or activity opportunities is one of the top influences contributing to people’s desire to walk. 4 Recent survey research finds a correlation between those who walk - because there were places to walk to. 5

Transit and trails can extend destination opportunities of pedestrians or cyclists from their immediate neighborhoods. When more individuals live within a walkable distance of transit stops and desired destinations - walking and transit trips increase. The presence of commercial development near residential housing can also encourage
relatively low vehicle ownership rates and short commuting distances among residents of a mixed-use neighborhood.

Walking trips are most likely to occur when a destination is within ¼ mile of a residence or workplace. Walking trips become much less likely when located more than ½ mile from points of origin or destination.\(^6\) Section 3.2 discusses America’s growing dependency on automobile travel, and concurrent increase in obesity rates across the nation. Multiple research studies have shown that residents of areas with higher rates of walking and cycling experience lower rates of obesity, and fewer cases of diabetes and hypertension.\(^7\)

A mixed use neighborhood in Kentlands, Maryland. The entire development provides a variety of housing types, commercial, and employment opportunities.\(^1\)

While many individuals walk or bike frequently as a means to get from one place to another, others may walk or bike solely for recreation with no particular destination in mind. Regardless of the utility for active travel, much of the infrastructure used remains the same.\(^8\)

Strategic zoning of mixed use development or compact housing near transit and trails can occur on a small percentage of a community’s land total land area while creating multiple advantages (See Appendix F) to the community and the region, including:

- An increase of transit and trail trips increase for commuting and reduction of automobile trips.
- Encouragement of local shopping and employment opportunities, and potential increase of sales tax revenues
- A community’s share of moderate or affordable income housing can be accommodated in strategic mixed use locations to comply with Utah HB 295. Mixed use development can include both higher end or and moderate to low income housing types (See Chapter 6 Summary of Utah State Code 10-9a-403).
- Individuals and families of moderate to lower income tend to have less income for a second vehicle, and may not have income to purchase and maintain a significant yard area. Access to trail and transit for recreation, commuting or other travel for these individuals helps to maximize trail and transit use.
- Creating a safe and inviting environment for day and night time use. Workers and shoppers by day and residents at night keep people in a neighborhood during all hours to discourage crime.
- Mixed use development, or transit oriented development could be used as a receiving area for development rights in a Transfer of Development Rights (TDR) program, and help to preserve sensitive lands elsewhere in the community (See TDR under Section 5.1)

d. Street Hierarchy and connectivity – Narrow road pavement widths where appropriate encourage slower driving by
motorists, making pedestrian walking and crossing safer and more desirable. Streets in low to medium density residential areas require less street width compared to commercial or higher density residential areas. This is due to fewer people, visitors and cars traveling to fewer homes per square mile. Narrower Local streets (24 ft to 30 ft pavement width, not including curbs) provide sufficient width in any size city as long as sufficient Collector and Arterials are provided to accommodate accumulated traffic.

Residential neighborhoods of medium to more compact densities may also be serviced by narrow street pavement widths if alleys with rear parking are provided.

e. Street Connectivity – fewer Collector and Arterial streets are required when blocks are well connected and contain fewer dead ends or cul-de-sacs. This allows a higher proportion of narrow local streets that provide more route choices and disperse traffic.

Where cul-de-sacs are required, pedestrian right-of-way between the cul-de-sac and the next street should be provided (see Section 5.2a).

Two different types of community design appear at the top and bottom of this diagram. Streets in area C (single family residential) do not connect to shopping or school (area A), or to multi-family housing and office development (area B). This disconnected street network discourages walking, and causes traffic to collect onto collector streets (area D) and arterials (area E). Smaller, interconnected blocks that encourage walking and disperse traffic typify the lower half, connecting residential areas to work, shopping, schools and recreation (areas F & G).  
f. Complete Streets – A complete street profile requires all transportation modes to be present in a street profile design, including automobile, cycling, and pedestrian. Complete street profiles will vary between Local, Collector, and Arterial Streets, and will vary with the type of land use fronting the street. For example, a commercial land use fronting an arterial street would require wider sidewalks, and a wider shoulder to accommodate cycling and more frequent on-street parking.
5.3 - Potential of Canal Trails

As described in Section 3, canal roads create a traffic free corridor through neighborhoods and communities. Local governments should seek to engage in a dialog with canal companies to resolve any concerns over shared public use of a canal road. This section highlights shared canal road and trail agreements from jurisdictions in Utah that could serve as templates for agreements between additional canal companies, local governments, and land owners (See Resolving Canal Company Concerns, Page 65).

Canal trails enhance pedestrian safety by reducing crossing point conflicts with vehicles.9

Some canals in the county have been used regularly by pedestrians for decades with little concern expressed by the managing canal companies or land owners. Other canal companies post “no-trespassing” signs in an effort to minimize motorized vehicles on the maintenance road or any drowning mishap. Restricting use of canal roads is difficult to enforce because canal companies usually lack the resources to monitor public trespassing, and because police contracts usually focus on traffic violations and public health emergencies.

Canal Easements on Private and Public Land

Most of the canals in Cache County traverse private property through a canal easement that provides for the canal water channel and an adjacent maintenance road. The canal road allows canal company personnel to remove litter and debris from grates, inspect for bank failure, and to dredge the bottom of the canal.

Private land owners who own the land along the canal may grant permission to guests or the public to use the maintenance road across their land. Conversely, land owners may also restrict public access across their property and prevent users other than the canal company on their property.

Canals and canal roads that traverse public lands are often accessible to the public, such as the ditch that passes through the Cache Valley Fair Grounds and Willow Park in Logan. Also, the popular tubing activity on the Logan-Hyde Park-Smithfield in Logan Canyon traverses U.S. Forest Service property, and stops at the Logan Golf and Country Club where public canal access is restricted at the mouth of Logan Canyon. Another canal easement on public land is the Logan Northern Canal that runs along the steep embankment below Highway 91 owned by UDOT.

Canal Right-of-Way Corridor owned by the Federal Government

The United States Bureau of Reclamation owns a continuous 20-foot wide corridor of property along the 14-mile Hyrum-Mendon Canal (see description in Section 3). The Bureau of Reclamation relies on a local water board – the South Cache Water User’s
Association and subsidiary canal companies to perform operation and maintenance of water delivery to share holders. The Bureau and the Board must both agree to share the canal maintenance road as a trail as an agreement with Cache County before public access is permitted. The canal board and Bureau are not supportive at this time, and the public should avoid trespassing on this property.

The Bureau has entered into a shared use agreement with the federally owned Stienaker Canal in Uintah County, near Vernal, Utah. The agreement between the United States, the Uintah Conservancy District (water board), the Uintah County Recreation District, and Vernal City indemnifies the canal board of any liability, and spells out details of access rights and responsibilities for shared trail or road use. The Uintah Water district canal managers report that the agreement is successful for all parties, that water delivery and maintenance routines are not impeded by trail use, and that motorized vehicle use is discouraged by pedestrians using the facility.

Additional discussions to forward the idea of a canal trail along the Hyrum – Mendon canal should focus on Cache County’s interest in assuming full liability of the canal road, and in detailing shared responsibilities of operation and maintenance.

**New Development Opportunities along Canal Corridors**
Developers typically recognize the marketing advantage of a canal trail passing through or adjacent to their proposed development. Local development codes may not be able to require a trail easement from developers as part of the design review process, but incentives can be created to encourage a canal setback with public access, or to encourage a right of way to be deeded to into local government ownership. The local government may then work with the canal company to share use of the canal maintenance road for a public trail.

At least two communities in Cache County encourage developers to create trails along canals in their general plan, and development codes. Smithfield City’s general plan shows existing canal trail segments and future planned canals trails. The city’s subdivision code requires a 10 foot easement along the canal to be sold to the city, after which the city may construct a new trail service road as agreed upon with the canal company.

**North Logan City** has adopted a trails component to their general plan showing future desired trails along three canals passing through the city’s jurisdiction. Although sections of the canal are restricted to the public by some home owners along the canal, the city is pursuing trail development along other canal segments where land owners are more supportive. This gradual, “piece by piece” approach works towards a more complete canal trail in the future.

Although land owners will always have the right to restrict public access across their private property, alternatives such as bridge crossings to the other side of the canal, or detours onto a public street along a canal segment may be pursued to maintain trail continuity.
Resolving Canal Company Concerns

Interest in shared use of canal roads for trails is growing nationwide, and a growing number of agreements between local governments and canal companies exist to serve as examples. At least three existing agreements in Utah are in effect, including 1) Smithfield City and the Logan-Hyde Park-Smithfield Canal Company, 2) the Uintah Recreation Board, Uintah County, Vernal City in agreement with the Uintah Water Conservancy District (Stienaker Canal Company) and the Bureau of Reclamation, and 3) Clearfield City and Layton City in agreement with the Davis and Weber Counties Canal Company. Copies of these agreements are available from the Cache County Trails Coordinator in the County Development Services Department (764-1787).

Typical canal company concerns may be addressed as follows:

1. Litter: The Stienaker Canal Company in Vernal Utah has not observed an increase of litter from trail users sharing the canal road. Local governments could provide periodic trash cans and dog bag stations to encourage cleanup by trail users.

2. Vandalism and motorized vehicle abuse: The Stienaker Canal Company has not experienced vandalism, and finds that increased presence of trail users discourages illegal motorized use and vandalism. The company reports not abuse or tampering with head gate locks.

3. Liability: (Also see Section 6.1)
   In 2006, The Cache County Council approved the County Attorney to pursue agreements with canal companies or other utility companies that would indemnify the company from any potential lawsuit for damages sustained from public access along the corridor.

The 2007 Utah State Legislature passed SB98 – Government Immunity for Trails. The bill provides immunity for non-motorized trails along canals, ditches, rivers and other land features that are adopted as part of a general plan of a county or municipality, regardless of whether the property is privately or publicly owned (See Section 6.1)

Urban Canal Opportunities

Canals and ditch line diversions may be used to enhance urban down town environments as part of an enhanced streetscape opportunity. Decorative water channels and water features may be integrated into parks and commercial streets or complexes, to enhance the walking or cycling experience as part of a trail way system.

Illustration of Irrigation water enhancement in downtown Logan
5.4 - Funding Strategies & Sources

(See Appendix G)

Funding for trails and parkways can be gathered from both private and public sources. Donations of labor, equipment and expertise should not be overlooked as large expanses of trail can be built with these low cost resources. The County Trails Coordinator and Trails Coordinating Committee will seek to collect a growing list of potential donation and volunteer donors to refer to specific projects throughout the county.

Local Private Funding Sources

As the Cache County Trails and Parkway plan becomes better known, and the benefits more evident, local family or corporate foundations may wish to donate to certain trail, park, or land preservation projects. This is more likely to occur if non-profit agencies partner with local governments given the typical donation pattern of foundations to private 501(c)(3) non-profit organizations. Working with local wildlife or land trust organizations, or health and wellness organizations could attract additional private funding towards the regional parkway cause.

Development Agreements

Negotiations for Planned Unit Developments with a public trail could result not only in the provision of a trail easement by the developer, but also in trail construction built as part of the community infrastructure (Section 5.1). This may occur by the local government waiving sidewalks on one side of the street in low traffic volume areas, or by providing additional density to as incentive to build the trail. Trail building can help the developer sell lots more quickly, particularly when the trail system growth is underway.

Utah Conservation Corps

The Utah Conservation Corps (UCC), an environmental service program based out of Utah State University, can be utilized in the planning, construction, and maintenance of Cache County trails. Staff from the UCC can assist writing funding proposals and the on-ground design of trails. Hand crews from the UCC can also be utilized to construct and maintain trails. In most cases the costs of UCC assistance can be written into funding proposals.

In the past, the UCC has helped the City of Logan construct 2-mile Bonneville Shoreline Trail segment from Green to Logan Canyons. UCC staff also helped the City of Logan write a successful UDOT Transportation Enhancement proposal for construction of the Boulevard Trail. In addition, the UCC has helped the Logan Ranger District build and maintain over 50 miles of backcountry trails. UCC crews can also assist with re-vegetation, habitat restoration, and invasive weed removal efforts along trail corridors. For more information call Sean Damitz at (435) 797-0964 ext 1 or e-mail ucc@cc.usu.edu.

Grant Funding Sources

Appendix G provides a summary of known funding sources from state, federal, and private sources. As a National Scenic Byway, Logan Canyon is uniquely positioned to apply for National Scenic Byway funding that is available each year for visual and recreational enhancement.
6. Planning Resources
This section provides reference materials to assist local governments in updating general plans, or enact zoning ordinances to help implement trail construction and corridor preservation. The section outlines 1) design guidelines for various trail types, and 2) a summary of relevant case law and state statutes that will aid in land owner and developer dialogs, ordinance revisions, or other implementation efforts.

6.1 - Liability
The 2007 Utah State Legislature passed SB98 – Government Immunity for Trails. The bill provides immunity for non-motorized trails along canals, ditches, and rivers that are adopted as part of a general plan of a county or municipality, regardless of whether the property is privately or publicly owned.

The updated statute 63-30d-301 ‘Waivers of immunity – Exceptions’ reads as follows:

(n) the operation or existence of a pedestrian or equestrian trail that is along a ditch, canal, stream, or river, regardless of ownership or operation of the ditch, canal, stream, or river, if:
   (i) the trail is designated under a general plan adopted by a municipality under Section 10-9a-401 or by a county under Section 17-27a-401;
   (ii) the trail right-of-way or the right-of-way where the trail is located is open to public use as evidenced by a written agreement between the owner or operator of the trail right-of-way, or of the right-of-way where the trail is located, and the municipality or county where the trail is located; and
   (iii) the written agreement:
   (A) contains a plan for operation and maintenance of the trail; and
   (B) provides that an owner or operator of the trail right-of-way or of the right-of-way where the trail is located has, at minimum, the same level of immunity from suit as the governmental entity in connection with or resulting from the use of the trail.

Cache County Comprehensive Road/Trail Liability Insurance
If desired, Cache County will further explore liability protection, as was discussed by the county council on February 28, 2006. The council approved the county attorney to negotiate terms of indemnification with all affected parties on a case by case basis. This is made possible by the County’s comprehensive road liability insurance policy, which would also cover non-motorized roads - or trails. One example of an agreement could be a canal trail that is jointly sponsored by a city and the county, with vehicle access rights maintained only by the canal company. The county could indemnify land owners, the canal company, and the city through an agreement signed by multiple parties, and specify shared maintenance responsibilities by each party.

Other Laws Supporting Government and Land Owner Immunity
State Law and potential indemnification by the county provide additional assurance to land owners and utility companies that are protected by common law, other state laws, and case law when allowing public trail access across their property.

The following case law summaries illustrates that land owners are not liable
for accident or harm of general public recreational use on their property unless specific invitation is made, or unless a fee is charged for commercial recreational use on the property.

The summary is derived from the Bonneville Shoreline Trail website.¹

1. The land owner has no duty to warn, no duty to protect and is liable only for malicious injury to a trespasser (someone who illegally enters posted or enclosed property). Weber v. Springville City, 725 P.2d 1360 (Utah 1986).

2. To a licensee (an invited social guest or someone who is allowed on property but not invited), the landowner has a duty to warn of known dangers, but has no duty to protect or to make the property safe for the licensee. Stevens v. Salt Lake County, 478 P.2d 496 (Utah 1970).

3. The landowner has an affirmative duty to protect and to make the property safe for an invitee (a business patron or someone who enters the property in response to a public invitation). Steele v. Denver & Rio Grand Western R.R. Co., 396 P.2d 751 (Utah 1964).

4. These common rules are effective in promoting safety and in providing compensation for injuries, but they tend to motivate landowners to post property and prosecute trespassers in order to get highest level of liability protection. Thus, they conflict with modern society’s interest in encouraging public access to undeveloped private land.

5. Landowner Liability Act (U.C.A.

The Utah Legislature passed the Landowner Liability Act in order to modify the common law rules and to encourage owners to allow public access to private land. The act applies where:

1. The use of the land is recreational
2. The landowner does not charge a fee to users, and
3. the property is open to general public

This case law suggests that liability is only for malicious injury, and not for trespassing or open public recreational use on private property.

6. Liability of Public Landowners

Sovereign Immunity
Under common law, government agencies are not liable for discretionary functions unless immunity has been waived by statute. Madsen v. Borthick, 658 P.2d 627 (Utah 1983)

7. Immunity has been waived by statute for injuries caused by a “defective, unsafe, or dangerous condition of any highway, road, street, alley, crosswalk, sidewalk, culvert, tunnel, bridge, viaduct, or other structure located on them” or by “any public building, structure, dam, reservoir, or other public improvement.”¹

6.2 - Property Rights and Trails

Land owners are not required to provide a public trail easement on their property. The Utah State Legislature amended eminent domain law in the 2006 general session to exclude trails, paths, and other recreation uses outside of public right of ways as a valid and legal use of eminent
domain. Section **78-34-1** was amended to read as follows:

**Uses for which right may be exercised.** Subject to the provisions of this chapter, the right of eminent domain may be exercised on behalf of the following public uses:

1. All public uses authorized by the Government of the United States.
2. Public buildings and grounds for the use of the state, and all other public uses authorized by the Legislature.
3. Public buildings and grounds for the use of any county, city or incorporated town, board of education; reservoirs, canals, aqueducts, flumes, ditches, or pipes for conducting water for the use of the inhabitants of any county or city or incorporated town, or for the use of any county, city or incorporated town; the raising of the banks of streams, removing therefrom, and widening; deepening or straightening their channels; bicycle paths and sidewalks adjacent to paved roads; roads, streets and alleys for public vehicular use, excluding trails, paths, or other ways for walking, hiking, bicycling, equestrian use, or other recreational uses; and all other public uses for the benefit of any county, city or incorporated town, or the inhabitants thereof.

4. Roads, streets and alleys for public vehicular use, excluding trails, paths, or other ways for walking, hiking, bicycling, equestrian use, or other recreational uses; and all other public uses for the benefit of any county, city or incorporated town, or the inhabitants thereof.

**6.3 - RS-2477, Public R-O-W**

Most major roads and highways in the Western United States were established under an 1866 federal law, passed by Congress as an open-ended grant of "the right of way for the construction of highways over public lands, not reserved for public uses." This statute, commonly referred to as "R.S. 2477" was in effect for 110 years until it was repealed under the Federal Land Policy and Management Act of 1976 (FLPMA). This new law responded to a new national interest to protect and conserve remaining public lands and resources. However, FLPMA did protected existing R.S. 2477 rights-of-way established from 1866 to 1976.

Cache County has responded to a 1994 federal regulation requiring efforts to inventory R.S. 2477 rights-of-way on Forest Service and BLM lands. To avoid losing ownership of some routes, the county’s research aim is intended to:

1. Determine which categories of rights-of-ways the county intends to assert and maintain;
2. Determine how many rights-of-way the county has and where they are located; and
3. Gather documentation to show that each right-of-way is valid.

RS 2477 rights of way can exist on private land if the right of way existed on public land before it passed into private hands, it might still be a valid RS2477 right of way.

**6.4 - State of Utah 10-Year Continuous Use Rule**

Another relevant measurement to determine private vs. public status of a road (or trail) is to prove whether a route has been used ten continuous years prior to 1976. Utah’s definition of a public right-of-way designation requires historic proof to determine whether public access was available on a road traversing private or public land. Some of the difficulty in resolving such disputes is inherent in the interconnected ownership pattern of Forest Service and private lands. A random pattern of public and private ownership can make the beginning and ending points of a
road difficult to establish - particularly when additional roads to other public lands branch from a primary route.

6.5 - Affordable Housing Law

The Utah State Legislature passed House Bill 295 – “Affordable Housing” in 1996 in response to growing concerns over rising housing costs in the state. From 1992 to 1997, increases in Utah’s housing costs led all other states at 70%, compared to the second ranking state, Oregon at 50%. 10 years later, housing costs have continued to grow dramatically, and the need for affordable housing continues to grow as income rates continue to lag behind housing costs (see section 3.2).

House Bill 295 became Utah State Code 10-9a-403, which states that “the availability of moderate income housing is an issue of statewide concern. . . to this end municipalities should afford a reasonable opportunity for a variety of housing, including moderate income housing, to meet the needs of people desiring to live there.”

This law defines moderate-income housing as “housing occupied or reserved for occupancy by households with a gross household income equal to or less than 80% of the median gross income of the metropolitan area.” And by “December 31, 1998, each municipal governing board shall, as part of its general plan, adopt a plan for moderate income housing within that municipality.”

The state does not enforce Code 10-9a-403, but recent case law suggests that local governments must adjust general plans and supporting ordinances to avoid lawsuits from developers, or other groups advocating affordable housing. 4

To comply with the State’s affordable housing law, communities should 1) Estimate the existing supply of moderate income housing located within the municipality or county, 2) estimate the need for moderate income housing within the next five years, 3) A survey of residential zoning, 4) evaluate the existing zoning densities affect opportunities for affordable housing, and 5) a description of the municipality’s or county’s program to encourage an adequate supply of moderate-income housing.

Techniques to implement findings may include rezoning of density (such as mixed use development described in Section 5), inclusionary developments (mandatory set asides or density bonus), infrastructure expansion or rehabilitation, rehabilitation of existing uninhabitable housing stock, consideration of waiving construction related fees (impact fees), tax incentives, utilization of state programs, such as the Utah Housing Finance Agency, and the Department of Economic Development. 5

6.6 - Off-Highway Vehicle Law

Utah Code Section 41-22 allows local governments to enact ordinances that designate and supervise routes for off-highway vehicles (also called all-terrain vehicles - ATV’s), and snowmobiles. Mendon City adopted an ordinance that allows for ATV or snowmobile use of public local streets to connect to public unimproved roads and National Forest lands located west of town. The purpose of the ordinance is to control vehicle
speeds, define minimum age standards for vehicle operation, and prevent use along State HWY 23.

The State code 41-22-10.5, provides the following guidelines.

1. A municipality or county may adopt ordinances designating certain streets and highways under its respective jurisdiction as off-highway vehicle routes to allow off-highway vehicle operators to gain direct access to or from a private or public area open for off-highway vehicle use.

2. A municipality or a county may adopt an ordinance requiring an operator who is under 16 years of age to be under the direct visual supervision of an adult who is at least 18 years of age while using a route designated under Subsection (1).

3. A route designated under Subsection (1) may not be along, across, or within the boundaries of an interstate freeway or limited access highway.

4. Except as provided under Section 41-22-10.3, a person may not operate an off-highway vehicle on any street or highway that is not designated or posted as open for off-highway vehicle use in accordance with Subsection (1) or Section 41-22-10.1.

5. Subsection (4) does not apply to off-highway implements of husbandry used in accordance with Section 41-22-5.5

Section 41-22-10.1, describes conditions for ATV’s to operated on posted public land.

1. Currently registered off-highway vehicles may be operated on public land, trails, streets, or highways that are posted by sign or designated by map or description as open to off-highway vehicle use by the controlling federal, state, county, or municipal agency.

2. The controlling federal, state, county, or municipal agency may:

   a. provide a map or description showing or describing land, trails, streets, or highways open to off-highway vehicle use; or

   b. post signs designating lands, trails, streets, or highways open to off-highway vehicle use.

3. Liability may not be imposed on any federal, state, county, or municipality relating to the designation or maintenance of any land, trail, street, or highway open for off-highway vehicle use.

6.7 – Rails With Trails

In light of the growing public interest to share trails with active rail lines, the U.S. Department of Transportation published a report in 2002 called ‘Rails-with-Trails.’ The report addresses issues of a shared use path or trail located on or directly adjacent to an active railroad corridor. It also describes how most railway lines are privately owned, and that railroad companies are usually concerned about liability, and preventing collisions between individuals and operating trains. Liability concerns have been addressed to create about 65 RWT’s that collectively provide 239 miles of trail in 30 States today. Over 70 percent of RWT’s utilize barriers for separation from active railroads and other properties. Barriers include fencing (34%), vegetation (21%), vertical grade (16%), and drainage ditch (12%). Fencing is usually required when the edge of the trail is located less than 25 feet from the center of the tracks.6
Notes

Introduction

Section 1
1. Adaptation of a Florida Statewide Greenway System Report to the Governor by Utah State University, Department of Landscape Architecture and Environmental Planning in the 2004 Bear River Greenway Master Plan Study.
6. Blue way-Canoeing Photo, Department of Landscape Architecture and Environmental Planning in the 2004 Bear River Greenway Master Plan Study.

Section 2

Section 3

**Section 4**


Section 5
1. Envision Utah – Training resources available upon request and online. www.envisionutah.org

Section 6
4. Utah League of Cities and Towns, online summary of Utah’s Affordable Housing Law www.ulct.org
Appendix

A. Spring Creek Ranch (Planned Unit Development)

B. Logan River Trails (Cluster Development)

C. The Preserve at Farmington Greens (Cluster Development)

D. Harvest Park Development (TDR)

E. Setback/Buffer Guidelines for Commercial, Multi-Family or Mixed Use Development

F. Maximizing Regional Trail and Transit Use through Land Use and Transportation Planning

G. Funding Sources

H. Trail Cross Sections