



## **Table of Contents**

| 1.0 | Introduction                                    | 1  |
|-----|---|----|
| 1.1 | Overview of Parley's Canyon Trail               | 4  |
| 1.2 | Regional Goals and Objectives                   | 4  |
| 1.3 | Project Approach                                | 4  |
| 2.0 | Background Data & Existing Conditions           | 5  |
| 2.1 | Mapping and Aerial Images                       | 5  |
| 2.2 |   |    |
| 2.3 | Existing Land Use                               | 6  |
| 2.4 | Roadway and Utility Information                 | 8  |
| 2.5 | Field survey results                            | 9  |
| 3.0 | Environmental Screening                         | 10 |
| 3.1 | Wetlands and Floodplains                        | 10 |
| 3.2 |   |    |
| 3.3 | General Wildlife and Vegetation                 | 13 |
| 3.4 | Threatened, Endangered, and Sensitive Species   | 14 |
| 3.5 | Invasive Species                                | 14 |
| 3.6 | Historic and/or Archaeological Sites            | 15 |
| 3.7 | Public Land                                     | 16 |
| 4.0 | Trail Facility Needs and Analysis               | 16 |
| 4.1 | Trail Demand and Use                            | 18 |
| 4.2 | Recreational Opportunities                      | 20 |
| 4.3 | Local and Regional Connections                  | 20 |
| 4.4 | Potential Location for Trail Facilities         | 25 |
| 5.0 | Trail Routing Analysis and Initial Alternatives | 27 |
| 5.1 | Segment One                                     | 28 |
| 5   | 5.1.1 Segment Limits                            | 28 |
| 5   | 5.1.2 Geometric Considerations                  | 28 |
|     | 5.1.3 Design Constraints and Issues             |    |
|     | 5.1.4 Constructability Evaluation               |    |
| 5.2 | Segment Two                                     | 30 |











| 5.2.1   | Segment Limits   | 30 |
|---------|--|----|
| 5.2.2   | Geometric Considerations                               | 30 |
| 5.2.3   | Design Constraints and Issues                          | 31 |
| 5.2.4   | Constructability Evaluation                            | 32 |
| 5.3 Se  | egment Three – Alternative 3 (North of I-80)           | 32 |
| 5.3.1   | Segment Limits   | 32 |
| 5.3.2   | Geometric Considerations                               | 33 |
| 5.3.3   | Design Constraints and Issues                          | 33 |
| 5.3.4   | Constructability Evaluation                            | 33 |
| 5.4 Se  | egment Three – Alternative 3A (South of I-80)          | 34 |
| 5.4.1   | Segment Limits   | 34 |
| 5.4.2   | Geometric Considerations                               | 34 |
| 5.4.3   | Design Constraints and Issues                          | 35 |
| 5.4.4   | Constructability Evaluation                            | 35 |
| 5.5 Se  | egment Three – Alternative 3B (Tunnel or I-80 Bridges) | 36 |
| 5.5.1   | Segment Limits   | 36 |
| 5.5.2   | Geometric Considerations                               | 36 |
| 5.5.3   | Design Constraints and Issues                          | 37 |
| 5.5.4   | Constructability Evaluation                            | 37 |
| 5.6 Se  | egment Three – Alternative 3C (Trail Bridge)           | 39 |
| 5.6.1   | Segment Limits   | 39 |
| 5.6.2   | Geometric Considerations                               | 39 |
| 5.6.3   | Design Constraints and Issues                          | 40 |
| 5.6.4   | Constructability Evaluation                            | 40 |
| 5.7 Se  | egment Four  | 40 |
| 5.7.1   | Segment Limits   | 40 |
| 5.7.2   | Geometric Considerations                               |    |
| 5.7.3   | Design Constraints and Issues                          |    |
| 5.7.4   | Constructability Evaluation                            | 42 |
| 6.0 lmp | lementation Strategies                                 | 42 |
| 6.1 Eı  | nvironmental Permits Needed                            | 42 |
|         | asements, Leases, Purchases                            |    |
|         | aintenance, Operation, Regulation                      |    |
|         | ne Next Steps in the Planning Process                  |    |











# **List of Figures**

| Figure 1.1: Parley's Canyon Trail Study Corridor                                   | 1  |
|--|----|
| Figure 1.2: Local Context  | 2  |
| Figure 1.3: Regional Context   | 3  |
| Figure 3.1: FIRM 2001 - Floodplains along the Parley's Canyon Trail Corridor       | 10 |
| Figure 3.2: Protected Watersheds   | 12 |
| Figure 3.3: Water Resources in the Project vicinity                                | 13 |
| Figure 3.4: Uinta-Wasatch-Cache National Forest                                    | 16 |
| Figure 4.1: Activities Most Often Participated in by the 361 Respondents           | 17 |
| Figure 4.2: Motive for Using Parley's Canyon Trail                                 | 18 |
| Figure 4.3: The Wasatch Loop   | 21 |
| Figure 4.4: Emigration Canyon Trails   | 22 |
| Figure 4.5: Park City Area Trails  | 23 |
| Figure 4.6: Summit Park Trails   | 24 |
| Figure 4.7: Percentage of Users Who Would Use the Trail to Connect to Other Trails | 25 |
| Figure 4.8: Proposed Facilities  | 25 |
| Figure 4.9: Trailhead Signage Example  | 26 |
| Figure 4.10: Salt Lake City Watershed Education Signs                              | 27 |
| Figure 5.1: Trail Segment Alternatives   | 27 |
| Figure 5.2: Segment One Alignment  | 28 |
| Figure 5.3: Segment One Typical Section  | 28 |
| Figure 5.4: Segment Two Alignment  | 30 |
| Figure 5.5: Segment Two Typical Section  | 30 |
| Figure 5.6: Segment Three – Alternative 3 Alignment                                | 33 |
| Figure 5.7: Segment Three – Alternative 3 Typical Section                          | 33 |
| Figure 5.8: Segment Three – Alternative 3A Alignment                               | 34 |
| Figure 5.9: Segment Three – Alternative 3A Typical Section                         | 34 |
| Figure 5.10: Segment Three – Alternative 3B Alignment                              | 36 |
| Figure 5.11: Segment Three – Alternative 3B Typical Sections                       | 36 |
| Figure 5.12: Segment Three – Alternative 3C Alignment                              | 39 |
| Figure 5.13: Segment Three – Alternative 3C Typical Section                        | 39 |
| Figure 5.14: Segment Four Alignment  | 41 |
| Figure 5.15: Segment Four Typical Section  | 41 |
| Figure 6.1: Property Owners  | 43 |











# **Appendices**

Appendix A: Field Survey Photo Map

Appendix B: Utah Division of Wildlife Letter Appendix C: The Utah Nordic Alliance Article

Appendix D: Design Criteria Appendix E: Cost Estimate

Appendix F: Parley's Canyon Trail Alignments

Appendix G: Salt Lake City Public Utilities / Watershed Division Comments Appendix H: 2012 Public Survey Comments regarding Trail Feasibility Study

Appendix I: 2012 Public Survey Graphic Results regarding Trail Feasibility Study











## 1.0 Introduction

The Parley's Canyon Trail Feasibility Study examines a proposal to locate a non-motorized trail adjacent to Interstate 80, connecting Salt Lake County to Summit County. When the study began, the lower and upper sections of the canyon were considered in the scope of the study - starting at the Bonneville Shoreline Trail and proceeding east along Interstate 80 to the Summit Park community. As the study progressed, the lower portion of Parley's Canyon was dropped from consideration in favor of a safer route through Emigration Canyon. The purpose for this study is: 1) to determine trail routing alternatives, 2) estimate costs for construction, operations and maintenance, and mitigating for impacts to utilities, properties and the environment.

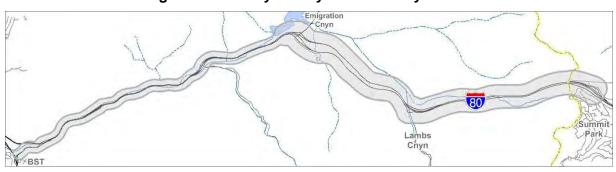


Figure 1.1: Parley's Canyon Trail Study Corridor

Interstate 80 is a major east west transportation corridor for vehicle traffic. Adding a non-motorized mode of transportation into this high volume / high speed corridor, will require separating the proposed trail from the existing roadway to maintain safety.

Access to the Wasatch Canyons and other destinations to the east, are considered highly desirable to recreationalists living along the Wasatch front. Because Interstate 80 offers the most direct route to recreational destinations east of Salt Lake, this study will consider how road and mountain bicyclists, cross country skiers and hikers can benefit from the development of a non-motorized trail in Parley's Canyon.

Michael Baker Jr., Inc. (Baker) with subconsultants Perkins Engineering and ArcSitio Design Inc., was selected to perform the feasibility study for Parley's Canyon Trail. The study area is illustrated in **Figures 1.1 and 1.2** and the regional context is shown in **Figure 1.3**. Specific goals and objectives for the study are identified in **Section 1.3**.

This document details the findings of tasks performed for the Parley's Canyon Trail Feasibility Study (**Section 1.3**).











Mtn. Dell Reservoir Summit Co. Salt Lake Co. To Salt Lake To Park Mtn. Dell Golf Course City -80 80 Beehive Bowhunters Summit Park Washington Park Study Area Boundary Lambs Canyon

Figure 1.2: Local Context











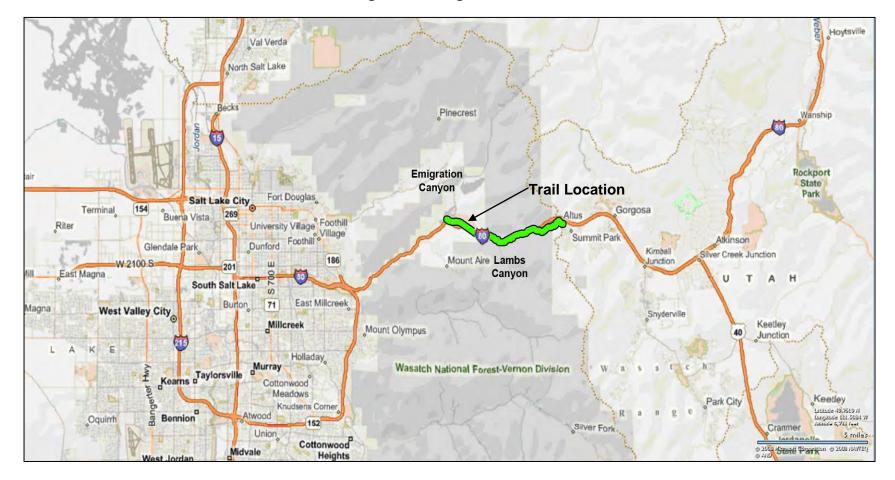


Figure 1.3: Regional Context











## 1.1 Overview of Parley's Canyon Trail

The proposed Parley's Canyon Trail begins at Kimball Junction in Summit County and moves west utilizing frontage roads south of I-80 to connect to the abandoned U.S. Route 40 roadway. Project stakeholders propose the trail continue west adjacent to I-80, then at the Mountain Dell Golf Course, head north along SR-65 towards Emigration Canyon Road, which cyclists can use to connect to the Bonneville Shoreline Trail. This would form a continuous bike friendly route for both recreation and commuting purposes.

The trail concept was first presented by Gordon Stam, a local resident and member of the Utah Bicycle Coalition in 2006. The concept was then presented in July of 2006 to the Summit County Commission. Shortly after, the concept was submitted as a project for Transportation Enhancement (TE) funding to the Utah Department of Transportation (UDOT). However, funding was not granted since supporting documentation (a Feasibility Study) had not been prepared. As a result, Salt Lake and Summit Counties agreed to consider the concept and formed a partnership to investigate development of the trail.

Since the majority of the trail exists within Salt Lake County, the County solicited the project for contract and hired the consultant. Project stakeholders, included the two counties, UDOT, Salt Lake City, and the general public (including the Utah Bicycle Coalition).

## 1.2 Regional Goals and Objectives

Salt Lake and Summit Counties recognize the value of connecting trails to serve the region. Parley's Canyon Trail will serve as a major non-motorized transportation and recreational trail, connecting users with recreational areas and existing and future transit and activity centers (e.g., Salt Lake City, Park City).

# 1.3 Project Approach

The Parley's Canyon Feasibility Study included planning for the development of a trail that will achieve maximum benefit for users, while balancing the ultimate costs and impacts. The Study includes the following fundamental goals:

- Identify practical trail alignments that will least impact private property, embrace cost effectiveness, and that are easy to construct.
- Satisfy trail user needs and achieve a trail configuration that will allow UDOT flexibility with future plans for I-80.
- Develop trail solutions that minimize encroachment on the watershed, wetlands, wildlife and native vegetation.











 Provide a planning document that provides the foundation for Salt Lake and Summit Counties to prepare a more detailed environmental assessment and preliminary design.

The project approach included the following tasks:

1) Identify user demand for the trail, 2) Determine opportunities for connectivity to other trails and regional destinations, 3) Determine the location for the Interstate 80 crossing and type, 4) Develop alternate alignments, 5) Identify trail facility needs and improvements, 6) Analyze the costs and evaluate phasing for design and construction, and 7) Investigate potential funding sources.

Specifically, the Scope of Services included the following tasks:

- <u>Information Gathering and Orientation</u>: Perform project history research, identify property ownerships adjacent to the trail, meet with the project review team and obtain existing mapping.
- <u>Field Work and Alignment Resolution</u>: Perform surveying and mapping, perform trail traffic planning, determine potential trail alignment and alternatives, determine impacts to properties and the environment, coordinate with stakeholders and local, county, state and federal agencies, conduct a constructability analysis and prepare cost estimates, and identify funding sources for construction.
- <u>Draft Feasibility Study</u>: Summarize the findings of the feasibility study including descriptions of all study elements, alignment mapping, illustrations, implementation strategies, and cost estimates.
- <u>Preliminary Feasibility Study Approval</u>: Present feasibility study findings and report to stakeholders and facilitate an Open House for public feedback.
- <u>Final Feasibility Study</u>: Adopt comments and revisions from the approval process and submit the final report.

# 2.0 Background Data & Existing Conditions

A fundamental component of the feasibility study was a comprehensive review of existing resources including mapping, existing plans and documents, existing and proposed land use, property ownership information, and roadway attribute data. To supplement the existing resources, a field survey was performed on June 6, 2008 to confirm existing conditions and investigate possible alternatives to the proposed alignment of Parley's Canyon Trail.

# 2.1 Mapping and Aerial Images

Aerial photography was obtained from the Utah Automated Geographic Reference Center (AGRC) for the Study Area and clipped to develop a base map for Parley's Canyon Trail. Contours, property lines and the proposed alignments of Parley's









Canyon Trail were imported into GIS. Data layers were also used to develop plans in CADD for conceptual design of trail alignment alternatives. Existing maps for the study area were obtained to determine potential impacts and opportunities.

#### 2.2 Relevant Plans and Documents

UDOT Right of Way (ROW) Plans and as-built drawings were obtained for the existing I-80 corridor between Exit 134 (SR-65 Interchange) and Exit 140 (Summit Park). These plans show the current ROW lines for I-80 and the frontage roads that exist north of Interstate 80 along this corridor.

The Basin Recreation Master Plan was obtained for existing and planned trails for Summit County. The Emigration Canyon Trails Master Plan was obtained for existing and planned trails within Emigration Canyon. Given the multiple jurisdictions this trail crosses, other relevant plans include the Uinta-Wasatch-Cache National Forest Master Plan, the Salt Lake City Department of Public Utilities Watershed Management Plan, the Salt Lake County Wasatch Canyons Master Plan. The planning of this trail must include recommendations and restrictions included in these plans.

## 2.3 Existing Land Use

The study area is comprised mostly of open space, including protected watershed lands, with multiple recreation areas. Properties that may be potentially impacted by the proposed trail alignment include (1) the Interstate 80 ROW, owned and maintained by UDOT; (2) protected watershed lands both owned and managed by Salt Lake City Corporation; (3) a developed park (Washington Park) owned and maintained by Salt Lake City Corporation; a golf course (Mountain Dell Golf Course) owned and maintained by Salt Lake City Corporation; (4) federal lands managed by the United States Forest Service – Uinta-Wasatch-Cache National Forest; and (5) land owned by the Beehive Wasatch Bowhunters (BWB), as well as other private landholders.



I-80 Corridor in Parley's Canyon and the BWB Property Location













**Uinta-Wasatch-Cache National Forest** 

Uinta-Wasatch-Cache National Forest encompasses nearly two million acres located in three primary areas: the northern and western slopes of the Uinta Mountains; the Wasatch Front, from Lone Peak north to the Idaho border, including the Wasatch, Monte Cristo, and Bear River Ranges; and the Stansbury Range, in the Great Basin.<sup>1</sup>

Of the nearly two million acres within the boundaries of the Uinta-Wasatch-Cache National Forest, approximately 1.2 million acres are federal land, while the remaining 0.8 million acres of land are owned by state and local governments and private entities. According to the U.S. Forest Service, Uinta-Wasatch-Cache is one of the most frequently visited forests in the United States.

The Mountain Dell Canyon Golf Course, at an altitude of 6,000 feet, consists of 201 acres extending up Parley's Creek, owned by Salt Lake City Corporation. It is located approximately 12 miles east of Salt Lake City and 13 miles west of Park City. According to the Salt Lake City Golf website, the course is regarded as one of the most beautiful public golf courses in the Salt Lake City area and offers two challenging 18-hole courses.<sup>2</sup>



Mountain Dell Golf Course











Washington Park, also owned by Salt Lake City Corporation, is nestled in Parley's Canyon and surrounded by the Mountain Dell Canyon Golf Course. Washington Park is one of 126 parks that Salt Lake City maintains. Located off of Exit 134 (SR-65 Interchange) on I-80, the park offers picnic areas, athletic fields, a playground and other amenities.<sup>3</sup>



Washington Park

## 2.4 Roadway and Utility Information

There are several existing roadway corridors that lie within the Parley's Canyon Trail Study Boundary. Interstate 80 (I-80) is the widest road corridor within the study area. I-80 ascends Parley's Canyon from Salt Lake City as a six lane highway to an elevation of approximately 7000' at Parley's Summit.



I-80 in Parley's Canyon



Abandoned US-40

At Exit 134 (SR-65 interchange) off of I-80 there is an existing frontage road that parallels I-80 on the north side, and travels east towards the Mountain Dell Golf Course and Washington Park. This two-lane road serves as an access road for the Golf Course and Washington Park. There are two seasons of heavy use, one during the summer months when the golf course is in operation, the other

Abandoned U.S. Highway 40 (US-40) also lies within the study area west of the Summit Park community. In the early 1970's I-80 replaced much of US-40, but remnants still exist in Parley's Canyon. **Section 3.6** discusses the history of US-40 in more detail.



Frontage Road/Golf Course Access Road











during the winter when the community comes to sled, snowshoe and cross country ski.



At the Lambs Canyon Exit off of I-80 (Exit 137) there is another existing frontage road that parallels the north side of I-80 and travels east towards the BWB Property. The existing traffic on this frontage road primarily serves the BWB. In the winter, this road is not always cleared of snow and can become impassable.

Frontage Road/BWB Access

As the environmental process continues, utility companies (Pacificorp, Chevron, etc.) should be consulted with given the extensive gas and power line easements found in this area.

#### 2.5 Field survey results

On June 6, 2008, members of the project team surveyed the study area for potential issues. Aerial photos and contour maps were used as references. Notes and photos were taken to record visual information. The project team started at the SR-65 Interchange at Mountain Dell and continued eastward towards Summit Park. A photo map was organized and is located in Appendix A. The team was unable to survey the BWB property because it was gated, as it is private property. The BWB currently use their land as an archery range/course. Three Dimensional Big Game Archery Targets were observed on the hillsides in various areas throughout the property.



Entrance to the Beehive Wasatch Bowhunters Property

As a result of the field survey, team members thought it was important to include an alternate alignment using Lambs Canyon as the crossing, and having the trail continue on the south side of I-80, to connect to the old US-40.











# 3.0 Environmental Screening

More in-depth analysis of the environment and other project constraints will be necessary as the environmental process continues. In-depth analysis could include a Wetland and Waters of the U.S. Delineation; Historical and Archaeological investigations; Threatened, Endangered, & Sensitive Species analysis; Geotechnical Investigations; and a Noise analysis, to name a few. This feasibility report is based on the field review and other available information gathered to date. A significant area of environmental concern is the trail's placement in a protected watershed area. This is discussed further in **Section 3.2**. As the environmental study progresses, a detailed watershed analysis will be needed in order to determine impacts to the protected watershed.

## 3.1 Wetlands and Floodplains

Within the project study boundary, there are potential wetland areas along Parley's Creek and low lying areas that tend to accumulate water seasonally. Wetlands are defined using the 33 CFR 328.3(b) as having the presence of hydrophytic vegetation, hydric soils, and wetland hydrology. As the environmental study progresses, a detailed wetland and waters of the U.S. delineation should be performed in order to delineate existing wetlands within the Study Area. The placement of fill or dredge material in waters of the United States, including wetland areas, is regulated by the US Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act. If fill or dredge materials are placed in any wetland area, a Section 404 permit will be required before work can commence.

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program. This program was established in accordance with the National Flood Insurance Act of 1968, as modified by the Flood Disaster Protection Act of 1973 and the National Flood Insurance Reform Act of 1994. Salt Lake County participates in the regular phase of FEMA's National Flood Insurance Program (NFIP) and the Flood Insurance Rate Map (FIRM) in the project area vicinity is shown in **Figure 3.1**.

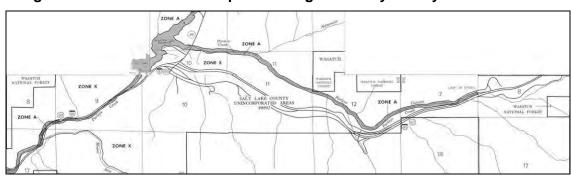


Figure 3.1: FIRM 2001 - Floodplains along the Parley's Canyon Trail Corridor









The 100-year floodplain associated with Parley's Creek and the Mountain Dell Reservoir, resides in the study area. The current and beneficial value of the existing floodplain is to convey runoff from the 100-year storm events. Base elevations and flood hazard factors have not been determined for this area. If work will be required within the designated 100-year floodplain, coordination with the local floodplain coordinator during design is required, since Salt Lake County participates in the FIRM.

## 3.2 Water Resources

Parley's Canyon Trail lies within a protected watershed area. **Figure 3.2** shows the protected watershed area and the project location. This map was obtained from the Salt Lake City Public Utilities Watershed Division<sup>4</sup>. As the environmental study progresses, a detailed watershed analysis will need to be done in order to determine impacts to the protected watershed. As the major land owner for this project and managers of the watersheds in the area, Salt Lake City will need to be kept informed and coordinated with as the Environmental Process continues.

Activities in the canyons around Salt Lake City can have an immediate impact on the quality of the drinking water. The water in a canyon stream can take less than 24 hours to reach the drinking water faucets in the Salt Lake Valley. Approximately 60% of the drinking water supply for the valley comes from protected watersheds. Invasive species can also have an impact on the water quality because they are more susceptible to fires. Ash runoff from these fires could impact the culinary water intake. See **Section 3.5 Invasive Species** for more detail.

Source watershed protection and drinking water treatment has nearly eliminated illness caused by drinking water contamination. Protected watershed canyons include City Creek Canyon, Emigration Canyon (above Burrs Fork), Parleys Canyon, Dell Canyon, Lamb Canyon, Big Cottonwood Canyon, and Little Cottonwood Canyon (see **Figure 3.2**). To help keep the drinking water safe, the following rules apply to protected watersheds<sup>5</sup>:

- Camping is allowed in developed campgrounds in all protected watershed canyons. Backcountry camping is not allowed in City Creek, Emigration, Parleys, Lambs, and Dell Canyons.
- Use designated restrooms.
- Practice "Leave No Trace" skills. Pack out what you pack in or use trash containers.
- Campfires are allowed in developed facilities with fire rings. Backcountry fires are not allowed in City Creek, Emigration, Parleys, Lambs, and Dell Canyons. Seasonal restrictions on fire use may apply. Fireworks are prohibited.











- Dogs, horses, and other domestic animals are prohibited in protected watersheds because their waste can end up in your drinking water. Search/Rescue dogs, etc. allowed by permit only.
- Swimming, wading, and motorized boating are prohibited in protected watershed canyons as studies show these activities have water quality and public health impacts. Fishing waders are required in all lakes and streams.
- Motorized vehicles are not allowed except on roads or trails that are specifically designated as open for that use. Off-road, cross-country travel is prohibited.

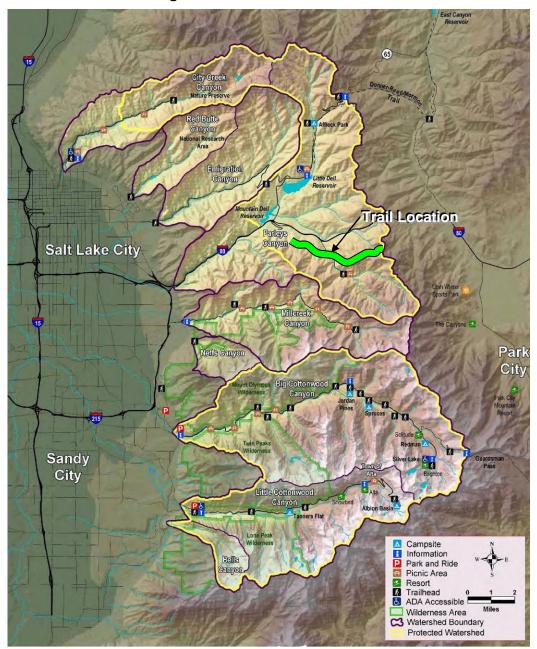


Figure 3.2: Protected Watersheds











Parley's Creek and Lambs Creek run within the project study boundary. Parley's Creek runs in an east-west direction and Lambs Creek runs in a north-south direction through Lamb's Canyon, an important sub-watershed to the Parleys Canyon watershed. Lambs Creek is a tributary to Parley's Creek as seen in **Figure 3.3**.

Emigration Canyon

Res 55 Mtn Dell Golf Course

Mtn Dell Golf Course

Lambs

Canyon

Figure 3.3: Water Resources in the Project vicinity

Steps will be taken to minimize or avoid impacts to water resources. If construction is required within Parley's or Lambs Creek, a Stream Alteration Permit will be required. Prior to construction, a Storm Water Pollution Prevention Plan (SWPPP) will be prepared and a Utah Pollutant Discharge Elimination System (UPDES) Storm Water General Permit must be issued from the Utah Department of Environmental Quality (UDEQ), Division of Water Quality. Watershed regulations also apply to construction activities in the watershed and will be addressed.

## 3.3 General Wildlife and Vegetation

The vegetation and wildlife in the project area have been heavily influenced by the existing roadway corridors. Wildlife currently residing in the study area seems to be more tolerant of high traffic density and noise. With the presence of Mountain Dell Golf Course, Washington Park, and the archery range, wildlife also seems more tolerant of human presence in these areas as well. The Study Area contains suitable habitat for forage, roosts, and nesting to migrating birds, such as raptors, wading and shore birds, and passerines. Wildlife has the potential to be disturbed by construction, maintenance, and users of the trail.

Areas outside the study area, but potentially affected by increased dispersed recreation and disturbance due to the presence of the trail and auxiliary developments, include habitat that is less accustomed to traffic, noise, and human presence.

A variety of plant species exist within the study area including, but not limited to, western choke cherry (Prunus virginiana var. demissa), heart leaf arnica (Arnica cordifolia), elephanthead (Pedicularis groenlandica), curley dock (Rumex crispus), big sagebrush (Artemisia tridentate), green rabbitbrush (Chrysothamnus viscidiflorus), cheatgrass (Bromus tectorum L.), intermediate wheatgrass (Thinopyrum intermedium),









Alfalfa (Medicago setiva), scrub oak (Quercus gambelii), tumble mustard (Sisymbrium altissimum), and a mix of native and non-native grasses.

Existing vegetation should be protected from disturbance beyond the specified limits of construction or maintenance. If vegetation is removed, it should be re-established using native plants. The trail could also be a means of introducing weed species along



Arnica cordifolia

the trail corridor. Weed species have an effect on wildlife habitat and forage by reducing the amount of native vegetation in the area. See **Section 3.5 Invasive Species** for more detail.

## 3.4 Threatened, Endangered, and Sensitive Species

The Utah Department of Natural Resources through the Utah Division of Wildlife Resources (UDWR) maintains the Natural Heritage Program database with the known locations of federally listed threatened and endangered species, as well as state sensitive species. In a letter dated June 20, 2008, UDWR stated that there are no records of occurrence for any threatened, endangered, or sensitive species within the project area (see **Appendix B** for UDWR letter). However, in the vicinity of the project study area there are recent occurrences of the following state sensitive species; Bonneville cutthroat trout (Oncorhynchus clarkia utah), ferruginous hawk (Buteo regalis), and northern goshawk (Accipiter gentiles). There are also historical records of occurrence for the western pearlshell (Margaritifera falcata) and western toad (Bufo boreas).

There were no threatened, endangered, or state sensitive plant species observed during the field visit within or in the immediate vicinity of the Study Area. As the environmental process continues, a further detailed survey should be completed to determine the presence of any threatened, endangered, or sensitive species or their habitat, exist within or in the vicinity of the study area. The Utah Division of Wildlife Resources should be contacted regarding sensitive species.

## 3.5 Invasive Species

Salt Lake County has several species listed as invasive. Invasive species include not only noxious weeds, but also other plants and animals that have been introduced into an environment where they did not evolve. As a result, invasive species generally do not have natural predators to limit their reproduction, and thus spread rampantly. Invasive species can produce significant changes to vegetation, composition, structure, or ecosystem function. Thus, effecting wildlife habitat and forage.











Invasive species or noxious weeds have the potential to be introduced or spread along trails. These species often create a monoculture and are more susceptible to fire. Depending on the size of the fire, the culinary water intake could be affected by ash runoff. Because of the sensitive nature of the watershed, extra precautions should be taken and eradication strategies should be implemented immediately if an invasion does occur<sup>5</sup>.



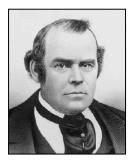
Bromus tectorum L.

Mapping data collected by Salt Lake City Public Utilities staff shows a direct correlation between trails and heavy weed infested areas in the Watershed. The disturbed nature of the tread and sidelines contribute as well as the fact that transport vectors often include cars, bikes, shoes, etc.

Utah Administrative Code R-68-9 (The Utah Noxious Weeds Act) places responsibility for weeds clean-up on the property owner. Any herbicide use in this area needs to be compliant with Salt Lake City's watershed approved herbicide requirements, which are found in code 17.04.375. According to Salt Lake City Public Utilities, there are no known invasive weed infestations along the proposed trail corridor at this time.

## 3.6 Historic and/or Archaeological Sites

Parley's Canyon was named in honor of Parley P. Pratt, who constructed a toll road through the canyon, called the Golden Pass Toll Road (1848 – 1850). The Golden Pass Toll Road became the primary route into the Salt Lake Valley from the east. The roadway fell into disrepair and politicians stepped in to improve the road. The road went through many improvements and by 1870, the roadway was no longer a toll facility. By 1930 this roadway was paved and designated as U.S. Highway 40 (US-40).



Parley P. Pratt

With continued increases in traffic and the changes in design criteria for Interstate highways, it was necessary for the roadway to be reconstructed with fewer horizontal and/or vertical curves. Between 1969 and 1973, I-80 was constructed and completed with two separate roadway facilities for east and west traffic<sup>7</sup>. There are still remnants of the old US-40 in Parley's Canyon. Portions of old US-40 are proposed for use by the Parley's Canyon Trail.

As the environmental study progresses, a detailed archaeological/historical survey will need to be performed to identify any existing archaeological or historical sites that may be impacted.











#### 3.7 Public Land

The project area lies partly within the Uinta-Wasatch-Cache National Forest Boundary. The land that falls within the boundary of the National Forest is owned by the Uinta-Wasatch-Cache National Forest, as well as several other entities, such as private residents and Salt Lake City (see **Figure 6.1 Property Owners** in **Section 6.2**).



Figure 3.4: Uinta-Wasatch-Cache National Forest

Wildlife and plants continue to thrive in this highly visited recreational area, largely because of the ongoing efforts of concerned citizens, agencies, and non-profit organizations. Several conservation education and restoration programs are currently practiced for the Uinta-Wasatch-Cache National Forest. The Forest Service balances diverse recreation opportunities with conservation efforts. Since Parley's Canyon Trail lies within a protected watershed area, recreation within the Uinta-Wasatch-Cache National Forest in this area is limited to those activities that do not have an immediate impact on the quality of the drinking water. In the summer, recreational opportunities include: fishing, hiking, viewing wildlife, and picnicking and camping at developed campgrounds and picnic areas. During the winter, cross country skiing, snow shoeing and sledding are some of the recreational opportunities that can be enjoyed<sup>8</sup>.

Parley's Canyon Trail could connect to several mountain biking, hiking, cross-country skiing, and other trails within the Uinta-Wasatch-Cache National Forest. These potential connections should be balanced to protect wildlife habitat and watershed integrity with the desire to create more dispersed recreation. Since Parley's Canyon lies within a protected watershed, watershed policy and regulations protecting the surrounding area exists and must be followed.

# 4.0 Trail Facility Needs and Analysis

The current available recreational links between Salt Lake City and Park City consist of either bike riding on I-80 between Mountain Dell (SR-65 exit) and Summit Park community, or riding through Deer Valley, Guardsman Pass Road, and Big Cottonwood Canyon. These









corridors are typically only partially used by cyclists and the Guardsman Pass Road is unpaved between the summit and Park City. The Emigration to Summit Park corridor is the most direct route between Park City and Salt Lake City. A dedicated trail and crossing of I-80 between Park City and Salt Lake City could be used as a recreation trail as well as a possible commuter trail. This trail could provide increased recreational access to trails above and around the Mountain Dell Golf Course, Emigration Canyon, Lambs Canyon, and Summit Park and could also expand the cross country ski trail system at the Mountain Dell Golf Course.

As a measure of identifying trail user needs, public outreach consisted of handing out questionnaires at the UTA Rideshare Bike Bonanza at the Gallivan Plaza in Downtown Salt Lake City on May 15th, 2008 and also at the Cycle Salt Lake Century Race check in on May 16, 2008. About 200 questionnaires were completed during these two events. Other identified user groups were contacted by phone and email including The Utah Nordic Alliance (TUNA), Wasatch Mountain Club, and Frontrunner Running Club.

TUNA included an article about the project in their October 2008 issue of the TUNA News (see **Appendix C** for the article). They also posted the questionnaire to their website (www.utahnordic.com). Salt Lake County Parks and Recreation also created a website (http://www.recreation.slco.org/planning/html/Parleys\_Canyon.html) to convey information about the project and provide a link to the questionnaire. Over 160 additional questionnaires were received by mail and email. Of the 361 total questionnaires received to date, **Figure 4.1** displays the activities in which respondents participate in the most.

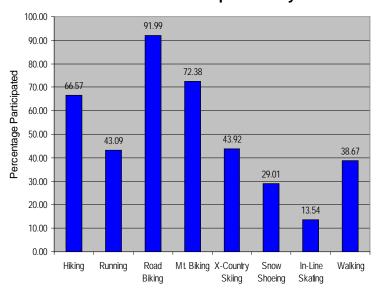


Figure 4.1: Activities Most Often Participated in by the 361 Respondents









Almost 92% of respondents most often participated in road biking, followed by Mountain biking at 72%. Although it would be an epic commute from Salt Lake City to Park City, bicycle commuting is a growing practice and should be considered in the design of this trail. Currently Emigration Canyon is heavily used by cyclists from the Salt Lake City side; nevertheless, only a small percentage actually completes the trip to Park City given that the current Parley's Canyon route requires riding on I-80.

#### 4.1 Trail Demand and Use

People were asked if they would use Parley's Canyon Trail and 98% of the respondents said "yes". When asked how often, the average response was approximately 4 times a month. People were also asked if they would use the trail for training, recreation, and/or commuting. **Figure 4.2** shows the results for the 361 respondents' motives for using the Parley's Canyon Trail. Approximately 84% of the people responded with recreation as their top motive for using the trail.

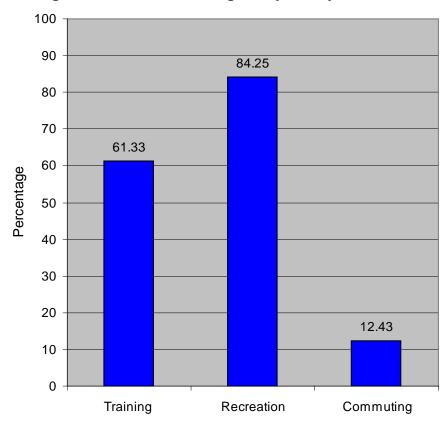


Figure 4.2: Motive for Using Parley's Canyon Trail

Respondents were also asked to identify the trail activities that they most often participated in and rank them 1 through 8. The following activities were given as choices: Hiking, Running, Road Biking, Mt. Biking, X-Country Skiing, Snow Shoeing, In-Line Skating, and Walking.

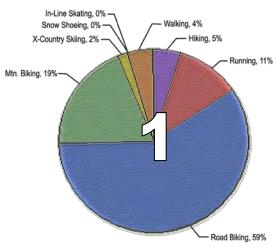








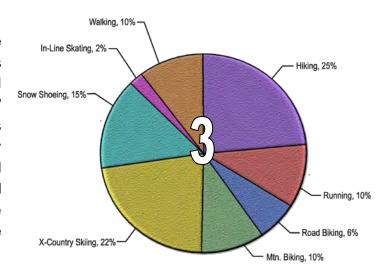
Of the 361 respondents, 222 ranked their priorities for trail activities. "Road Biking" topped the priority list with 59% of people ranking this as their first priority in trail activities. "Mountain Biking" was next at 19%; followed by "Running" at 11%; "Hiking" at 5%; "Walking" at 4%; and "X-Country Skiing" at 2%.





"Mountain Biking" topped the second priority list with 32% of respondents. "Hiking" was next with 26%; followed by "Road Biking" at 17%; "Running" at 9%; "X-Country Skiing" at 8%; "Walking" at 6%; and "Snow Shoeing" and "In-Line Skating" with just 1%, as the respondents' second priority.

Twenty-five percent (25%) of the respondents listed "Hiking" as followed their third priority, closely by "X-Country Skiing" with 22%. "Snow Shoeing" was next with 15%; followed by "Running", "Walking", and "Mountain Biking" at 10%; "Road Biking" at 6%; and "In-Line Skating" with 2%, as the respondents' third priority.











## 4.2 Recreational Opportunities

Trails enhance opportunities for recreation, exercise, and transportation. There are several non-motorized trails throughout the Uinta-Wasatch-Cache National Forest and adjacent areas. The Parley's Canyon Trail will extend the existing trail system, thereby enhancing recreational opportunities and shall provide additional connectivity for users.

The survey findings certainly support the need for a Parley's Canyon Trail and affirm the idea that a dedicated trail would be widely used to connect recreation areas. Based on the "Road Biking" as the preferred activity, it is recommended that the Parley's Canyon Trail be planned for and accommodate road biking first and foremost, followed by mountain biking, running, hiking, walking, snow-shoeing and cross-country skiing.

There may be somewhat of a conflict in the development of the trail to accommodate both road biking and mountain biking. Road biking involves paved surfaces, while mountain biking typically involves unpaved surfaces (dirt trails). Due to the majority response in favor of road biking in the survey, it is recommended that the trail have a paved surface, with the understanding that mountain bikes can ride on paved surfaces, whereas road bikes may experience difficulty on unpaved surfaces.

Developing the trail to accommodate road bikes, as well as other recreation activities (e.g., hiking), would require designating the Parley's Canyon Trail a shared use facility or shared use path. As a designated shared use facility, it must meet guidelines set forth by the American Association of State Highway and Transportation Officials (ASSHTO). Based on AASHTO guidelines for the development of bicycle facilities (insert footnote/reference green book), a two-way shared use path must be constructed at a minimum of eight feet wide. It is recommended that the Parley's Canyon Trail be constructed at a minimum paved width of twelve feet with an additional unpaved clearance width of two feet on each side, graded to a maximum of 1:6 slope. This two-way shared use path would allow for additional users, such as pedestrians, in-line skaters, etc.

# 4.3 Local and Regional Connections

The Parley's Canyon Trail will serve as part of the 230-mile proposed Wasatch Loop, which will include the Bonneville Shoreline Trail, the Legacy Parkway Trail, the Jordan River Parkway Trail, the Lakeshore Trail, the Provo River Parkway Trail, the Historic Union Pacific Rail Trail, and a planned or proposed trail along the Weber River. See **Figure 4.3** below (www.wasatchlooptrail.com).



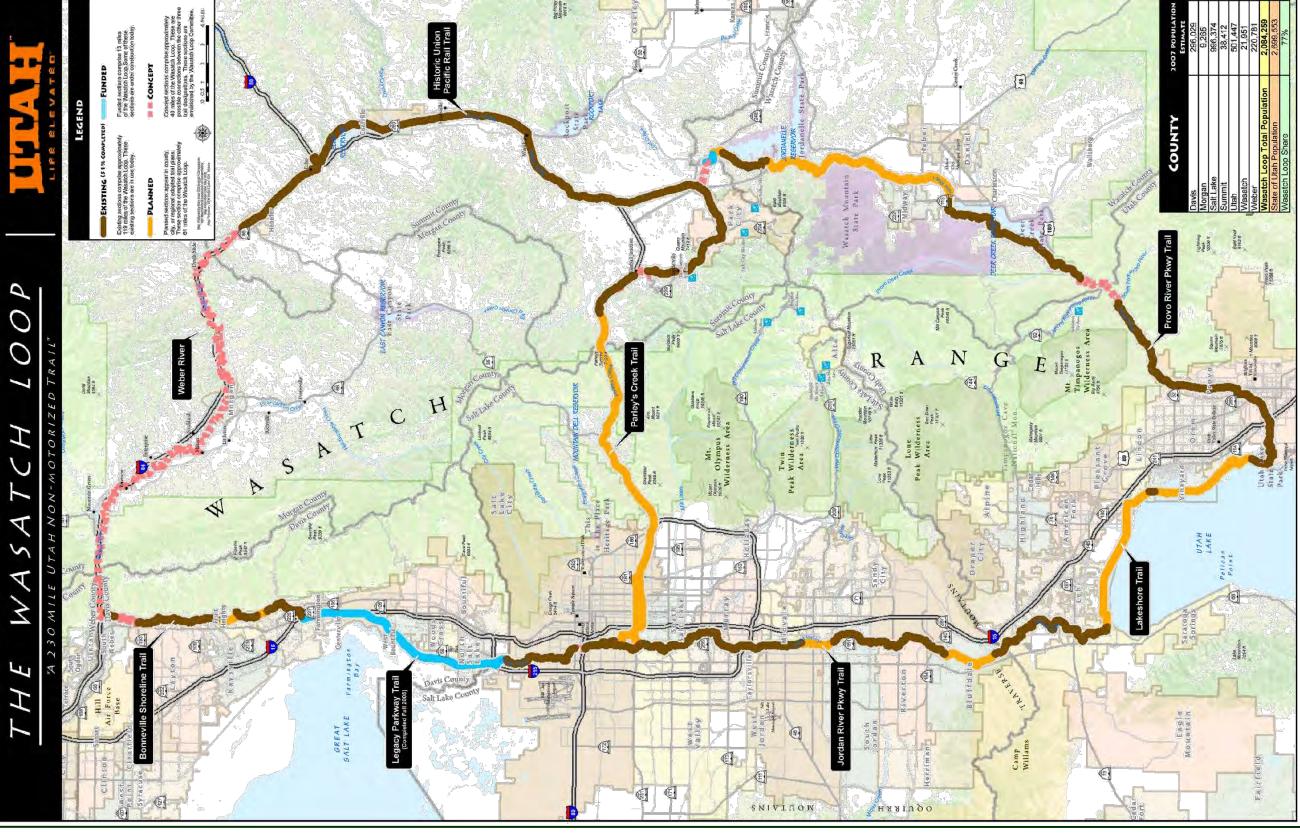








Figure 4.3: The Wasatch Loop











The Parley's Canyon Trail could also serve as a connection to the Emigration Canyon trails. The Emigration Canyon Trails Master Plan was adopted in March of 2007 and identifies the trail system for Emigration Canyon. The trail system encompasses nearly 27-miles of regional trails along three general alignments, and more than eleven miles of local trails following fifteen alignments. Emigration Canyon provides a link between the Bonneville Shoreline Trail in Salt Lake City and trails to the east, beyond Emigration Canyon, of national historic significance. These include the Great Western Trail, the Donner Reed Trail, the Pony Express Trail, and the Mormon Pioneer Trail.

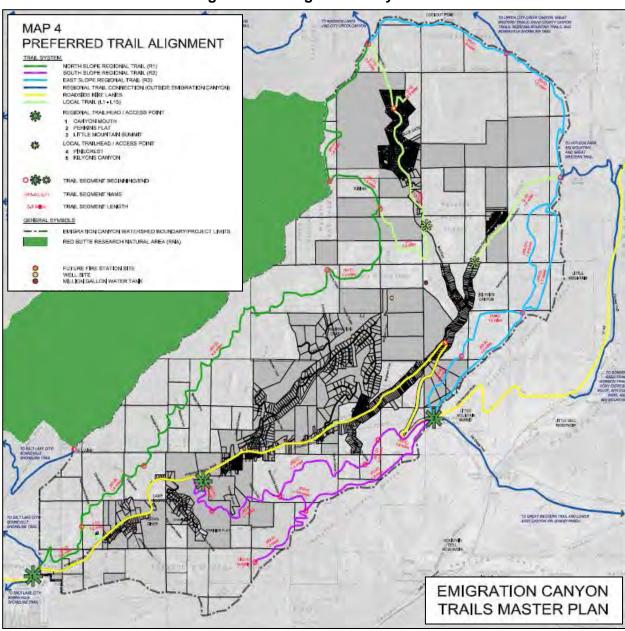


Figure 4.4: Emigration Canyon Trails









Within the greater Park City area in Summit County there lies over 350 miles of trail, which the Parley's Canyon Trail could also connect to. These trails include McLeod Creek Trail, Glenwild/Blackhawk Trail, Mid-Mountain Trail, Summit Park, Millennium Trail, Rail Trail, Round Valley, Trailside Park Trail, Ecker Hill X-C Trail, and Promontory Trail. See **Figure 4.5** below (www.basinrecreation.org/Trails/trails.html).

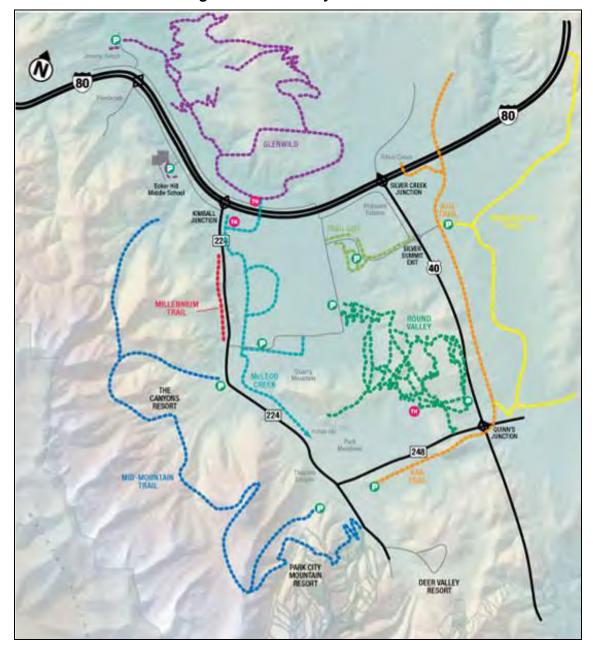


Figure 4.5: Park City Area Trails









The Parley's Canyon Trail would directly connect into the Summit Park trails, located west of Park City. See **Figure 4.6** below (www.basinrecreation.org/Trails/trails.html).

Parley's Summit Summit Park Trails Parley's Canyon **Trail Connection** Kilby Rd. New Multi Use Trails Existing Hiking Trails Service Road

Figure 4.6: Summit Park Trails











Based on the survey responses regarding potential trail connections, every effort should be made in the planning stages of the Parley's Canyon Trail to provide as many connections as possible to existing, proposed and planned trails to maximize the usage and viability. Trail connections could potentially increase bicycle visits to Lambs Canyon, provide increased mountain bike access to trails above and around the Mountain Dell Golf Course, and expand the cross-country ski trail system at the Mountain Dell Golf Course.



Figure 4.7: Percentage of Users Who Would Use the Trail to Connect to Other Trails

#### 4.4 Potential Location for Trail Facilities

Proposed facilities to support the use of the Parley's Canyon Trail include trailhead signage, restrooms, and parking. These proposed facilities are indicated in **Figure 4.8**.

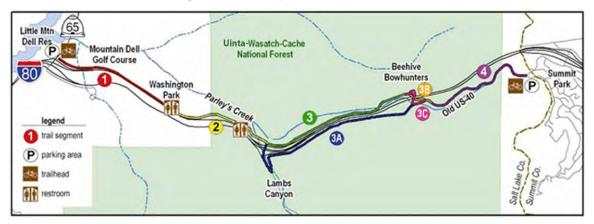


Figure 4.8: Proposed Facilities











Two trailhead locations are proposed: one at the west end of Trail Segment One, at the Mountain Dell Golf Course, and one at the east end of Trail Segment Four. Both trailhead locations would be adjacent to parking facilities.

Trailhead signage is recommended to identify the trail's alignment, changing geometry (e.g., length of segments, width of segments, designated striping, etc.), approximate grades, approved/prohibited trail uses, etc. (**Figure 4.9**). The trailhead signage will incorporate Salt Lake City's "Keep it Pure style" (see **Figure 4.10**).



Figure 4.9: Trailhead Signage Example

Existing Trailhead at Summit Park

Signage to facilitate watershed education in Salt Lake City's protected watershed areas would also be posted along the trail. Existing watershed education signs are currently located at the existing trailhead at Summit Park (see **Figure 4.10**).

Parking facilities for the trail exist at the existing trailhead at Summit Park as well

as near the Mountain Dell Golf Course. Both facilities are unpaved vehicle pull-off areas. These facilities could be paved and signed to enhance vehicle accessibility.

There is an existing restroom facility at Washington Park available for trail users. Another restroom facility is proposed at the east end of Mountain Dell Golf Course, in an area occupied by the black and blue tees for Hole 14. This facility could be jointly used by the golf course and trail users. The environmental document will include an





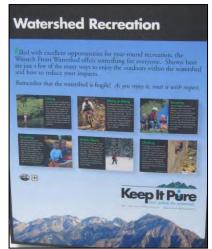




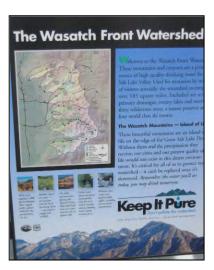


evaluation and identification of specific restroom needs and locations needed to accommodate increased access and use to this area. Parley's Canyon is designated as protected watershed and Salt Lake City and the Salt Lake Valley Health Department have specific sanitation regulations in areas that are designated as protected watershed. The proposed Parleys Trail will necessitate the need to provide sanitary facilities to users of the trail in order to both meet the requirements of protected watershed regulations, and to mitigate water quality concerns from inadequate sanitary facilities.

Figure 4.10: Salt Lake City Watershed Education Signs







# 5.0 Trail Routing Analysis and Initial Alternatives

Little Mtn
Dell Res

Mountain Dell
Golf Course

Washington
Park

Park

Arrey's Creek

Lambs
Canyon

Figure 5.1: Trail Segment Alternatives











## 5.1 Segment One

#### 5.1.1 Segment Limits

Segment One begins at the intersection of SR-65 and the Mountain Dell Golf Course frontage road. This segment would utilize the Mountain Dell Golf Course frontage road for the route (on road facility to be shared with vehicles), and continue to Washington Park, where the frontage road ends as shown in **Figure 5.2**.

Mountain Dell Golf Course

Washington
Park

Figure 5.2: Segment One Alignment

#### 5.1.2 Geometric Considerations

In general, all preliminary segment designs are based on AASHTO guidelines (see **Appendix D** for Design Criteria). Some guidelines have been minimally adjusted to minimize potential impacts to environmentally sensitive areas, construction feasibility, and economic factors. Note that all trails are typically described and dimensioned in figures as a 10-foot wide two-way shared-use path, this is for "illustration only," and the final trail widths will be determined during Preliminary Engineering.

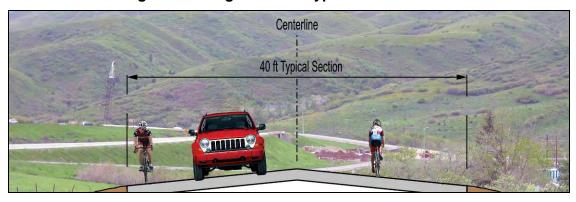


Figure 5.3: Segment One Typical Section

Segment One consists of two "shared route" lanes on the existing Mountain Dell Golf Course frontage road. With minimal traffic volume to create user conflicts, the shared











lanes would be shown as in **Figure 5.3**. The shared lanes would be delineated with "Share the Roadway" signs. With vertical grades averaging 3%, and no grades steeper than 7.5%, following the existing profile of the roadway, the vertical geometry provides a moderate climb for cyclists and other users with minimal impact to traffic operations, constructability, and /or maintenance of the roadway.

#### 5.1.3 Design Constraints and Issues

A meeting was held with David Terry, the Salt Lake City Golf Manager, on September 29, 2008 to discuss potential issues with having the trail adjacent to the Mountain Dell Golf Course. Managers at the Golf Course expressed concerns with having increased numbers of cyclists and bicycle speeds within Segment One near the Mountain Dell Club House parking. There are approximately 300 – 400 cars per day during the summer months that use the frontage road to access Mountain Dell Golf Course and Washington Park. The peak golf usage period is May 15th to October 15th. There is also some concern with westbound high-speed downhill bicycle traffic passing in front of the entrance/exit to the Mountain Dell Golf Course. Mitigation strategies should be considered to address potential conflicts at this location. This may include signs to warn cyclists of hazards and help manage their speed, or signs to warn motorists entering/exiting the golf course of the shared-use roadway.

#### 5.1.4 Constructability Evaluation

Construction logistics and impacts to the existing roadway and ROW in Segment One would be minimal. The installation of signs and pavement markings are anticipated to have a minor impact to traffic. Construction of Segment One depends on available funding and ROW easement agreements. Trailhead signage and parking is also recommended as Segment One construction. The construction of Segment One could possibly be done in conjunction with the Mountain Dell Golf Course reconstruction project of the maintenance building (east of the main golf course parking lot as discussed in a meeting with David Terry). Otherwise, alternative trailhead areas, such as constructing additional parking in coordination with the golf course, would have to be evaluated at a later date.

The estimated cost for constructing Segment One is approximately \$12,000. The cost estimate includes shared lane pavement markings, signing, engineering, construction, and speed-mitigation. See **Appendix E** for a detailed cost estimate.









## 5.2 Segment Two

#### 5.2.1 Segment Limits

Segment Two begins at Washington Park (where Segment One terminates) and travels east to the Lambs Canyon Exit #134 on I-80. When constructed, this segment will partially utilize the Mountain Dell Golf Course existing maintenance road. Segment Two will also comprise a newly constructed trail alignment as part of this study. **Figure 5.4** shows the location of where Segment One ends, and the boundaries of Segment Two.

Washington Park

P

Figure 5.4: Segment Two Alignment

#### 5.2.2 Geometric Considerations

Segment Two consists of a paved 10-foot wide two-way shared-use path utilizing the Mountain Dell Golf Course existing maintenance road and a newly constructed alignment. As shown in **Figure 5.5**, the trail would maintain a minimum unpaved 2 ft of clearance in both directions. Vertical profile grades vary greatly throughout this section (1% to 8%), with grades of 8% or less.



Figure 5.5: Segment Two Typical Section









## 5.2.3 Design Constraints and Issues

The dirt access road, east of the gate on the frontage road, is used by Mountain Dell Golf Course maintenance personnel on a daily basis during the summer months to access irrigation controls on Lamb's Creek, near the Lambs Canyon interchange. The access road traverses the golf course from the gate, east to the south side of the fairway at Hole 14.



Gate at east end of Mt. Dell Golf



Access west of Lamb's Exit

From this point, the trail continues east towards the green at Hole 13 and connects to a dirt access road. The trail continues east towards the Lamb's Creek irrigation facilities. The trail is proposed to share this access road. Mr. Terry indicated that Salt Lake City Golf would be in favor of improving and/or paving the access road, since it is adversely affected by wet weather.

Salt Lake City Golf will need to maintain access to the road(s) to reach irrigation controls in the future. The access road(s) are, or will be constructed, to a width appropriate for shared use by trail users and motorists. North of the irrigation facilities, the trail diverges off the existing road to avoid the steep grades of the Lamb's Canyon access road to the facility. This report assumes the section of maintenance access road from the irrigation facility to the Lamb's Canyon frontage road would not be paved or upgraded.

A new trail alignment is recommended for the south side and parallel to Hole 14 for about 1200 feet from the existing access road termination to near the Hole 14 black and blue tee box. During field observations, it was noted that a new trail near the black and blue tee boxes could potentially encroach the I-80 embankment on the south. There is currently a portable toilet at this location, which could be utilized by trail users in conjunction with the golf course.

Salt Lake City Golf requires a Minimum Safety Envelope (MSE) of 150-ft left/right of the tee boxes and green and 200-ft left and 260-ft right of the fairway through the heart of the driving zone (approx 200-300 yards down from the tee boxes). Since the distance between the trail and Hole 14 tee boxes/green would be less than the required MSE of 150 feet and the distance between the trail and the fairway would be less than the required MSE of 200 feet, trail user safety was expressed as a concern









by project stakeholders. If the MSE cannot be met, a protective screen will be required along the trail through this area.

Salt Lake City Golf would be willing to allow the black and blue tees and cart paths at Hole 14 to be relocated as part of the trail project costs. According to Salt Lake City Golf, Hole 14 is a difficult, narrow and long par 5, so relocating the tee boxes to the west and north could provide an opportunity to realign and shorten the hole, thus making it more playable. The fairway realignment could have a positive impact on the trail, by shifting the center point of the fairway further north away from the trail. The area formerly occupied by the Hole 14 black & blue tees could be used to construct a permanent restroom facility that could then be jointly used by the golf course and the trail users.

# 5.2.4 Constructability Evaluation

As shown in **Figure 5.4**, Segment Two is comprised of a paved path through existing maintenance roadway corridors, and construction of a new paved path through existing vegetation, to be cleared, and the Mountain Dell Golf Course. East of the maintenance roadway corridors, the trail will be constructed through a protected watershed. Construction impacts to the watershed will have to be minimized and mitigated. The final design and environmental impacts would need to be determined prior to construction with all proper ROW clearances. Pending proper clearances, work activities would be performed within the requirements of those agreements. Thus, if all parties agree upon construction activities within economically feasible limitations, while minimizing impacts to protected resources, access and construction of Segment Two will depend on availability of funding and materials. Mitigation, custom construction methods, and contingencies may also be required.

The estimated cost for this segment is approximately \$2.2 million. The cost estimate includes a 15' wide paved trail; golf course improvements; a restroom facility; a trail safety screen; engineering and construction costs; and acquisition of ROW. See **Appendix E** for a detailed cost estimate.

# 5.3 Segment Three – Alternative 3 (North of I-80)

# 5.3.1 Segment Limits

Segment Three, Alternative 3 (the preferred alternative) begins at the Lambs Canyon exit north of I-80 (the terminus of Segment Two, Exit #137). In this segment, the route would share the existing frontage road currently used by sight-seers, hunters, and members of the BWB. The frontage road ends at the BWB property. Alternative 3 terminates at the I-80 crossing location, which is the beginning of Alternative 3B or 3C.









Figure 5.6: Segment Three – Alternative 3 Alignment

#### 5.3.2 Geometric Considerations

In Segment Three, bicycles will share the existing I-80 frontage road with motor vehicles as shown in **Figure 5.7**. With vertical grades averaging 5%, and no grades steeper than 8%, the vertical geometry provides a moderate climb for trail users with minimal impact to traffic operations, constructability, and /or maintenance of the roadway.



Figure 5.7: Segment Three – Alternative 3 Typical Section

# 5.3.3 Design Constraints and Issues

Currently, the frontage road is primarily used by sight-seers, hunters, and members of the BWB. The project team attempted to contact the BWB, but was unable to meet with them to discuss the trail alignment.

# 5.3.4 Constructability Evaluation

Construction logistics and impacts to the existing roadway and corridor along Segment Three are expected to be minimal. The installation of signs is anticipated to have minor impacts on traffic. Construction of Segment Three will depend on









funding, available materials, ROW clearances, and coordination with landowners, including the BWB.

The estimated cost for this segment is approximately \$10,000. The cost estimate includes signage; bicycle "Share the Road" pavement markings, engineering and construction costs. See **Appendix E** for a detailed cost estimate.

# 5.4 Segment Three – Alternative 3A (South of I-80)

# 5.4.1 Segment Limits

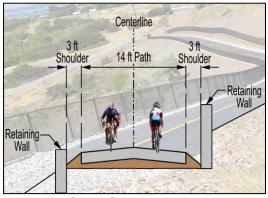
Alternative 3A begins also begins at the Lambs Canyon exit (terminus of Segment Two, Exit #137 on I-80). This alternative would utilize the Lambs Canyon interchange as a crossing of I-80 and continue south towards Lambs Canyon. The trail would then wind its way up the hillside to the east of Lambs Canyon Road and parallel I-80 on the south side of the interstate, towards old US-40. This alternative would terminate at the connection with old US-40, which is the beginning of Segment Four.

Figure 5.8: Segment Three – Alternative 3A Alignment



#### 5.4.2 Geometric Considerations

Figure 5.9: Segment Three – Alternative 3A Typical Section







Flatter Grade <9% Standard











The beginning of Segment 3A consists of two striped bicycle lanes similar to Segment Three. The trail crosses under I-80, crosses the eastbound and westbound I-80 exit ramps, then continues south on Lambs Canyon Road. The trail would then head east across Lambs Creek on a proposed 200-foot long,12'-wide pedestrian bridge, traverse the steep slope east of Lambs Creek, and continues north and east. In order to traverse the steep slope, it would require retaining walls and trail grades up to 12%. Once the trail reaches the ridge above I-80, it would parallel I-80 heading east to US-40, where Segment Four begins.

## 5.4.3 Design Constraints and Issues

Potential conflicts between motorists and trail users will need to be determined and addressed where the trail crosses under I-80 and also at-grade on the exit ramps. Signing and striping for the trail crossing locations will likely be needed to warn motorists and trail users. The trail in this segment will be on property owned by UDOT, Salt Lake City, Uinta-Wasatch-Cache National Forest, and three private property owners. Issues such as: trail user safety, future plans, liability, maintenance, watershed protection and erosion control will need to be determined and addressed with the respective property owners. There are overhead power lines with an existing access trail running east to west on the ridge above I-80. The existing access trail could be paved and used as the Parley's Canyon Trail and utility company access.

#### 5.4.4 Constructability Evaluation

Once the trail heads east from Lambs Creek Road it would be constructed through a protected watershed. Construction impacts to the watershed will need to be minimized and mitigated. Construction of the pedestrian bridge, and retaining walls east of Lambs Creek, will likely require excavation into the slope. Planting, seeding, geosynthetic erosion control, and drainage development will likely be needed for mitigation. There could be a potential for slope failures along I-80 in several locations near Segment 3A. It is possible that poor soils will be encountered in the steep slope areas east of Lambs Creek. An extensive geotechnical investigation will be required to evaluate constructability, and the proposed mitigation measures including the retaining wall and cut/fill slope areas of the trail alignment. Additionally Segment 3A resides primarily within UDOT No Access (NA) lines for I-80. UDOT has said that an alignment outside of the NA lines would be preferred.

The cost estimate for this section includes a 12' wide paved trail on moderate to flat terrain; a 14' wide paved trail on steep terrain with retaining walls; a 12' wide pedestrian bridge structure; engineering and construction costs; and acquisition of ROW. The cost is estimated at \$5.2 million. See **Appendix E** for a detailed cost estimate.









# 5.5 Segment Three – Alternative 3B (Tunnel or I-80 Bridges)

# 5.5.1 Segment Limits

Alternative 3B is the crossing of I-80 by a tunnel or I-80 bridges. Alternative 3B connects to Segment Three at the BWB property on the north side of I-80 and connects to old US-40 on the south side of the interstate.

Beehive Bowhunters Odulisale

Figure 5.10: Segment Three – Alternative 3B Alignment

## 5.5.2 Geometric Considerations

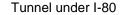
Segment Three – Alternative 3B consists of a new two-way shared-use path diverging off the existing I-80 frontage road west of the BWB entrance. The trail would travel under I-80 via a culvert-like tunnel system or two I-80 bridges would be constructed to span over the trail. As shown in **Figure 5.11** the 12-foot wide trail would maintain a minimum clearance width of two feet on each side for the majority of the trail and the I-80 Bridges alternative. The tunnel option would be a 14 ft path as shown on **Figure 5.11**. Vertical profile grades vary greatly throughout this section (0.5% to 9.5%).

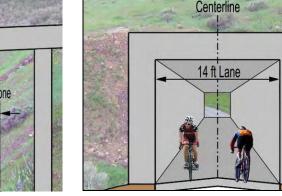
Centerline

2 ft
Clear Zone
/12 ft Lane

I-80 Bridges

Figure 5.11: Segment Three – Alternative 3B Typical Sections













Alternative 3B could also provide an opportunity for wildlife to cross under I-80. Wildlife crossing structures, strategically placed along state highways, allow deer, elk, bears, mountain lions and other species to move daily and seasonally in search of nourishment, mates, and new home ranges. Such crossings help mitigate the negative impacts of habitat fragmentation that break apart and isolate wildlife populations, making them more vulnerable to disease, fire and drought.

Wildlife crossings can also be instrumental in preventing vehicle collisions. Without such structures, thousands of animals will die and human lives are put at risk. A recent study requested by Congress estimates that the total annual cost associated with animal-vehicle collisions (a-v-c's) is \$8,388,000,000, with hundreds of human lives lost each year. Within the last five years in Utah, the incidence of a-v-c's has increased by more than 25%. Appropriately placed wildlife crossing structures and associated fencing have been shown to reduce a-v-c's by more than 80%. Reducing the number of a-v-c's on Utah highways will save the state millions of dollars.<sup>9</sup>

UDOT also has some funding available for construction of wildlife crossings along Utah highways.

Alternative 3B could also potentially be utilized to provide vehicular access and egress to and from Summit Park in the event of an emergency, such as a wildfire or a catastrophe on I-80. If this option would be considered, the use of the trail would have to be coordinated with local emergency services and reevaluated to accommodate emergency vehicles.

#### 5.5.3 Design Constraints and Issues

For this segment, the trail will be located on property owned by UDOT, Salt Lake City, and the BWB. Issues such as safety of trail users, future plans, liability, maintenance, watershed protection and erosion control will need to be determined and addressed with the respective property owners. The project team attempted to contact the BWB, but was unable to set up a meeting to discuss possible use of their land, and/or potential issues they may have with the proposed trail alignment.

#### 5.5.4 Constructability Evaluation

Alternative 3B would be constructed through a protected watershed. Construction impacts to the watershed will need to be minimized and mitigated similar to the constructability issues described in **Section 5.2.4**.

The tunnel option would require multiple Traffic Control phases on I-80 to complete construction of the Alternave 3B segment. First, the center pre-cast culvert sections under the I-80 median would need to be excavated and constructed, followed by temporary paving of the median so that one direction of I-80 (eastbound, for example)









could be temporarily routed onto the median while the portion of the culvert beneath the eastbound lanes is constructed. Finally, the eastbound lanes would be shifted back to their normal alignment, allowing for the westbound lanes to be shifted onto the median while the remainder of the culvert is constructed. Impacts to traffic would be moderate, but traffic control costs would be relatively low. UDOT's involvement would be a key factor for the implementation of the Alternative 3B Tunnel.

The I-80 bridges over the trail alternative would require Accelerated Bridge Construction (ABC) strategies similar to those utilized to construct and place the new bridge in Parley's Canyon in 2008. In order to minimize traffic impacts while beginning critical bridge deck construction, the new I-80 bridges would be constructed on temporary bents adjacent to I-80 and final abutment piles would be constructed to support the new structure in the I-80 median and outside shoulders of I-80. After the decks are constructed, traffic would be detoured over a weekend, allowing construction crews to demolish the existing I-80 pavement and excavate deep enough to allow the new decks to be moved into place. Once in place, traffic will be placed on the new structures while crews below continue to excavate the new trail and construct final walls. Impacts to traffic and traffic control costs would be minimal, but construction of temporary bents and moving bridges would add a considerable cost to the project. Again, UDOT's involvement would be a key factor for the construction of Alternative 3B I-80 Bridges.

Both alternatives are contingent upon all parties involved approving construction activities within economically feasible limitations, while minimizing impacts to protected resources, access, and construction of Alternative 3B. Thus constructability of this segment would be limited by the availability of funding, materials, and mobility of the equipment.

The cost estimate for the I-80 pedestrian tunnel crossing includes a 12' wide paved trail on moderate to flat terrain; a 14' wide paved trail on steep terrain; a tunnel (includes installation and MOT); engineering and construction costs; and acquisition of ROW. The costs are estimated at over \$2 million. See **Appendix E** for a detailed cost estimate.

The cost estimate for the I-80 bridges includes a 12' wide paved trail on moderate to flat terrain; a 14' wide paved trail on steep terrain; I-80 structures with required ABC; excavation; engineering and construction costs; and acquisition of ROW. The costs are estimated at over \$7 million. See **Appendix E** for a detailed cost estimate.









# 5.6 Segment Three – Alternative 3C (Trail Bridge)

# 5.6.1 Segment Limits

Alternative 3C is the crossing of I-80 by a pedestrian/bicycle bridge. It connects to Segment Three at the BWB property on the north side of I-80 to old US-40 on the south side of I-80.

Beehive Bowhunters Ollus Ab

Figure 5.12: Segment Three – Alternative 3C Alignment

## 5.6.2 Geometric Considerations

Segment Three – Alternative 3C consists of a new two-way shared-use path following the existing I-80 frontage road through the entrance of the BWB property and follows a switch-back climbing in elevation, thus utilizing the natural terrain to rise above the I-80 clearance requirements. The new trail would travel over I-80, with a truss bridge structure with a center pier in the median for support, and then onto a man-made embankment to the South of I-80 to connect to old US-40. As shown in **Figure 5.13**, the trail would be a 14 ft wide, paved structure. Approaches on each side of the structure are typically 12 ft paved path and maintain a minimum unpaved clearance width of 2 ft on each side. The vertical profile grade varies greatly throughout this section (0.5% to 9.5%).

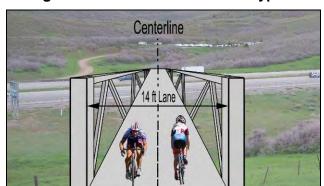


Figure 5.13: Segment Three – Alternative 3C Typical Section











# 5.6.3 Design Constraints and Issues

For this segment, the trail will be located on property owned by UDOT, Salt Lake City, and the BWB. Issues such as trail users safety, future plans, liability, maintenance, watershed protection, and erosion control will need to be addressed with the respective property owners. The project team attempted to contact the BWB, but was unable to set up a meeting to discuss possible use of their land, and/or potential issues they may have with the proposed trail alignment. UDOT has stated the center pier would require standard protection for this obstacle/hazard within the clear-zone of I-80.

## 5.6.4 Constructability Evaluation

Alternative 3C will require new trail construction within a protected watershed. All impacts would need to be minimized and mitigated within feasible limitations. The majority of the work would be performed with minimal traffic impacts. A work area in the median would need to be established and protected in order to construct a center support pier. Other work areas would include the trail construction leading up to the bridge abutments and the bridge abutments themselves, all which should be minimal traffic impacts. Concluding abutments and pier construction, the bridge truss would be lowered into place by cranes, intermittently shutting-down traffic on I-80.

Alternative 3C would require an approval for construction activities from all parties involved within economically feasible limitations, while minimizing impacts to protected resources, access, and construction. Thus constructability of this segment would depend on the availability of funding and materials.

The cost estimate for the structure over I-80 includes a 12' wide paved trail on moderate to flat terrain; a 14' wide paved trail on steep terrain; pedestrian structure over I-80; embankment; engineering and construction costs; and acquisition of ROW. The total costs are estimated at \$1.7 million. See **Appendix E** for a detailed cost estimate.

#### 5.7 Segment Four

#### 5.7.1 Segment Limits

Segment Four begins on the south side of I-80 at the crossing location of Alternative 3B or 3C, or could connect to Alternative 3A. Segment Four utilizes the old US-40 for the route and terminates at Summit Park.











Figure 5.14: Segment Four Alignment



#### 5.7.2 Geometric Considerations

Segment Four consists of two "shared route" lanes on the old US-40 road bed. With minimal traffic volume to route user conflict, the bike lanes would be shared as shown in **Figure 5.15**. They would be delineated from adjacent motorized traffic lanes by signing and shared lane pavement markings. The route would utilize the old US-40 aggregate base (if determined to be in reasonable condition) by milling the existing road and paving a smooth surface. With vertical grades ranging from 0.3% to 8%, the vertical geometry provides a moderate climb for cyclists and other users with minimal impact to traffic operations, constructability, and/or maintenance of the roadway.

Centerline
40 ft Typical Section

Figure 5.15: Segment Four Typical Section

# 5.7.3 Design Constraints and Issues

For this segment, the route will be located on property owned by UDOT, Salt Lake City, and several private landowners. Issues such as trail user safety, future plans, liability, maintenance, and watershed protection will need to be addressed with the respective property owners. UDOT owns old US-40, but does not maintain the road. There is a gate at the east end of the road preventing access. Salt Lake City and









respective property owners are the only entities who have vehicular access to this area.

# 5.7.4 Constructability Evaluation

Construction logistics and impacts to the existing roadway and corridor along Segment Four would be minimal. The installation of signs, striping, milling, and paving operations would be constructed with minor impacts. Construction of Segment Four would depend on funding, available materials and ROW easement agreements. Trailhead signage and parking would also need to be considered for the construction of Segment Four.

The cost estimate for Segment Four includes 4" milling and overlay; striping; signing; and engineering and construction costs. The costs are estimated at approximately \$65,000. See **Appendix E** for a detailed cost analysis.

# 6.0 Implementation Strategies

#### 6.1 Environmental Permits Needed

Parley's Creek and Lambs Creek are within the project area and if any work is required within these creeks, coordination with the USACE will be required. The USACE administers Section 404 of the Clean Water Act. Under Section 404, a permit is required for the discharge of dredged or fill material into waters of the United States. The Division of Water Rights, also known as the State Engineer's Office, administers a Stream Alteration Program that requires individual planning activities that affect a natural stream to obtain a Stream Alteration Permit. Most construction is covered by General Permit 40, which authorizes the State to have its Stream Alteration Permit also fulfill the requirements of Section 404 of the Clean Water Act. In some instances, however, a USACE individual permit is required.

#### 6.2 Easements, Leases, Purchases

The majority of the route is located on existing roadways. It will be necessary to obtain an easement, lease, or purchase property from land owners for portions of the route that requires constructing a new trail alignment. Depending on the segment, easements may be required from Salt Lake City, UDOT, Uinta-Wasatch-Cache National Forest, Private Residents, and/or the BWB.









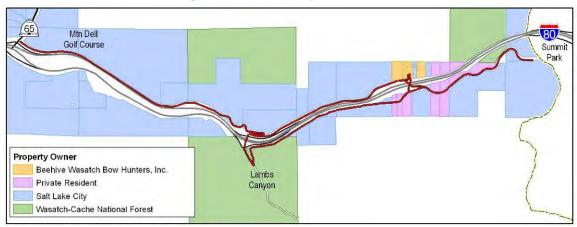


Figure 6.1: Property Owners

# 6.3 Maintenance, Operation, Regulation

Salt Lake City Public Utilities would patrol and enforce trail violations with regards to the protected watershed. Such violations include, but are not limited to, dogs or other domesticated animals on the trail, dispersed restrooms and camping, motorized vehicles, off-trail/road travel, and littering. Salt Lake County Park and Recreation would be responsible for maintenance of the trail and designated restroom facilities.

Maintenance of the route is critical in regards to clearing debris. Accumulation of debris could pose a danger for cyclists riding downhill at fast speeds. UDOT owns, and Salt Lake City currently maintains, the frontage road along I-80 from the Emigration Canyon exit to the east end of the Mountain Dell Golf Course, where the gate is located.

The proposed Parley's Canyon Trail would increase costs to Salt Lake City Public Utilities for additional watershed education and enforcement and also increase costs to Salt Lake County for trail and facility maintenance. A funding mechanism that covers the additional costs for Salt Lake City Public Utilities and Salt Lake County would be evaluated in the environmental document. Funding for maintenance would specifically provide for (1) operations and maintenance of the trail, (2) installation, maintenance, and pumping of associated toilet facilities; (3) mapping and treatment of introduced invasive species along the trail; and (4) increased patrols for watershed enforcement.

# 6.4 The Next Steps in the Planning Process

The Parley's Canyon Trail Feasibility Study was the initial step in determining the possibility of a trail connection between Salt Lake County and Summit County in the upper portions of Parley's Canyon. The study evaluated land ownerships, watersheds zones and restrictions, trail alignment alternatives and design standards required to











safely handle higher bicycle speeds and multiple uses. The study also estimated development costs associated with the various trail alignments and design standards. The cost estimates were generated in 2010 and will require updating when additional planning and design studies are pursued.

Bicycle commuters and recreational cyclists have expressed moderate to high levels of interest in developing this trail route in recent years. While the number of bike commuters between Salt Lake County and Summit County is not significant, recreational cycling in both counties is growing exponentially. Cyclists desire to have bike routes that connect to destinations not only in Davis and Utah Counties, but also to Summit County.

Essential to taking the next steps toward developing this trail route, it will be important to identifying funding sources, partnering with other agencies that have mutual development goals in the canyon and who can also share the expense of developing the trail corridor. A combination of Federal, State and Local funding sources will likely be required since the estimated cost for developing this trail route could be in the range of twenty million dollars depending on which alignments and crossings are actually built.

With a project of this magnitude with potential impacts to sensitive national forest lands and watershed areas, an environmental impact study will be necessary to address the all trail development issues.









<sup>&</sup>lt;sup>1</sup> U.S. Forest Service, http://www.fs.fed.us/r4/wcnf/about/.

<sup>&</sup>lt;sup>2</sup> Salt Lake City Golf, Mountain Dell Canyon,

http://www.slcgov.com/publicservices/golf/Mountain%20Dell%20Canyon.htm.

<sup>&</sup>lt;sup>3</sup> Salt Lake City, Department of Public Services, Parks Division, http://www.slcgov.com/publicservices/parks/.

<sup>&</sup>lt;sup>4</sup> Salt Lake City, Department of Public Utilities, Watershed Management Protected Watershed Map www.slcgov.com/Utilities/watershed/images/trailhead%20overview2.pdf

<sup>&</sup>lt;sup>5</sup> Salt Lake City, Department of Public Utilities, Watershed Management Rules and Regulations, http://www.slcgov.com/utilities/ud watershed-rulesreg.htm

<sup>&</sup>lt;sup>6</sup> Utah Division of Wildlife Resources, Conservation Data Center, http://dwrcdc.nr.utah.gov/ucdc/

<sup>&</sup>lt;sup>7</sup> Utah Rails, The Golden Pass, A History of Transportation in Parleys Canyon, Utah, Don Strack. http://utahrails.net/utahrails/parleys.php

<sup>&</sup>lt;sup>8</sup> Uinta-Wasatch-Cache National Forest, http://www.fs.fed.us/r4/uwc/recreation/wcnf/index.shtml

<sup>&</sup>lt;sup>9</sup> Western Wildlife Conservancy, Letter to UDOT, December 12, 2008 lists.westernlaw.org/lists/d\_read/wga-all/Pathways%20Vol.%20I,%20Issue%20I/Letter%20to%20UDOT.doc



# Appendix A - Field Survey Photo Map







# Parley's Canyon Trail - Photo Map Descriptions

Note: Photos are organized from south to north beginning at the SR 65 Interchange at Mountain Dell.

- 1A Frontage Rd looking west towards the SR-65 Interchange.
- 1B Frontage Rd looking west towards the SR-65 Interchange.
- 2A Frontage Rd looking east.
- 2B Frontage Rd looking east
- Frontage Rd looking northwest down Frontage Rd.
- 4A Gate where Frontage Road turns to dirt road. Paved road forks left to Washington Park.
- 4B Fork to Washington Park.
- 5 Dirt road looking southeast. I-80 above to the right.
- 6A Dirt road looking southeast. I-80 above to the right.
- 6B Dirt road looking northwest. I -80 above to the left.
- 7 Dirt road looking west. I -80 above to the left.
- 8 Dirt road looking northeast.
- 9A End of dirt road looking west.
- 9B Looking northwest into golf course.
- 9C Looking northeast into golf course.
- 9D Looking east into golf course.
- 10 Looking south towards I-80.
- 11 Looking southeast along north edge of I-80.
- Looking east from edge of I-80 down to golf cart path. Seg 2 alignment goes through J-John adjacent to cart path.
- Looking southeast along north edge of I-80.
- Looking northeast toward golf green and cart path.
- Looking southeast toward Lamb's Canyon Interchange.
- 16 Looking northwest toward golf course.
- 17 Looking northwest from steep access road near Lamb's Canyon Interchange.
- 18 Looking eastward down on access road. (trail could come through here note utilities)
- Looking westward at intersection of golf cart path and access road (trail proposed to come through near here)
- 20 Looking southwest along golf cart path. (trail would be left of cart path)
- 21 Frontage road at Lamb's Interchange looking east.
- Frontage road looking southwest. I-80 to the south.
- Frontage road looking southwest from a point near archery range gate.
- Looking east where Frontage Road meets archery range gate.
- 25A Looking northeast over I-80 into archery range from access road. (this is along the 3B trail bridge alignment)
- 25B Looking east along access road to end of Old US-40.
- 26 Looking northeast over I-80 into archery range from access road.
- 27A Looking southwest from south edge of I-80. (near the trail bridge alg 3B crossing)
- 27B Looking north across I-80 into archery range.
- 27C Looking eastbound I-80.
- 27D Looking southeast into wetland area. Note CMP stand pipe.
- Looking west along access road from end of old US-40.
- 29 Looking east from end of old US-40.
- 30 Looking east along old US-40.
- 31A Looking west along old US-40.
- 31B Looking east along old US-40.

- 32A Looking west out over curve of old US-40.
- 32B Looking north along old US-40.
- 32C Looking southeast along old US-40.
- 33A Looking west from the top of old US-40 near gate.
- 33B Looking southwest from the top of old US-40 near gate. (note watershed signs and large open area for trailhead/parking lot.
- 33C Looking southeast from the top of old US-40 along gate.
- 33D Looking east from the top of old US-40 near gate.

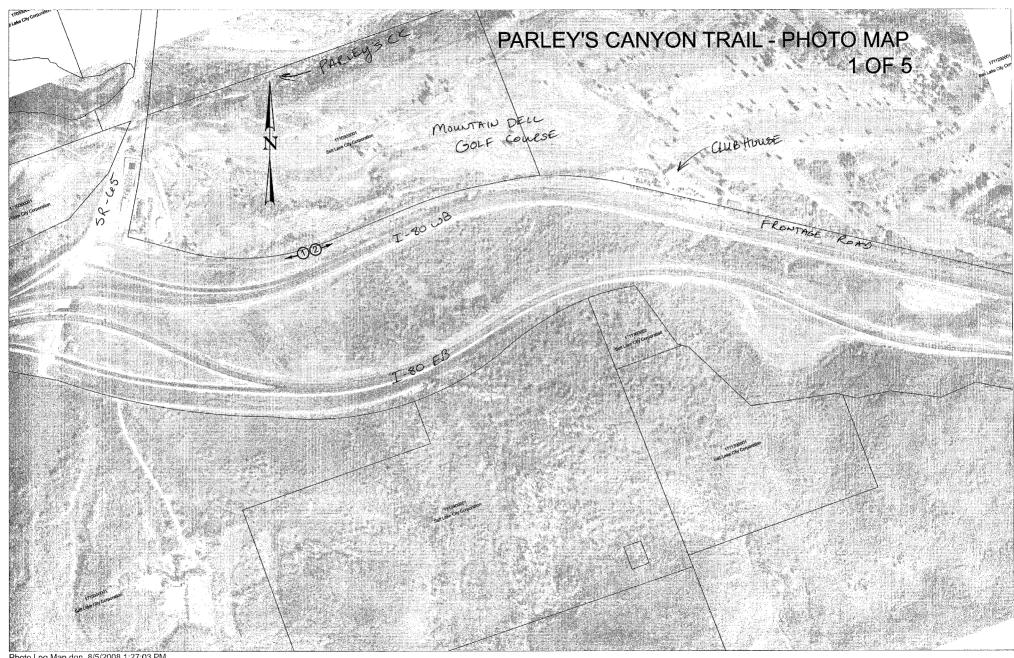
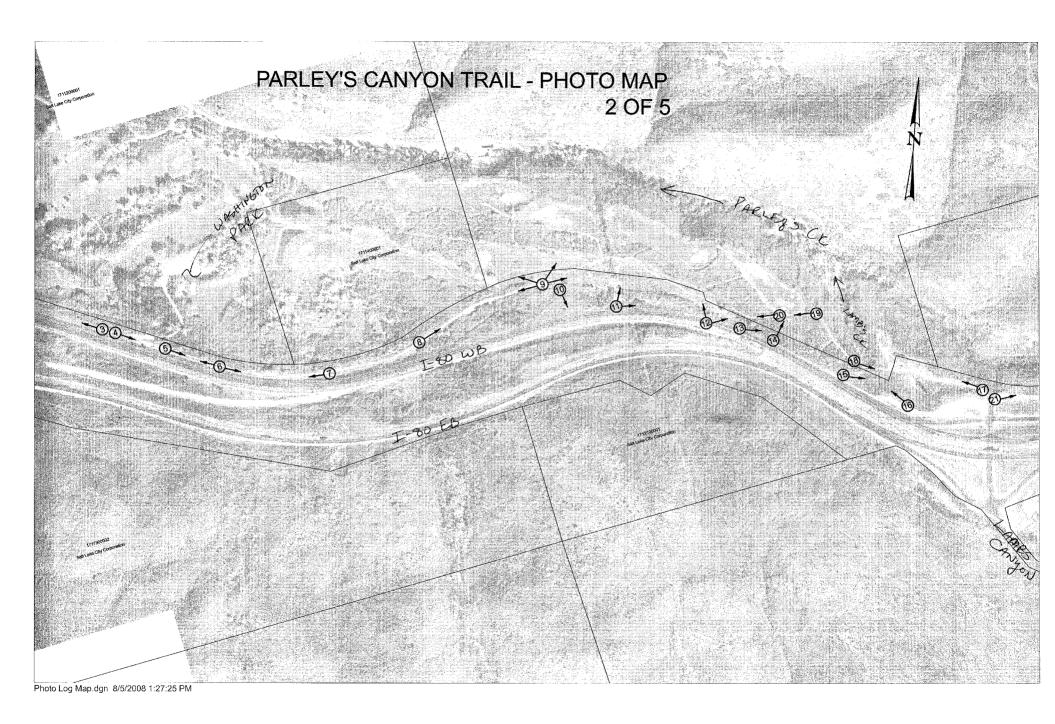


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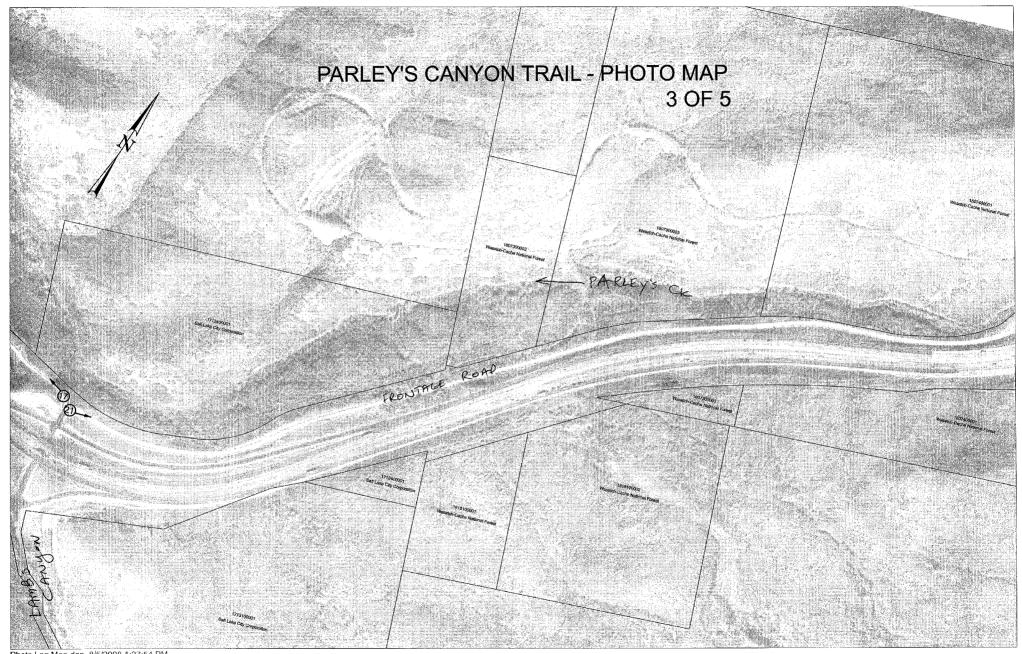


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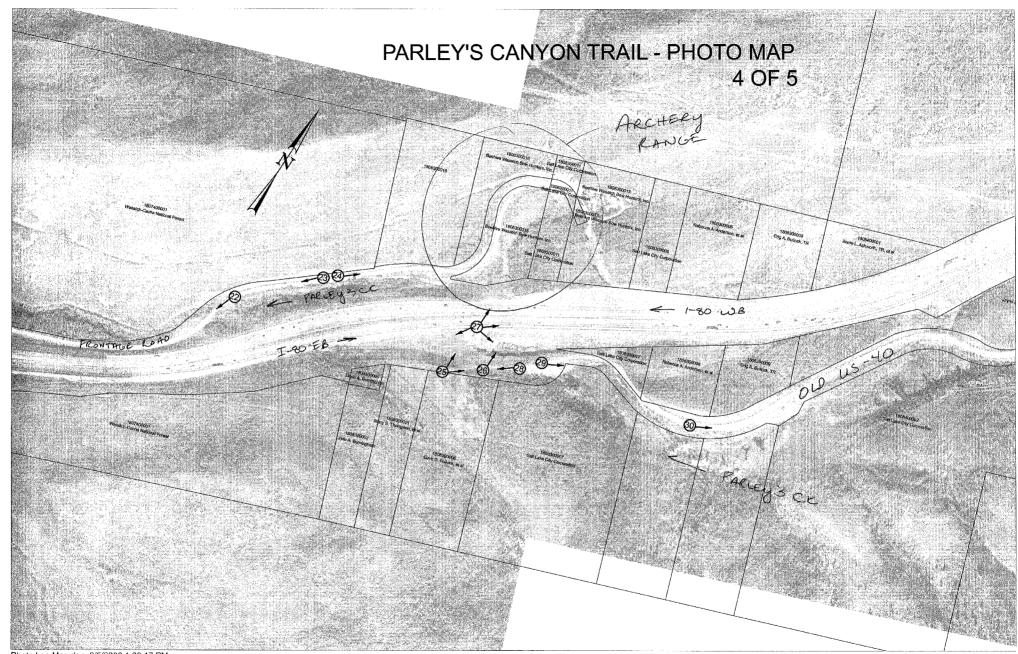


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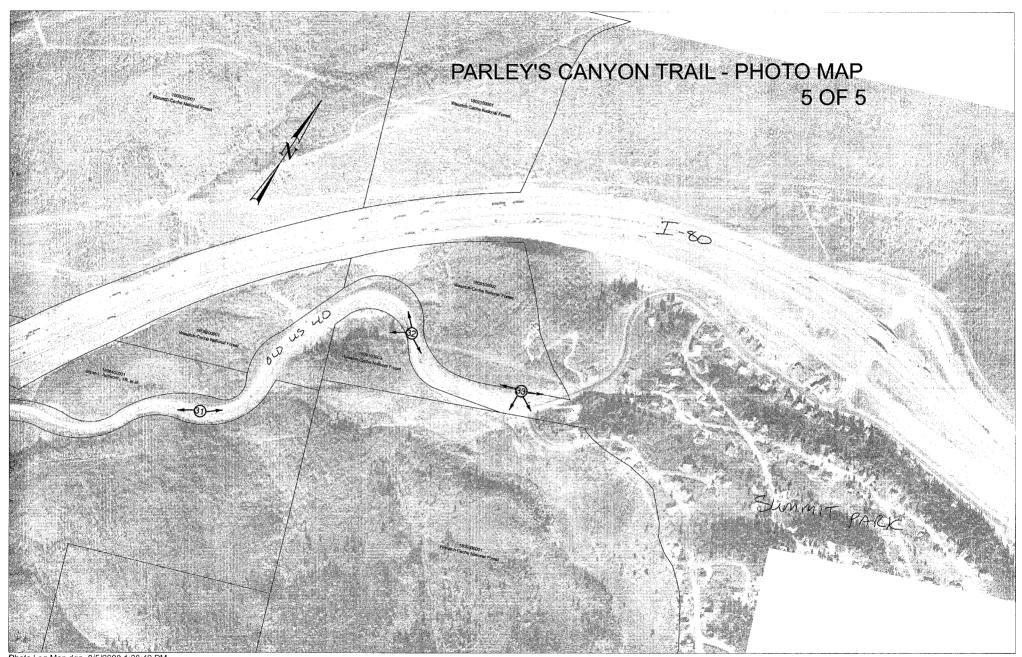


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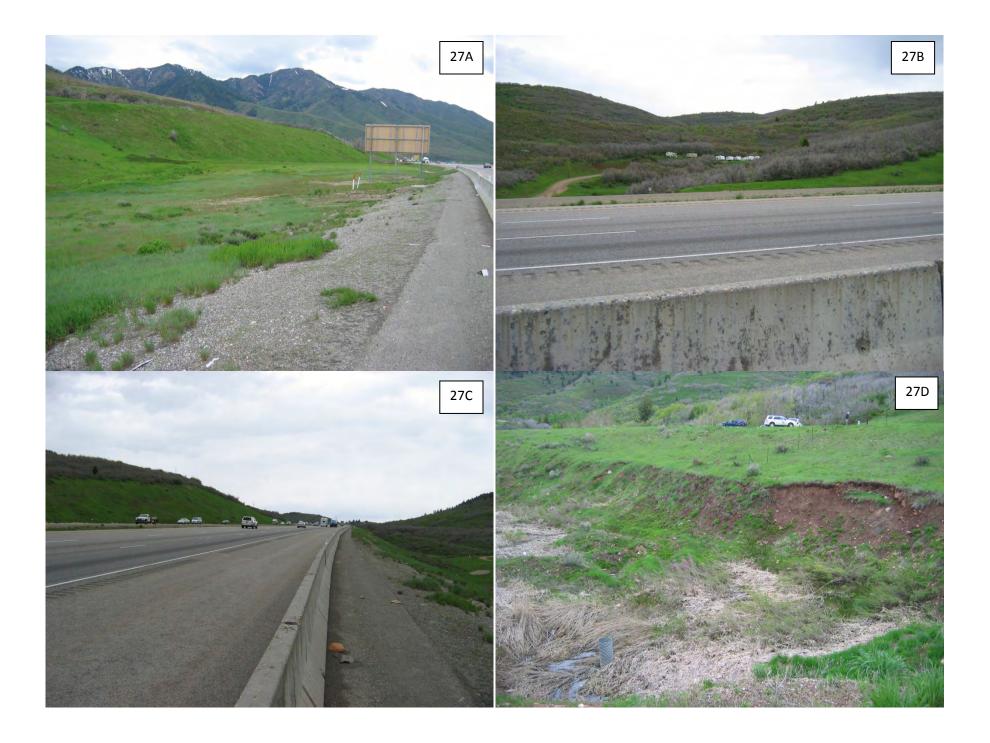




















# Appendix B – Utah Division of Wildlife Resources Letter











# State of Utah

### DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER

Executive Director

GARY R. HERBERT

Lieutenant Governor

**Division of Wildlife Resources** 

JAMES F. KARPOWITZ

Division Director

June 20, 2008

Tamara Keefe Michael Baker Jr., Inc. 6955 South Union Park Center, Suite 370 Salt Lake City, UT 84047

Subject: Species of Concern Near I-80, Parley's Canyon

Dear Tamara Keefe:

I am writing in response to your email dated June 17, 2008 regarding information on species of special concern proximal to the project located along I-80 in Parley's Canyon, in Salt Lake and Summit Counties, Utah.

Within a ½-mile radius, the Utah Division of Wildlife Resources (UDWR) has recent records of occurrence for Bonneville cutthroat trout, ferruginous hawk and northern goshawk, and historical records of occurrence for western pearlshell and western toad. All of the aforementioned species are included on the Utah Sensitive Species List.

The information provided in this letter is based on data existing in the Utah Division of Wildlife Resources' central database at the time of the request. It should not be regarded as a final statement on the occurrence of any species on or near the designated site, nor should it be considered a substitute for on-the-ground biological surveys. Moreover, because the Utah Division of Wildlife Resources' central database is continually updated, and because data requests are evaluated for the specific type of proposed action, any given response is only appropriate for its respective request.

In addition to the information you requested, other significant wildlife values might also be present on the designated site. Please contact UDWR's habitat manager for the central region, Ashley Green, at (801) 491-5654 if you have any questions.

Please contact our office at (801) 538-4759 if you require further assistance.

Sincerely.

Sarah Lindsey Information Manager

Utah Natural Heritage Program

cc: Ashley Green, CRO





## Appendix C – The Utah Nordic Alliance Article









### **Parleys Canyon Trail:** Salt Lake City to Summit Park

#### by Tamara Keefe

Parleys Canyon Trail is a joint venture of Salt Lake and Summit Counties to increase recreational opportunities and provide a transportation option adjacent to Interstate 80 through upper Parleys Canyon. Parleys Canyon Trail is proposed to begin at Kimball Junction in Summit County and would head west along frontage roads to the abandoned U.S. 40 roadway, eventually crossing I-80 to the north and continuing west running adjacent to the I-80 corridor. At the Mountain Dell Golf Course, the trail would connect to SR-65 and head towards Emigration Canyon. Salt Lake County, with support from Summit County, selected Michael Baker Jr., Inc. (Baker) with subconsultants Perkins Engineering and ArcSitio Design Inc. to perform a feasibility assessment of Parleys Canvon Trail between Summit Park and I-80 Mountain Dell Interchange (SR-65).

The trail concept was first presented by citizens to the Utah Bicycle Association in 2006. The concept was then presented in July of 2006 to the Summit County Commission. Shortly thereafter, the concept was submitted as a project for Transportation Enhancement Funding to the Utah Department of Transportation (UDOT). However, funding was not granted since supporting documentation (a Feasibility Assessment Report or Master Plan) had not been prepared. Salt Lake and Summit Counties have adopted the concept and formed a partnership to advance the planning for the trail.

Salt Lake and Summit Counties recognize the value of connecting trails between the two counties to serve the region. In addition to creating a valuable commuter and recreational link between Park City and Salt Lake City, a dedicated trail and crossing of I-80 may also increase bicycle or hiking visits to Lambs Canyon, provide increased mountain bike access to trails, and possibly expand the cross country ski trail system. When complete, Parleys Canyon Trail has the potential to serve as a major regional transportation corridor connecting users with recreational areas and existing and future transit and activity centers.

You can email me at this email address, tkeefe@mbakercorp.com if you have any questions or would like further information. ◆



#### Give voice to the Nordic Community

Go to www.utahnordic.com to download a survey to submit. Make sure to include your interest in nordic skiing.

### YURT **Certification Classes**

All yurt users must be certified in how to safely use the TUNA yurt. The certification requirement will be wavied for all persons who have used the yurt in the last three years or have participated in a yurt maintenance party and are familiar with the required maintenance and safe operation of the yurt. If you have not used the yurt and are not familiar how to get to the yurt or where the yurt is located, you will be required to participate in a certification before you will be allowed to rent the yurt.

Yurt certifications are offered on a regular basis and for a small donation you will be allowed to participate in a ski trip to the yurt where you will be familiarized with its location, how to get there and how to safely operate and maintain the yurt. To find out more about certification dates send mail to Greg Adams at yurt@utahnordic.com. Groups traveling to the certification typically meet in Salt Lake, on the designated days, at 8:00 AM at the K-Mart on Parleys Way, or rendezvous at the Kamas Forest Service Office at 9:00 AM.

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## Appendix D – Design Criteria







#### PARLEY'S CANYON TRAIL - TRAIL GEOMETRIC DESIGN CRITERIA

| ITEM  | AASHTO          | Comments   |
|---|-----------------|--|
| Design Controls                               |                 |  |
| Classification                                | Shared Use Path |  |
| Reference                                     | BF p.8          |  |
| Design Speed (mph)                            | 20              |  |
| Reference                                     | BF p.36         | FOR GRADES >4%, 30 MPH DESIGN SPEED IS ADVISABLE.                            |
| Pavement Surface Quality                      | Smooth          |  |
| Reference                                     | BF p. 18        | SMOOTH SURFACE AND UNIFORM WIDTH.  |
| Cross Section Elements                        |                 |  |
| Pavement Width (ft)                           | 10              |  |
|   | 14              | FOR GRADES >9%, A 14FT PATH IS UTILIZED                                      |
| Reference                                     | BF p.35         |  |
| Shoulder Width (ft)                           | 2 -3            | AASHTO RECOMM. A 1:6 SLOPE BE MAINTAINED. IF CANAL/DITCH                     |
| Reference                                     | BF p.36         | PRESENT, MORE WIDTH OR BARRIER IS RECOMM.                                    |
| Min. Horizontal Separation from Roadway (ft)  | 5               | MUCH MORE THAN 5 FT. IS PREFERABLE. IF <5 FT., A SUITABLE                    |
| Reference                                     | BF p.35         | PHYSICAL BARRIER (AT LEAST 3.5 FT. HIGH) IS RECOMMENDED.                     |
| Horiz. Dist. from Pavement Edge to Signs (ft) | 3-6             | WELGUEEN EDGILENGE OF GLOVICI COSCUE TO TRAVI                                |
| Reference                                     | BF p. 35        | MEASURED FROM EDGE OF SIGN CLOSEST TO TRAIL                                  |
| Lateral Clearance for Horizontal Curves (ft)  | BF. Table 4     |  |
| Reference                                     | BF p.46         |  |
| Cross Slope (%)                               | 2               | CROSS SLOPE IN ONE DIRECTION PREFERRED OVER CROWNING.                        |
| Reference                                     | BF p.38         | USE 25' FOR TRANSITION BETWEEN CROSS-SLOPE DIRECTION CHANGES (i.e2% TO +2%). |
| Vertical Distance from Pavement to Signs (ft) | 4-5             | MEAGURER EROM POTTOM EROF OF GIONG   |
| Reference                                     | BF p.35         | MEASURED FROM BOTTOM EDGE OF SIGNS.  |
| Min. Vertical Obstruction Clearance (ft)      | 10              |  |
| Reference                                     | BF p.36         |  |
| Alignment Elements                            |                 |  |
| Stopping Sight Distance (ft)                  | BF. Figure 19   | DAGE OF FOR EDICTION FACTORS   |
| Reference                                     | BF p.42, p.38   | PAGE 38 FOR FRICTION FACTORS.  |
| Min. Radius (ft)                              | 100             | 100 FT. IS BASED ON 20 MPH DESIGN SPEED. FOR 30 MPH, THE                     |
| Reference                                     | BF p.38         | MIN RADIUS IS 225 FT.  |
| Max. Grade (%)*                               | 5               | KEEP LENGTH OF GRADES STEEPER THAN 5% TO A MINIMUM (SEE                      |
| Reference                                     | BF p. 39        | MITIGATION MEASURES p. 39)   |
| Min. Length of Crest Vertical Curve (ft)      | BF. Table 3     |  |
| Reference                                     | BF p.44         |  |

#### Notes

BF = AASHTO "Guide For The Development Of Bicycle Facilities 1999"

<sup>\* =</sup> For grades > 9%, a 14 ft pavement section is utilized



## Appendix E – Cost Estimate







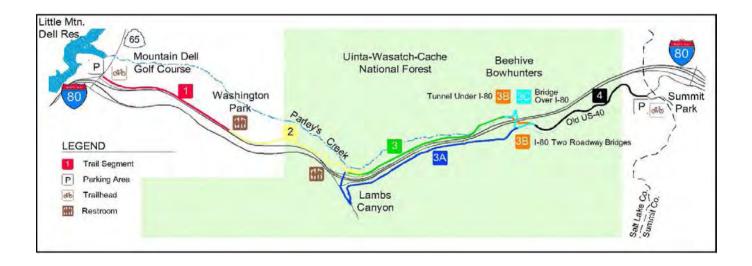
| Parley's Canyon Trail - Mountain Dell Reservoir To Summ   | it Par | k            |
|---|--------|--------------|
| Alternative Trail Alignments  |        |              |
| Cost Estimates Revised 24 March 2014  (Estimated costs are shown in 2014 dollars.)  (Using UDOT's Cost Index, 16.4% was added to construction costs for the period 2 (For projecting future cost, add 5% inflation per year to construction costs |        | 2014.)       |
|   |        |              |
| Alignment Using Option 3C Bridge Over I-80 - Lower  | st Co  | st           |
| ITEM  | С      | OST ESTIMATE |
| Segment 1 - Frontage Road from Mountain Dell Reservoir to Washington Park   | \$     | 5,991        |
| Segment 2 - New Trail from Washington Park to Lambs Canyon  | \$     | 3,650,942    |
| Segment 3 - Frontage Road from Lambs Canyon to Beehive Bowhunters   | \$     | 17,142       |
| Option 3C - Bridge Over Interstate-80   | \$     | 2,613,347    |
| Segment 4 - Old US-40 Roadway from Beehive Bowhunters to Summit Park  | \$     | 2,533,295    |
| Tota  | I \$   | 8,820,717    |

| Alignment Using Option 3B Tunnel Under I-80 - Mid Ra                      | nge | Cost          |
|---|-----|---------------|
|   |     |               |
| ITEM  | (   | COST ESTIMATE |
| Segment 1 - Frontage Road from Mountain Dell Reservoir to Washington Park | \$  | 5,991         |
| Segment 2 - New Trail from Washington Park to Lambs Canyon                | \$  | 3,650,942     |
| Segment 3 - Frontage Road from Lambs Canyon to Beehive Bowhunters         | \$  | 17,142        |
| Option 3B - Tunnel Under Interstate-80                                    | \$  | 3,343,613     |
| Segment 4 - Old US-40 Roadway from Beehive Bowhunters to Summit Park      | \$  | 2,533,295     |
| Total   | \$  | 9,550,983     |

| Alignment Using Segment 3A New Trail South Side of I-80                                   | -  | High Cost     |
|---|----|---------------|
|   |    |               |
| ITEM  |    | COST ESTIMATE |
| Segment 1 - Frontage Road from Mountain Dell Reservoir to Washington Park                 | \$ | 5,991         |
| Segment 2 - New Trail from Washington Park to Lambs Canyon                                | \$ | 3,650,942     |
| Segment 3A - New Trail South Side of Interstate-80 from Lambs Canyon to Beehive Bowhunter | \$ | 7,492,283     |
| Segment 4 - Old US-40 Roadway from Beehive Bowhunters to Summit Park                      | \$ | 2,533,295     |
|   |    |               |
| Total   | \$ | 13,682,511    |

| Alignment Using Option 3B I-80 Two Roadway Bridges - H                    | ligh | nest Cost     |
|---|------|---------------|
|   |      |               |
| ITEM  | (    | COST ESTIMATE |
| Segment 1 - Frontage Road from Mountain Dell Reservoir to Washington Park | \$   | 5,991         |
| Segment 2 - New Trail from Washington Park to Lambs Canyon                | \$   | 3,650,942     |
| Segment 3 - Frontage Road from Lambs Canyon to Beehive Bowhunters         | \$   | 17,142        |
| Option 3B - Two Interstate-80 Roadway Bridges                             | \$   | 11,872,616    |
| Segment 4 - Old US-40 Roadway from Beehive Bowhunters to Summit Park      | \$   | 2,533,295     |
|   |      |               |
| Total   | \$   | 18,079,986    |

#### Parley's Canyon Trail - Mountain Dell Reservoir To Summit Park Segment 1 - Frontage Rd North Side of I-80 from Mountain Dell Reservoir to **Washington Park** Cost Estimate Revised 24 March 2014 (Estimated costs are shown in 2014 dollars.) (Using UDOT's Cost Index, 16.4% was added to construction costs for the period 2010 to 2014.) (For projecting future cost, add 5% inflation per year to construction costs.) Description: 2 Shared route lanes; Minimal impacts to ROW; Minor construction ITEM COST ESTIMATE Construction "Shared Lane" pavement marker's; 5 \$ 873 Regulatory signs (30"x30"); 8 \$ 3,259 Subtotal Construction 4,132 **Design and Contingency** Design and Construction Engineering (20% of Construction Subtotal) \$ 826 Contingency (25% of Construction Subtotal) \$ 1,033 Subtotal Design and Contingency 1,859 Total Project Cost \$ 5,991



## Parley's Canyon Trail - Mountain Dell Reservoir To Summit Park Segment 2 - New Trail North Side of I-80 from Washington Park to Lambs Canyon

#### Cost Estimate Revised 24 March 2014

(Estimated costs are shown in 2014 dollars.)

(Using UDOT's Cost Index, 16.4% was added to construction costs for the period 2010 to 2014.)

(For projecting future cost, add 5% inflation per year to construction costs.)

| ITEM   | COST ESTIMATE   |
|--|-----------------|
| Contruction and Land Acquisition                                   |                 |
| 15 ft wide paved trail; 7,330 lf; Moderate to flat terrain         | \$<br>1,407,799 |
| Golf course improvements: grading, landscaping, irrigation         | \$<br>58,200    |
| Restroom: pre-fab doulbe vault                                     | \$<br>116,400   |
| Trail safety screen netting; 1,200 lf                              | \$<br>245,837   |
| Subtotal Construction  | \$<br>1,828,236 |
| Right of Way; 50,000 sf  | \$<br>1,000,000 |
| Subtotal Non-Construction  | \$<br>1,000,000 |
| Subtotal Construction and Land Acquisition                         | \$<br>2,828,236 |
| Design and Contingency   |                 |
| Design and Construction Engineering (20% of Construction Subtotal) | \$<br>365,647   |
| Contingency (25% of Construction Subtotal)                         | \$<br>457,059   |
| Subtotal Design and Contingency                                    | \$<br>822,706   |
| Total Project Cost   | \$<br>3,650,942 |

Note: Price per foot of trail includes: mobilization, excavation & fill, 3" asphalt & 6" base course, drainage, signing & Note: Cost estimate revised to add 5' of pavement width to trail to accommodate saftey.

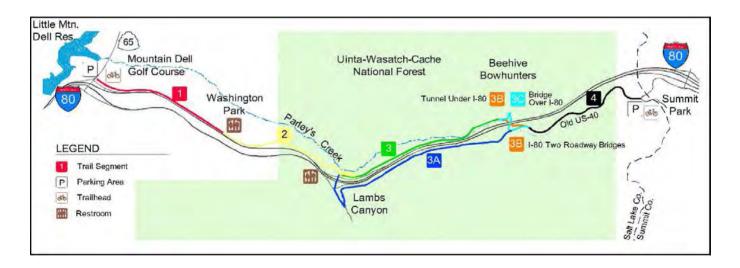


#### Parley's Canyon Trail - Mountain Dell Reservoir To Summit Park Segment 3 - Frontage Rd North Side of I-80 from Lambs Canyon to Beehive **Bowhunters** Cost Estimate Revised 24 March 2014 (Estimated costs are shown in 2014 dollars.) (Using UDOT's Cost Index, 16.4% was added to construction costs for the period 2010 to 2014.) (For projecting future cost, add 5% inflation per year to construction costs.) Description: 2' to 4' Bi-directional painted bike lanes; Minimal impact to ROW; Minor construction ITEM COST ESTIMATE Construction Two 6" solid white pavement stripes; 15,260 lf 10.658 \$ "Bicycle Rider" pavement markers; 2 \$ 349 Regulatory signs (30"x24"); 2 \$ 815 Subtotal Construction \$ 11,822 **Design and Contingency** Design and Construction Engineering (20% of Construction Subtotal) \$ 2,364 Contingency (25% of Construction Subtotal) 2.956 5,320 Subtotal Design and Contingency Total Project Cost \$ 17,142



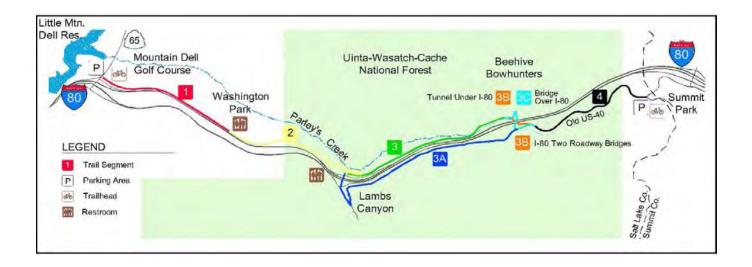
#### Parley's Canyon Trail - Mountain Dell Reservoir To Summit Park Segment 3A - New Trail South Side of I-80 from Lambs Canyon to Beehive **Bowhunters** Cost Estimate Revised 24 March 2014 (Estimated costs are shown in 2014 dollars.) (Using UDOT's Cost Index, 16.4% was added to construction costs for the period 2010 to 2014.) (For projecting future cost, add 5% inflation per year to construction costs.) ITEM COST ESTIMATE **Construction and Land Acquisition** 12' Paved trail; 8,300 lf; Moderate to flat terrain \$ 1.082.054 14' Paved trail; 2,600 lf; Steep terrain with retaining walls \$ 2,421,120 Pedestrian bridge structure; 200 lf; 12' wide \$ 698,400 Subtotal Construction \$ 4,201,574 Right of Way; 70,000 sf 1.400.000 \$ Subtotal Non-Construction \$ 1,400,000 Subtotal Construction and Land Acquisition 5.601.574 **Design and Contingency** Design and Construction Engineering (20% of Construction Subtotal) 840.315 \$ Contingency (25% of Construction Subtotal) 1,050,394 Subtotal Design and Contingency \$ 1,890,709 Total Project Cost \$ 7.492.283

Note: Price per foot of trail includes: mobilization, excavation & fill, 3" asphalt & 6" base course, drainage, signing & striping, & fence



#### Parley's Canyon Trail - Mountain Dell Reservoir To Summit Park **Option 3B - Tunnel Under I-80** Cost Estimate Revised 24 March 2014 (Estimated costs are shown in 2014 dollars.) (Using UDOT's Cost Index, 16.4% was added to construction costs for the period 2010 to 2014.) (For projecting future cost, add 5% inflation per year to construction costs.) Description: 12' to 14' Shared-use path; Tunnel under I-80 ITEM **COST ESTIMATE Construction and Land Acquisition** 12' Paved trail; 700 lf; Moderate to flat terrain \$ 91,258 14' Paved trail; 390 lf; Steep terrain \$ 181,584 Tunnel under I-80; 410 lf; Includes installation and MOT 1,908,960 \$ **Subtotal Construction** \$ 2,181,802 Right of Way; 9,000 sf 180,000 \$ Subtotal Non-Construction \$ 180,000 Subtotal Construction and Land Acquisition 2,361,802 **Design and Contingency** Design and Construction Engineering (20% of Construction Subtotal) \$ 436,360 Contingency (25% of Construction Subtotal) \$ 545,451 Subtotal Design and Contingency 981,811 \$ Total Project Cost | \$ 3,343,613

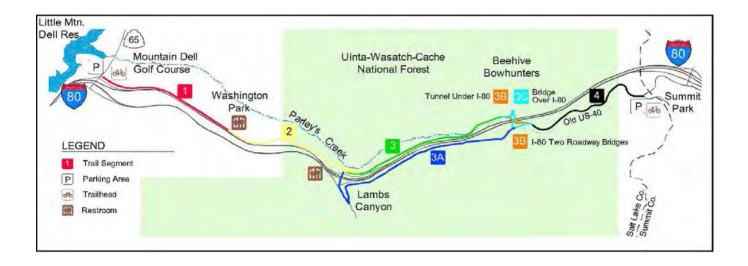
Note: Price per foot of trail includes: mobilization, excavation & fill, 3" asphalt & 6" base course, drainage, signing & striping, and fence



#### Parley's Canyon Trail - Mountain Dell Reservoir To Summit Park Option 3B - I-80 Two Roadway Bridges Cost Estimate Revised 24 March 2014 (Estimated costs are shown in 2014 dollars.) (Using UDOT's Cost Index, 16.4% was added to construction costs for the period 2010 to 2014.) (For projecting future cost, add 5% inflation per year to construction costs.) Description: 12' Shared-use path under I-80 bridges ITEM **COST ESTIMATE Contruction and Land Acquisition** 12' Paved trail; 1,110 lf; Moderate to flat terrain \$ 144.708 14' Paved trail; 390 lf; Steep terrain \$ 181,584 2 - I-80 Bridges with reg'd ABC (\$500,000 additional per structure); 21,600 sf \$ 6,192,480 Excavation; 37,926 cy \$ 1,545,101 Subtotal Construction 8,063,873 \$ Right of Way; 9,000 sf 180.000 \$ Subtotal Non-Construction \$ 180,000 Subtotal Construction and Land Acquisition 8,243,873 **Design and Contingency** Design and Construction Engineering (20% of Construction Subtotal) \$ 1,612,775 Contingency (25% of Construction Subtotal) \$ 2,015,968 Subtotal Design and Contingency 3,628,743

Note: Price per foot of trail includes: mobilization, excavation & fill, 3" asphalt & 6" base course, drainage, signing & striping, and fence

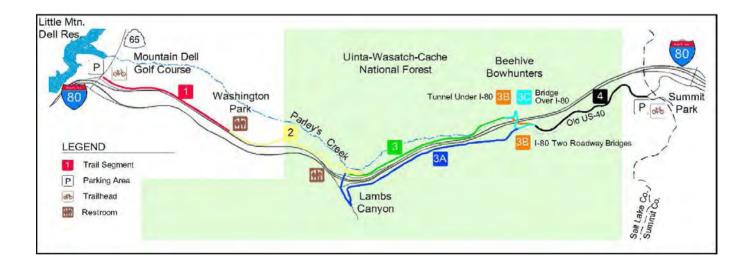
Total Project Cost | \$



11,872,616

#### Parley's Canyon Trail - Mountain Dell Reservoir To Summit Park **Option 3C - Bridge Over I-80** Cost Estimate Revised 24 March 2014 (Estimated costs are shown in 2014 dollars.) (Using UDOT's Cost Index, 16.4% was added to construction costs for the period 2010 to 2014.) (For projecting future cost, add 5% inflation per year to construction costs.) Description: 12' to 14' Shared-use path over I-80 ITEM COST ESTIMATE **Contruction and Land Acquisition** 12' Paved trail; 1,545 lf; Moderate to flat terrain 201.419 14' Paved trail; 565 lf; Steep terrain \$ 263,064 Bridge over I-80; 245 If 855.540 \$ Concrete Barrier; 700 If \$ 32,592 Embankment (Borrow); 10,133 cy \$ 212.314 Subtotal Construction 1,564,929 Right of Way; 17,210 sf 344.200 Subtotal Non-Construction 344,200 \$ Subtotal Construction and Land Acquisition \$ 1.909.129 **Design and Contingency** Design and Construction Engineering (20% of Construction Subtotal) 312,986 \$ Contingency (25% of Construction Subtotal) 391,232 704,218 Subtotal Design and Contingency Total Project Cost \$ 2,613,347

Note: Price per foot of trail includes: mobilization, excavation & fill, 3" asphalt & 6" base course, drainage, signing & striping, and fence



## Parley's Canyon Trail - Mountain Dell Reservoir To Summit Park Segment 4 - Old US-40 South Side of I-80 from Beehive Bowhunters to Summit Park

| Summer ark   |    |               |
|--|----|---------------|
|  |    |               |
| Cost Estimate Revised 24 March 2014  |    |               |
| (Estimated costs are shown in 2014 dollars.)   |    |               |
| (Using UDOT's Cost Index, 16.4% was added to construction costs for the period 201           |    | 2014.)        |
| (For projecting future cost, add 5% inflation per year to construction costs.)               | )  |               |
|  |    |               |
|  |    |               |
| Description: 2 Shared route lanes with 40' milled and overlaid asphalt on the Old US 40 UTBC |    |               |
|  |    |               |
| ITEM   |    | COST ESTIMATE |
| Construction   |    |               |
| Milling 4"; 52,000 sq yd   | \$ | 60,528        |
| 14' Paved trail; 12,000 tons; Steep terrain; 4" Asphalt (HMA)                                | \$ | 1,676,160     |
| 1- 4" Double yellow pavement stripes   | \$ | 8,084         |
| "Shared Lane" pavement markers; 4  | \$ | 698           |
| Regulatory signs (30"x30"); 4  | \$ | 1,630         |
| Subtotal Construction  | \$ | 1,747,100     |
|  |    |               |
| Design and Contingency   |    |               |
| Design and Construction Engineering (20% of Construction Subtotal)                           | \$ | 349,420       |
| Contingency (25% of Construction Subtotal)   | \$ | 436,775       |
| Subtotal Design and Contingency  | \$ | 786,195       |
| Total Project Cost   | \$ | 2,533,295     |

Note: Assuming density of HMA is 152 pcf





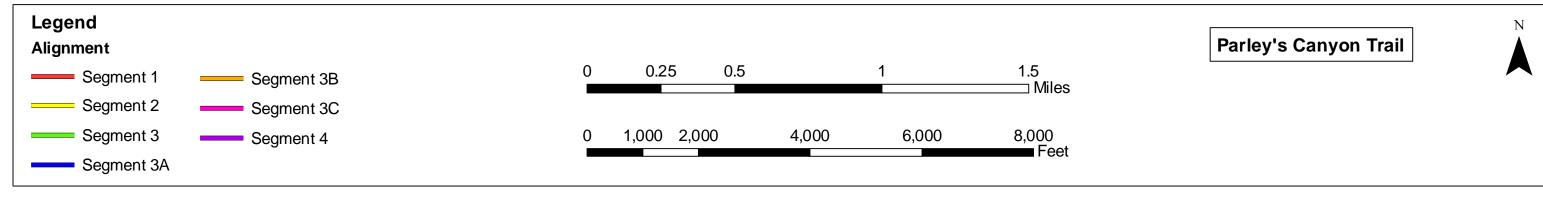
## Appendix F – Parley's Canyon Trail Alignments

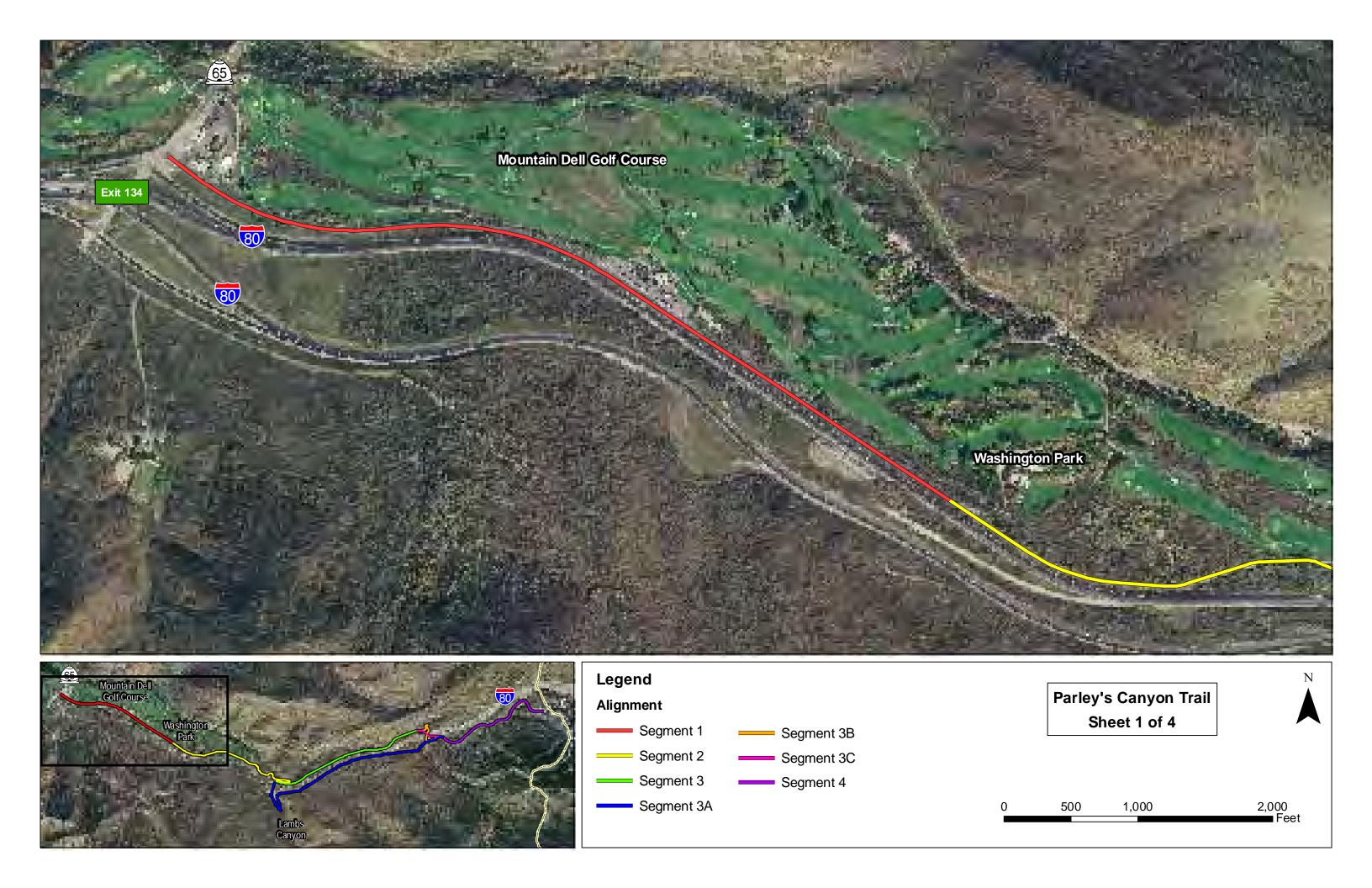


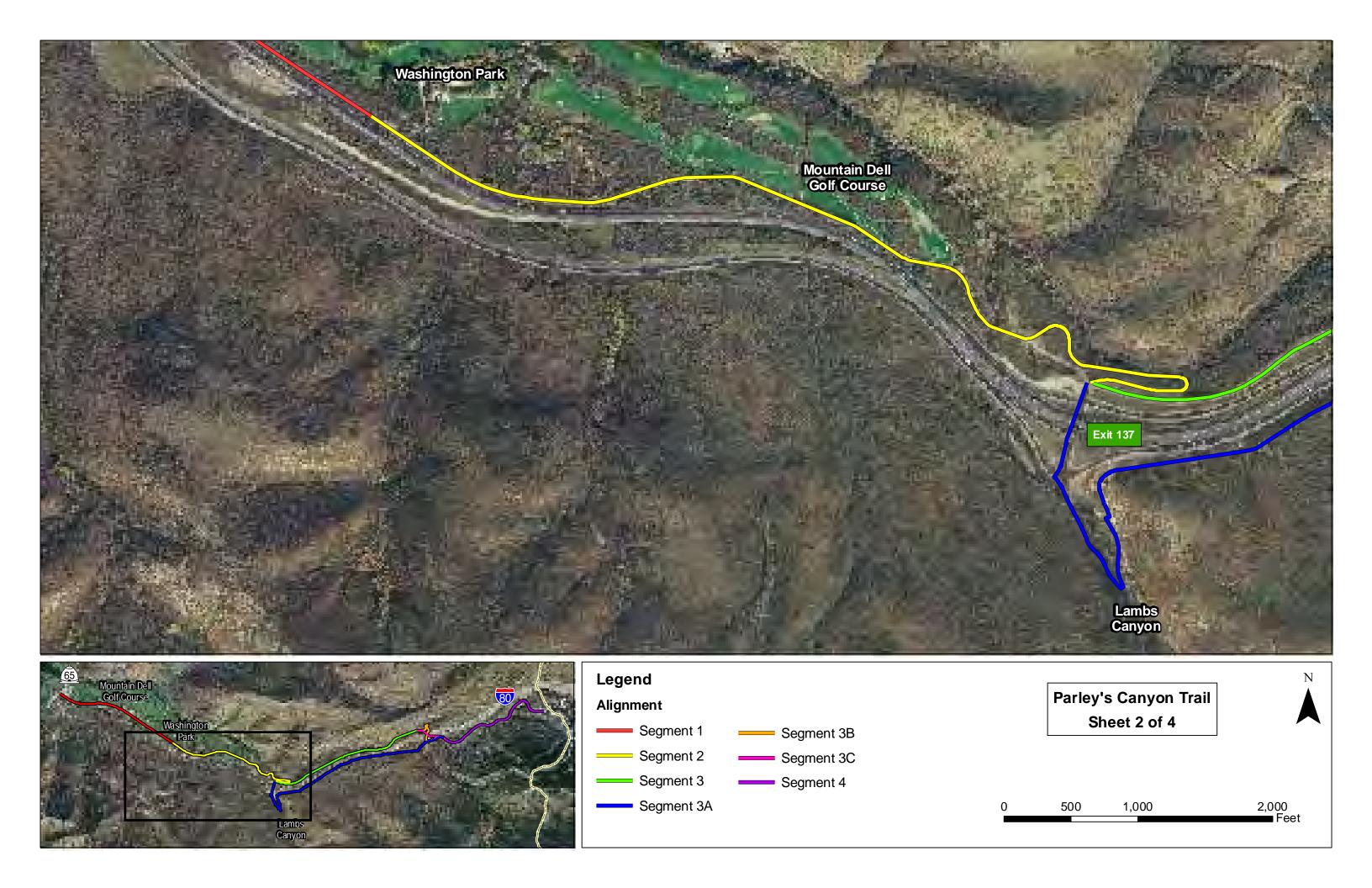


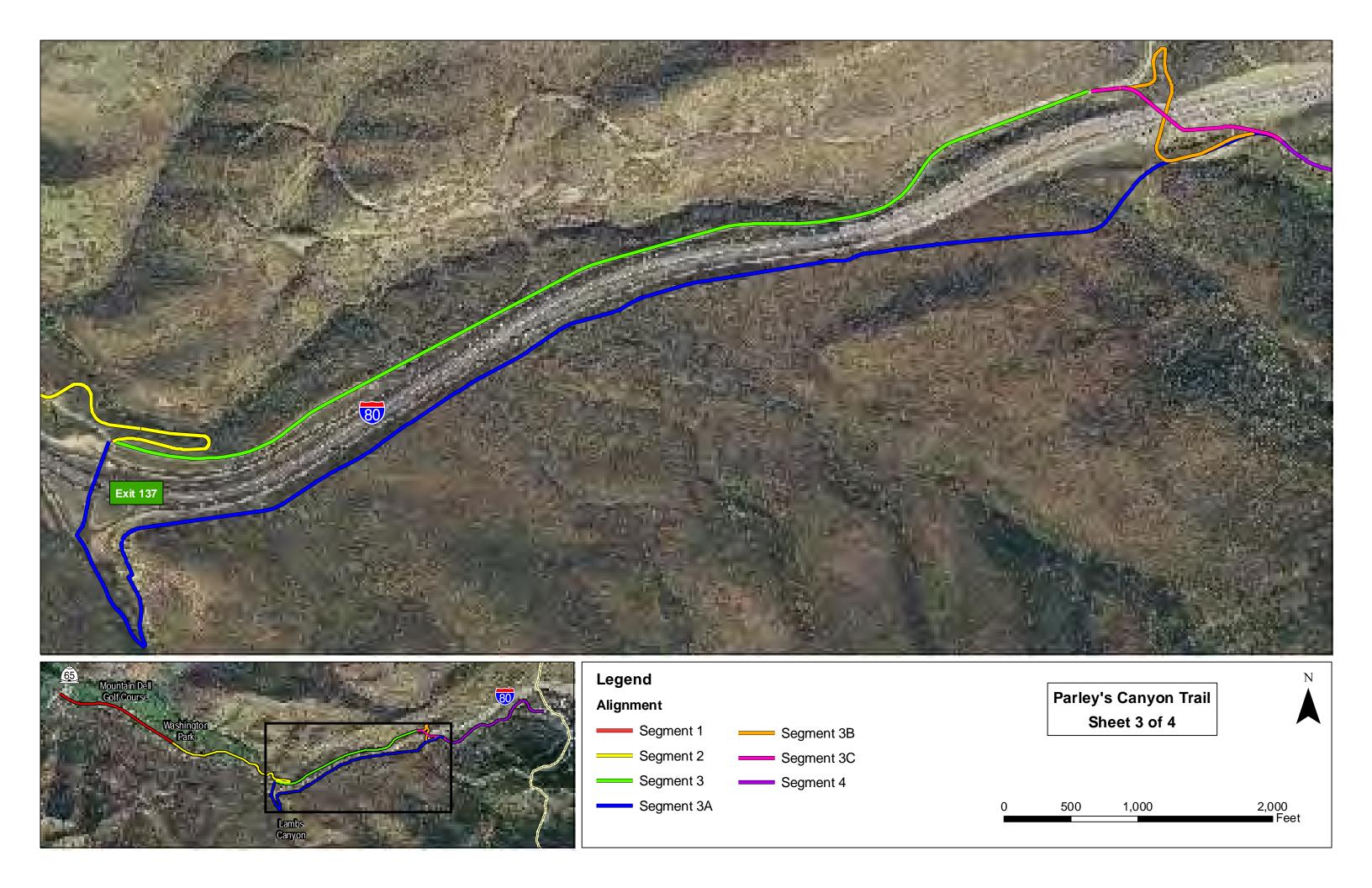


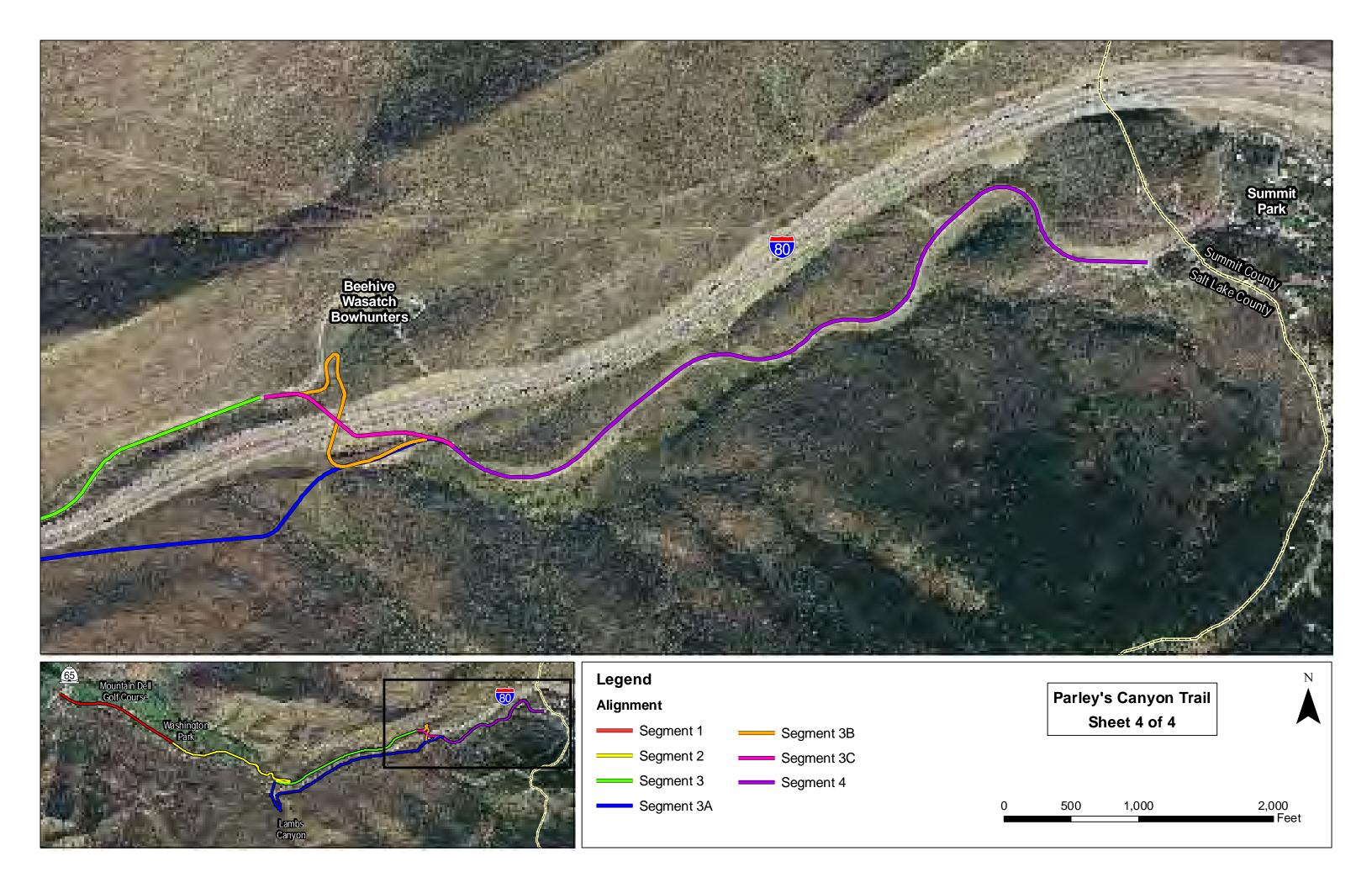














# Appendix G Salt Lake City Public Utilities Comments







#### COMMENTS FROM SALT LAKE CITY DEPARTMENT OF PUBLIC UTILITIES - WATERSHED 4/22/2009

| No. | Section | Page<br>No. | Comment   | Action* | Resolution   | Responsible<br>Party | Action Item |
|-----|---------|-------------|---|---------|--|----------------------|-------------|
| 1   | General |             | Salt Lake City Department of Public Utilities would retain exclusive management of this trail and associated facilities. Because it is anticipated that the proposed Parleys Trail would significantly increase SLCDPU's obligation and need for additional watershed education, enforcement, and facility maintenance. A funding mechanism that covers SLCDPU's additional costs must be evaluated. The FAR should include this as an important point in the study.  Funding should specifically provide for (1) operations and maintenance of the trail, (2) installation, maintenance, and pumping of associated toilet facilities; (3) mapping and treatment of introduced invasive species along the trail; and (4) increased patrols for watershed enforcement.  Additionally, this fits within the scope of work as identified on page 5 of the FAR referred to "implementation strategies."   | E       | Added to the document in Section 6.3 "The proposed Parley's Canyon Trail would increase costs to Salt Lake City Public Utilities for additional watershed education and enforcement and also increase costs to Salt Lake County for trail and facility maintenance. A funding mechanism that covers the additional costs for Salt Lake City Public Utilities and Salt Lake County would be evaluated in the environmental document. Funding for maintenance would specifically provide for (1) operations and maintenance of the trail, (2) installation, maintenance, and pumping of associated toilet facilities; (3) mapping and treatment of introduced invasive species along the trail; and (4) increased patrols for watershed enforcement."  | TK                   |             |
| 2   | General |             | The FAR should include evaluation and identification of specific restroom needs and locations needed to accommodate increased access and use. As acknowledged in the FAR, much of the study area in Parley's Canyon is designated as protected watershed. Salt Lake City and the Salt Lake Valley Health Department have specific sanitation regulations in areas that are designated as protected watershed. The proposed Parleys Trail will necessitate the need to provide sanitary facilities to users of the trail in order to both meet the requirements of protected watershed regulations, and to mitigate water quality concerns from inadequate sanitary facilities.  | E       | Added to the document in Section 4.4 "Parley's Canyon is designated as protected watershed and Salt Lake City and the Salt Lake Valley Health Department have specific sanitation regulations in areas that are designated as protected watershed. The proposed Parleys Trail will necessitate the need to provide sanitary facilities to users of the trail in order to both meet the requirements of protected watershed regulations, and to mitigate water quality concerns from inadequate sanitary facilities."   | TK                   |             |
| 3   | General |             | The FAR should address the need to inform trail users of watershed regulations. SLCDPU prefers that any signage along the trail be consistent with signage created in our Keep It Pure watershed education program, and clearly notify trail users of watershed regulations. This would be consistent with the existing signage to facilitate watershed education in SLC's protected watershed areas. This is found throughout Big and Little Cottonwood Canyons, Millcreek, Parleys and City Creek Canyons and is an important component of SLCDPU's 1999 Watershed Management Plan.   | A       | The FAR includes this in Section 4.4. It states "Trailhead signage is recommended to identify the trail's alignment, changing geometry (e.g., length of segments, width of segments, designated striping, etc.), approximate grades, approved/prohibited trail uses, etc. (Figure 4.9). The trailhead signage will incorporate Salt Lake City's "Keep it Pure style" (see Figure 4.10).  Signage to facilitate watershed education in Salt Lake City's protected watershed areas would also be posted along the trail. Existing watershed education signs are currently located at the existing trailhead at Summit Park (see Figure 4.10)."   | TK                   |             |
| 4   | General |             | <ul> <li>SLCDPU would additionally like the FAR to address the following general issues:</li> <li>(1) The "environmental process" should be described, including who will lead and be involved in that process in subsequent steps;</li> <li>(2) Land use jurisdictions, policies, ordinances, and regulatory requirements within the study area should be defined in more detail.</li> <li>(3) A list of potential stakeholders and their needs should be identified in the FAR;</li> <li>(4) The FAR indicates the proposed trail will provide opportunities for dispersed recreation outside of the "study area",— it should acknowledge that watershed policy and regulations protecting the surrounding area exists and is critical</li> <li>(5) The study should specifically refer to the Parleys Canyon Watershed, its characteristics, and the role it has in the overall water supply context.</li> <li>(6) The FAR should address potential responsibilities and liabilities resulting from any accidents on the trail as a result of user interactions, excessive user speed, etc.</li> </ul> | A/E     | <ol> <li>(1) That is the next step in the environmental process.</li> <li>(2) Regulations described in Section 3.2</li> <li>(3) Addressed in general terms, environmental document will have more detail</li> <li>(4) Changed to read "These potential connections should be balanced to protect wildlife habitat and watershed integrity with the desire to create more dispersed recreation. Since Parley's Canyon lies within a protected watershed, watershed policy and regulations protecting the surrounding area exists and must be followed."</li> <li>(5) Section 3.2 Water Resources, specifically identifies the protected watershed area, the impact activities may have in this area, and the policies and rules.</li> <li>(6) Will be addressed in the environmental document.</li> </ol> | TK                   |             |

| No. | Section | Page<br>No. | Comment  | Action* | Resolution  | Responsible Party | Action Item |
|-----|---------|-------------|--|---------|---|-------------------|-------------|
| 5   | 1.0     | 1           | Delete first sentence "In addition to creating a valuable" Until stakeholder interests are identified this is slightly erroneous.  | A       | Changed sentence to read "A dedicated trail and crossing of I-80 may create a commuter and recreational link between Park City and Salt Lake City, increase bicycle and hiking visits to Lambs Canyon, provide increased mountain bike access to trails, and will expand the cross country ski trail system." | TK                |             |
| 6   | 1.0     | 1           | Insert Operations & Maintenance into "The purpose of this study was to prepare a "realistic and pragmatic plan" for developing the Trail, including construction phasing, operations & maintenance, cost estimating and mitigation techniques for impacts to utilities, properties and the environment."   | Α       | Changed   | TK                |             |
| 7   | 1.0     | 2           | Please fix to accurately represent landownership. SLCDPU has identified land ownership as City property; this identifies the entire area as USFS ownership incorrectly.  | Α       | Deleted landownership   | TK                |             |
| 8   |         | 5           | There should be a review of the SLC Watershed Management Plan, the Salt Lake County Canyons Master Plan, and the 2003 Wasatch Cache National Forest Plan as part of this study. Otherwise there will be some policy information missing here.  | Α       | Review of the plans   | TK                |             |
| 9   | 2.2     | 6           | Please add this paragraph:  "Given the multiple jurisdictions this trail crosses, other relevant plans include the Wasatch-Cache National Forest Master Plan, the SLCDPU Watershed Management Plan, the Salt Lake County Canyons Master Plan. The planning of this trail must include recommendations and restrictions included in these plans."   | Α       | Added   | TK                |             |
| 10  | 2.3     | 6           | Starting after "include" delete rest of sentence, replace with: "(1) the Interstate 80 Right of Way, owned and maintained by UDOT; (2) protected watershed lands both owned and managed by Salt Lake City Corporation; (3) a developed park (Washington Park) owned and maintained by Salt Lake City Corporation; a golf course (Mountain Dell Golf Course) owned and maintained by Salt Lake City Corporation; (4) federal lands managed by the United States Forest Service – Uinta-Wasatch-Cache National Forest; and (5) land owned by the Beehive Wasatch Bowhunters as well as other private landholders." | Α       | Changed   | TK                |             |
| 11  | General |             | It may be of note that the utility easements (Pacificorp, Chevron, etc.) should be consulted given the extensive gas & power lines found in the area.  | Α       | Noted; We acknowledge that this is something that needs to be done.   | TK                |             |
| 12  | General |             | Of general note, the Wasatch-Cache National Forest is now the Uinta-Wasatch-Cache National Forest, name changes should be made throughout the document.  | Α       | Changed   | TK                |             |
| 13  | 2.3     | 7           | First paragraph, replace first sentence with:  Of the nearly two million acres within the boundaries of the Uinta-Wasatch-Cache National Forest, approximately 1.2 million acres are federal land while the remaining 0.8 million acres of land are owned by state and local governments and private entities.   | A       | Changed   | TK                |             |
| 14  | 2.3     | 7           | Second paragraph, end of first sentence:  After Creek, insert: ", owned by Salt Lake City Corporation" Sentence beginning with "Washington Park"  After "Washington Park" insert ", also owned by Salt Lake City Corporation"  | A       | Changed   | TK                |             |

| Section | Page<br>No.              | Comment  | Action*   | Resolution  | Responsible<br>Party   | Action Item  |
|---------|--------------------------|--|---|---|--|--|
| 2.4     | 8                        | Paragraph 3.  Delete last sentence, beginning with "Most of the traffic…" and replace with: There are two seasons of heavy use, one during the summer months when the golf course is in operation, the other during the winter when the community comes to sled, snowshoe and cross country ski."  | Α   | Changed   | ТК   |  |
| 2.4     | 8                        | Paragraph 4 In sentence "most of the traffic" delete "people travelling" and replace with "due to travel"  | Α   | Changed   | тк   |  |
| 3.0     | 9                        | This would be an optimal spot to articulate what environmental processes and reviews this trail would need to go through.  | Α   | Changed to read "More in-depth analysis of the environment and other project constraints will be necessary as the environmental process continues. In-depth analysis could include a Wetland and Waters of the U.S. Delineation; Historical and Archaeological investigations; Threatened, Endangered, & Sensitive Species analysis; Geotechnical Investigations; and a Noise analysis, to name a few. This feasibility report is based on the field review and other available information gathered to date.   | TK   |  |
| 3.2     | 13                       | After "north south direction" in first sentence, insert:  "through Lamb's Canyon, an important sub-watershed to the Parleys Canyon watershed."   | Α   | Changed   | TK   |  |
| 3.2     | 13                       | After last sentence in final paragraph of 3.2, please insert the following sentence: "Watershed regulations also apply to construction activities in the watershed and will be addressed."   | Α   | Changed   | TK   |  |
| 3.3     | 13                       | After first paragraph, please insert the following paragraph:  "Areas outside the study area, but potentially affected by increased dispersed recreation and disturbance due to the presence of the trail and auxiliary developments, include habitat that is less accustomed to traffic, noise, and human presence."  | Α   | Changed   | TK   |  |
| 3.3     | 13                       | RE: Plant Species list: This may not be accurate. SLCDPU staff recommends a ground truthing of this list; some of these species are located out of the trail corridor area in higher elevations in Parley's Canyon, but not at this particular location.   | Α   | Plant list revised and those species noted in the field visit are listed.   | TK   |  |
| 3.3     | 14                       | Second Paragraph  This statement should be expanded upon, or should not be included as it seems that more in depth environmental analysis would need to be conducted to make this determination.   | Α   | Deleted   | TK   |  |
| 3.5     | 15                       | After final paragraph, please insert the following paragraphs:  "Mapping data collected by SLCPU staff shows a direct correlation between trails and heavy weed infested areas in the Watershed. The disturbed nature of the tread and sidelines contribute as well as the fact that transport vectors often include cars, bikes, shoes, etc. Additionally, regarding weeds, it should also be noted that:  Utah Administrative Code R-68-9 (The Utah Noxious Weeds Act) places responsibility for weeds clean-up on the property owner.  - Any herbicide use in this area needs to be compliant with Salt Lake City's watershed approved herbicide requirements, which are found in code 17.04.375. | Α   | Added   | TK   |  |
|         | 3.2<br>3.2<br>3.3<br>3.3 | 2.4 8  3.0 9  3.2 13  3.3 13  3.3 14   | Delete last sentence, beginning with "Most of the traffic" and replace with: There are two seasons of heavy use, one during the summer months when the golf course is in operation, the other during the winter when the community comes to sled, snowshoe and cross country ski."  2.4 8 Paragraph 4 In sentence "most of the traffic" delete "people travelling" and replace with "due to travel"  3.0 9 This would be an optimal spot to articulate what environmental processes and reviews this trail would need to go through.  3.2 13 After "north south direction" in first sentence, insert: "through Lamb's Canyon, an important sub-watershed to the Parleys Canyon watershed."  After last sentence in final paragraph of 3.2, please insert the following sentence: "Watershed regulations also apply to construction activities in the watershed and will be addressed."  After first paragraph, please insert the following paragraph: "Areas outside the study area, but potentially affected by increased dispersed recreation and disturbance due to the presence of the trail and auxiliary developments, include habitat that is less accustomed to traffic, noise, and human presence."  3.3 13 This may not be accurate. SLCDPU staff recommends a ground truthing of this list; some of these species are located out of the trail corridor area in higher elevations in Parley's Canyon, but not at this particular location.  Second Paragraph  3.3 14 This statement should be expanded upon, or should not be included as it seems that more in depth environmental analysis would need to be conducted to make this determination.  After final paragraph, please insert the following paragraphs:  "Mapping data collected by SLCPU staff shows a direct correlation between trails and heavy weed infested areas in the Watershed. The disturbed nature of the tread and sidelines contribute as well as the fact that transport vectors often include cars, bikes, shoes, etc. Additionally, regarding weeds; it should also be noted that:  1 Litah Administrative Code R-68-9 (The Utah No | Delete last sentence, beginning with "Most of the traffic" and replace with: There are two seasons of heavy use, one during the summer months when the golf course is in operation, the other during the winter when the community comes to sled, snowshoe and cross country skl."  2.4 8 Paragraph 4 In sentence "most of the traffic" delete "people travelling" and replace with "due to travel"  A In sentence "most of the traffic" delete "people travelling" and replace with "due to travel"  A In sentence "most of the traffic" delete "people travelling" and replace with "due to travel"  A In sentence "most of the traffic" delete "people travelling" and replace with "due to travel"  A In sentence "most of the traffic" delete "people travelling" and replace with "due to travel"  A In sentence "most of the traffic" delete "people travelling" and replace with "due to travel"  A In sentence "most of the traffic" delete "people travelling" and replace with "due to travel"  A In sentence "most of the traffic replace what environmental processes and reviews this trail would need to go through.  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A In sentence "most of the traffic and environmental envir | 2.4 8 Bolete last sentence, beginning with "Most of the traffic." and replace with: There are two seasons of heavy use, one during the summer monts when the golf course is in operation, the other during the winter monts when the golf course is in operation, the other during the winter monts when the golf course is in operation, the other during the winter when the community comes to sled, snowshoe and cross country sk."  2.4 8 Paragraph 4 In sentence "most of the traffic" delete "people travelling" and replace with "due to travel"  A Changed  Changed to read "More indepth analysis of the environment and other project constraines will be received by as the environmental process continues. In-depth analysis could include a Wetland and Waters of the U.S. Delineation; Historical and Archaeological investigations; Threatends. Invastigations; and a Noise analysis, to name a few. This grabular introducts are continues, indeed any wetland and Waters of the U.S. Delineation; Historical and Archaeological investigations; and a Noise analysis, to name a few. This reading the projects analysis and solve analysis, to name a few. This reading the scene in finel paragraph of 2. Delete insert the following sentence:  3.2 13 **After insert sentence in finel paragraph of 2. Delete insert the following sentence:  3.3 **After first paragraph, please insert the following paragraph:  3.4 **After first paragraph, please insert the following paragraph:  3.5 **After paragraph, please insert the following paragraph:  A **Changed**  Changed  A **Changed**  Changed  A **Changed  Changed  A **Changed  A ** | 2.4 8 Business seasons of heavy use, one during the summer months when the gold course is in operation, the other during the winter whom the when the gold course is in operation, the other during the winter whom the community comes to sled, snowshoe and cross country skil.  2.4 8 Paragraph 4 In sentence 'most of the traffic' delete 'people travelling' and replace with 'due to travel'  3.0 9 This would be an optimal spot to articulate what environmental processes and reviews this trail would need to go through.  3.1 This would he an optimal spot to articulate what environmental processes and reviews this trail would need to go through.  3.2 13 After 'noth south direction' in first semence, insert: 'through Lamb's Canyon, an important sub-watershed to the Parleys Canyon watershed.'  3.2 13 After 'noth south direction' in first semence, insert: 'through Lamb's Canyon, an important sub-watershed to the Parleys Canyon watershed.'  3.2 13 After last sentence in final paragraph of 3.2, please insert the following sentence: 'Visionathed rogulations also apply to construction activities in the watershed and will be officially and distributions of the study area, but potentially affected by increased dispersed recreation and distributions due to the presence of the trail area auxiliary directionments, include habitat and the sub-value of the second presence of the trail area auxiliary directionments, include habitat and the sub-value of the second presence of the trail area auxiliary directionments. A Changed TK  C |

| No. | Section | Page<br>No. | Comment  | Action* | Resolution  | Responsible<br>Party | Action Item |
|-----|---------|-------------|--|---------|---|----------------------|-------------|
| 24  | 3.7     | 15          | This paragraph needs to be reworked to focus on the public lands located within the Parleys Canyon Protected Watershed.  These are general activities in the Uinta Wasatch Cache National Forest. However, lands in much of the Study Area are within the City's protected watershed and have more constraints in the types of allowable uses. It might be a good idea to draw attention to these distinctions since they apply to much of the study area, in the Forest Plan.  Additionally, without context, multiple activities which are listed here are not allowed within any part of Salt Lake City's protected Watershed.  | A       | Deleted bulleted list of NF activities and changed paragraph to read "Since Parley's Canyon Trail lies within a protected watershed area, recreation within the Uinta-Wasatch-Cache National Forest in this area is limited to those activities that do not have an immediate impact on the quality of the drinking water. In the summer, recreational opportunities include fishing, hiking, viewing wildlife, and picnicking and camping at developed campgrounds and picnic areas. During the winter, cross country skiing and snow shoeing or sledding are some of the recreational opportunities that can be enjoyed." | TK                   |             |
| 25  | 3.7     | 16          | After the last sentence in the section "Parley's Canyon Trail could connect" Please insert the following:  "These potential connections should be balanced to protect wildlife habitat and watershed integrity with the desire to create more dispersed recreation."   | A       | Changed   | TK                   |             |
| 26  | 4.0     |             | Commuter Reference  This trail will primarily be a recreation based trail, since the actual use as a "commuter" trail will be limited, please delete the "commuter" reference.   | A       | Changed to read "The Emigration to Summit Park corridor is the most direct route between Park City and Salt Lake City. A dedicated trail and crossing of I-80 between Park City and Salt Lake City could be used as a recreation trail as well as a possible commuter trail."   | TK                   |             |
| 27  | 4.0     |             | Bullet Pointed Possibilities  Regarding the bullet points of possibilities within this section, this again is where crosschecking the various plans (ie, SLC Watershed Management Plan) is important to double check the consistency of these assertions with partnering owners.   | A       | Changed paragraph to read "This trail could provide increased recreational access to trails above and around the Mountain Dell Golf Course, Emigration Canyon, Lambs Canyon, and Summit Park and could also expand the cross country ski trail system at the Mountain Dell Golf Course."  | TK                   |             |
| 28  | 4.0     |             | Public Outreach needs significant expansion to be adequate  Additionally, it has been recommended (route scouting review in June 2008, as well as meeting at SLCDPU summer 2008) by SLCDPU staff as the primary owners and managers of the land this trail will utilize, to include sufficient public outreach, that addresses more user groups, specifically those that use Parleys Canyon, yet might not be interested in road biking or cross country skiing.  Each fall the canyon is heavily used by not only wildlife watchers, but by hunters. The myriad of hunting seasons in Parleys results in heavy traffic by the various bow, muzzle loader and rifle hunters visiting this area. SLCPU again recommends that this user group be contacted over this trail.  To be fair, the charts discussing potential user ship of this trail should also incorporate expanded user groups. SLCPU recommends contacting various environmental, hunting, wildlife, residential community councils within the political boundaries of Salt Lake City, etc. to seek input and feedback regarding the need and use of this trail. | A       | Yes and it will in the environmental phase.   | TK                   |             |
| 29  | 4.0     | 22          | Could Baker staff contact SLCDPU Watershed 483-6889 about the trail references?  | Α       | Contacted Neil and trail references were okay.  | TK                   |             |
| 30  | 4.4     | 23          | Figure 4.5  Needs to delineate land ownership accurately, as well as identify further locations for restroom facilities along the upper portion of the trail within the protected Watershed area. These facilities must be accessible for cleaning trucks.   |         | This figure does not show land ownership, it just shows the Uinta-Wasatch-Cache NF boundary, Refer to map that shows land ownership Fig 6.1. Restrooms further addressed in Environmental Document.   | TK                   |             |

| No. | Section | Page<br>No. | Comment  | Action* | Resolution   | Responsible<br>Party | Action Item |
|-----|---------|-------------|--|---------|--|----------------------|-------------|
| 31  | 4.4     | 23          | Figure 4.6 should incorporate the Keep it Pure style | Α       | Changed paragraph to read "Trailhead signage is recommended to identify the trail's alignment, changing geometry (e.g., length of segments, width of segments, designated striping, etc.), approximate grades, approved/prohibited trail uses, etc. (Figure 4.9). The trailhead signage will incorporate Salt Lake City's "Keep it Pure style" (see Figure 4.10)." | TK                   |             |

<sup>\*</sup> A = concur, D = Do not concur, E = Exception, X = Delete



## Appendix H 2012 Public Survey Comments







### Parleys Canyon Trail Public Comment Survey



## 1. Please indicate the County where you reside.

|                  | Response<br>Percent | Response<br>Count |
|------------------|---------------------|-------------------|
| Salt Lake County | 65.2%               | 374               |
| Summit County    | 34.8%               | 200               |
|                  | answered question   | 574               |
|                  | skipped question    | 0                 |

### 2. Do you agree with the stated regional goals and objectives from the study.

|                        | Response<br>Percent | Response<br>Count |
|------------------------|---------------------|-------------------|
| Yes                    | 95.2%               | 216               |
| No                     | 0.4%                | 1                 |
| Other (please specify) | 4.4%                | 10                |
|                        | answered question   | 227               |
|                        | skipped question    | 347               |

### 3. Please rate the quality and quantity of the environmental data collected for the study.

|                  | Insufficient | Adequate    | More than<br>Adequate | Rating<br>Average | Response<br>Count |
|------------------|--------------|-------------|-----------------------|-------------------|-------------------|
| Quality of Data  | 2.3% (5)     | 53.5% (114) | 44.1% (94)            | 2.42              | 213               |
| Quantity of Data | 1.0% (2)     | 53.6% (103) | 45.3% (87)            | 2.44              | 192               |

Other (please specify)

9

| answered question | 217 |
|-------------------|-----|
| skipped question  | 357 |

### 4. Do you feel the screening process for the study was sufficient?

|                        | Response<br>Percent | Response<br>Count |
|------------------------|---------------------|-------------------|
| Yes                    | 95.4%               | 208               |
| No                     | 1.8%                | 4                 |
| Other (please specify) | 2.8%                | 6                 |
|                        | answered question   | 218               |
|                        | skipped question    | 356               |

#### 5. Do you agree with the analysis process in section 4.0 of the study?

|     | Response<br>Percent | Response<br>Count |
|-----|---------------------|-------------------|
| Yes | 99.1%               | 209               |
| No  | 0.9%                | 2                 |

Other (list additional uses to be considered)

5

| answered question | 211 |
|-------------------|-----|
| skipped question  | 363 |

6. After reviewing the list of considered facility needs in section 4.0 of the study, do you feel that there are any partnerships, ideas or facility needs that weren't considered but should be?

|     | Response<br>Percent    | Response<br>Count |
|-----|------------------------|-------------------|
| Yes | 13.5%                  | 28                |
| No  | 86.5%                  | 179               |
|     | Other (please specify) | 19                |
|     |                        |                   |

| 207 | answered question |
|-----|-------------------|
| 367 | skipped question  |

## 7. Please RANK the trail routing options described in section 5 of the study. For a new window with graphics of the routing options from the study <u>click here.</u>

|   | Unacceptable<br>Option | Acceptable Option | Good<br>Option | Better<br>Option | Best<br>Option | Rating<br>Average | Response<br>Count |
|---|------------------------|-------------------|----------------|------------------|----------------|-------------------|-------------------|
| Segment Alternative 3 - North Side of I-80        | 6.3% (13)              | 22.8% (47)        | 33.0%<br>(68)  | 14.1%<br>(29)    | 23.8%<br>(49)  | 3.26              | 206               |
| Segment Alternative 3A - South<br>Side of I-80    | 2.9% (6)               | 25.9% (53)        | 38.0%<br>(78)  | 12.7%<br>(26)    | 20.5%<br>(42)  | 3.22              | 205               |
| Segment Alternative 3B - I-80<br>Bridge Underpass | 5.5% (11)              | 27.4% (55)        | 37.3%<br>(75)  | 17.9%<br>(36)    | 11.9%<br>(24)  | 3.03              | 201               |
| Segment Alternative 3B - I-80<br>Tunnel Crossing  | 7.4% (15)              | 26.6% (54)        | 30.5%<br>(62)  | 17.2%<br>(35)    | 18.2%<br>(37)  | 3.12              | 203               |
| Segment Alternative 3C - I-80 Bridge Crossing     | 11.3% (23)             | 24.6% (50)        | 31.0%<br>(63)  | 14.8%<br>(30)    | 18.2%<br>(37)  | 3.04              | 203               |
|   |                        |                   |                | А                | dditional C    | omments?          | 44                |

| answered question | 213 |
|-------------------|-----|
| skipped question  | 361 |

| Page 2, | Q2. Do you agree with the stated regional goals and objectives from the study.  |                       |
|---------|---|-----------------------|
| 1       | Have not seen them or read the entire study   | May 15, 2012 9:11 PM  |
| 2       | I live in Duchesne County but have ridden my bicycle from SLC to Park City over I-80. I support the bike-foot path.   | May 15, 2012 7:44 PM  |
| 3       | I didn't read the study   | May 15, 2012 2:52 PM  |
| 4       | Yes with the exception of this trail being used as a transportation corridor. The number of riders utilizing the trail to commute between Salt Lake and Park City will be minimal.                            | May 14, 2012 2:08 PM  |
| 5       | Yes, I very much support the Trail. Please work towards this as it would be a great addtion for cyclists, skiers, and recreationalists.   | May 14, 2012 1:27 PM  |
| 6       | Please more trails on the west side of Salt Lake County   | May 9, 2012 8:29 AM   |
| 7       | Not just recreational, will be used by bicycle commuters as well  | Apr 17, 2012 11:13 AM |
| 8       | Yes as long as environmental impact is low  | Apr 17, 2012 9:47 AM  |
| 9       | Emigration Canyon bike lanes should be improved to accommodate this project. This should be considered a continuation of an improved biking facility in Emigration Canyon.                                    | Apr 17, 2012 8:20 AM  |
| 10      | I think any bike trails are good, but I am kind of tired of seeing all the funding dumped into eastside trails. there are zero trails on the westside even though that is where all the population growth is. | Apr 16, 2012 7:58 AM  |

| Page 2, Q3. Please rate the quality and quantity of the environmental data collected for the study. |  |                       |  |  |
|---|--|-----------------------|--|--|
| 1   | See above. I fully support a non-motorized option  | May 15, 2012 9:11 PM  |  |  |
| 2   | Don't understand why bow hunter group wasn't contacted for access to their property for survey. Keeping bike trail on north side seems preferred, least costly and avoid the need for tunnel or bridge to cross over/under I-80. | May 15, 2012 4:06 PM  |  |  |
| 3   | I didn't read the study  | May 15, 2012 2:52 PM  |  |  |
| 4   | Not sure   | May 15, 2012 9:35 AM  |  |  |
| 5   | Well there is a major interstate right there. How much more impact would a trail have in relation to that.   | May 14, 2012 5:51 PM  |  |  |
| 6   | Areas of concern are noted but not documented  | May 10, 2012 3:49 PM  |  |  |
| 7   | No comment, I did not read it in sufficient detail   | May 10, 2012 12:01 PM |  |  |
| 8   | Please more trails on the west side of Salt Lake County  | May 9, 2012 8:29 AM   |  |  |
| 9   | Generally it is good but as it notes, a detailed watershed analysis would still need to be done.   | Apr 16, 2012 2:20 PM  |  |  |

| Page 2, Q4. Do you feel the screening process for the study was sufficient? |  |                       |  |  |
|---|--|-----------------------|--|--|
| 1   | they only had several hundred replies to their initial surveys- there are many more users in summit/salt lake counties that would be users of the trails | May 29, 2012 11:16 AM |  |  |
| 2   | See above  | May 15, 2012 9:11 PM  |  |  |
| 3   | it's hard to tell  | May 15, 2012 7:44 PM  |  |  |
| 4   | I didn't read the study  | May 15, 2012 2:52 PM  |  |  |
| 5   | No comment, I did not read it in sufficient detail   | May 10, 2012 12:01 PM |  |  |
| 6   | Please more trails on the west side of Salt Lake County  | May 9, 2012 8:29 AM   |  |  |

| Page 2, Q5. Do you agree with the analysis process in section 4.0 of the study? |  |                       |  |  |
|---|--|-----------------------|--|--|
| 1   | See above  | May 15, 2012 9:11 PM  |  |  |
| 2   | I didn't read the study  | May 15, 2012 2:52 PM  |  |  |
| 3   | No comment, I did not read it in sufficient detail   | May 10, 2012 12:01 PM |  |  |
| 4   | Please more trails on the west side of Salt Lake County  | May 9, 2012 8:29 AM   |  |  |
| 5   | I agree with the resulting design idea: that a paved surface makes the most sense for all parties. But the analysis process probably should have included Jeremy Ranch area residents specifically, and the text in 4.0 could have stronger caveats about the self-selected nature of the survey participation. It notes that over half the responses came from Bike Bonanza and Century signup, but I don't see it say later that this particular population may explain some of why road cycling scored so high as an expected use. And balance the survey response with something not specific to the trail, like "Past surveys of Summit County residents have found the following pie chart of participation in various recreation activities" (and same for Salt Lake County). | Apr 16, 2012 2:20 PM  |  |  |

| 2  | I'm not sure I follow how the project would connect with Emigration Canyon safely; i.e. there are not bike lanes on the East Canyon road, and it is not clear how the connection at Summit Park to Park City would be made.  | May 22, 2012 8:29 PM  |
|----|--|-----------------------|
| 2  |  |                       |
|    | See if signs, restrooms, etcbe sponsored by Summit County and Salt Lake County retailers. Combine basic maintenance and restroom maintaenance with Mt Dell already existing maintenance efforts as another   | May 16, 2012 6:44 AM  |
| 3  | See above  | May 15, 2012 9:11 PM  |
| 4  | Option 3A could provide a firebreak between the freeway and the gambel oak-covered mountain sides south of the freeway. Remember the wildfire that occurred ( about the summer of 2002, I don't remember the exact year) that started adjacent to the freeway and worked toward Summit Park due to west winds.     | May 15, 2012 8:50 PM  |
| 5  | The need to construct trail so that it is not shaded; in other words, it needs to be crafted so as to maximize sun exposure to melt off snow, minimize snow build-up and maximize trail use.   | May 15, 2012 4:06 PM  |
| 6  | I didn't read the study  | May 15, 2012 2:52 PM  |
| 7  | Is the existing parking at Mountain Dell adequate during peak use of the golf course? It seems full as it is many days during the summer. Perhaps designate part of the right of way along the road as overflow parking. May impact bicycle traffic flow at times, but is the most cost effective/smallest impact. | May 15, 2012 1:43 PM  |
| 8  | yes the possible subsidized funding through competitive ventures, like Running and Cycling races.  | May 15, 2012 10:26 AM |
| 9  | Mountain Trails Foundation in Park City  | May 14, 2012 1:27 PM  |
| 10 | Consider partnering with Bike Utah   | May 10, 2012 2:35 PM  |
| 11 | Study feasibility of following the route of the oil/gas pipelines starting just north of Mountain Dell at the I-80 exit to East Canyon/Immigration Canyon. This route goes all the way to Parley's Summit and beyond joining existing Summit County trails.  | May 10, 2012 12:01 PM |
| 12 | south side of I-80 from SR65 exit to Lamb's Canyon exit.   | May 9, 2012 9:11 AM   |
| 13 | Please more trails on the west side of Salt Lake County  | May 9, 2012 8:29 AM   |
| 14 | Handing out info at only one event which many do not participate (SL Century) is in-adiquate. Local advocacy groups s/b formally included in the stakeholders including Bike Utah, SL Co BAC, Mt. Trails and Wasatch Mountain Club   | Apr 17, 2012 11:13 AM |
| 15 | As a road and mountain biker I believe that both could be encompassed. Perhaps the trail could be paved - with a single track trail right next to it?  | Apr 17, 2012 9:47 AM  |
| 16 | Segment Alternative 3B - I-80 Bridge Underpass should be wider than 10', particularly as shown because debris would slide down the slopes unto the path. Either Alternatives 3B or 3C should be revised and widened to serve as wildlife   | Apr 17, 2012 8:20 AM  |

| Page 2, Q6. After reviewing the list of considered facility needs in section 4.0 of the study, do you feel that there are any partnerships, ideas or facility needs that weren't considered but should be? |   |                      |
|--|---|----------------------|
|  | crossings as well. This would open the door to additional funding sources. Is a ten foot wide trail adequate for cross country skiing in the winter? 12' wide would be better for a multi-use trail shared by pedestrians and bicyclists. |                      |
| 17   | Not a big expense, but bike racks at locations where the trail would connect to other recreation (e.g., dirt trails) and at Washington Park (if there aren't any at the park now).  | Apr 16, 2012 2:20 PM |
| 18   | Pretty complete.  | Apr 14, 2012 9:12 PM |
| 19   | Can not tell if bathrooms would support winter trail use?   | Apr 14, 2012 6:55 PM |

| For a new window with graphics of the routing options from the study <a href="http://www.recreation.slco.org/planning/pdfdocs/parleystrailoptions.pdf" target="MAP">click here.</a> |  |                       |
|---|--|-----------------------|
| 1   | So let me get this right, the Feds rammed I-80 through here, the city has a golf course, there used to be a narrow gage rail line through here and now we are over regulating what is probably the most benign use of this canyon since Parley Pratt created a toll road here. Typical   | May 29, 2012 10:47 AM |
| 2   | In any alternative, a 12' cross section should be used instead of 10'. Also, underpasses are more desireable as it is a more direct route and does not climb or have to zig-zag to get over the freeway.   | May 22, 2012 8:29 PM  |
| 3   | Honestly, I don't care which way or how you do itI would LOVE to see bicycle access on this route. I ride now and am forced onto the freeway which is nosy, dangerous and not all that much fun. I think this path would see some great usethis is EXACTLY what I want my taxes to go towards. Good job and best of luck. I look forward to the day this project has been completed.   | May 18, 2012 3:04 PM  |
| 4   | I am pretty much only filling this out because I REALLY want to see this trail become a reality. To long we have allowed the automobile to run our way of transporting ourselves from place to place. PLEASE, for the sake of the current generations and future ones, make this trail a reality. If you build it, people will use it. I don't want to ride my bike on I-80 every time I ride to work from Salt Lake to Park City. This would also be a great route not only for local cyclists but for touring cyclists as well.  | May 18, 2012 12:29 PM |
| 5   | overall I like the idea of a mixed use trail   | May 18, 2012 7:49 AM  |
| 6   | tunnels and bridges seem like a waste of \$ and un-necessary impact to I-80 traffic during construction given the fact that there is barely any vehicle traffic on these frontage roads and lambs exit.  | May 16, 2012 9:47 PM  |
| 7   | A tunnel crossing makes it very difficult in the winter time to ski, snowshoe, etc. Also it can be more dangerous with ice build up in the spring time for riders, as well as puddles.   | May 16, 2012 4:52 PM  |
| 8   | Significant safety concerns with Segement 3B and on ramps.   | May 16, 2012 6:44 AM  |
| 9   | Perhaps the most cost effective option would be appropriate since this is a fairly expensive project.  | May 16, 2012 6:39 AM  |
| 10  | build more down hill mountain bike trails and stop paving the world it hurts the environment.  | May 15, 2012 11:58 PM |
| 11  | I'd prefer to stay off the road for the Lambs Canyon exit off of I-80 and have an underpass/tunnel further up the trail (near the BWB property). I'd think trail under an existing I-80 bridge would be easier to complete vs a new tunnel under I-80. If the tunnel option is selected it would need to have adequate drainage so that snowmelt and/or rain does not leave standing water on the trail (a problem with nearly all of the tunnels/underpasses on the Legacy Bike Trail in Davis Co). I am generally opposed to building an overpass structure over I-80 it would be acceptable if there were no other feasible solutions but there are other more appropriate options. | May 15, 2012 10:49 PM |

Page 2, Q7. Please RANK the trail routing options described in section 5 of the study.

| For a new window with graphics of the routing options from the study <a href="http://www.recreation.slco.org/planning/pdfdocs/parleystrailoptions.pdf" target="MAP">click here.</a> |   |                       |
|---|---|-----------------------|
| 12  | This connection should be a top priority for Salt Lake and Summit county recreation departments. It's potential for expanding recreation and as a tourism and economic development tool makes it an important infrastructure improvement. Please get this done!   | May 15, 2012 8:56 PM  |
| 13  | I'm a Summit Park resident who works in Salt Lake City. The Parley's Canyon Trail would serve as an important recreation and commuting corridor for me.   | May 15, 2012 8:50 PM  |
| 14  | North side seems best choice overall. It needs to be constructed so that it receives maximum sun exposure to melt off snow, minimize snow build-up and maximize trail use.  | May 15, 2012 4:06 PM  |
| 15  | Another great way to promote tourism  | May 15, 2012 3:01 PM  |
| 16  | All seem just as good - the fastest, cheapest option is the best (too much going back and forth to the report to complete the survey).  | May 15, 2012 1:43 PM  |
| 17  | as long as it's a paved trail for road bike commuting I am in favor of any location.  | May 15, 2012 12:52 PM |
| 18  | this could be such a huge connection, that dedicating a paved path is a MUCH better option than sharing the road with vehicles. More expensive, yes, but this would be such an amazing trail to utilize and promote -   | May 15, 2012 10:26 AM |
| 19  | was the abandoned rail grade on the hillside north of I-80 considered in this study as an alternative for section three? The climbing grades would be more user friendly. 12% is hardly a grade that most cyclists would want to climb much less descend.   | May 14, 2012 4:45 PM  |
| 20  | Basically, any option that can be accomplished would be best. The least expensive option would probably be fine. The tunnel does provide wildlife protection, so perhaps funding would be available for that option that wouldn't be for other options.   | May 14, 2012 1:27 PM  |
| 21  | Section 5.4.3 Potential Conflicts mentioned motorists and users under 1-80 and at grade at the exit ramps. I have used these locations (as well as at East Canyon) and the reality is traffic is so light as to not be an issue or significant conflict.  | May 12, 2012 8:16 AM  |
| 22  | do what is cheaper.   | May 11, 2012 2:08 PM  |
| 23  | If not for cost associated with the underpass or tunnel options, they would be great options. The bridge option would still do the job at what appears to be a better price.  | May 11, 2012 2:06 PM  |
| 24  | As a trail user, all options seem equally good. As a tax-payer, 3B-(vehicle)bridge seems very expensive. As an environmentalist, a tunnel is good for wildlife, but wildlife also will use the pedestrian overpass as evidenced on the overpasses in SLC at the I-80/I-215 interchange. Admittedly, I doubt as many animal will use an ped overpass as will use a tunnel. | May 11, 2012 1:43 PM  |
| 25  | I believe 3A will be the safest.  | May 11, 2012 8:37 AM  |
|   |   |                       |

Page 2, Q7. Please RANK the trail routing options described in section 5 of the study.

| Page 2, Q7. Please RANK the trail routing options described in section 5 of the study.                         |
|--|
| For a new window with graphics of the routing options from the study   |
| <a href="http://www.recreation.slco.org/planning/pdfdocs/parleystrailoptions.pdf" target="MAP">click here.</a> |

| 26 | Seems like avoiding the cost of a bridge or tunnel is best option. If the north side route is chosen the bridge/tunnel option should be based on cost.  | May 10, 2012 3:49 PM  |
|----|---|-----------------------|
| 27 | Build whichever option is most affordable and helps expedite the project.   | May 10, 2012 1:44 PM  |
| 28 | I vote for the cheapest, easiest to build, easiest to maintain option, even if it makes for a steeper trail. I also vote for paved trail over dirt.   | May 10, 2012 1:19 PM  |
| 29 | All options are acceptable. Make decision based on feasibility, cost and use analysis.  | May 10, 2012 12:01 PM |
| 30 | Human beings should not be doing aerobic activities next to an interstate highway. In this case, the highway is on a relatively steep grade. As a result, many of the vehicles produce higher than normal levels of pollutants. Many of the pollutants linger in the immediate area of the highway. Users of the trail would breath in these pollutants.  | May 9, 2012 9:13 PM   |
| 31 | I am assuming 3B Bridge Underpass is using the existing bridge at Lambs Canyon. This is the best and most cost effective option.  | May 9, 2012 8:57 PM   |
| 32 | Make sure that you separate the two lanes of travel. People climbing at 10MPH against people descending at 50MPH is a recipe for disaster. I think this is a great idea, but the two lanes of travel needs to be kept separate.   | May 9, 2012 11:32 AM  |
| 33 | Please more trails on the west side of Salt Lake County   | May 9, 2012 8:29 AM   |
| 34 | There was a recommendation to incorporate a wildlife bridge crossing with the bike trail to capture funding from other sources. That seems like a good idea.  | May 3, 2012 8:31 PM   |
| 35 | I don't like the bridge crossing since it would require a significantly steeper grades than the more natural drainage following underpass or tunnel.  | Apr 30, 2012 8:36 AM  |
| 36 | please just provide something safe for bikers and that is not dark at night.  Darkness at night would be a large worry for those concerned about other human predators/those looking to do harm   | Apr 20, 2012 1:21 AM  |
| 37 | I would not rank this project as a priority until the bike lanes have been improved in Emigration Canyon as a connector for this project. There are already conflicts in Emigration Canyon because of the inadequate bike lanes and the additional bicycle traffic added by this project would only add to the problem. Once that bike route is improved this would be a fantastic addition. Segment 3 Alternative 3 (preferred): Four feet wide is not really adequate for the bike lane on the up hill side. Five feet wide is the recommended standard for bike lanes, and uphill bike lanes need to be as wide as possible. There probably is not much traffic on this frontage road so that may not be as important as on a busier roadway. However, a bike lane may not be necessary on the down hill side of the road, since bicyclists will probably be able to keep up with motorized traffic on the downhill side depending on the steepness of the grade. Segment Alternative 3B - I-80 Bridge Underpass should be wider than 10', particularly as shown because debris would slide down the slopes unto the path. Either Alternatives 3B or 3C should be revised and widened to serve as wildlife crossings as well. This would | Apr 17, 2012 8:20 AM  |

## Page 2, Q7. Please RANK the trail routing options described in section 5 of the study. For a new window with graphics of the routing options from the study <a target="MAP" href="http://www.recreation.slco.org/planning/pdfdocs/parleystrailoptions.pdf">click here.</a>

|    | open the door to additional funding sources.  |                      |
|----|---|----------------------|
| 38 | I like segment Alt. 3 (north side) because the road already exists, meaning less construction and less land damage. I also like the idea of a tunnel or underpass because then wildlife can use it as well. Even though it means more construction.   | Apr 16, 2012 3:01 PM |
| 39 | I think 3A would provide the best riding experience. But the wildlife crossing opportunity with 3B is also a good benefit. So I ranked them the same. Another thought to consider is whether you want the trail to be able to support events (like bike tours). That would argue more for 3 than 3A, because it puts more of the distance on a full-width road. Finally, the report's discussion of segment 4 should have said whether after resurfacing of the old US-40, it would remain closed to public motor vehicles. | Apr 16, 2012 2:20 PM |
| 40 | More focus on creating trails on the west side of Salt Lake County please.  | Apr 16, 2012 7:58 AM |
| 41 | Take a good look at Alternative 3A. With the construction of the deer fence on the south side of I-80 a 9-12' wide path has already been created from the summit almost down to Lamb's Canyon. It make this alternative just that much more viable/   | Apr 14, 2012 9:12 PM |
| 42 | prefer bridges to tunnels   | Apr 14, 2012 7:20 PM |
| 43 | Bridge is safer for riderstunnels are places people hang put in.  | Apr 14, 2012 7:18 PM |
| 44 | I just like the overpass option as it is more exposed. As a woman who rides this route by myself, a hidden tunnel is more scary just in case someone would be up to "no good".  | Apr 14, 2012 6:36 PM |
|    |   |                      |



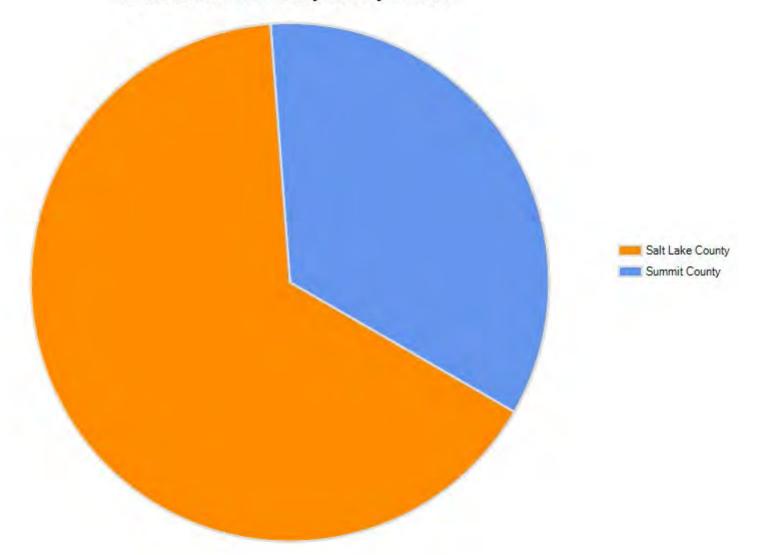
# Appendix I 2012 Public Survey Graphic Results



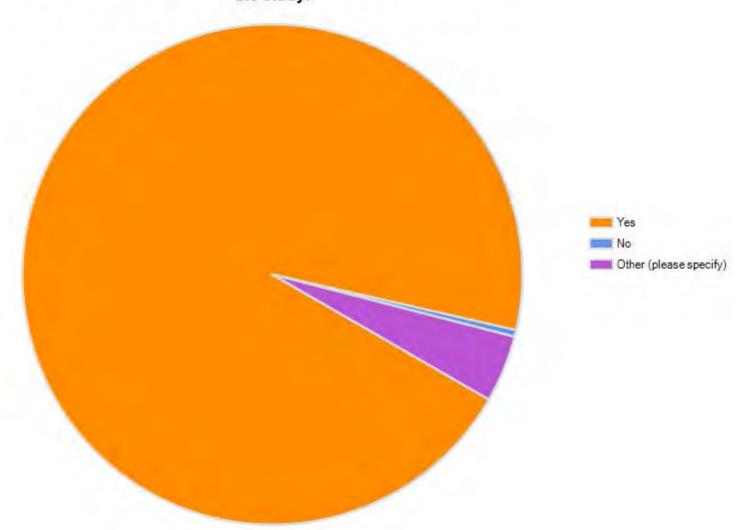




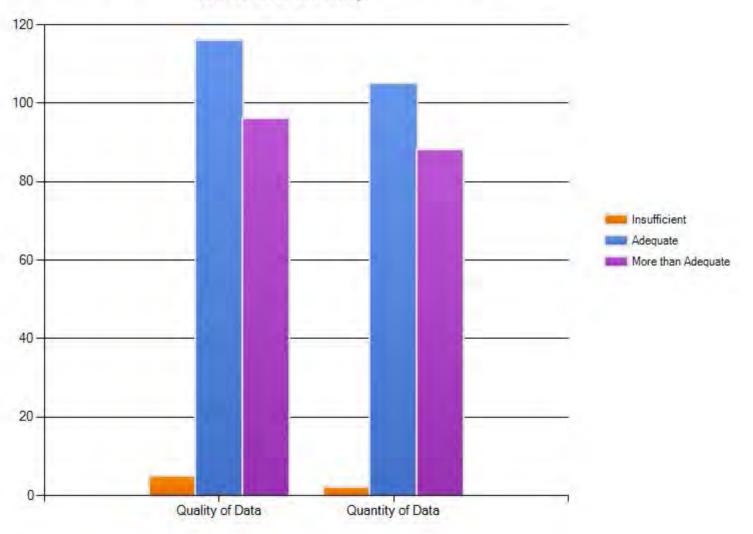
#### Please indicate the County where you reside.



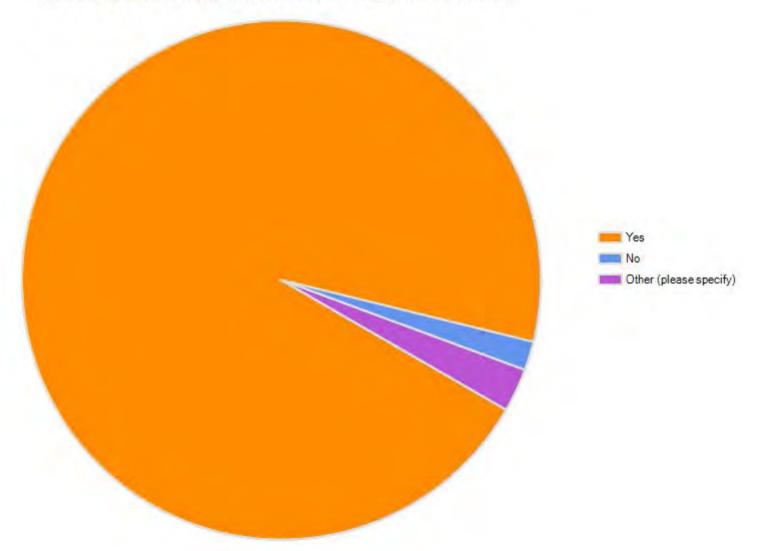
Do you agree with the stated regional goals and objectives from the study.



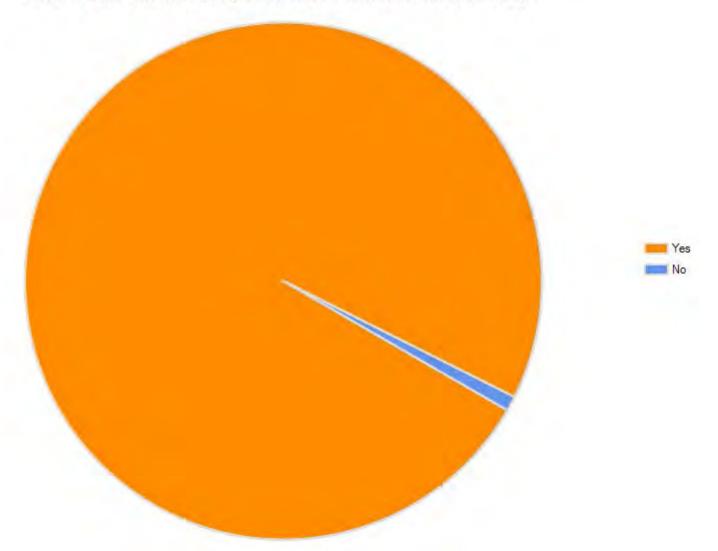
## Please rate the quality and quantity of the environmental data collected for the study.



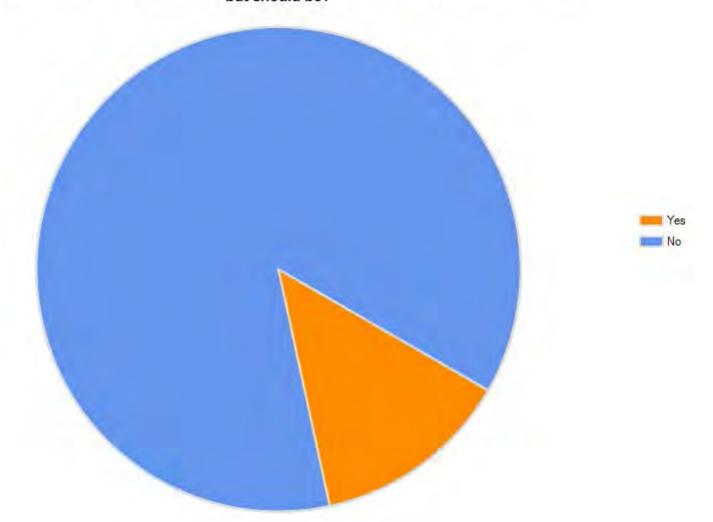
#### Do you feel the screening process for the study was sufficient?



Do you agree with the analysis process in section 4.0 of the study?



After reviewing the list of considered facility needs in section 4.0 of the study, do you feel that there are any partnerships, ideas or facility needs that weren't considered but should be?



### Please RANK the trail routing options described in section 5 of the study. For a new window with graphics of the routing options from the studyclick here.

