

# **Appendix A: Open House Exhibits**

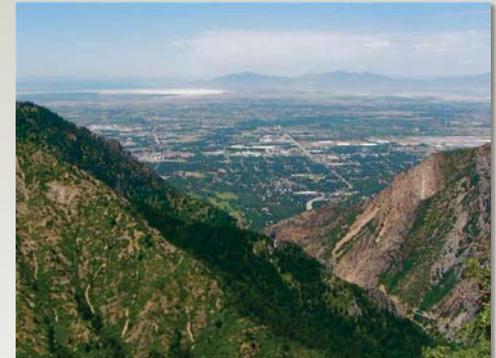
# **WELCOME**

**OGDEN CANYON OPEN HOUSE**  
**APRIL 2016**



## PURPOSE OF THE STUDY

- **The Transportation Commission asked UDOT to conduct a study to look at all modes of transportation in the canyon. The purpose of the study is to gather and share information and develop an understanding of the safety and mobility needs in the canyon.**
- **Phase I (2014-2015)** – Gathered engineering and environmental data, met with stakeholders, and gathered public opinion
- **Phase II (2015-2016)** – Developed concepts, formed focus groups, and narrowed options



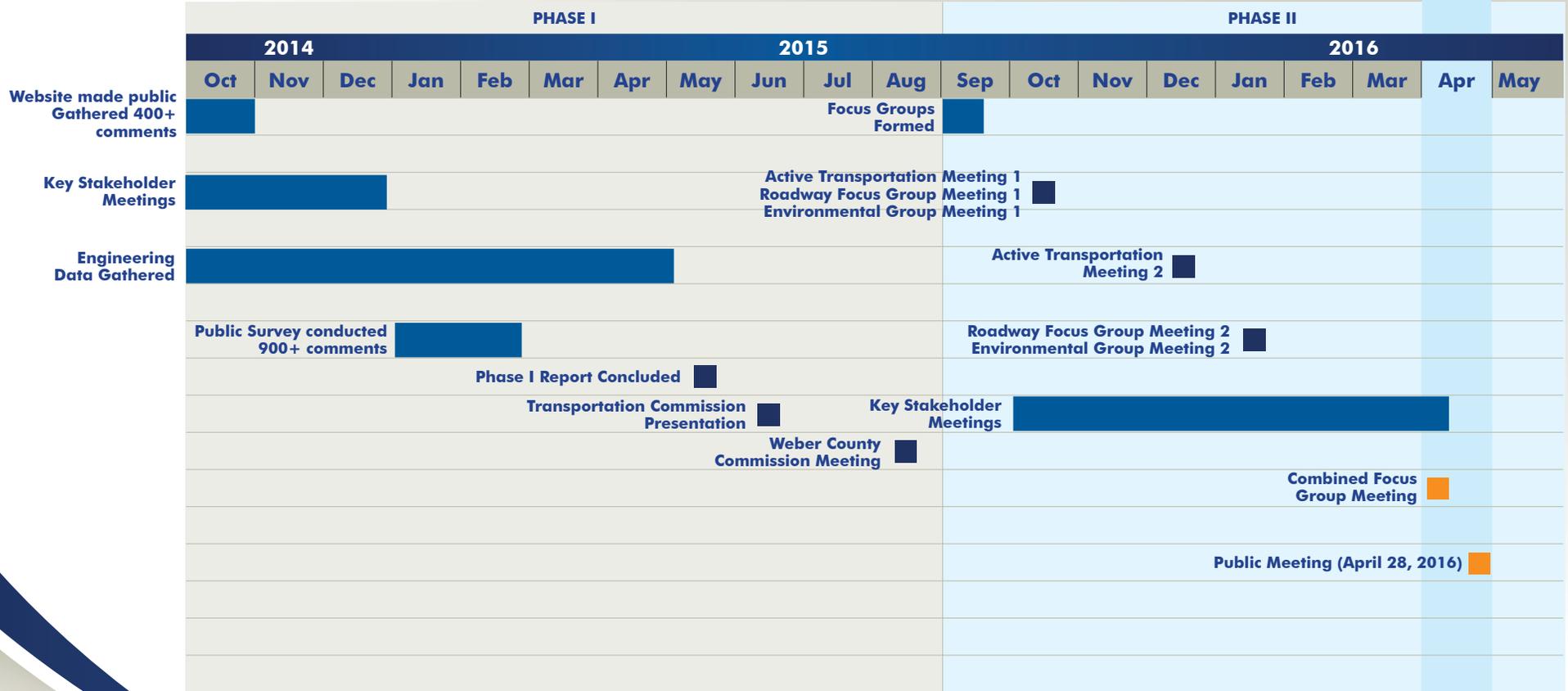
## **STAKEHOLDERS WE'VE MET WITH**

**Canyon Residents**  
**Ogden Valley Residents**  
**Huntsville Town**  
**Weber County**  
**Ogden City**  
**Pineview Water Systems**  
**Bureau of Reclamation**  
**Division of Wildlife Resources (DWR)**  
**United States Forest Service (USFS)**  
**PacifiCorp/Rocky Mountain Power**  
**Emergency Services: County Fire and Police**  
**Weber School District Transportation**  
**Weber Pathways**

**Utah Transit Authority**  
**Ogden Marathon**  
**Tour of Utah**  
**Visit Ogden**  
**Rainbow Gardens**  
**Gray Cliffs**  
**The Oaks**  
**Powder Mountain Resort**  
**Nordic Valley Ski Resort**  
**Wolf Creek Resort**  
**Snow Basin Resort**  
**GEM Committee (Upper Valley)**  
**Ogden Valley Planning Commission**  
**Utah Trucking Association**

# SCHEDULE

WE  
ARE  
HERE



## IDEAS THAT ARE NOT CURRENTLY RECOMMENDED

<b>Banning Trucks:</b>	State Law allows legal limit trucks on State Highways
<b>Closing the canyon to non-residents:</b>	State Highways (like SR-39) provide regional mobility for the public
<b>Gondola:</b>	The population densities and expected ridership don't support implementation (2004 study from Ogden City for the Downtown area shows cost is approx. \$10 million per mile on flat ground)
<b>Added capacity to North Ogden Divide:</b>	With the planned future capacity improvements to Trappers Loop, the traffic needs will be met without widening North Ogden Divide and/or Ogden Canyon
<b>Piping the River:</b>	Environmental impacts are too excessive
<b>Constructing Streetcar/Trolley:</b>	The population densities and expected ridership don't support implementation. It is not on UTA's Long Range Plan
<b>Implementing Toll Road:</b>	Would require State Law modifications. State Highways provide regional mobility for the public
<b>Constructing Train:</b>	The population densities and expected ridership don't support implementation. It is not on UTA's Long Range Plan (\$23 million/mile for SLC Trax)
<b>Constructing Tunnels:</b>	Traffic volumes do not support widening SR-39. The impacts to the mountain and slope stability are very high (\$40 million for just the Narrows section).
<b>Widening Trappers Loop</b>	Planned capacity improvements to Trappers Loop would allow Ogden Canyon to remain a two lane road for well into the future

# FINDINGS FROM PHASE I

## Public Opinion – More than 1,300 Comments

### 1. Most concerned with:

- Bicycle and pedestrian safety
- Safety for large vehicles including trucks and buses
- Rockfall and maintenance
- Parking in the canyon

### 2. Majority of public wants to:

- Preserve canyon aesthetics
- Establish VMS (Variable Message Signs) to communicate closures or delays
- Construct a shared use trail in the canyon that limits impacts to property owners and allows bicycles up and down canyon



**Read our Phase I Report  
online:**

**[udot.utah.gov/  
ogdencanyonstudy](http://udot.utah.gov/ogdencanyonstudy)**

# FINDINGS FROM PHASE I

## Engineering and Environmental Analysis

1. Roadway and safety improvements are necessary and feasible
2. Environmental data was gathered on the following:
  - Historic properties (homes, archaeological sites, bridges)
  - Ogden River, Warm Water Creek, Cold Water Creek, Goodale Creek, Wheeler Creek
  - State-sensitive wildlife & migratory birds
  - Hiking/mountain biking trails
  - Visual (mountain side, cliffs, stone walls, river, trees, historic bridges)



## PHASE II - FOCUS GROUPS

### Who Participated?

- Residents
- Business Owners
- Recreationalists
- Other stakeholders (US Forest Service, Weber County Fire and Police, School District, Utah Trucking Association, etc.)

### When were the Focus Groups Held?

- Each group met three times (October 2015 - April 2016)

### What was their Purpose?

- **Roadway** – Focused on understanding safety standards and needs, canyon geometry and design speeds, and other roadway features.
- **Active/Transit** – Focused on understanding recreation and transit needs in the canyon.
- **Environmental** – Focused on understanding effects of roadway and active transportation on the environment.



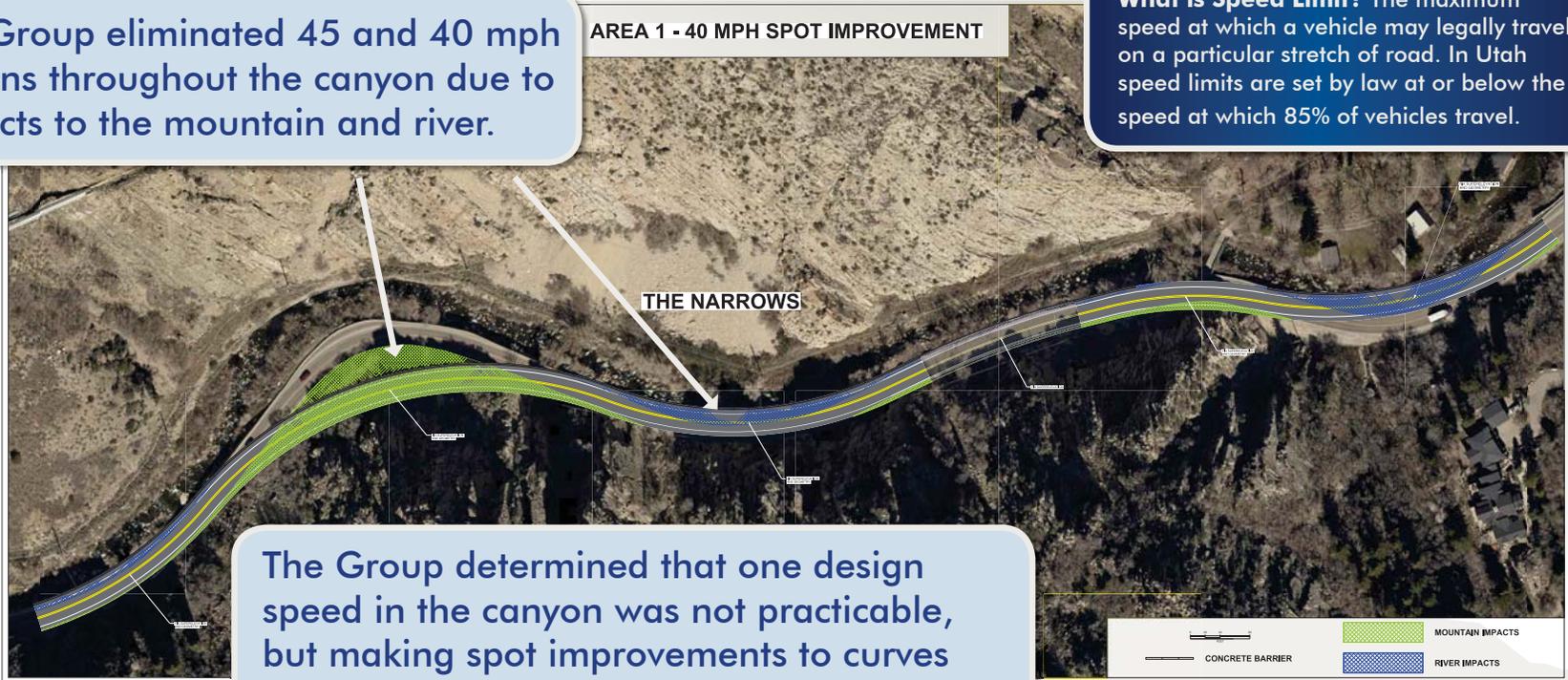
# FOCUS GROUP – ROADWAY

Roadway group reviewed 30, 35, 40, and 45 mph design speeds throughout the canyon and the impacts associated with accommodating those speeds.

The Group eliminated 45 and 40 mph options throughout the canyon due to impacts to the mountain and river.

AREA 1 - 40 MPH SPOT IMPROVEMENT

**What is Speed Limit?** The maximum speed at which a vehicle may legally travel on a particular stretch of road. In Utah speed limits are set by law at or below the speed at which 85% of vehicles travel.



The Group determined that one design speed in the canyon was not practicable, but making spot improvements to curves for safety was necessary.

**What is Design Speed?** It is a design criteria for determining the geometric factors of the road, such as curve length and stopping sight distance.

## FOCUS GROUP – ROADWAY

### Spot Improvements

- Three areas were identified for safety improvements from deficient curve geometry and superelevation (banking of the road)
- The group prioritized the areas and analyzed varying design speed impacts
- The spots were prioritized in the following order by the focus group and these Design Speeds were selected:
  1. Curves through the Narrows (**35 mph** Design Speed)
  2. Curves near the Alaskan Inn and Hermitage Neighborhood (**35 mph** Design Speed)
  3. Curves near Valhalla and Wildwood (**30 mph** Design Speed)

### Shoulder Widening

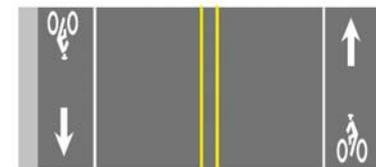
Widening the shoulder on both sides of the road to accommodate motorist and bicyclist safety was the highest recommendation in all three areas.



**Normal roadway crown**



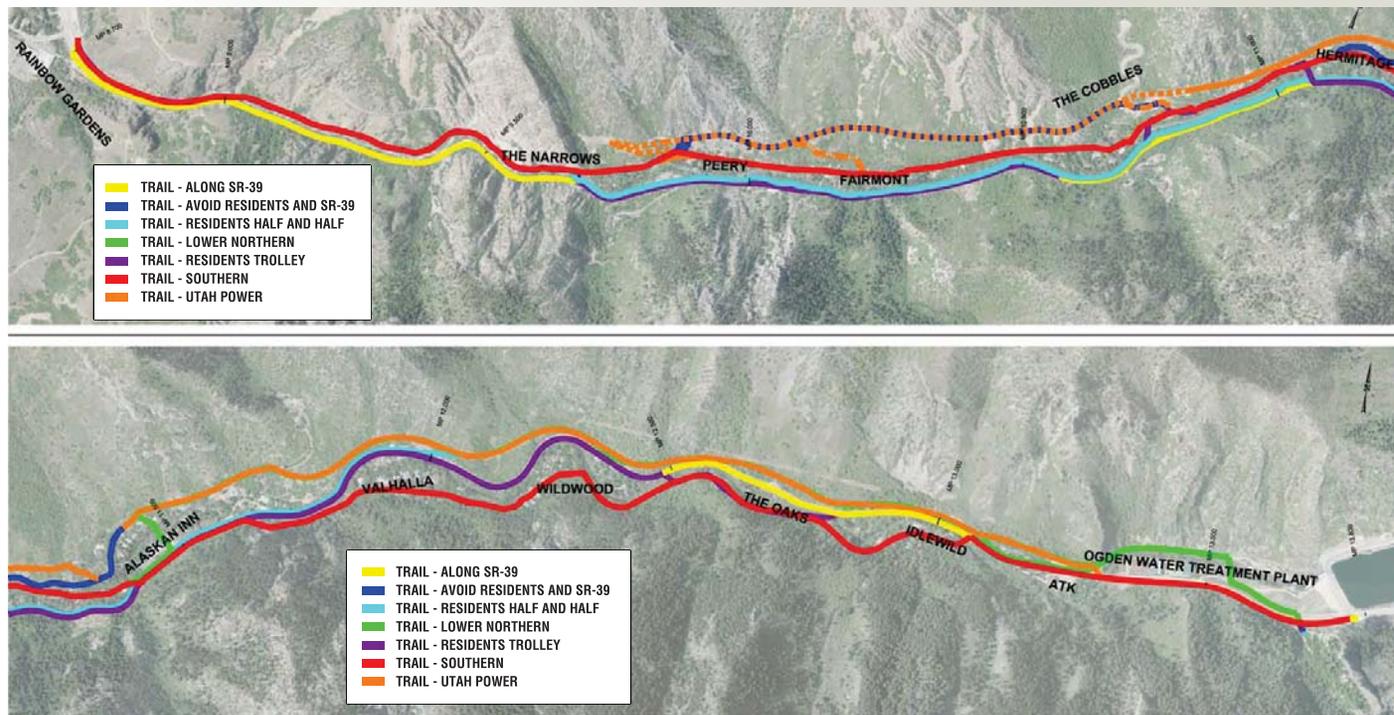
**Example of superelevation of road**



**Roadway Typical**

## FOCUS GROUP – ACTIVE TRANSPORTATION/TRANSIT

- The Active Transportation Group reviewed and rated seven trail concepts for location, trail type, and trail uses
- **Determined that both a shared use path (hikers, walkers, and family biking) and wider shoulders on the roadway (serious cyclists) were needed to accommodate users**



## FOCUS GROUP – ENVIRONMENTAL

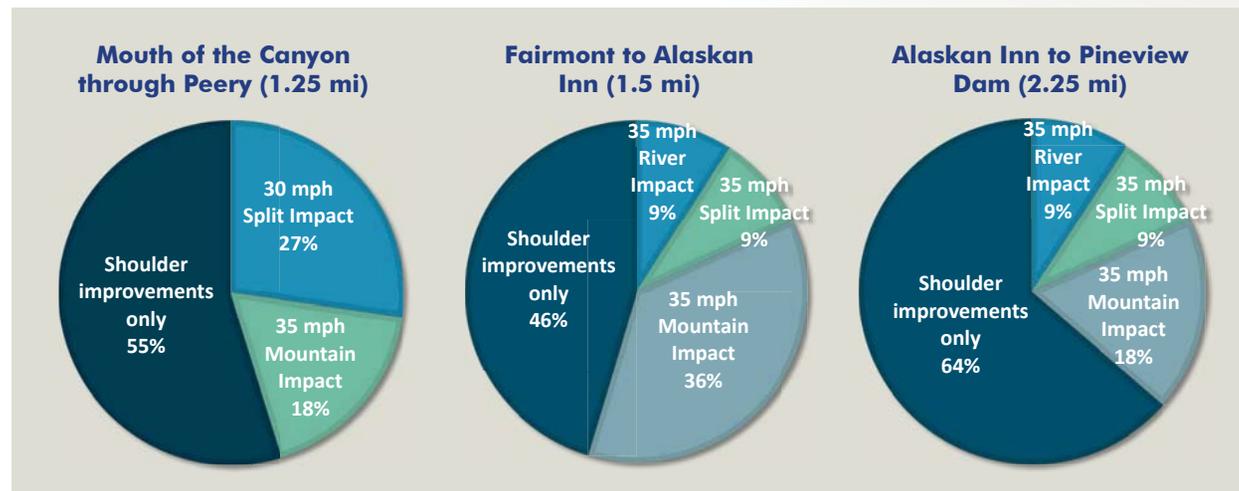
The group reviewed Active Transportation/Transit and Roadway group decisions on how they affected the environment (impacts to mountainside, river, visual, private property, etc.)

### Shared Use Path:

- Supports a trail system
- Did not think it was important to connect trails to neighborhoods
- Important to connect trails to scenic features in the canyon
- Important to connect any new trails to existing trail system

### Roadway:

- Speed is not critical - preferred **shoulder improvements only** and no change to current Design Speed
- Roadway improvements options:



# RECOMMENDATIONS MADE BY FOCUS GROUPS

## Desired Speed for the Canyon

- 30 mph through the Narrows and minimum of 35 mph through the rest of the canyon

**Final Design Speed Recommendation:** The Environmental and Roadway Focus Groups were divided on this issue. UDOT's final recommendation based on engineering analysis is a Design Speed of 30 mph from the Mouth of the Canyon through the Narrows and 35 mph through the rest of the canyon.

## Make Roadway Spot Improvements

- Safety improvements for curves
- Wider shoulders on the road (both sides) throughout the canyon are desired for bicycle and motorist safety even if a shared use trail is constructed
- Add messaging signs to the canyon (top and bottom)



## RECOMMENDATIONS MADE BY FOCUS GROUPS

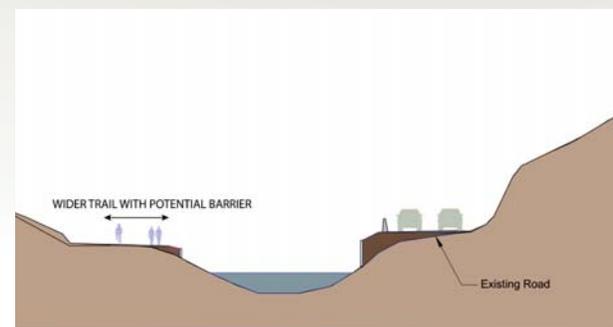
### Shared Use Trail

A paved shared use trail is desired in the lower portion of the canyon with an unpaved trail throughout the rest of the canyon which avoids residents. **The exact layout of the trail is still to be determined.** Further environmental and right-of-way analysis is needed.

In order to accommodate a bike shoulder on the roadway through the Narrows, UDOT would have to make drastic modifications to the mountain or impact the river. **The groups recommended that cyclists could ride on a paved shared use trail through the lower section of the canyon.** The trail would be designed to safely accommodate both pedestrians and cyclists. Cyclists would merge back onto SR-39 after the narrows.



**Example of paint striping on a shared use trail**

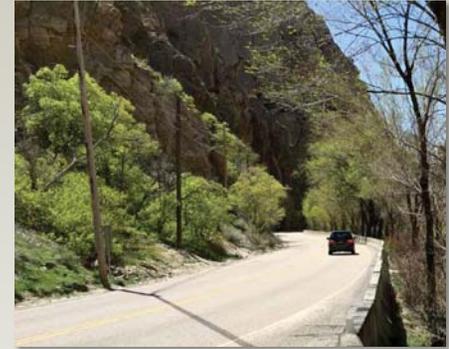


**Cross section of road with small shoulder improvements and shared use trail that accommodates all user types**

## NEXT STEPS - UDOT

**Roadway Improvements** – UDOT will use the study's recommendations to prioritize projects for funding approval by the Transportation Commission. Each improvement will require an environmental approval, and maintenance and safety projects will be prioritized first.

**UDOT has upcoming projects in Ogden Canyon.** One project will flatten a curve and widen the road in The Narrows (as recommended from our Phase I Study). The other project will replace the bridge at Grey Cliffs and perform minor rehabilitation on the two bridges located at the top and bottom of the canyon.



## **NEXT STEPS - Weber County**

**Shared Use Trail** – Weber County is the lead agency on any future trail in the canyon. The County will assess this Study's final report and determine any future funding, phasing, and timing of a trail system.

Items that were not fully developed but warrant further analysis include access management, zoning and land use, property boundaries, parking, and corridor preservation.

**We have met with Pineview Water, Bureau of Reclamation, and PacifiCorp/ Rocky Mountain Power and have received conditional approval to study a trail on their corridor. Further coordination will need to occur with these agencies, residents, and Weber County.**

