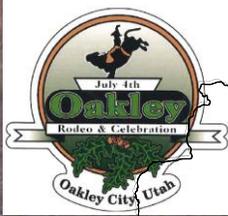
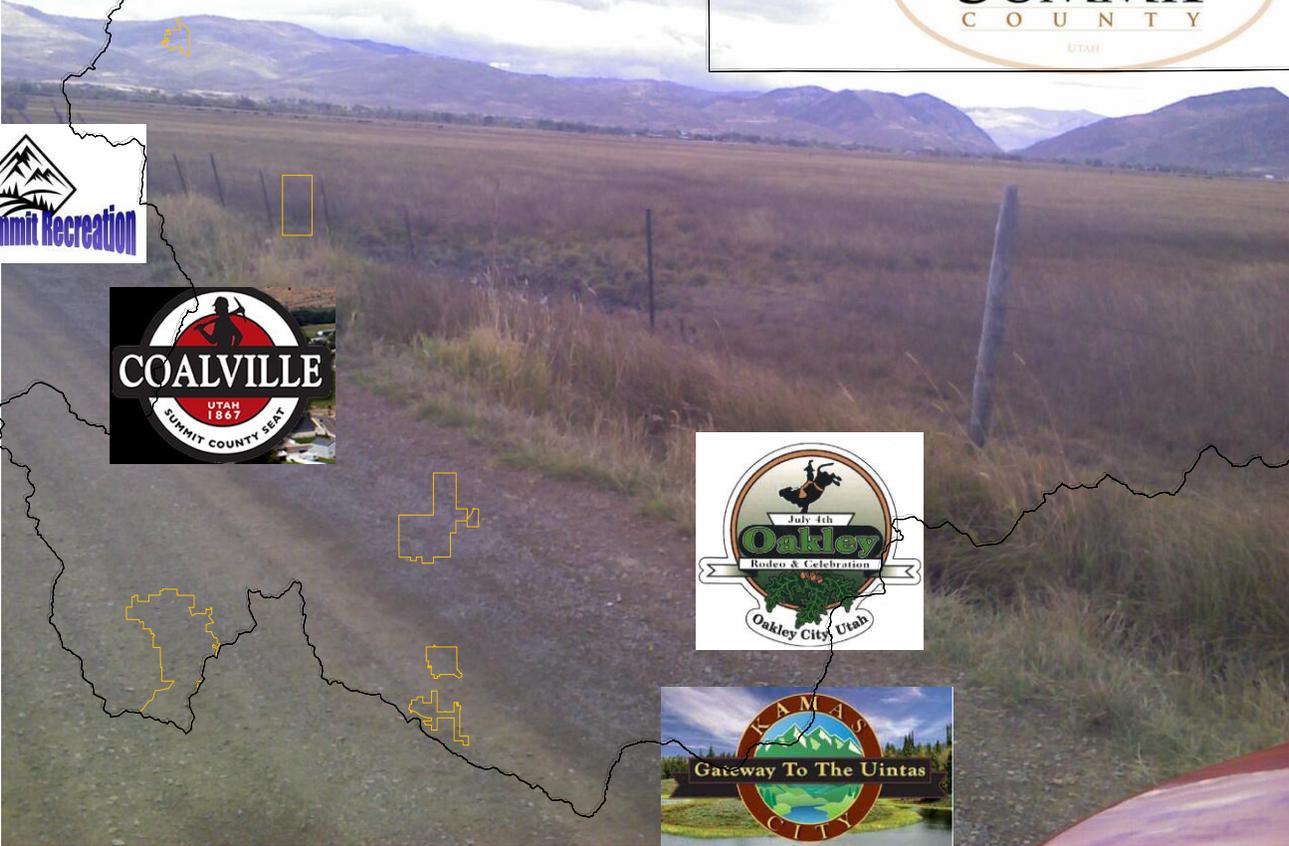


Eastern Summit County Transnortation Master Plan



FRANCIS CITY
Home of Frontier Days
Labor Day Weekend

6-26-13

Transportation Stake holders:

Summit County
Henefer Town
Coalville City
Oakley Town
Kamas City
Francis City
North Summit Special Recreation District
Utah Department of Transportation (UDOT)

Other Stake Holders:

Emergency Services: North Summit
Agricultural Preservation Committee
Division of Wildlife Resources
Park City Transit
Wasatch County, UT
Morgan County, UT
Uintah County, WY
Mountainlands Association of Governments
Snyderville Basin Planning
School Districts, North and South Summit
Forest Service
Private Road Owners/operators and HOA's

Citizens of Summit County

County seat: **Coalville**

<u>Cities</u>	Coalville Kamas Oakley Park City
<u>Towns</u>	Francis Henefer
<u>CDPs</u>	North Snyderville Basin Samak South Snyderville Basin Summit Park Woodland
<u>Unincorporated communities</u>	Echo Hoytsville Peoa Wanship
<u>Ghost towns</u>	Grass Creek Rockport Wahsatch



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APPENDICES

- Appendix A – Project List / Map
- Appendix B - . Future Land Use
- Appendix C - Resolution / ordinance
- Appendix D- Designated contacts

1.0 Introduction

Plan Summary:

- *The roadway system functions well currently*
- *This plan intends to keep it working well in context of the community goals character*

The Eastern Summit County network of roads are owned and maintained by several jurisdictions. These include State, County, City, and private roads of many different widths, and functions. The Utah Department of Transportation (UDOT) operates most regionally significant roads. Summit County operates many inter jurisdictional roads as well as small-scale residential streets. The five rural communities inclusive of this plan are listed in Table 1.1 geographically from north to south. The table lists data pertinent to their transportation planning.

Table 1.1: General Road Miles and Population

Jurisdiction	Miles Paved	Total miles*	Population 2010**	Area (sq miles)	Year incorp.
Henefer	7.83	8.87	766	0.86	1859
Coalville	10.20	11.90	1,363	3.72	1858
Oakley	9.27	9.27	1,470	6.23	1868
Kamas	9.94	9.96	1,811	1.59	1857
Francis	9.02	9.26	1,077	1.79	1869
County	252.28	330.91		1880***	
Totals***	298.51	439.09	36,324 All County		

* - UDOT class B&C roads 2011 - exclude private streets and US Forest Service, ** - 2010 Census data *** includes Park City

Unincorporated communities are frequently referenced and include: Wanship, Peoa, Woodland, Echo, Upton, Hoytsville, Samak and Marion. Weber Canyon, the High Uinta's (US Forest Service), East Canyon, Chalk Creek, and others also have transportation needs.

As a complete transportation plan, all types of users must be considered in addition to automobiles including: pedestrian, mobility impaired, equestrian, ATV, cyclists, agricultural support, rail, wildlife, etc.

According to the Eastern Summit County General plan (General Plan, page 3), there is an "AGREEMENT ON THE FUTURE."

There is substantial agreement among the residents of Eastern Summit County on a vision for the future. While there are questions regarding the most appropriate means to achieve the vision, residents agree in a number of areas. In general, these are:

- 1. Protect the rural, agricultural, and small town lifestyle.*
- 2. Protect the natural resources.*
- 3. Improve relationships between the County and incorporated municipalities.*

Transportation in all forms is a critical element to achieve this vision.

1.1 Plan Summary

This section summarizes the key objectives and elements of these chapters.

Chapter 1 provides a basic background and summary of the Eastern Summit County area and its communities.

Chapter 2 provides the existing conditions. Elements of this chapter include the study area boundaries, level of service discussions, and design volumes on area roads. Design volumes are adjusted to a standard of the 30th highest hourly traffic based on the UDOT I-80 counter at Coalville. The area has some environmental constraints that may limit potential transportation solutions. Area roads generally operate at acceptable levels of service currently. This chapter also provides roadway classifications background.

Chapter 3 evaluates the future impact of increased population and travel on the existing road network based on currently platted / Entitled land uses. The year 2025 is the approximation of the “Entitled” build-out condition based on a 3.4% annual growth rate. The 3.4% estimate comes from the Summit County Travel Demand model, by taking the remaining entitlements (vacant lots) dividing by the 13 years in the future and dividing by existing population. The rate is also reasonably consistent with historic growth rates, as found from the Governor’s Office of Planning and Budget, Utah Population Estimates Committee. Actual traffic growth projections in the Plan were based on a detailed evaluation of the remaining development potential of undeveloped parcels within the area.

Chapter 4: Build-out evaluation is similar to Chapter 3 but extends the evaluation period in the future to roughly 2040, again roughly a 3.4% annual population growth rate of this rural area. This “Build-Out” condition would occur with the completion of all potential subdivisions, homes and businesses based on zoning as illustrated in the respective community maps. See Appendix B.

Chapter 5 contains County/Community-initiated goals, principles, and actions to enact the preferred alternative. It provides coordination of the communities, alternative modes, monitoring, and additional capacity.

Chapter 6: This chapter list the projects required to maintain acceptable quality of transportation referred to as levels of service (LOS). It also reviews the alternatives evaluated. Projects are listed in three phases of the improvement plan: current to 2020, 2021 to 2030, 2031 to 2040. The detailed listing and map is provided in Appendix A. An element of this effort will include the emphasis on and development of various transportation forms: ATV, pedestrian, equestrian, transit, bicycle, and other non-standard transportation modes.

Chapter 7 addresses a recommended approach to plan implementation and working together as communities. These recommended improvements provide a basis for a future Capital Facilities Plan (CFP). A CFP provides funding recommendations and a basis for possible impact fee calculations. Final project designs, funding and implementation will be required during project development as approved by each body working together toward the goal of maintaining the quality of transportation.

1.2 Limits of study:

Eastern Summit County encompasses roughly 1,849 square miles in north-central Utah. The study area contains the bulk of the acreage.

Outer Boundaries of study Limits:

-Southwest: The southwest most portion of Summit County is covered by the Snyderville Basin Transportation Master Plan (SB-TMP) and Park City with their respective planning. The Promontory and Tollgate projects are included in the SB-TMP, based on similar Snyderville Basin travel patterns.

-Southeast: Wasatch County adjoins to the southeast. Access is via SR-248 from Kamas, SR-32 from Francis, and parallel along SR-35 through Woodland.

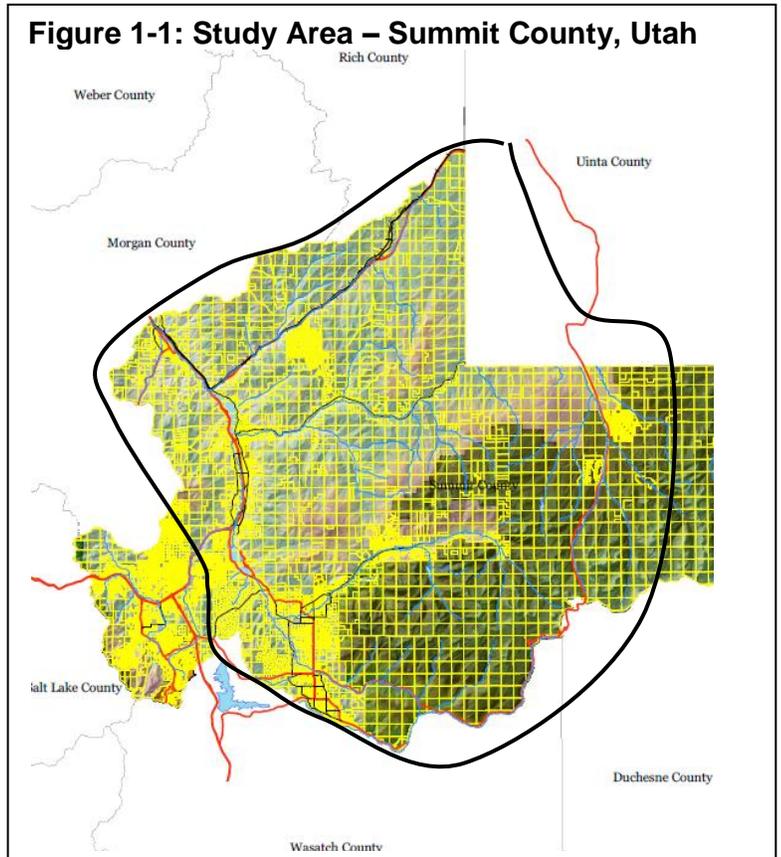
-East: The east boundary is effectively the US Forest Service area and the Mirror Lake Highway corridor (SR-150). Though very removed, Wyoming / Uinta Basin areas can be accessed from the study area via SR-150 and SR-35 respectively. Very little additional consideration is rendered herein based on: US Forest Service control, limited connecting access and conservative zoning in the remote areas.

-North: The Wyoming and Rich County Lines form the northerly boundary accessible via I-80 and Chalk Creek Road.

-Northwest: Morgan County is the Northwesterly boundary accessible via I-84, SR-65 and East Henefer Road.

1.3 Travel History Summary

Summit County was used by Native Americans and wildlife as a sanctuary and travel corridor. The first sustained transportation began with the "westward migration". Originally used by trappers and explorers, horse/ox/foot means of transportation through Echo Canyon toward Henefer and East Canyon is well documented as being used by 80,000 persons in the early and mid 1800's. These include the California Trail (Hastings Cut Off), the Mormon Trail (1847), and the Pony Express route. A significant change occurred when the preferred transportation route shifted from



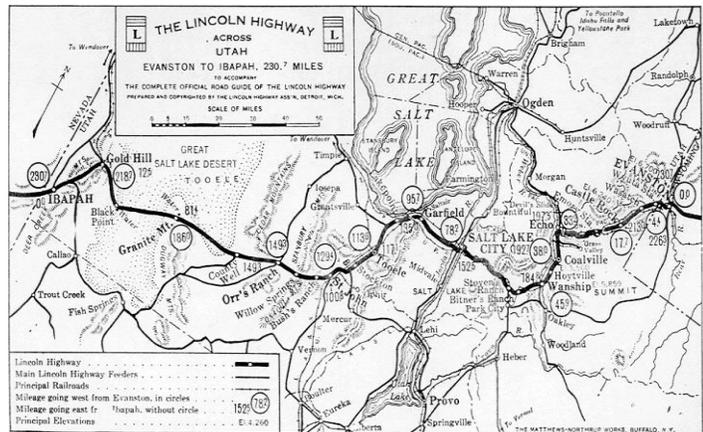
Echo train station as relocated to Coalville

Henefer toward Coalville and along what is presently the I-80 route into the Salt Lake Valley, roughly 1862.

Transportation began an evolution from horse to mechanical. Rail travel entered the County in 1868 and 1869. The Summit County Railroad in 1871 and 1872 extended the lines to the Park City Mines. Rail became the preferred long distance and material transportation. It shaped many of the communities and in some cases created communities: Echo, Coalville, and Wanship historically had depots that have since been abandoned. Echo still retains the ability for material transfer by an active rail spur, which is an important transportation component. Demand for coal and the ability to ship it was a key to Coalville's prosperity until 1972 when the Chapel coalmine closed. The Park City line operated until as late as 1987. This Park City spur is now State owned and developed into the Rail Trail. The current heavy rail corridors continue to operate today from Wyoming, through Summit County to Morgan County.



Individual mobility remained by horse and wagon until the early 1900's. With the development of the automobile, Summit County became a by-way for changing wagon routes to auto routes, the Lincoln Highway being one of the most significant. Many incremental changes occurred including: Parley's Canyon shifting from community to government maintenance.



Even with the automobile, regional mobility remained somewhat limited. Travel time to the Wasatch Front was a still hours. Smaller communities continued to thrive. In the mid 1960's, interstate construction changed the individual mobility, as Salt Lake Valley goods, services and employment became available with a travel time of near 1 hour.

Rail service was reduced to the major east to west coast connectors from Wyoming to Morgan County. Further, with the decline in mining, and passenger rail transportation non-accessible (passenger stations were closed), automobile transportation became the backbone of the rural quality of life.

Communities' Transportation Summary:

Additional community history is interesting but beyond the scope of this plan. Other quality resources are available and are recommended to provide additional insight and context to this plan.

North Summit: Rich in historic trans-continental means of travel as described above.

Henefer: originally settled as a station along the Pioneer Trail; Brigham Young stayed here ill en route to the Salt Lake Valley, as the Vanguard Company continued trail improvements over the most difficult portion of the trail. Henefer is also a point where the Company turned South toward up East Canyon finding the Weber drainage impassable.

Coalville: As the name describes, coal presence was key to its development. As a needed commodity for both the railroad and a growing state population, coal access inspired transportation and additional town development.

South Summit / Kamas Valley is uniquely known for Native American living, even more so than the rest of Summit County. For the settlers, the valley became a rural outpost rich in water, agriculture, and nearby lumber. The Valley is unique in that no transcontinental train rails or historic trails were the basis for the formation of the historic settlement patterns.

Oakley: Key to transportation as the mouth of Weber Canyon. Oakley currently tests the transportation system annually in a nationally known rodeo.

Kamas: Its City motto well summarizes transportation needs – ‘Gateway to the Uintas’ providing access to the majestic Mirror Lake Highway and on to Wyoming.

Francis: A southerly access to the Uinta’s with continued access to Wasatch and Duchesne Counties, Francis is a growing gateway.

Each of the above incorporated communities and other areas identified as communities are within the subject plan area. Coordination between State, County and municipalities are key to the successful development and implementation of the Eastern Summit County Transportation Master Plan.

1.4 Future Land use

Populated and accessible areas of Eastern Summit County are evolving with a mix of residential, commercial and major recreational uses. Wagon trails converted to the region’s roads have shaped the transportation system since the settlement of the County. The road system (Subject Road Network, Figure 1-2) consists of state, county, city and private roadways. Appendix B contains a summary of land use data in three forms: Existing (2011), Entitled (2025), Build-out (2040). Entitled land uses are reasonably eminent, such as subdivided lots being built upon. Build-out projects land uses are based on probable future zoning constructed and as illustrated in the respective community plans (Appendix C, zone maps).

The projected conditions are analyzed on the road network via Quick Response System II (QRSII), a travel demand model. Existing and future levels of service / traffic volumes are determined from the model. Thereby, future needs and alternatives are determined.

This Transportation Master Plan is to provide complete infrastructure review at a master planning level. Individual improvements will require site specific design and review.

1.5 Purpose and objectives:

The purpose of this Transportation Master Plan is to identify existing transportation issues and propose solutions in a manner that meets the travel requirements of existing and future residents in the context of the Mission of the Eastern Summit County General Plan, 2010 and the plans of the five incorporated municipalities located in Eastern Summit County. The solutions should be compatible with the characteristics identified in each area. Having a clear, complete vision will assist all concerned to work together to provide long term transportation success.

**Eastern Summit County
General Plan:
MISSION STATEMENT**

– To enhance the quality of life in Eastern Summit County through responsible growth that fosters stewardship of the land and natural resources while balancing private property rights and respecting our rural and agricultural foundation.

others.

- Community / Town - Support and coordinate with each Community in their community goals. The plan will require a considerable level of cooperation between the communities
- New development to mitigate their own traffic impacts and provide regional improvements that will maintain appropriate traffic service standards as development occurs, including alternative modes of transportation. Set appropriate traffic Level of Service (LOS) standards that reduce congestion, minimize the traffic impact of special events and slow the growth of traffic from development, event promotion, and natural growth.
- Plan the implementation of needed road improvements prior to the regular occurrence of unacceptable levels of service, so that the rural life style, including mobility and the area's quality of life can be maintained. Approval of new development should be contingent on its demonstrated ability to mitigate and meet established traffic level of service standards at each phase of its build-out, regionally and locally.

Create the most appropriate design solution for each major intersection – Consider all appropriate intersection enhancements to promote a safe and functional intersection.

Protect residents from noise, heavy congestion, and air pollution

- Traffic Counts: Maintain an annually updated database of traffic counts for the area County roads, which will be used to monitor and manage traffic conditions. The County will continue to conduct an annual traffic monitoring and reporting program to provide data for various area county roads.
- Optimize access: Access control will be important along all routes, particularly SR-32 and Hoytsville Road. Encourage appropriate connectivity of the road network and all modes of transportation. Access control includes multimodal modes of traffic control measures such as limited-use portions of roads including equestrian, ATV, pedestrian / bicycle programs, and other appropriate modes. Consider possible transit connections to Park City where determined practical.
- Each Community, Summit County and UDOT will be involved in on-going traffic management and implementation programs. Recent examples of this effort include adoption of a Cooperative Corridor Agreements for SR-248. The agreement is primarily associated with the Park City portion of SR-248. However some information is provided with the subject area, from Kamas to Wasatch County.

1.6 Review and Approval Process

This Transportation Master Plan is both a policy document and an action plan. Its review and adoption will reflect the comprehensive and regional nature of this long range planning effort. Each jurisdiction should refer to it in decisions of mutual interest.

- A draft resolution (appendix D) is provided for Cities / Towns to adopt this transportation master plan. This or a similar document should be passed. It is not binding as to land use, but establishes policy for coordination and appropriate consideration.
- County - This plan is proposed to be adopted by County ordinance and supplemented by a future capital improvement programs. The plan is an implementation program and measures as a foundational document for working cooperatively with the Communities.
- Other interested parties, such as UDOT, utilities, emergency services, etc. have provided current and future feedback as described in the Stakeholders Appendix E.

As with any master plan, periodic review and update of the plan is recommended to ensure compatibility with existing conditions for transportation enhancement. The facilities recommended in this plan should be implemented through a separate capital facilities program.

After adoption by the County Council and municipalities, the key capital facilities elements of the plan will continue to be coordinated with UDOT so that it can be included in future versions of the Long Range Transportation Master Plan and the Statewide Transportation Improvement Plan (STIP). UDOT has been consulted in the plan development. Subsequent reviews and modification will also seek all stake holder input.

The plan will be reviewed annually by County Engineering staff. The review will be completed in January as part of the annual Transportation report. Summary reports will be provided to the County Council and the respective municipalities to evaluate the degree of progress towards achievement of the plan's goals, policies, and actions. Implementation of the plan will be evident by enactment of County Ordinance and municipality resolution.

The plan implementation may be further evidenced by the execution of an Eastern County Capital Facilities program (CFP) and the traffic impact fee program will be considered based on findings from this Transportation Master Plan and respective community interest.

1.7 Conclusion

- Eastern Summit County transportation system is generally a free flowing network of rural streets operating at acceptable levels of service.
- Future road network performance is expected to be successful. Growth should be reasonable as provided in each communities existing entitlements (2025) and planned zoning (2040).
- Improvements as listed in Table 1.2 are expected to maintain the goals, policies, and actions of the Eastern County General Plan.
- Annual reporting is expected.
- Support data for modeling is needed from each community to update Travel Analysis Zones as provided in the Summit County Travel Demand Model.
- Implementation is probable by each community by resolution and by County ordinance following notice and public hearing. Each Community could and yet may adopt individual transportation plans. A unified plan will be the most effective for achieving the community goals.

Table 1.2: Projects list {{{ SEE APPENDIX FOR LARGER VERSION }}}}

County Projects		County Projects		Coalville City Projects		Kamas City Projects			
Cost 1,000's		Cost 1,000's		Cost 1,000's		Cost 1,000's			
1	South Echo Frontage Echo to Henefer Multi use corridor	\$ 243		43	500 South Frontage SR-280 to Hobson Multi use corridor	\$ 331			
2	South Coalville Frontage Pave Coalville to Creamery Multi use corridor	\$ 453		44	Bridge over I-80 Ped Friendly Frontage Road to Frontage Rd Separated Ped lane	\$ 217			
3	Hobson Frontage Intersection Hobson Lane Frontage Intersections improve - safety	\$ 101		45	Main Street Widen Main Street Completed 2009-2010	\$ -	87	Future road network - East side East side layout development activities	
4	Judd Lane Frontage Intersection Judd Lane Frontage Intersections improve - safety	\$ 50		46	Intersection Main - 100 S Main / 100 S Capacity increase - 80 S School	\$ 498	88	500 North 100 W to SR-32 New 2 lane collector	
5	South River Bend Frontage Judd to the end Multi use corridor-trail head	\$ 21		47	School Road Access now park Alternatives	\$ -	89	Foot Hill Drive All to County Minor Widen / improve	
6	Old Lincoln Hwy County Shop to Wanship Minor Widen / improve	\$ 675		48	Intersection Main - 50 N Main / 50 N Capacity increase	\$ 556	90	Pedestrian improvements Various approx 1 mile Sidewalk	
7	Old Lincoln Hwy Wanship to Blue Sky Minor Widen / improve	\$ 631		49	Future Intersection Main - 200 N Main / future 200 N Capacity increase	\$ 616	91	Bridge Replacement 3 canal crossings? preventative / programming	
8	Wanship Town Site Improve Wanship streets Minor Widen / improve	\$ 141		50	SR-280 : 100 South Widen (See #112) Main to I-80 Widen - curb - improve	\$ -	Oakley Town Projects		
9	Woodenshoe Peoa to Democrat Shoulder and align	\$ 1,273		51	50 North Widen Main to 350 East Widen to 3 lane	\$ 432	93	Main Street - upper Weber Canyon Rd to 4750 N New street	
10	Foot Hill Drive Francis to Kamas Minor Widen / improve	\$ 708		52	50 North Extend 350 East to Chalk Creek New 2 lane collector	\$ -	94	Main Street - lower 4750 N to SR-32/Polar King New street	
11	Hoysville Road Coalville to Wanship Add bike lane one side/capacity	\$ 2,739		53	100 East Improve 100 N (Chalk Crk) to 100 S (S) Widen - curb - walk	\$ 372	95	Future road network - West Various W of Newlane development activities	
12	Chalk Creek Road Coalville to Upton Add bike lane one side/capacity	\$ 3,332		54	100 North (Chalk Creek) Main to Industrial Rd Widen to 3 lane	\$ 611	96	Future road network - East Various E of Newlane development activities	
13	South Henefer Road Henefer to the end Minor Widen / improve	\$ 2,548		55	Beacon Hill Dr. 400 S to Old Farm Road-New New 2 lane collector	\$ 104	97	Pedestrian improvements Rodeo grounds to new in to center 10' multi use trail	
14	East Henefer Road Henefer to Morgan Co. Minor Widen / improve	\$ 1,753		56	New 200 North Main to Industrial Rd New 2 lane collector	\$ 205	98	Weber Canyon Rd - Bike lane SR-32 to County 5' widening	
15	West Henefer Rd All Minor Widen / improve	\$ 2,607		57	School Road (700 E) Boarder Station - 150 North New 2 lane collector	\$ -	99	Pedestrian improvements Cow alley to County/Peoa Soft Surface	
16	West Hoysville Rd Coalville to Judd Ln Minor Widen / improve	\$ 2,626		58	Pedestrian improvements various city wide trails, sidewalks	\$ -	100	Bridge Replacement pionion,new.river rd,mill race preventative / programming	
17	West Hoysville Rd Judd Ln to Wanship Minor Widen / improve	\$ 747		59	Hoysville Rd/Main S Bike Ln Main to S to County Add bike lane one side/capacity	\$ 478	UDOT Projects		
18	Weber Canyon Rd Oakley to end Widen / turn lanes / capacity	\$ 2,601		60	Future road network-NE etc various city wide development activities	\$ -	101-A	SR-32 Widen Oakley/Kamas New Ln to Kamas/SR-248 expand to 5 lane	
19	Weber-Provo Diversion Trail Oakley to Francis Trail	\$ 3,934		61	Boarder Station Widen within the City Minor Widen / improve	\$ 306	101-B	Mid Kamas Valley Corridor Mill Race S to SR-248 New 2 lane collector	
20	Lower River Road Francis / all Widen / shoulder / align	\$ 2,009		62	Bridge Replacement approximately 4 preventative / programming	\$ -	101-C	Democrat Alley Pave-plus Pave / widen Peoa / Oakley to 248 Pave / widen / align	
21	South Echo Frontage Alignment In Echo Intersections improve	\$ 186		Francis Town Projects		\$ 2,061	101-D	East Kamas Corridor Oakley to Kamas New 2 lane collector	
22	Browns Canyon Near Wasatch Co New truck by pass	\$ 486		63	Future road network- NW Northwest layout development activities	\$ -	101-E	Kamas Valley Cross Connection Marion to Democrat Alley New 2 lane collector (See #24)	
23	Park-n-rides - shelters various Mode share	\$ 300		64	Future road network- NE Northeast layout development activities	\$ -	102	SR-32 Widen - Kamas/Francis Kamas / SR- 248 to Francis / SR-32 12' widen	
24	Kamas Valley Cross Connection Marion New 2 lane collector	\$ 1,142		65	Future road network-South South layout development activities	\$ -	103	SR-32 Wanship Walkway Rail Trail head to Rafter B 6' walk / curb	
25	Rail Trail Extension - I-80 Cross Echo Dam Rd to Echo Convert RR bridge / connect	\$ 314		66	Future road network-East East layout development activities	\$ -	104	SR-32 Wanship / Oakley Trail Wanship Rafter B to Oakley New Ln Soft surface separated trail	
26	Rail Trail Extension - Historic Echo to I-80 overpass Soft surface - I-80 drainage	\$ 190		67	Foot Hill Drive SR-35 to County Minor Widen / improve	\$ 395	105	SR-32 Widen - Wanship/Browns Rafter B to Browns Canyon 12' widen	
27	Rail Trail - Weber River Echo to Henefer Soft surface river access	\$ 1,024		68	Lambert Ln / Page Ln Widen All Minor Widen / improve	\$ 522	106	SR-32 Widen - Browns/Oakley Browns Canyon to Oakley New Ln 12' widen	
28	Extend Historic Trail I-80 under pass to Henefer Soft surface - single track	\$ 1,131		69	Spring Hollow All Minor Widen / improve	\$ 461	107	SR-32 Wanship other ramp Modify Ramps ? Needed	
29	Hoysville Road - Ped Trail Coalville to Wanship 10' multi use trail	\$ 6,730		70	South Willow Way-Lower River Intersection Intersection improve	\$ 683	108	SR-32 Widen Francis/Wasatch Francis Main to Wasatch Co Minor Widen / improve	
30	Rail Trail Access Judd, Hobson Trail head parking	\$ -		71	Pedestrian improvements various city wide trails, sidewalks	\$ -	109	SR-248 - 4 Lane Kamas to Wasatch Co widen	
31	Hoysville Trail Head LDS Church-Creamery Ln Trail head and trail to Rail Trail	\$ 447		72	Hallam Road Trail Wild Willow to Lambert trail	\$ -	110	I-80 / I-84 Capacity interchange Verify Capacity	
32	Wanship SR-32 Sidewalk (see #103) Wanship Add sidewalk and curb	\$ 324		73	Bridge Replacement None preventative / programming	\$ -	111	I-80 Judd or Creamery Ln Exit Judd / Creamery New exits - not likely needed	
33	East Side Rockport Trail Rockport Reservoir 10' recreational trail	\$ 2,142		75		\$ -	112	SR-280 : 100 South Widen Main to freeway ramps Widen / improve	
		Costs in \$1,000's : Includes Inflation						113	SR-65 - Bike Lane Henefer to Morgan Co. Add bike lane one side/capacity
		PHASE 1 - 2011-2020						114	SR-150 - mirror lake hwy various Minor Widen / improve
		PHASE 2 - 2021-2030						115	SR-35 - Francis Widen SR-32 to Foothill Minor Widen / improve
		PHASE 3 - 2031-2040							
		OTHER TIMING							

Subject to Change

Previous Long Range Plan Total for Summit County

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2.0 Existing Conditions

Existing transportation conditions are favorable as determined by current traffic counts. These counts and the current roadway geometry allow for the evaluation of the existing transportation system and serve as the foundation of this transportation plan.

State and County traffic counts have been done for several years in key areas of the County. As a complete transportation plan, other forms of mobility are also reviewed such as bicycle / pedestrian / equestrian trails. This data forms the basis for analyzing the existing transportation system as well as providing the foundation from which to project future conditions.

Existing Conditions data includes:

- Existing facilities
 - o Roadways and system hierarchy
 - o Non roadway transportation facilities (trails, walks, etc)
 - o Current and historic traffic counts
 - o Accident data
- Existing demographics
 - o Population
 - o Land uses
 - o Special events
- Transportation Policies of the respective jurisdictions
 - o Level of Service
 - o Intersection
 - o Access management
- Environmental Constraints

The Summit County Travel Demand Model is used for traffic analysis. The model uses an Excel© database to track land use and estimate travel demand in smaller areas, known as Travel Analysis Zones (TAZ). Appendix B contains a listing of the zones and an approximation of the homes, business, recreational and institutional trips. The entirety of Summit County is divided into 94 zones with 13 external stations. Eastern Summit County is represented by 51 of the TAZs. This data was analyzed with a QRSII travel demand model. The QRSII model is based on National Cooperative Highway Research Program report number 187. Because of the scale and diversity of the County wide model, final calibration to existing traffic counts is also done in Excel© as well as a determination of the current levels of service, as discussed below.

2.1 Existing facilities

The vast majority of transportation in the subject area is by automobile. Of necessity, most of the analysis is based on automobile services. Nevertheless, other forms of transportation are necessary and affect auto transportation and vice versa.

The street system in the study area is a mix of State, County, local Municipalities, and privately owned and operated roads. This mixture presents challenges in coordinating roadway maintenance and improvement programs between the jurisdictions. However, a first step to completing a coordinated effort is to identify the different agencies and identify which roads they control, as shown in Figure 2.1.

Table 2.1: Summary road networks

Community	Miles	Residences	Street network description
Henefer	8.87	202	<i>Roughly 15 town block network with other spurs from the State and County road system – UDOT operates the main street.</i>
Coalville	11.9	519	<i>Roughly 14 city block network with other spurs or low volume connections. Direct access to the I-80 via SR 208 – Main street is community operated and recently updated – A community transportation plan is in place with QRS II model support.</i>
Oakley	9.27	406	<i>Few rural large blocks with UDOT and County operated main streets.</i>
Kamas	9.96	614	<i>Roughly a 34 city block roadway system – UDOT operated main street and major streets (SR 248, 32, 150).</i>
Francis	9.26	373	<i>New network system with a few large rural blocks, UDOT main and major streets.</i>
County:	330.91	3229	Contains all network roadway forms from Interstate to private dirt roads. Frequently roadways are lined with driveways as allowed by local zoning code.

Within the study area there are sub areas of interest:

Unincorporated areas included hereafter as part of the County:

- 1. Wanship – Few blocks with a UDOT main roadway*
- 2. Hoytsville – Linear valley with few intersections on County roads*
- 3. Upton – Linear valley, single County Street*
- 4. Woodland – UDOT road with a residential area with newer streets*
- 5. Echo – Linear residential and commercial area and a historical way point along the pioneer trail, rail road and County Road. Contains an active rail spur*
- 6. Marion – Few intersections along a major UDOT Road with a density of single access points*
- 7. Peoa - Linear valley, single major intersection*

Recreational areas: Wasatch, Samak, Weber Canyon, Rockport Reservoir, Echo Creek Ranches, Uintah Lands, etc.

External Connections:

- SR-248 to Wasatch Co., Hideout Town and Park City / US-40*
- SR-35 to Heber – Wasatch County*
- SR-35 to Tabiona – Wasatch / Duchesne Co*
- SR-65 to East Canyon - Morgan County*
- SR-150 to High-Uintahs / Wyoming.*
- I-80 W. to Snyderville Basin / Salt Lake County*
- I-80 E. to Evanston – Wyoming*
- I-84 W. to Morgan County*
- East Henefer Road to Croydon / Lost Creek*
- Browns Canyon – to SR-248: Wasatch Co. / Park City*
- Chalk Creek Road to Wyoming*
- 200 South to Tuhaye (dirt secondary access)*
- Lower River Road and SR-35, Minor access point to Wasatch County*

2.1.1 Roadways and system hierarchy

As with most rural areas, the communities and Eastern Summit County have limited formal designations of street class and type. Each community may redefine designations and coordination via this plan.

Transportation planners and engineers strive for a balance between encouraging regional connectivity and limiting a road's impact on the local quality of life. The region must accommodate transportation corridors and maintain traffic flow while simultaneously minimizing the effect on neighborhood streets. Defining a hierarchy of streets helps organize regional movements and separate them from local traffic. This hierarchy of streets is called the Functional Classification of Streets, shown in Figure 2.3 as adapted from a standard FHWA publication. The roadway system in the subject area contains all major types of streets: Freeways to small and often private roads and drives. For this plan, only the major designations are used as follows:

- 1) Freeways,
- 2) Arterial Streets
- 3),Collector Streets
- 4) Local Streets

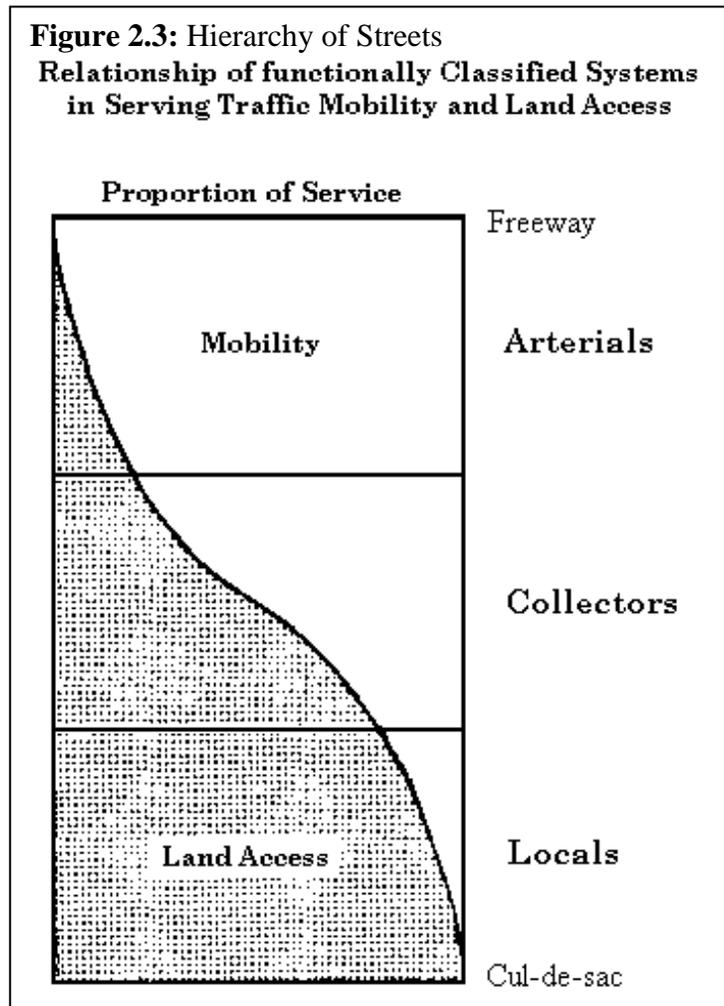
Freeways

Freeways (generally under federal or state jurisdiction) use full access control. Drivers cannot get on just anywhere. They connect regions and typically carry the largest traffic volumes, at high speeds and with high levels of service. Access is strictly limited to interchanges, which are carefully located and designed for maximum safety. Interchanges are generally spaced per federal guidelines. Freeways have a typical right-of-way of more than 100 feet, with speeds of 60 mph or higher. Examples of freeways within Eastern Summit County include both I-80 and I-84.

Arterial Streets

Arterial streets distribute traffic from the freeway system to smaller geographic areas (cities and towns) or provide access inter-area. Arterials are intended to serve mobility rather than access, and can typically carry volumes of 7,000 – 40,000 vehicles per day depending on the facility. Such roads may carry bus routes, connect collector streets, and provide intra-community connectivity, and may or may not allow parking on the road. Individual property access is discouraged. Arterials are typically spaced one mile apart in dense areas, with speeds of 40 - 60 mph and right-of-way widths of around 100'. The arterials within the study are typically higher speeds outside incorporated jurisdictions and clearly defined within communities. They include State Roads: 32, 35, 248, 65, 68, 280, and County Roads: Hoytsville Rd Echo Dam and Main, Browns Canyon, Lower Weber Canyon Rd and Chalk Creek.

Figure 2.3: Hierarchy of Streets
Relationship of functionally Classified Systems
in Serving Traffic Mobility and Land Access



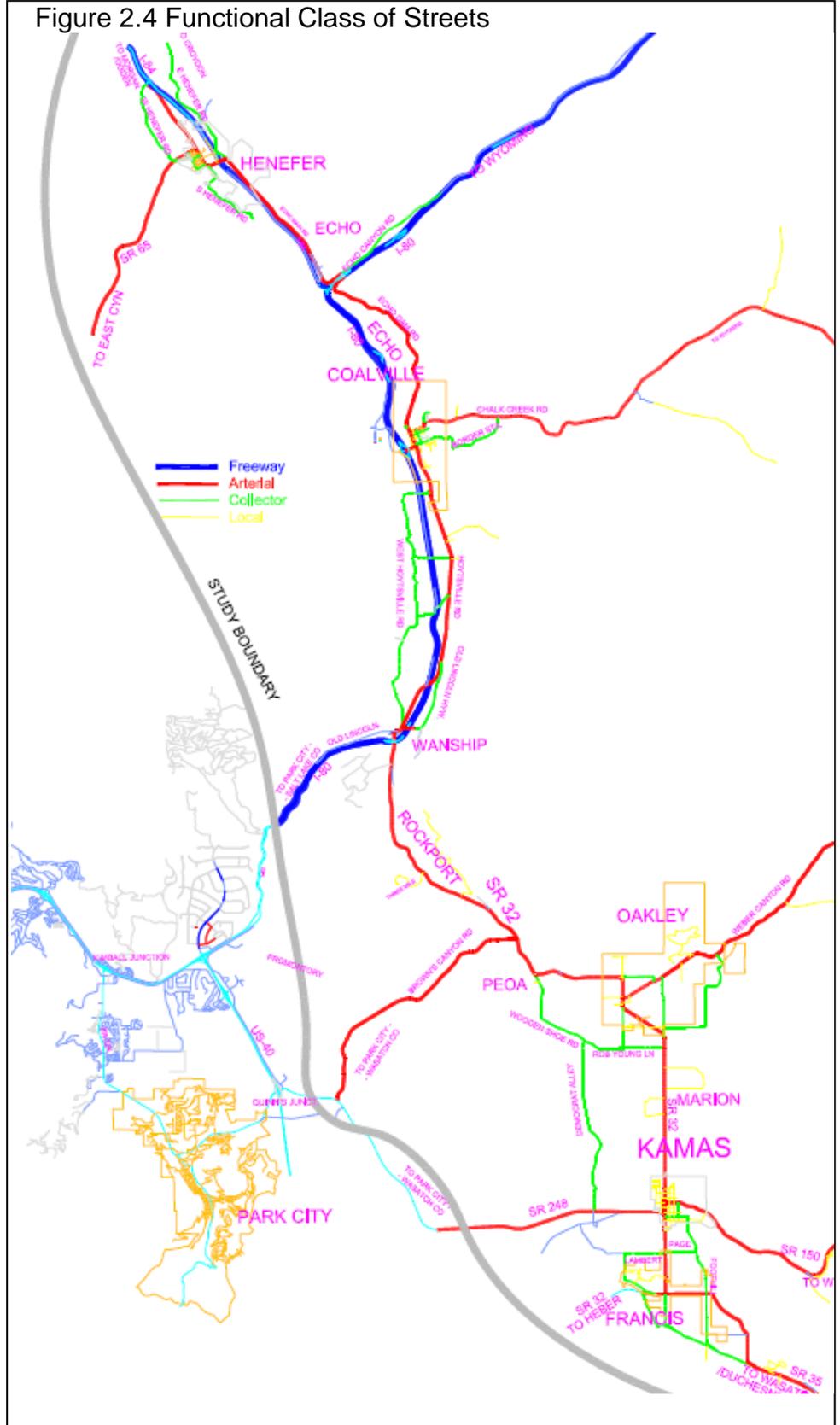
Collector Streets

Collector streets provide some land access service and higher volume traffic circulation within the community and link to the arterial system. The collector street system may also carry future bus routes. Collectors have right-of-way widths of between 60 and 80', and can typically carry 5,000 – 14,000 vehicles per day. Collectors typically will have some limitations on access points. Allowable speeds on collector streets should be between 30 - 45 mph with careful consideration of the area served by the street and the adjacent uses, particularly within municipalities. The optimal collector spacing in populated areas is around one mile in the rural areas and less than ½ mile in the cities. Examples of collector streets include Foothill Drive, Lambert Lane, Lower River, Willow Way, Democrat Alley, Mill Race, West Hoytsville Road, Old Lincoln Hwy., Creamery Lane, Hobson, Judd Lanes, Echo Canyon Roads, Boarder Station, Upper Weber Canyon Rd, Page Lane, Hallam Road, etc. In the Cities and Towns these also include extensions of the same roadways and also include New Lane in Oakley, Coalville Main Street, Spring Hollow and Hill Top Road in Francis, etc.

Local Streets

Local streets provide direct access to adjacent residential and commercial properties, connect to the higher order road system, and offer the lowest level of mobility. Service to through-traffic movement usually is deliberately discouraged. Local

Figure 2.4 Functional Class of Streets



streets have a typical right-of-way of up to 60', a 25 mph speed limit, and are spaced as frequently as necessary and safe. In many instances, local streets are privately owned and maintained. Local streets are the only roadway facilities considered for traffic calming measures (refer to the Summit County traffic calming program for more information).

Local streets often provide access and critical inter-area circulation, in emergency conditions. They may provide temporary relief of more regionally significant traffic.

UDOT has adopted their own standards of roadway classification as shown in Table 2.2.

2.1.2 Non roadway transportation facilities (trails, walks, etc)

The first alternate mode user is the pedestrian, however bikes, ATV, equestrian and other non roadway users are inclusive. In the subject area, a mixture of trails is encouraged as associated with the rural environment.

Non-car users frequent the shoulder for travel. Very low volume and dirt roads function as multi use corridors including all motorized and non-motorized users. At approximately 400 ADT, gravel roads could be considered for paving based on Guidelines for Geometric Design of Very Low-Volume Local Roads and associated research. This improves road maintenance as well as user wear and tear and reduces fuel consumption.

2.1.2.1 Pedestrian Sidewalks / trails

A comfortable walking distance is commonly defined as ¼ mile, as cited in various planning studies reported by the American Planning Association. Within the study area, only areas within the cities and towns begin to approach the defined distance. Sidewalk infrastructure varies across each of the municipalities noted in the plan and as described below. The Eastern Summit County Development Code does not require sidewalks in rural areas. Other means of pedestrian transportation, such as asphalt or dirt paths, should be considered where sidewalks are not required. At minimum, road shoulders and clear zones in rural areas should provide alternate mode access.

Some regional connectivity needs to be continued to preserve the roadway capacity. Non roadway facilities are an important element of the transportation system. The interaction of pedestrians, bikers, road cyclist, ATV, equestrian, etc. affect the user comfort of each other and of roadway traffic. Existing regional facilities include the Rail Trail and the Marion trail. See Figure 2.5.

Often undeveloped shoulders provide an alternative mode for access whether acceptable by code or not. Often this is a function of the agricultural basis of the subject area. Based on the low volume, many streets are used by both vehicle and alternative mode users alike.

Table 2.2: UDOT Access Management Class

UDOT Access Management Categories			
Category Assignment		Level-of-Importance	Example roadways
1	I	Freeway/Interstate	I-80, I-84
2	S-R	System Priority Rural	SR-248, SR-32
3	S-U	System Priority Urban	SR-248
4	R-R	Regional Rural	SR-248,35,32,150,65, 86
5	R-PU	Regional Priority Urban	SR-35, 150
6	R-U	Regional Urban	
7	C-R	Community Rural	SR-248, 32, 280, 86
8	C-U	Community Urban	
9	O	Other	SR-302
*Source: Administrative Rule R930-6 Table 7.3-1			

County trail and sidewalk maintenance policies have yet to be developed. The County may consider adopting a position on winter sidewalk maintenance to the extent it promotes the goals of the County.

Within the municipalities, some pedestrian facilities are provided with varied levels of service. For example, Coalville maintains a high level of service. It has sidewalks and the City will remove the snow from the walks. Most of the communities do not have walks as illustrated in Figure 2.5 and Table 2.3.

2.1.2.2 Cycling

The most frequently mentioned alternate use of the roadways is cycling. Typically shoulders are narrow and not maintained for cycling (sweep to remove gravel and other objects of cycling concerns). This creates a natural conflict of cyclist and motorist in speed, space, and mass. Trailheads are not defined, but cyclists often travel from outside of the study area to enjoy the rural area. Loop routes are preferred. Rider platoons range from single riders to large unscheduled clubs of 20 or more. Special events that involve competition, spectators, and support crews are addressed below.

Figure 2.5: Existing trails and pathways

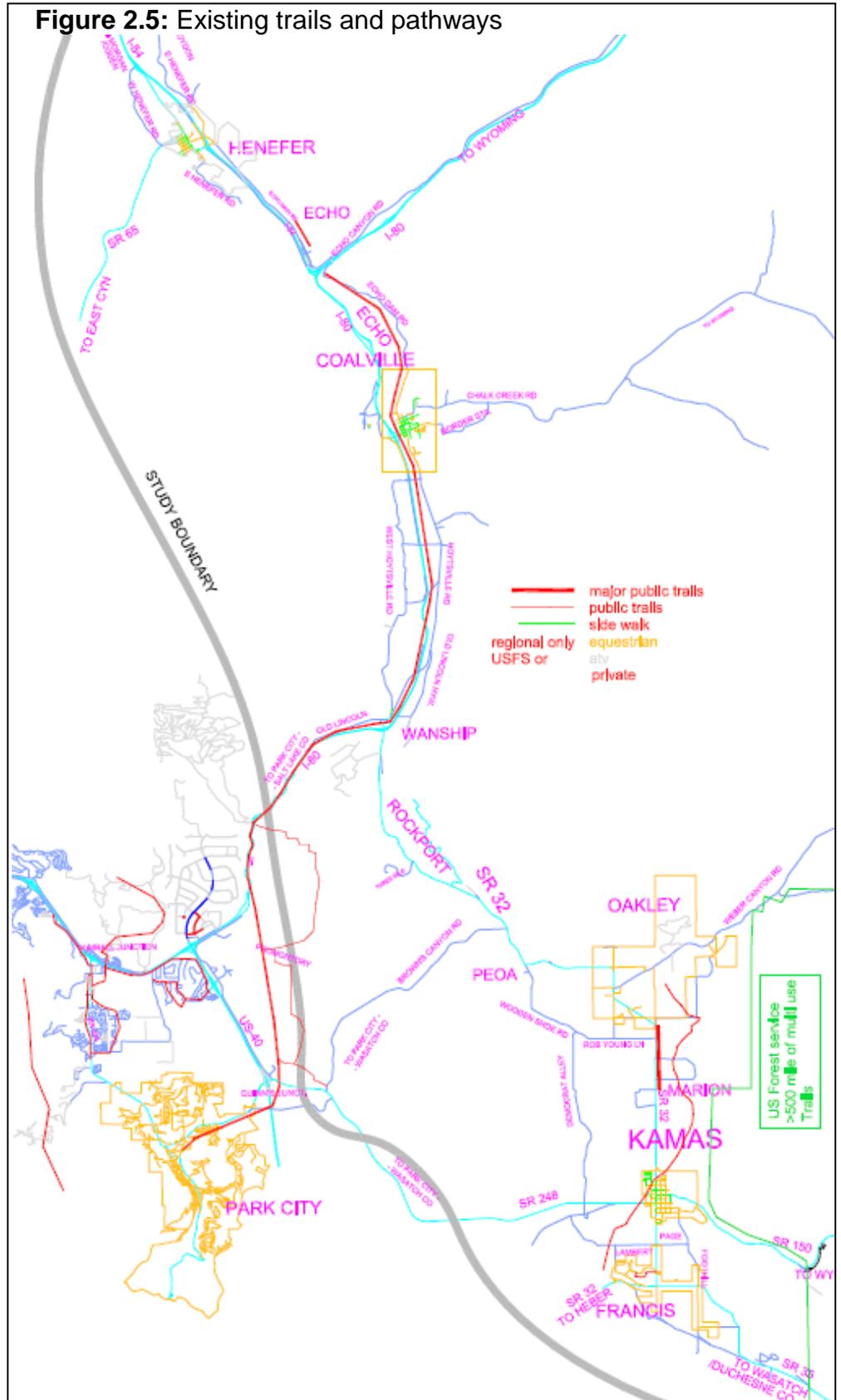


Table 2.3: Trails and Path Maintenance

Community:	Walks existing:	Maintenance Policy:	Development Code
Henefer:	Along Main, spurs one side of each street north of main, newer projects both sides	If done by adjacent owner Minor repair fund by Town,	New areas – both sides, unless approved by the Planning Commission to only one side. –all residential and commercial zones for new subdivisions
Coalville:	both sides most streets – some additional pieces needed also interconnected via the Rail trail.	High level of service in commercial areas and historic platted area, snow removed by the city. Others by adjacent owner	Required both sides in commercial and dense zones
Oakley:	no walks	Private walks by owner or HOA	Not required
Kamas:	most of Main and Center St. and several spurs with non-contiguous walks, newer areas both sides	By adjacent owner	New subdivisions
Francis :	River Bluff only	Private walks by owner	New Subdivisions
County:	Isolated areas only - within the study area: the only noted sidewalks and trails are: Marion trail and some walk in the Wanship area. Rail trail is a great example of inter jurisdictional trail providing alternative access	The rails trail maintained by the Mountain Trails Foundation. Other walks have an undefined maintenance and typical are not removed of snow nor maintained except as special designation by staff or Council.	None required
North Summit Rec	Some tie to the rail trail	Works with Mountain Trails Foundation	Developing policies

As provided in state code BICYCLE-RELATED UTAH CODE (TITLE 41, CHAPTER 6a) – Cyclists are allowed on streets. There are requirements listed for both the cyclist and the motorist. The County has not designated bike routes, however, UDOT has evaluated roads as illustrated in Figure 2.6 Green being good, yellow fair, and orange, poor. A red, or worse rating, does not exist in the subject area.

2.1.2.3 Equestrian / ATV / Snowmobile

Other than U.S. Forest service uses listed below, no formal ATV or equestrian trails exist in the study area. Their use on the public roadway has been accepted on shoulders of the roadway or the roadway as part of a rural community. These accesses are often recreational or personal travel as well as provide an agricultural function.

Magnesium chloride has been hard on animal’s feet. It is used to minimize maintenance and promote dust free conditions on dirt or gravel roads – other chemicals, hard surfacing, recycled pavement or a separated path may be considered as alternatives for future projects. These are all a financial / functional consideration.

Figure 2.6: Cycling rated by UDOT



2.1.2.4 Multi-use US Forest Service Trails

US Forest Service (USFS) and vast open range constitutes a very large percentage of the County. Of the entire study area, the most consistent and dynamic area of motorized and non motorized interest is the USFS area. With the exception of the Rail Trail and other non-continuous and private tracks: hiking, equestrian, and biking are mostly limited to USFS trails.

Public Access and points of interest are listed on the Kamas Ranger District web site: <http://www.fs.fed.us/wcnf/unit/kamas/index.shtml>. The Motor vehicle map provides limitations for these trails as well as trailheads. There are approximately 545 miles of designated trails in the USFS area.

2.1.2.5 Transit

Since May 2002, Summit County has contracted with Park City Transit to provide for year-round bus service to the Snyderville Basin. Service currently does not extent to the study area; however the Park City Transit and Summit County have developed a Short Range Transit Plan. It considers all merging possibilities to enhance transportation via this service. Typical transit performance is listed in Table 2-2. This Eastern County plan should provide guiding, long-range vision where applicable to transit and other access opportunities for future short and long-range transit plans. The elements of the plan should include park-and-ride lots, transit hubs or other connecting travel modes. Interim opportunities would encourage carpooling and encourage future bus ridership. See Section 3.6 of this Plan for a discussion of future public transit options and the respective Short Range Transit Plan. Currently, private trip reductions are to be encouraged.

Performance Standard	
(people/hour)	10
Table 2.4: Transit Route Performance	

2.1.2.6 Rail

Currently, at the mouth of Echo Canyon, exists the only operating rail spur in the County. Historical service of rail transportation is well documented. While there are no known passenger transportation service opportunities in the foreseeable future, transfer of goods is an economic opportunity that should be considered in economic development and diversification.

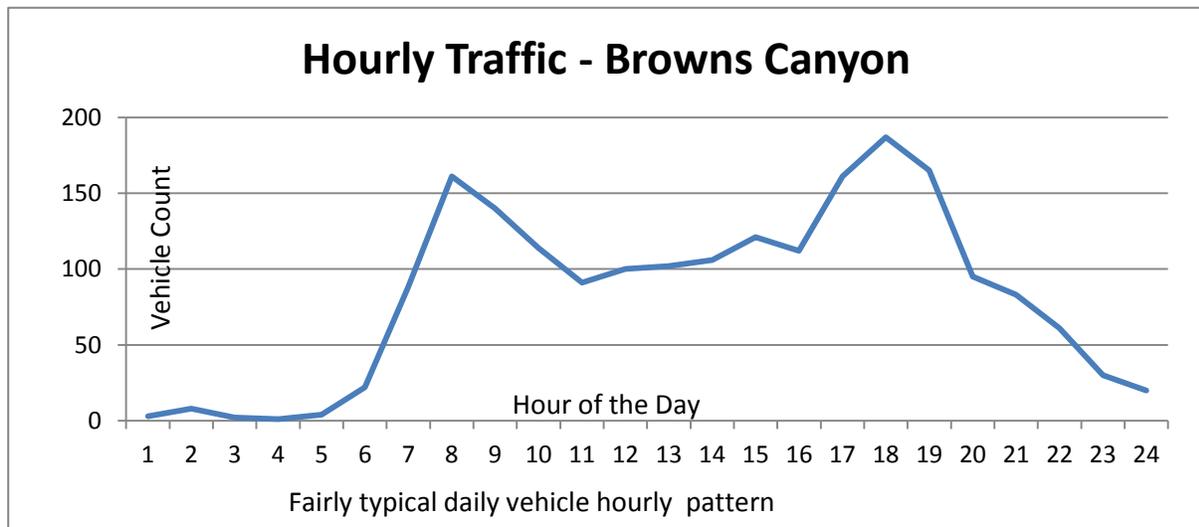
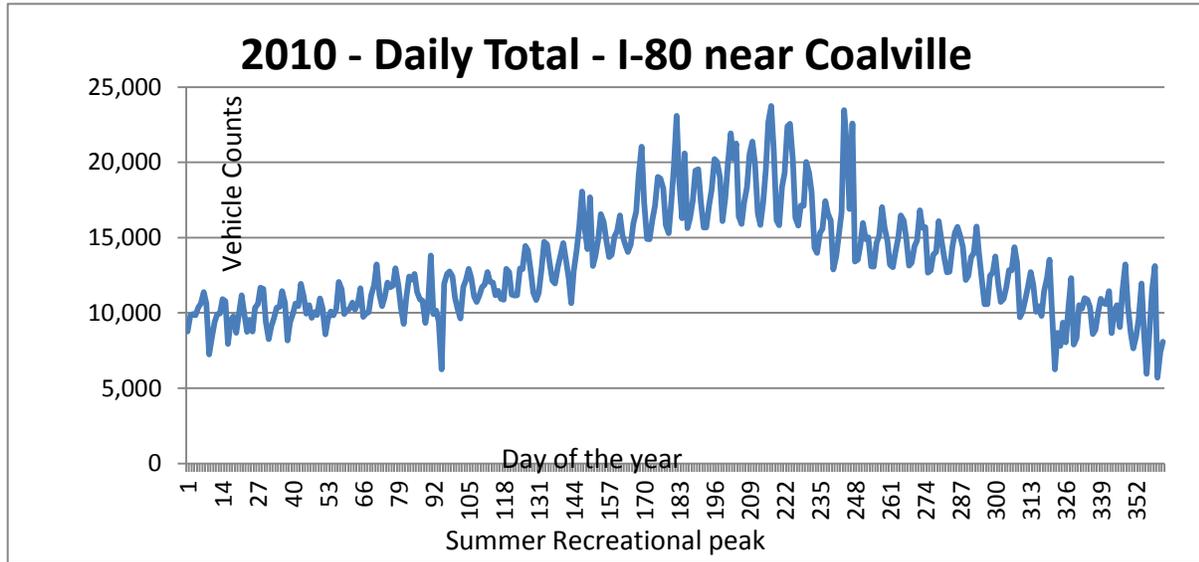
Vehicle - train conflicts are a common concern. With the remaining rail line being a major rail arterial, at grade rail-vehicle crossings are rare in Summit County. It is common for transportation plans to include off-grade rail crossing improvements. In this plan, no known current problems are foreseen. However an enhancement is needed on the narrow width of the rail bridge over the Echo roadway underpass as opportunity provides.

2.1.3 Current and Historic Traffic Counts

Sheets four and five of the Annual 2011 Traffic Report of the County contain daily traffic Counts, see appendix B. They range from 24 hour periodic counts to a permanent count station operated by UDOT along I-80. Analysis of data from the I-80 counter near Coalville provided valuable data – such as a “late summer” peak. Understanding daily traffic patterns is a critical consideration in this plan development. This pattern is a virtual inverse of the Snyderville Basin side of Summit County as SR-224 traffic peaks in January and February associated with recreational ski interests. Some travel demand illustrated in the Figure 2.7 at the off peak time is ski based as skiers or employees commute to the Snyderville Basin.

Installing a permanent traffic counting station along SR-32 in the Kamas Valley would be ideal to capture internal traffic. The most detailed UDOT counters in this study are interstate and capture pass through traffic with transcontinental potential. An SR-32 counter would catch area specific traffic without being too specific to one area. For example: The Coalville I-80 counter does not mirror local data in peak time of the day. The 24-hour data shown in Figure 2.7 from Browns Canyon does indicate that a more common occurrence is an AM peak followed by a slighter greater PM peak, unlike the Snyderville Basin.

Figure 2.7: Traffic patterns

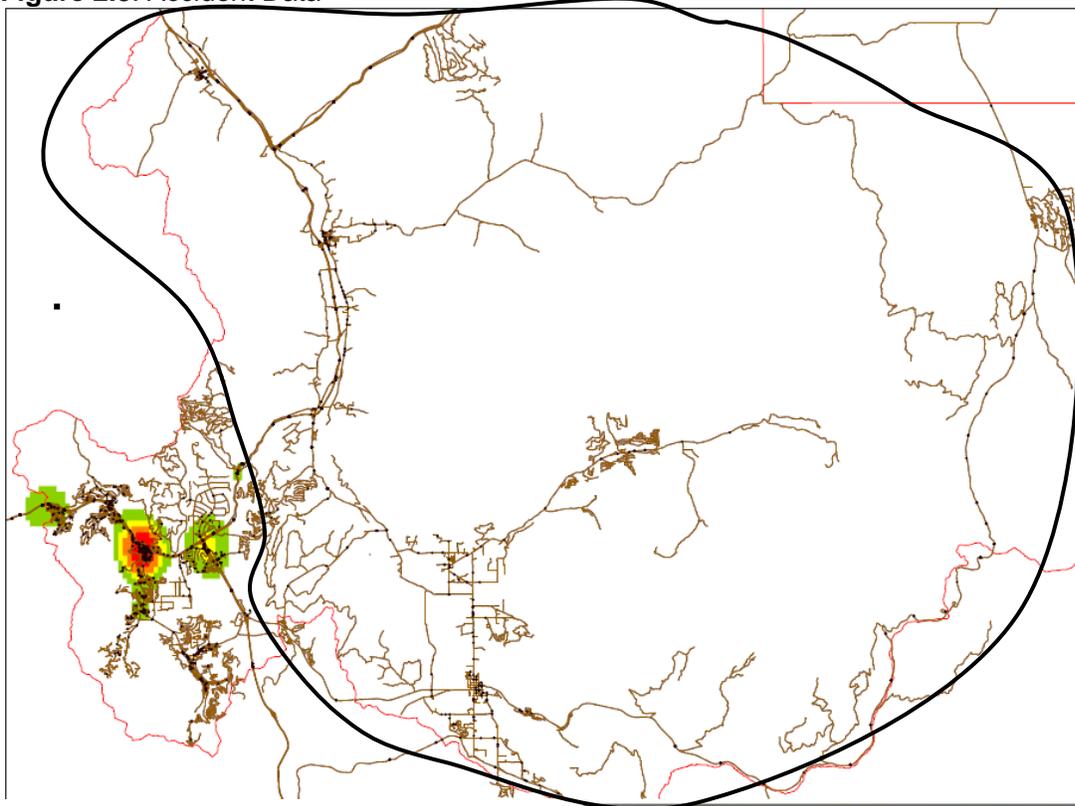


2.1.4 Accident Data

Summit County generated a three-year accident history for the entire County. Crashes were summarized for the three-year period from 2008 to early 2011. The accident history indicates a higher occurrence of crashes than would be expected in the Snyderville Basin. However, the accident study did not find any exceptional trends within the transportation study area. Figure 2.8 identifies in 'Red' the most occurrences, and 'White' means no strong trend.

Incidents on some of the state system are not reported on the County System. For example, the I-80 and I-84 interchange is known as a problem area. Discussions with emergency service personnel and personal observations confirm the locations problems. UDOT has in their plans to improve the interchange as discussed in Chapter 4.

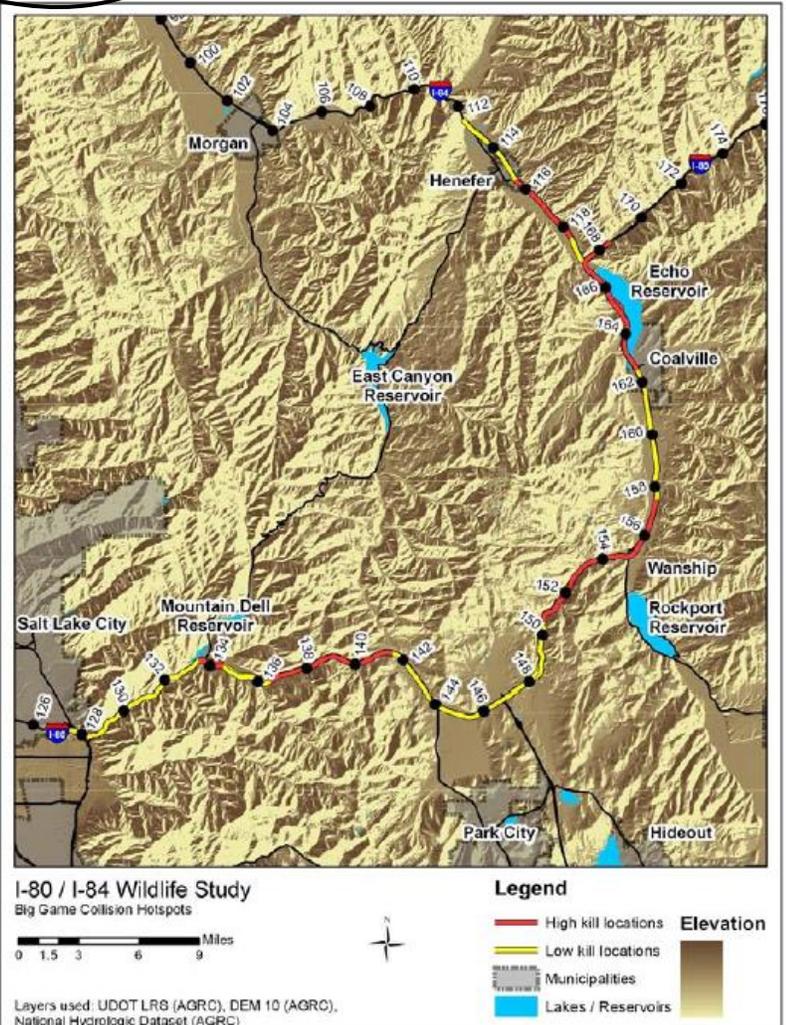
Figure 2.8: Accident Data



A number of intersections in the study area are less than ideal in configuration. Based on accident data and the current volumes, no exceptional concern is illustrated at this point. As traffic grows, improvements will be required.

Wildlife accident data was reviewed as provided in the UTAH DEPARTMENT OF TRANSPORTATION I-80 and I-84 Corridor Wildlife-Vehicle Collision Reduction Study by Bio-West, May 2011. The figure identifies three area hot spots: Wanship, Echo and I-84 toward Henefer. This doesn't include wounded or kills post crash.

Thus transportation planning and its impact to wildlife becomes a relevant concern as part of this plan. Wildlife needs to be considered in all improvement projects. The Bio-West study also highlights the high cost of wildlife collisions. Wildlife kill data would be useful for local roads as well and would further emphasize the need to consider wildlife crossings when making road



improvements. Wildlife kill data would be useful for local roads as well and would further emphasize the need to consider wildlife crossings when making road improvements.

2.2 Existing Demographics

A detailed analysis of socioeconomic data is beyond the scope of this Transportation Master Plan. However, recent growth trends in the area can be briefly addressed. In the 1980's, Summit County began to experience an increase in population. This was due in part to its proximity to the Wasatch Front: the mountain community lifestyle appealed to Salt Lake residents, who began relocating to the area and its environs. Further development and escalation of the Park City market and costs has created additional attraction for the subject area.

2.2.1 Population

Table 2.5 forecasts the expected population growth in Summit, Wasatch and Salt Lake Counties over the next 20 years. These population projections were not the basis used for developing the future traffic forecasts identified in this study. They do give a relative feel for expected projections. The traffic forecasts used in this plan were derived by the actual study of expected future County land use conditions.

Table 2.5: Population Growth in Selected Counties

	Population			Annual Growth		
	1980	2005	2030	1980 – 2005	2005 – 2030	1980 - 2030
Summit	10,198	36,417	85,660	5.22%	3.48%	4.35%
Salt Lake	619,066	970,748	1,381,519	1.82%	1.42%	1.62%
Wasatch	8,523	20,138	46,193	3.50%	3.38%	3.44%
	Households			Annual Growth		
	1980	2005	2030	1980 – 2005	2005 – 2030	1980 - 2030
Summit	3,381	12,948	33,620	5.52%	3.89%	4.70%
Salt Lake	201,742	329,497	493,628	1.98%	1.63%	1.80%
Wasatch	2,595	6,343	15,429	3.64%	3.62%	3.63%
	Employment			Annual Growth		
	1980	2005	2030	1980 – 2005	2005 – 2030	1980 - 2030
Summit	5,528	26,558	45,318	6.48%	2.16%	4.30%
Salt Lake	331,155	696,595	1,002,915	3.02%	1.47%	2.24%
Wasatch	3,151	8,612	15,640	4.10%	2.42%	3.26%
Source: Utah Governor's Office of Planning and Budget						

While table 2.5 provides a general growth trend, Appendix B lists the summary of a parcel by parcel analysis of existing and entitled land uses extrapolated to growth projections. Based on the 2040 year 'build out' analysis, the recommended annual general growth rate used 3.4%. The Travel Demand Model identifies the specific locations of growth and is the recommended analysis tool.

2.2.2 Land Uses

Traffic volumes and patterns are directly related to land use and development density. In order to develop an accurate assessment of future traffic conditions in the study area, an examination of existing land use is essential (see Appendix B for more information on existing land uses). This

includes identifying and quantifying the locations and amounts of the various land uses throughout the area, such as commercial, retail, residential, industrial, public facilities, open spaces, parks, golf courses, schools, and offices. As previously stated, the Forest Service and summer recreational uses are a major contributor to the peak travel demand.

Most of eastern Summit County's 1,849 square miles is agricultural, open range or forest service. As such, the trip generation per acre is very low. Travel time, as a function of speed and distance, becomes the primary consideration in modeling of traffic as land uses are projected.

2.2.3 Special Events

In addition to the daily traffic in the area, several significant multi-day events occur annually within the region. These events typically attract visitors to the area. These recurring events include:

Table: 2.6: Special Events

General Location	Date	Approximate # of visitors
County Wide		
Ragnar - Wasatch Back Relay (all)	Mid June	1200 teams
Tour of Utah		
Soft Ball (fields)		
Sundance (theaters)	January	Most Basin
Henefer		
Bike Program		1000
Potato Race / Little Buckro Rodeo	July 4	3000
Coalville		
- Super Cruise	July 9 th -second Sat July	4000
Arbor Day Celebration	May	1500
Echo Resort Fishing Derby	June	1500
Annual Heritage Festival and Pig Roast – BBQ competition	June	3000 - 6000
Tri-Utah Triathlon	July	2500
Summit County Fair / Parade	August	3000
North Summit School events	Various	Various
Oakley		
Rodeo	July 4 th – 2 nights	5500
Softball – Fast Pitch Triple Crown	Summer	2000
Kamas		
Kamas Valley Fiesta Days	July 24 th - 3 days	5500
Over the Top		
South Summit School events	Various	Various
Francis		
Rodeo	Labor Day	
North Summit Recreation		
All night tournaments	End of July	7-9 teams
Basketball tournament	1 Feb / 1 March	

2.3 Transportation Policies of the Respective Jurisdictions

A key component in any transportation planning study is to understand the influence and ramifications of the Level of Service (LOS) policy. LOS is not currently defined in subject area's County Code and undefined or only generally defined in municipal codes. Decision makers need to recognize how LOS is derived so that they can apply it appropriately. This section provides a discussion of LOS, including a basic definition and its role in transportation planning and traffic engineering. Following the background information is a brief discussion of Summit County's LOS policy and an evaluation of the current policy.

2.3.1 Background

LOS is a term used by traffic engineers to qualitatively describe traffic operating conditions. The term is defined in the Highway Capacity Manual (HCM), Transportation Research Board, 2000. The 2000 version of the HCM is the sixth publication of this reference document, which was first published in 1950. Each new release typically reflects the latest research and how it improves the understanding of traffic flow characteristics.

The 2000 HCM contains procedures and methodology for calculating LOS for different transportation facilities and travel modes. Similar to a report card, LOS varies from "A" to "F" with "A" representing the best driving conditions and "F" the worst, with "E" representing the capacity threshold. Table 2.7 provides descriptions of the six LOS categories. Various performance measures are used depending on the type of transportation facility or travel mode. For roadway facilities, the performance measures used to determine LOS are typically based on the speed, volume, or density of vehicles during a specified peak hour.

Table 2.7: Level of Service Descriptions

Level of Service Description			
LOS	Description	Average Delay (seconds/vehicle)	
		Signalized	Un-signalized
A	Extremely favorable progression and a very low level of control delay. Individual users are virtually unaffected by others in the traffic stream.	$0 \leq 10$	$0 \leq 10$
B	Good progression and a low level of control delay. The presence of other users in the traffic stream becomes noticeable.	$> 10 \text{ and } \leq 20$	$>10 \text{ and } \leq 15$
C	Fair progression and a moderate level of control delay. The operation of individual users becomes somewhat affected by interactions with others in the traffic stream.	$>20 \text{ and } \leq 35$	$>15 \text{ and } \leq 25$
D	Marginal progression with relatively high levels of control delay. Operating conditions are noticeably more constrained.	$> 35 \text{ and } \leq 55$	$>25 \text{ and } \leq 35$
E	Poor progression with unacceptably high levels of control delay. Operating conditions are at or near capacity.	$> 55 \text{ and } \leq 80$	$>35 \text{ and } \leq 50$
F	Unacceptable progression with forced or breakdown operating conditions.	> 80	> 50

Source: *Highway Capacity Manual* (Transportation Research Board, 2000).

While the natural desire is to drive at an LOS A, cost and impacts to establish a high LOS is tremendous and not fiscally sound. LOS A is not always desirable based on cost to achieve that level of service; however rural areas typically enjoy a higher LOS due to more dispersed, lower trip generating land uses, such as agriculture verses retail or commercial.

Transportation planners and traffic engineers use LOS to identify problems and evaluate improvement alternatives for roadways and intersections. These applications are commonly found in transportation impact studies for new development projects and in engineering studies of transportation improvement projects. For both types of studies, LOS thresholds are set that establish the desired operating conditions. In an impact study, the focus is on ensuring that approval of the new development does not cause operating conditions to be worse than the desired LOS. For engineering or design studies, the focus is on identifying the size and extent of the improvement to achieve the desired LOS.

For the purposes of this plan, Volume to Capacity (V/C, HCM page 21-3) is used. 'Volume' is the adjusted vehicle counts. 'Capacity' of the roadway is based on the width of the road, ability to pass, the number of access points, and so forth. Two ranges of V/C are applied in this plan, see Table 2.8. Approaches that are more rigorous may be used. For the purposes of Transportation Planning, the approximated V/C is sufficient. As individual projects are proposed, intersection analysis or other more rigorous levels of analysis may be recommended.

Table 2.8: V/C Eastern Summit County TRANSPORTATION MASTER PLAN

EVALUATION VOLUME TO CAPACITY RATIOS		
LOS	County Routes	State Routes
A	0.00	0.00
B	0.26	0.30
C	0.43	0.49
D	0.62	0.70
E	0.82	0.90
F	1.00	1.00

Highway Capacity Manual, Exhibit 21-2

2.3.2 Existing LOS Policy

Table 2.9 contains a summary of each jurisdiction's level of service policy. Standards or expectations are very loosely or not defined.

Table 2.9: LOS Policy Summaries

Henefer	Local streets shall be so laid out that their use by through traffic will be discouraged. (Ch 10.11-L)
Coalville	"When demand volume exceeds the capacity of the lane, extreme delays will be encountered with queuing which may cause severe congestion affecting other traffic movement in the intersection. This Condition usually warrant improvement of the intersection." (Coalville City TMP, 2007)
Oakley	None
Kamas	None
Francis	LOS B in the General Plan
County	"Traffic Volume: No development shall cause the traffic volume on any public road or intersection thereon, affected by the proposed subdivision, to fall below the design capacity of the roadway, as measured by the highway capacity manual (Transportation Research Board, Special Report 209, 1985)."

Specific LOS thresholds need to be established as well as supporting critical information related to the following LOS application and calculation issues:

- Methodology for calculating LOS

- Determination of the season, day of week, and time of day for applying the LOS threshold. Exceptions that are allowed to the LOS threshold due to tradeoffs associated with economic, social, or environmental impacts
- Other modes of LOS calculations

2.3.3 LOS Standards

Following are general discussion items for a recommended LOS standard for determining local LOS. It serves as a general common outline as each jurisdiction considers LOS standards for the respective future land Development Codes. Each jurisdiction may adopt a more detailed methodology. For the purposed of the uniformity, policies and methods herein are recommended as a minimum standard for traffic analysis review.

2.3.3.1 Methodology

Several methods of Determining LOS are available. For a Transportation Master Plan, a high level of analysis is used for a corridor rather than analysis on each intersection. Intersection analysis is recommended for project specific analysis. Methodology should be spelled out in a policy. Initial ideas are provided in Chapter 5 for more detailed analysis. The methodology needs to be somewhat flexible as varied uses will require different analysis. For example: Schools require a morning analysis while businesses often are PM peak trip generating.

2.3.3.2 Season, Day of Week, and Time of Day

Peak traffic volumes during the year in most urban areas occur when school is in session and roadway conditions are not constrained by weather. This EMTP peak is summer recreation based. As a result, the LOS policy should specify use of worst case conditions for LOS calculations. Likewise, the policy should identify the day of week and time of day. Many communities design their roadway systems for the 30th to 100th highest hour of traffic demand, which typically corresponds to the PM peak hour (e.g., 5:00 to 6:00 PM) on a Tuesday, Wednesday, or Thursday. Depending on the type and location of study, other seasons, days of the week, and times of day may need to be considered in a transportation impact study or engineering study to adjust to the equivalent of 100th highest system hour. The LOS policy should reflect this potential and identify who is responsible for making this determination.

2.3.3.3 LOS Exceptions

As previously mentioned, maintaining a high LOS threshold may not always be desirable. There are inherent tradeoffs between the construction of roadway improvements to provide for a desired LOS and the potential monetary cost as well as the impacts those improvements may have on social conditions or the physical environment. In some cases, the cost to provide a desired LOS may be too high for a community or development to support or accept. In other cases, the roadway improvement to provide acceptable driving conditions may cause adverse impacts to the physical environment. This could include habitat disruption or destruction, increased air pollution, increased noise, increased runoff, and induced growth. Since LOS is essentially a measure of driver comfort and convenience, a community may desire to maintain balance between providing convenient roadway travel for residents and visitors with the need to minimize impacts on the physical environment.

2.3.3.4 Other Modes

LOS policies should consider relationships among all modes using the transportation system. This is particularly important for the roadway system because buses, bicycles, and pedestrians are all roadway users, but they may not be fully recognized in traffic operations analysis and the calculation of LOS. For example, existing roadway pavement widths that are maximized for automobile use may result in elimination of bike lanes, and maximize crossing times for pedestrians.

Establishing thresholds is only one step in developing a complete LOS policy that addresses all the important issues, including calculation and application of LOS. Summit County and the Cities and Towns LOS policy should guide and direct transportation studies. Summit County would also benefit from alternative forms of roadway evaluation that account for multi-modal forms of transportation and different user groups (e.g., if parking were limited at a commercial establishment, alternative modes of transportation would likely need to be used and evaluated for arrival/departure of customers).

2.3.4 Current Levels of Service

Based on the volume to capacity ratio of the respective streets, Table 2.10 summarizes current roadway conditions. All roadways within the study area meet current LOS standards. Some roadway geometry is not to current standards.

Table 2.10: Current LOS Conditions

Road name	location	ADT	Current LOS	Road name	location	ADT	Current LOS
Chalk Creek Road+center	Near main	1436	a	State Routes - In Cities			
Chalk Creek Road	N of Brd Sta. Rd	866	a	Coalville - SR-280	From I-80 to Main Street	5140	a
Chalk Creek Road	N of South fork	569	a	Oakley SR-32	S of new lane	5779	b
Creamery Lane	near hoyt rd	277	a	Kamas SR-32	Between Signals	8596	c
Echo Main Road	henifer end	653	a	Kamas SR-32	S toward Francis	4655	b
Echo Main Road	I-80 end	370	a	Francis SR-32	North of intersection of 35	4877	b
Echo Dam Road	near Coalville	509	a	Francis SR-35	Near 32	3593	a
Echo Dam Road	near i-80	268	a	Henefer - SR 86	Near 100 S	1179	a
Echo Canyon Road	south end	170	a	State Routes - In County			
East Henefer Road	near Morgan co	78	a	I-80	Wanship	16068	a
East Henefer Road	pre land fill	573	a	I-80	Coalville	14337	a
Hoytsville Road	near 32	1329	a	I-80	Above Echo	13481	a
Hoytsville Road	north of shop	1140	a	i-80	Wyoming	14000	a
Hoytsville Road	near Coal city	1981	a	I-84	Near I-80	8600	a
Judd Lane	near hoyts rd	315	a	I-84	Morgan County	9548	a
South Henefer Road	near city	328	a	SR-32	I-80 end - in Wanship	2832	a
Old Lincon Hyw	near 32	260	a	SR-32	s of I-80 to browns	2500	a
West Henefer Road	near 65	300	a	SR-32	N of Peoa	3058	a
2nd South, Kamas	200 south nr 248	252	a	SR-32	Marrion	6288	c
Brown's Canyon Road	top	2419	a	SR-32	Wasatch County	2300	a
Brown's Canyon Road	near 32	1801	a	SR-150	out of Kamas - samak	1700	a
Democrat Alley	south of 248	310	a	SR-35	west side of Francis	688	a
Millrace Road	near Rob Young	160	a	SR-86	N of Henefer	516	a
New Lane	near 32	978	a	SR-65	Near Henefer	332	a
Rob Young Lane	near 32	417	a	SR-248	near Kamas	5900	b
Weber Canyon Road	in oakley - near the diner	1090	a				
Weber Canyon Road	n of dump sta	544	a				
Weber Canyon Road	n of oakley @40 mph	1011	a				
Woodenshoe Road	near 32	488	a				

2.3.5 Intersection

As discussed above, roadway capacities are generally controlled by the intersection capacities along the route in more populated areas. For the purposes of this study, intersections will be reviewed in more detail as street enhancements are proposed. Some geometric and signing or marking enhancements are proposed as information is specifically available. Improvements need to comply with the American Association of State Highway and Transportation officials (AASHTO) and the Manual of Uniform Traffic Control Devices, or MUTCD, including warrants and the respective signing and pavement markings.

There are currently only two signalized intersections in the study area, both in Kamas along Main Street (SR-32) and both are operated by UDOT. They are located at 200 South (SR-248) and Center or Mirror Lake Highway (SR-150). Chapter 4, Future Conditions, includes a discussion of future intersection treatments.

2.3.6 Access Management

Access (getting on the road) management strategies are intended to provide and manage access to properties along roadways, while simultaneously maintaining traffic flow and optimizing safety, capacity, and speed. They promote health, safety and so forth for the citizens and system users. There are four basic methods of access management, as described below.

1. Limit the number of conflict points that a vehicle may experience in its travel. This is especially important at intersections and driveways where vehicle, pedestrian, and bicycle paths cross, merge, and diverge.
2. Separate conflict points that cannot be eliminated. Provide adequate spacing between conflict points; this will give motorists, pedestrians, and cyclists adequate time to react to the conflict points.
3. Remove turning vehicles from through travel lanes. Provide turning lanes and restrict turning movements. This allows turning and merging traffic to adjust travel speeds appropriately, minimizing impact on through travel movements.
4. Provide adequate internal circulation and storage within private properties, which will improve operations on the adjacent roadway.

Summit County Code and Ordinance 181-D have regulations concerning driveways which provides some level of access management and encroachment permitting. The Cities and Towns have various access regulations as follows:

Table 2.11: Access standards
Henefer: Driveways: No more than 2 per street, more than 20' separation, 30' from intersections. Streets: subject to fire standards.
Coalville: Driveways: edge of drive to property near a intersection 20' residential 40' commercial: Driveway to Driveway 12' Intersection centerlines: 150' offset on local streets, 450' on major streets
Oakley: none: see future street network
Kamas: Future Street Network established, primarily in the commercial areas. Driveways: none
Francis: Future Street Network established, max block length 1200' – pedestrian ways @ 800', Intersection standards offset, grade and separation. Driveways: combining provided
County: Driveway Code/Ordinance provides intersection and property set back
North Summit Rec: n/a

The following tables identify the UDOT access management categories currently adopted through Administrative Rule R930-6: Accommodation of Utilities and the Control and Protection of State Highway Rights of Way. Every UDOT controlled facility within Utah has been classified. The state highway access management standards for each of the roadway categories identified are outlined in Table 2-12.

Table 2-12: UDOT Access Management Standard Spacing							
Category		Minimum Signal Spacing (feet)	Minimum Street Spacing (feet)	Minimum Access Spacing (feet)	Minimum Interchange to Crossroad Access Spacing (feet)		
					To 1 st R-in R-out A	To 1 st Intersection B	From last R-in R-out C
1	I	Interstate/Freeway Standards Apply					
2	S-R	5,280	1,000	1,000	1,320	1,320	1,320
3	S-U	2,640	No Un-signalized Access Permitted		1,320	1,320	1,320
4	R-R	2,640	660	500	660	1,320	500
5	R-PU	2,640	660	350	660	1,320	500
6	R-U	1,320	350	200	500	1,320	500
7	C-R	1,320	300	150	Not Applicable		
8	C-U	1,320	300	150			
9	O	1,320	300	150			

*Source: Administrative Rule R930-6 Table 7.4-1

Based on the UDOT criteria, the recommended access management standards for Summit County are set forth in Chapter 5.

2.4 Environmental Constraints

The subject area is mountainous valleys of many types and scales. There are several hydrologic features and constraints that may limit the possible uses in the area. The mountains encompassing the valleys have considerable areas of steep slopes (over 30% slope), as approximated in Figure 2-9 and 2-10. These environmental constraints limit both development and utility as transportation corridors. These steep slopes make roadway and utility construction very challenging or expensive. The Eastern Summit County Development Code prohibits development on slopes greater than 30%.

Conservation easements: Future conservation easement should consider transportation impacts toward community goals and impact on future transportation circulation. Agricultural or open space preservations need to be considered. All future preservations should consider transportation impacts toward community goals and the impact on future transportation circulation.

Hydrologic features in the area include primarily the Weber River drainage and a portion of the Provo River Drainage. The flood plains need to be respected. Likewise areas of hydrophilic (wetland) interest are a concern.

Not illustrated on the figures is wildlife habit. Big game is the most common concern. The following site provided detailed information as to all species and may provide insight as to roadway design in context of area wildlife. <http://mapserv.utah.gov/Wildlife> .

Figure 2-9: Environmental Constraints: South Summit

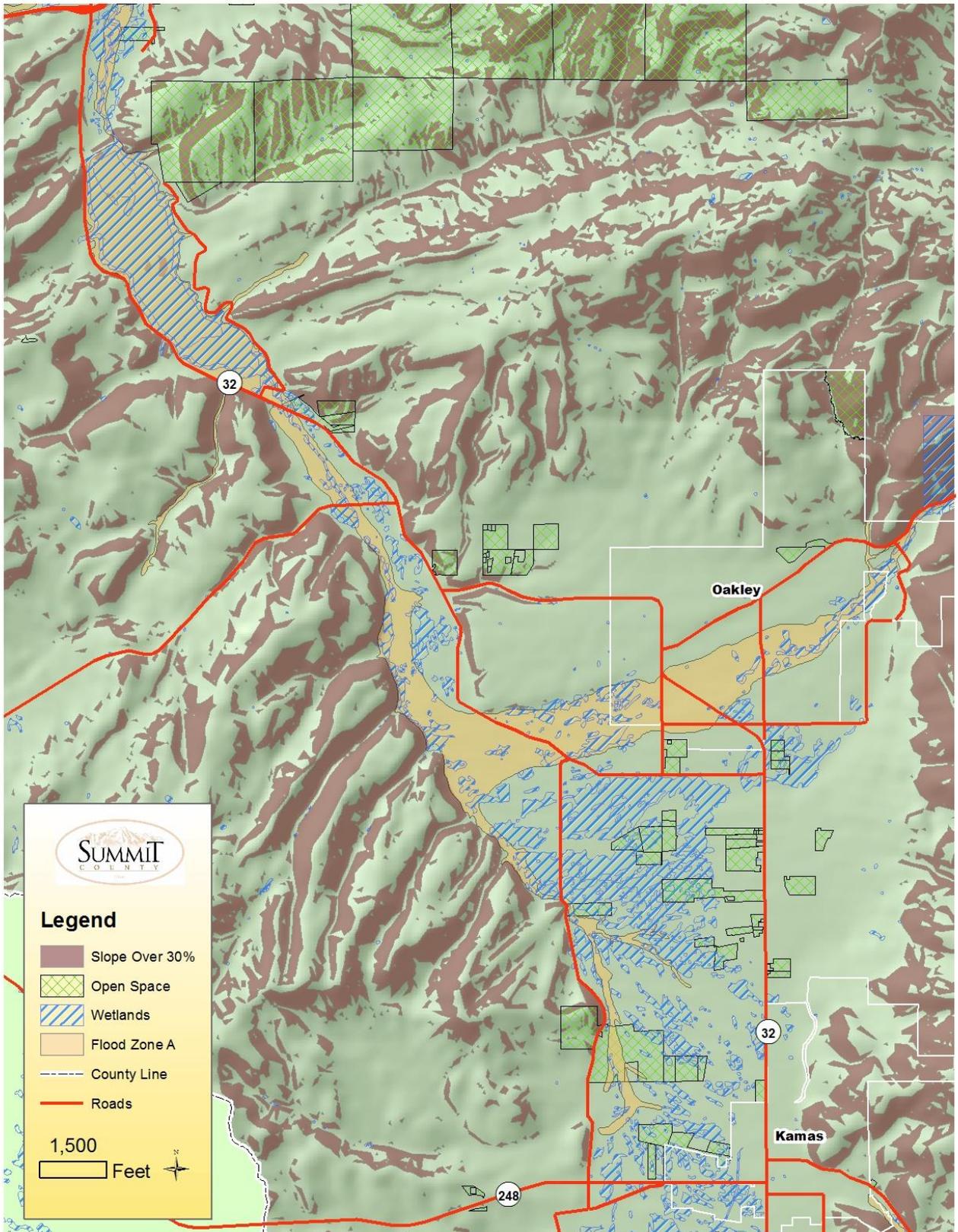
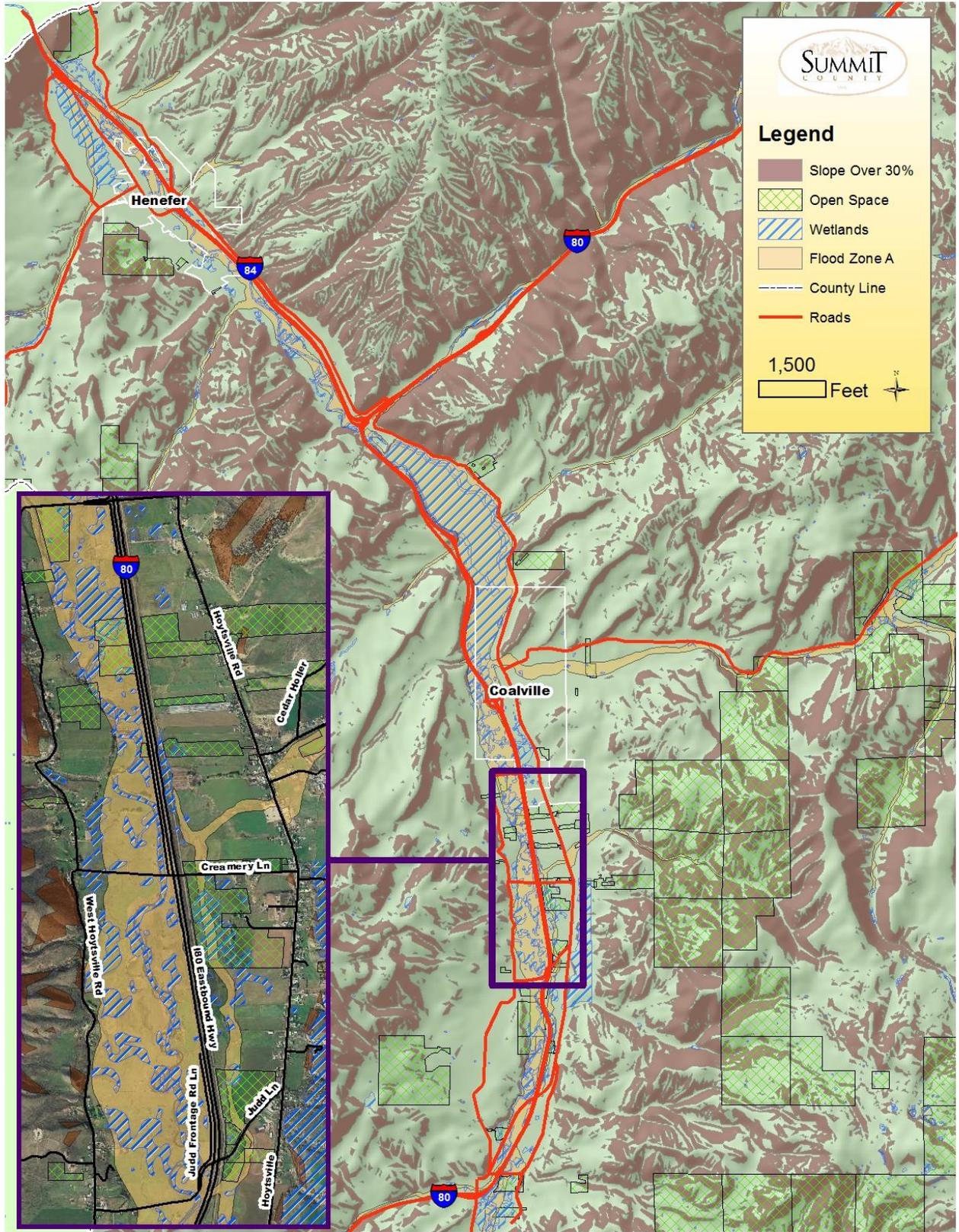


Figure 2-10: Environmental Constraints North Summit



3.0 Entitled Future Conditions (2025)

Future LOS at Entitlement appears to be favorable. Generally, the street network will remain at an acceptable LOS for uses projected by currently available building lots. Some improvements of the transportation network will help maintain service levels with minimal capacity expansion. Continued implementation of good transportation policies are required as listed.

Summit County has created a comprehensive list of current entitlements and expected future developments within the study area. These are used to project the future travel demand. Two methodologies are employed:

- 1) Entitled Land uses
- 2) Zoning Build-out Land uses.

Entitled land uses, termed 2025, are uses reasonably eminent, such as an existing building lot that is vacant but platted. These entitled uses are addressed in this Chapter. Zoning build-out, termed 2040, is a projection of zonings from across the study area. It assumes build-out reasonably as illustrated in County, City and Town zone maps, see Appendix C. Zoning build-out is addressed in the next Chapter 4.0.

As established in Chapter 2, the current street network performs well overall, with acceptable Levels of Service (LOS). With the use of the Summit County Travel Demand Model, this chapter projects traffic conditions as entitled uses are built. This assumes few significant changes to the street network as summarized in Table 3.1.

The analysis of the following is required:

- 3.1 - Entitled Land uses
- 3.2 - Projected travel demand and distribution
- 3.3 - Project travel volumes and future Levels of service (LOS) at Entitlement / 2025
- 3.4 - Conclusions

Community	Street network description changes
Henefer	No significant changes of the network
Coalville	Minimal changes of major network per the City Transportation Master Plan
Oakley	No significant changes of the network
Kamas	No significant changes of the network
Francis	Minimal changes of major network per City development plan
Eastern County:	Minimal capacity changes of major network, policy implementation, widen / improve some streets to County Standard
UDOT	Some enhancement of SR-32 – no major capacity enhancements.

3.1 Entitled Land Uses

Commercial and residential entitlements were analyzed. With few multi-family units entitled, the number of Single Family Residents illustrates projected growth most readily as listed in Table 3.2.

The annual growth rate is calculated to be around a 3.4%. This rate appears to be correct given the areas previous growth patterns. A rate of 3.5 % would be around 250 new structures between all the subject jurisdictions per year. This builds out includes existing entitlements only. The assumption is that units not constructed upon during the period will be replaced with new entitlements. In the next Chapter it is assumed that by 2040, remaining entitled units will be built upon or further replaced.

Table 3.2: Entitle Single Family Residences

Community	2011 Single Family Residences	Entitled Residences
Henefer	202	243
Coalville	417	530
Oakley	406	579
Kamas	614	725
Francis	373	723
Eastern County:	3229	*5044
* Many of these are secondary home lots – 5044 drops to 3755		

The study does not extend to the entire Eastern Summit County planning area. Promontory and Tollgate exhibits traffic patterns that are consistent with the remainder of the Snyderville Basin and are addressed in that plan.

3.2 Projected Travel Demand and Distribution

Future travel demand and associated traffic conditions are functions of projected land use and socioeconomic conditions. Future travel demand is commonly estimated using a computerized travel demand model. The four-step transportation modeling processes are and have been applied as follows:

- Trip Generation
- Trip Distribution
- Modal Split
- Trip Assignment

3.2.1 Trip Generation:

The Summit County Model is County wide. It uses four main commercial categories: Retail, Office, Institutional, and Industrial in trip generation estimates. There is also a provision that allows for unique land uses in the model. The cabin areas are a substantial contributor, so a reduction over the single-family homes rate is used for these areas. The commercial volumes are primarily analyzed in terms of PM peak hour of trips that will be generated by each development, based on rates published in the Institute of Transportation Engineers (ITE) Trip Generation, 7th Edition, 2003. Where needed, average daily trips were converted to PM Peak. Residential uses are based on per unit calculation. In the subject study area, less than 10% multi- family units are projected. As noted, recreational users are difficult to quantify as to trip generation. External node traffic is assumed to increase at a similar growth rate of 3.4%.

3.2.2 Trip distribution:

Consistent with National Cooperative Highway Research Program (NCRP) report 187, the County Model's distribution of traffic across the network is based on trip productions and attractions. For detailed information, refer to the NCRP report. In the simplest form – these are homes that produce a trip and businesses that attract the trips. Many factors and calibrations occur to calibrate and

match existing conditions. Then the new land uses are added to the model to project the future conditions.

3.2.3 Modal split:

Modal split assumes the availability of other modes of transportation. As a rural area, mode share is likely less than 1%. No significant adjustment is recommended to the subject area for Modal Split. Nevertheless as opportunities develop, they should be acted upon as the discussed in non-roadway facilities above.

3.2.4 Trip Assignment:

Traffic is assigned to the roadway network based primarily on travel times. This is a function of roadway speed and is the major factor of the rural modeling in trip assignment. Delays at intersections may have some affect on the traffic routes, but not the extent that it does in an urban street network.

3.3 Project Travel Volumes and Levels of Service at Entitlement / 2025

Table 3-3 contains the resulting forecasted volumes and LOS on several major roadways from the Summit County Travel Demand Model. As expected, a 3.4% system wide increase is projected based on increased land uses. As further expected, areas that are significantly built out, a low

Table 3.3: Future Traffic Volumes and LOS for Entitled Growth (2025)

Road name	location	ADT	LOS	Road name	location	ADT	LOS
Chalk Creek Road+center	Near main	1808	a				
Chalk Creek Road	N of Brd Sta. Rd	1029	a	State Routes - In Cities			
Chalk Creek Road	N of South fork	845	a	Coalville - SR-280	From I-80 to Main Street	7209	b
Creamery Lane	near hoyt rd	323	a	Oakley SR-32	S of new lane	7248	c
Echo Main Road	henifer end	636	a	Kamas SR-32	Between Signals	13882	e
Echo Main Road	I-80 end	370	a	Kamas SR-32	S toward Francis	6768	c
Echo Dam Road	near Coalville	506	a	Francis SR-32	North of intersection of 35	6757	c
Echo Dam Road	near i-80	272	a	Francis SR-35	Near 32	5082	b
Echo Canyon Road	south end	435	a	Henfer - SR 86	Near 100 S	1460	a
East Henefer Road	near Morgan co	118	a				
East Henefer Road	pre land fill	735	a	State Routes - In County			
Hoytsville Road	near 32	1671	a	I-80	Wanship	25647	b
Hoytsville Road	north of shop	1601	a	I-80	Coalville	21822	b
Hoytsville Road	near Coal city	2253	a	i-80	Above Echo	19453	b
Judd Lane	near hoyts rd	370	a	i-80	Wyomming	20381	b
South Henefer Road	near city	356	a	I-84	Near I-80	12127	a
Old Lincon Hyw	near 32	413	a	I-84	Morgan County	13051	a
West Henefer Road	near 65	328	a	SR-32	I-80 end - in Wanship	3689	b
2nd South, Kamas	200 south nr 248	415	a	SR-32	s of I-80 to browns	5596	b
Brown's Canyon Road	top	3780	a	SR-32	N of Peoa	4752	b
Brown's Canyon Road	near 32	2916	a	SR-32	Marrion	8899	d
Democrat Alley	south of 248	984	a	SR-32	Wasatch County	3444	b
Millrace Road	near Rob Young	152	a	SR-150	out of Kamas - samak	2623	a
New Lane	near 32	1319	a	SR-35	west side of Francis	961	a
Rob Young Lane	near 32	468	a	SR-86	N of Henefer	578	a
Weber Canyon Road	in oakley - near the diner	2125	a	SR-65	Near Henefer	419	a
Weber Canyon Road	n of dump sta	903	a	SR-248	near Kamas	9413	c
Weber Canyon Road	n of oakley @40 mph	2365	a				
Woodenshoe Road	near 32	714	a				

percent increase occurred, and areas of greater growth a greater percent increase occurred.

The LOS of all County Roads remains acceptable. Several state roads are at or near capacity. Kamas Main at this high level of analysis, is expected to fall below LOS D, a state standard. More rigorous methods of analysis may further define the needed improvements during various project development.

3.4 Conclusions

Entitled / 2025 conditions appear very favorable. Neither the County or the Cities and Towns have been excessive in subdivision or commercial approval to the extent general roadway failure is expected. The primary action is to implement and enhance the system to current standards to sustain the LOS. This plan is intended to help work together in programming future needs.

UDOT has programmed enhancement of the existing SR-32 corridor. Specific review will be provided with that project. The capacity of Kamas Main St. should be carefully considered in the near future. Another primary concern is SR-32 from Peoa to Francis – access control will be important as discussed in the following chapter.

4.0 Zoning Build-out Future Conditions (2040)

Summary:

- ° Few of the county / city operated roadways will require specific additional capacity:
 - Several localized improvements will be required to maintain capacity and improve safety.
 - A future road network illustration for each individual community is recommended for good community circulation and alternative routing in case of an unusual event (special event or emergency).
- ° UDOT's system will require additional capacity along SR-32, 35 and SR-248.
 - Northern Summit County roadways are expected to operate at acceptable LOS.
 - Southern Summit County alternatives are discussed for SR-32. Additional capacity is needed from Peoa to Francis including alternate corridors, which are established with this plan.
 - ° Short and long term – access control will be important

Zoning build-out, termed 2040, is a projection of zoning from across the study area assuming build-out roughly as illustrated in the community zoning maps, see Appendix C. For example, a favorably situated 20 acre parcel with ½ acre zoning on the community maps are assigned around 40 lots. Sensitivities of land conditions from section 2.4 require adjustments to the 40 lots. Likewise, an industrial or commercial area's probable future land use is estimated. While the conditions are anticipated to change, this is the best available projection of the expected future conditions. Inclusive of the project is the potential infill of existing communities historic blocks as estimated based on zoning prescribed. Again some areas may not develop as illustrated, however others in the proximity may develop with offsetting additional traffic generation.

Following the analysis pattern from Chapter 3, the following four areas are considered.

- 4.1 - Zoning Build-out Land uses
- 4.2 - Projected travel demand and distribution
- 4.3 - Project travel volumes and future Levels of service (LOS) at Zoning Build-out / 2040
- 4.4 - Conclusions

Table 4.1: Street Network build-out Required	
Community	Street network description changes
Henefer	Minimal changes of major network
Coalville	Minimal changes of major network, some local roads added
Oakley	Minimal changes of major network, main and some local roads added
Kamas	Minimal changes of major network, some local roads added
Francis	Minimal changes of major network, some local roads added
Eastern County:	Some UDOT enhancement of SR-32 – some capacity enhancements considered
UDOT	Some UDOT enhancement of SR-32 – some

4.1 Zoning Build-out Land Uses

Similar to Section 3 Table 4.2, single family residences illustrate projected build conditions: See Appendix B

4.2 Projected Travel Demand and Distribution

The same modeling process was used as with the entitled conditions. A less reserved or higher trip generating approach was used with the recreational properties based on system summer peak. Again modal split is assumed to be minimal. In the modeling process, few modifications to the roadway network were needed. Most modifications are 'project streets' required for access to new development that are not expected to be funded by the community.

Table 4.2: Residences at build-out			
Community	2011 Residences	Entitled Residences	Build-out Residences
Henefer	202	243	908
Coalville	417	530	1,062
Oakley	406	579	1,064
Kamas	614	725	1,018
Francis	373	723	1,985
Eastern County:	3229	5044	*7,264
* Many of these are secondary home lots – drops to 5,707 w/o recreational areas increase			

4.3 Project Travel Volumes and Future Zoning LOS at Build-out / 2040

The following LOS, indicated in Table 4.3, and volumes are built on the existing network with some necessary additional local connections as illustrated by the respective communities. Additional demand is added to the regional network. The Cities, Towns, and County road networks continues to perform at acceptable levels of service with few exceptions. The most noted exception is Weber Canyon Road. This conclusion is subject to possible conversion of seasonal/recreational use to primary residential use. There is a significantly higher average trip generation rate per unit for primary residential. As such, some additional capacity will be required. The trip generation per unit needs to monitored in the recreational areas and will affect improvements needed.

Table 4.3: Future Build-out Volumes and LOS

Road name	location	ADT	LOS	Road name	location	ADT	future network
Chalk Creek Road+center	Near main	4546	a				
Chalk Creek Road	N of Brd Sta. Rd	2276	a	State Routes - In Cities			
Chalk Creek Road	N of South fork	2041	a	Coalville - SR-280	From I-80 to Main Street	10749	c
Creamery Lane	near hoyt rd	395	a	Oakley SR-32	S of new lane	15952	f
Echo Main Road	henifer end	2081	a	Kamas SR-32	Between Signals	19940	f
Echo Main Road	I-80 end	1944	a	Kamas SR-32	S toward Francis	12773	e
Echo Dam Road	near Coalville	1948	a	Francis SR-32	North of intersection of 35	12623	e
Echo Dam Road	near i-80	895	a	Francis SR-35	Near 32	10937	d
Echo Canyon Road	south end	695	a	Henfer - SR 86	Near 100 S	5280	b
East Henefer Road	near Morgan co	167	a			0	
East Henefer Road	pre land fill	3544	b	State Routes - In County		0	
Hoytsville Road	near 32	2353	a	I-80	Wanship	35402	c
Hoytsville Road	north of shop	2254	a	I-80	Coalville	30385	c
Hoytsville Road	near Coal city	2287	a	i-80	Above Echo	23883	b
Judd Lane	near hoyts rd	451	a	i-80	Wyomming	29309	c
South Henefer Road	near city	1386	a	I-84	Near I-80	17545	b
Old Lincon Hyw	near 32	437	a	I-84	Morgan County	18329	b
West Henefer Road	near 65	1598	a	SR-32	I-80 end - in Wanship	4749	b
2nd South, Kamas	200 south nr 248	1433	a	SR-32	s of I-80 to browns	6045	c
Brown's Canyon Road	top	8118	c	SR-32	N of Peoa	9727	d
Brown's Canyon Road	near 32	6579	c	SR-32	Marrion	16016	f
Democrat Alley	south of 248	1689	a	SR-32	Wasacth County	4671	b
Millrace Road	near Rob Young	400	a	SR-150	out of Kamas - samak	2274	a
New Lane	near 32	3684	b	SR-35	west side of Francis	1387	a
Rob Young Lane	near 32	1063	a	SR-86	N of Henefer	1671	a
Weber Canyon Road	in oakley - near the diner	6615	c	SR-65	Near Henefer	595	a
Weber Canyon Road	n of dump sta	3045	b	SR-248	near Kamas	14767	e
Weber Canyon Road	n of oakley @40 mph	7240	d				

The UDOT road network will require capacity increase along SR-32, SR-35 and SR-248. I-80, I-84 and others function at an acceptable LOS per Table 4.3.

4.4 Conclusions

Alternatives and the projects are listed in Chapter 6. The only County road that requires some additional capacity will be along Weber Canyon Road. Capacity may be provided by minor geometric enhancements such as turn lanes or additional width. Analysis that is more rigorous may provide additional information for project design. Several state routes, without improvements, fall below the recommended LOS.

4.4.1 Future Roadway System

Currently the UDOT Long Range plan identifies improvements to SR-32 and some to SR-35. SR-248 these should be coordinated by this plan. These improvements will be discussed in Chapter 6.0. Intersections will need to be reviewed in detail with each project.

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5.0 Transportation Plan Strategy, Goals, Principles and Actions

To promote a more unified plan – common goals, principles, and actions will help establish the future transportation vision.

The respective jurisdictions' general plans are the adopted planning guide for the future of the region. While the general plans primary focus is on land use planning and design, they do not typically coordinate system wide transportation goals and policies. As a supplement to the policies provided in the general plan documents, this transportation plan establishes goals, principles and actions to implement a comprehensive transportation program consistent with transportation practices.

As traffic increases, preservation of community character needs to be integrated to the extent possible. Preservation of LOS is one factor. Safety is also a major concern. Accommodation of all users is another interrelated consideration. A multifaceted approach to meeting the region's transportation needs is recommended. The overall transportation strategy contained in this plan is based on the following interrelated approaches:

Manage the Demand

Reduce or modify trips by providing services in close proximity, typically with the five towns / cities indentified. This will reduce average trip length. There is some discretion as to travel timing. Mode of transportation is often limited but the length of the trip can be influenced by a variety of land use factors.

Greater Efficiency

Make the most efficient use of existing road capacity before building new roads. Several techniques are available to increase efficiency on existing roads. Capacity enhancing tools are an integral part of this plan, and are addressed further in the goals, principles and actions section of this chapter.

More Capacity

Area traffic volumes are predicted to double within the next 30 years. New or expanded roads should be limited to key areas where the current infrastructure will be inadequate to meet demand.

Land Use Planning

Current land use planning concentrates new developments to minimize impacts on the existing road network. Most of the expected growth is predicted to occur where services are comfortably available - in the respective municipalities. Alterations of the plans may have significant transportation impacts that will need to be fully evaluated prior to approval. In some approvals, elements such as park-n-ride lots, transit connections, etc. can be tied to new development approvals to minimize its traffic. Providing for multi-use parking lots provides several benefits: staging parking for special events, creating sites and programs for employee carpooling, and may provide a basis for future transit.

Realistic Expectations

Establish and maintain realistic expectations of residents concerning the capacity of their roadway network. Many areas of the country are experiencing increasing traffic congestion. Traffic will increase in the study area, and despite the financial resources and programs dedicated to ease

traffic woes, congestion will still occur. The County’s challenge will be to manage congestion effectively, and reduce citizen frustration and inconvenience as much as practical.

Regional Solutions

Continue coordinating regional transportation planning to solve transportation issues. Traffic problems are inherently regional and the region is maturing. Effective solutions will require the active cooperation of UDOT, all communities and the business leaders and other stakeholders. The success of any traffic management will depend on a coordinated response from all the stakeholders.

Plan’s Goals / Principles / Actions

The goals, policies, and actions described in this section provide a series of measures which can be assigned and monitored annually for completion. The plan’s actions are intended to address the area’s existing and future transportation challenges and provide a clear means of measuring our progress towards the achievement of our goals and objectives. Progress reports should be presented to the Communities annually:

GOALS, PRINCIPLES, ACTION OF THE

EASTERN SUMMIT COUNTY TRANSPORTATION MASTER PLAN INCLUSIVE OF:
 HENEFER, COALVILLE, OAKLEY, KAMAS, FRANCIS

5.1 Coordination of the Communities

GOAL	PRINCIPLE:	ACTION:
		Establish a standing means of communication between Cities, Towns and the County such that they, UDOT and others will have clearer objective in achieving community goals.
		Continued communication will enable concerns to be identified in transportation documents and projects, to be more effective.
		Build upon current meetings, COG, planning etc to include transportation updates <u>Agency: Administration, Planning, Engineering</u>
		Further establish methods to review traffic management plans for major special events such as biking events.
		Coordinate with cities/county to avoid multiple major events taking place on the same weekend except as may be advantageous. <u>Agency: Planning</u>
		Joint agency expectations are provided in the Cooperative Corridor Agreements
		Establishing Cooperative Corridor Agreements are mutually beneficial in accelerating the installation of safety and traffic management facilities. The Cities, Summit County and UDOT will participate in on-going traffic management and implementation programs. <u>Agency: Public Works/Engineering.</u>
		Coordinate with UDOT on near-term projects, including new medians, speed limits adjustments, intersection capacity increases and intersection approach improvements. The agreements will be reviewed and modified as needed at least every 3 years by UDOT and Summit County. <u>Agency: Public Works/Engineering.</u>
		Work with UDOT on other beneficial agreements within the study area including right-of-way preservation and design within the context of Eastern Summit County planning documents. <u>Agency: Public Works/Engineering.</u>
		The plan will require a new and extraordinary level of cooperation and support between the stakeholders.
		Summit County’s transportation problems are regional in nature and cannot be effectively addressed by any one entity.

		Solicit functional transportation solutions and support from all stakeholders as occasion provides. Make the annual transportation report available to all stakeholders. <u>Agency: Public Works/Community Development.</u>
		Consider the formation of a Transportation Management Association (TMA) to recommend public and private sector solutions. <u>Agency: Public Works/Community Development</u>
		Non-motorized transportation facilities should routinely be included with all road construction and reconstruction projects as funding allows. <u>Agency: Public Works / Community Development / Engineering.</u>
Road design / Public work standards need to be coordinated.		
	Standards must be both safe and efficient: Road widths that are too narrow may not provide the needed capacity and safety, while an overly wide road may be an economic burden to the community in maintenance and may increase speeds over what is desirable.	
		Review each community standards <u>Agency: Planning, Public Works, Engineering</u>
		Review and create a transition of standards so that they are logical and representative of actual and projected demands to avoid long-term and short-term costs, while reflecting community goals. See AASHTO Policies for design of highways: <u>Agency: Public Works / Community Development / Engineering.</u>
Consider innovative financing methods, in addition to traditional funding sources.		
	A well-functioning transportation system is beneficial to other entities and individuals besides Summit County and the Cities and Towns alone.	
		Develop special service districts to minimize burdens placed on the citizens of Summit County. Chapter 7 or future CFP of this plan outlines preferred funding sources. <u>Agency: Public Works/Community Development/County Council.</u>
	Identify the fair share of needed improvement costs among the stakeholders as appropriate. Adopt a CFP based on an agreed sharing of these costs.	
		Implement new funding sources such as traffic impact fee programs, assessments to businesses, direct developer contributions, and the public share. <u>Agency: Public Works/Community Development.</u>
Work with each city and include Park City as applicable to identify new methods of traffic management for major special events in the region.		
	Require traffic management plans for special events, to be submitted by the event organizer.	
		Review plans for conformance and mitigation measures, and release traffic control permits upon approval. Evaluate the review process annually. Agency: Public Works/Engineering/Community Development.
5.2 Alternative Transportation Modes		
GOAL	PRINCIPLE:	ACTION:
Complete the alternative mode plans. Establish plans for cycling / pedestrian and other modes.		
	Expand bicycle parking opportunities at businesses within the Eastern County.	
		Locate and implement where beneficial sites - preferably with business or other complementary services. <u>Agency: Planning.</u>
	Secure adequate transportation funds to build an interconnected trails network.	
		Incorporate key trail improvements into the capital facilities planning. Work with the North Summit Recreation District in improvements and maintenance of the trails. Identify South Summit trails authority: <u>Agency: Administration, public works.</u>
		Work with the non-motorized trails agencies to encourage this form of transportation. <u>Agency: Public Works, Planning, Engineering</u>
Encourage the public to use efficient travel modes.		
	Summit County is a tourist destination with a worldwide reputation as bicycling-hiking area. Opportunities for alternate mode use should be emphasized.	

		The County / Cities should consider implementing the complete streets standard to create a safer / more positive bicycle/pedestrian interface. This plan will work with partners to encourage safe multi modal transportation with signage, striping, symbols, clean roads, bike racks and public education. It encourages integrating bicycle/pedestrian needs into ongoing land use, transportation and economic development plans. <u>Agency: Public Works/Community Development.</u>
Maintain the high quality of transportation as established by Summit County.		
		Support the each jurisdiction in its master planning efforts.
		Coordinate transportation improvements with each supportive entity. <u>Agency: Public Works/Community Development.</u>
Reserve opportunities to insure successful transit. Also, pursue regional transit opportunities, particularly to connect the Kimball's Hub to the Wasatch Front via commuter bus.		
		Future transportation networks will be benefited by accommodation of transit infrastructure.
		Summit County will consider all feasible options to insure successful transit in congested conditions and special events, including: park-n-ride, ride share opportunities, etc. <u>Agency: Public Works/Community Development.</u>
		Coordinate with Park City / UTA to reserve future opportunities in transit.
		Summit County will consider all feasible options to insure successful transit in congested conditions such as special events, including: park-n-ride, ride share opportunities, etc. <u>Agency: Public Works/Community Development.</u>
Consider Big Game movements in roadway design.		
		Wildlife collision are hazardous and costly.
		Summit County will consider all feasible alternatives to improve safety in wildlife crossing of the roadway system. Utah Division of Wildlife services will be consulted. <u>Agency: Public Works/Engineering/Community Development.</u>
5.3 Monitoring		
GOAL	PRINCIPLE:	ACTION:
Annual monitoring of traffic conditions on area roads to report on the effect of planned mitigations.		
		Monitoring road conditions is necessary to understand current conditions and project future conditions.
		Summit County has monitored the area traffic conditions and will need to continue to do so. Cooperation of Communities and UDOT will be sought to further refine the monitoring. <u>Agency: Engineering</u>
Establish an on-going traffic accident review process to evaluate factors contributing to accidents in the area.		
		Review accidents on roads that occur within Summit County annually.
		Based on the review of serious accidents, implement any needed signage, safety or road projects in a timely manner. <u>Agency: Engineering/Sheriff/Public Works/Emergency Services .</u>
		Include traffic accident data in annual transportation report. Include wildlife collisions as available. <u>Agency: Engineering/Public Works</u>
Evaluate transportation facilities annually with long-range vision of the TMP.		
		Prioritize improvements based on new traffic data, identified needs and available funds.
		Review the TMP / CFP annually and update it to take into account the progress on project implementation in an annual report to Community Councils and agencies. Assess goals annually, amend or set new goals only in response to changed conditions. <u>Agency: Public Works.</u>
		Create guidelines for ongoing review of traffic, multi modal opportunities, and parking demands as well as periodic updating of the TMP. <u>Agency: Engineering/Public Works</u>

5.4 Additional Capacity

GOAL	PRINCIPLE:	ACTION:
		Provide additional capacity as needed and prudent.
		Intersections will be evaluated on a case by case basis and consider all appropriate methods to provide a safe and compatible intersection.
		Review of the goals and vision of the respective General Plans and this TMP will be considered prior to making improvements. <u>Agency: All</u>
		Additional capacity will be added based on the defined phasing and comparable levels of service
		Review of the goals and vision of the respective General Plans and this TMP will be considered prior to making improvements. <u>Agency: All</u>
		Currently Summit County, nor does any city, within the County operate or own traffic signals. Those that do exist are State owned and maintained. As with any tool, if justified by comprehensive study, a Traffic Signal may be installed. Required intersection capacity may often be achieved by the use of other means. Safety and performance of roundabouts are well documented and should be considered first. Typical roundabout reduction in crashes is 40%, injury crash reduction of 75% and fatalities of 90% reduction. All user types can and should be considered in intersection development. Numerous other benefits can be listed in delay, environmental, or beautification. Roundabouts can provide a beneficial alternative to other intersection controls for many reasons.
		While not mandated, roundabouts will be carefully considered prior to signal installation. Consideration will include safety, performance, aesthetics, long term cost / benefits, and so forth. <u>Agency: Planning / Engineering.</u>
		Consider methods of Travel Demand Management (TDM) to minimize the need for system expansion.
		Balance roadway expansion that addresses anticipated long-term development impacts with demand management strategies that reduce traffic effects. Many strategies can and are used to moderate the traffic impacts of new development and visitors.
		Ask employers to reduce employee and visitor trips, and to provide incentives for trip reduction. Implement transportation demand management programs where efficient, particularly with high demand users. <u>Agency: Community Development/Public Works.</u>
		Require new developments to implement programs enabling these goals, policies, and actions. <u>Agency: Public Works/Community Development.</u>
		Review plans for conformance and mitigation measures. Evaluate the process annually. <u>Agency: Public Works/Community Development.</u>
		Make the most efficient use of the existing road network before building or expanding roads.
		Arterials and Major Collectors should be mitigated to LOS D. The 30th highest peak hour conditions will be used and individual turn movements mitigated to no less than LOS E during the peak 15-minute movement. Higher demand days (greater than the 30th highest hour) may have some individual turn movements at LOS F during the peak 15-minute movement. Collectors and local streets shall have LOS C in harmony with the desired rural character of the area.
		Enact necessary Code provisions to support and enforce the LOS standards stated above. Administrative application of the above standards will apply in absence of more formal policy. <u>Agency: Public Works/Community Development.</u>
		Transportation needs will be met with the greatest efficiency by reserving transportation corridors.
		Corridors will be set aside and preserved with all development projects proposed. Leveraging of Corridor Preservation Fund will also be used to preserve the right-of-ways needed. <u>Agency: Community Development.</u>
		Consider roadway expansion when traffic conditions show signs of nearing unacceptable levels of service.
		For roadways and intersections, when a 30th highest hourly volume to capacity ratio of greater than 0.49 is exceeded, programming of needed improvements is recommended. <u>Agency: Public Works/UDOT</u>

		This plan will tailor the planned roadway improvement to mitigate the road or intersection's 30th highest traffic congestion conditions, not the most critical seasonal or peak hour condition. <u>Agency: Public Works/UDOT</u>
		Schedule roadway improvements to minimize impact on existing businesses, by phasing needed improvements in appropriate increments or restricting movements only for specific time increments. <u>Agency: Public Works/UDOT</u>
	Appropriate project funds for items on the 5-year priority list.	
		Annual transportation report should provide the County Council, Summit County Council of Governments and City Councils with a 5-year priority list of projects reviewed and recommended initially by County Public Works/Engineering and City staff. <u>Agency: Public Works/Engineering.</u>
Impacts of new development projects shall be mitigated to an acceptable LOS.		
	Traffic analysis will consider long-range impacts of project development.	
		Approval of new development will be contingent on mitigating impact and demonstrating that it can meet established traffic LOS standards at each phase of its build-out. Approval will also depend on status of capital improvement projects and transportation goals. <u>Agency: Public Works/Community Development.</u>
		Projects must consider the near, medium, and long-range impacts on LOS, including construction phases and other traffic as currently entitled. Typically, long range is no less than 25 years and is ideally at build-out. <u>Agency: Engineering/Community Development.</u>
		Allow for plan modification to correct conditions, if conditions are substantially different than expected. <u>Agency: Public Works/Community Development/Engineering.</u>
Street layout and access will be designed to a safe and efficient standard.		
	Enforcing access management standards will work to maximize the efficiency and capacity of roads and corridors in order to stay ahead of growing congestion. As discussed in Chapter 2, there are four basic methods of access management, summarized below:	
	· Limit the number of conflict points · Remove turning vehicles from through travel lanes	
	· Separate conflict points · Provide adequate internal circulation and storage.	
		Proposed access and intersection spacing will follow Table 4.1. <u>Agency: Community Development/Engineering.</u>
<i>Private streets should be constructed to a safe standard.</i>		
	Design engineer is responsible for ensuring safety in these instances.	
		Certified as built by project engineer. <u>Agency: Engineering.</u>

Table 5-1: Access Management Standards ; (Fehr&Peers, Feb. 2005, SBTMP – modified)

Table 5-1 Access Management Standards						
Category	Minimum Signal Spacing (feet)	Minimum Street Spacing (feet)	Minimum Access Spacing (feet)	Minimum Interchange to Crossroad Access Spacing (feet)		
				To 1 st R-in R-out A	To 1 st Intersecti on B	From last R-in R-out C
Arterials (Community/County)	1,320/ 2,640	350/660	200/500	500/ 660	1,320	500
Collector	1,320	300	150	Not Applicable		

6.0 Project List and Development of Alternatives.

The project list is primarily a compilation of the respective communities' road plans with the addition of identified areas of concern. Key alternatives are considered for the Kamas Valley with a recommendation of Democrat Alley paving and Lambert Lane final alternatives analysis:

The central element of a Transportation Master Plan (TMP) is the final projects list as previewed in Chapter 1. As conditions change, so may the list based on; 1) implementation of the improvements; 2) changed condition permitting the removal or modification of the list; 3) additions to the list based on new or unforeseen conditions beyond the scope of the Transportation Master Plan. The list/plan is reviewed annually and updated every 5 years.

Most conditions in Eastern Summit County, improvements do not require the development of alternatives as the options are logical as to project list inclusion. Since this Transportation Master Plan is a planning-level study, minimal description is included here. Sufficient information is provided to designate the needs. Details of design will follow with each during project design phase. There are two cases that specific alternatives are considered in more detail: These are:

- ° Kamas Valley Corridors: Oakley to Kamas along SR-32.
- ° Francis - access to SR-248

With calculated levels of service of the rural network system mostly acceptable (LOS greater than C), other roadway elements need to be considered. These include: general circulation, overall roadway width and alignment, other user considerations / accommodations, etc. These other needs have been identified in review with:

- Each City's and Town's staff and council
- Each City's and Town's General plan, future roadway networks and zoning maps (Appendix B)
- Site visits and analysis
- Public input and so forth

The projects list was developed along with the public hearing process in hopes of additional valuable information being provided.

High level cost estimates were generated to aid in perspective and decision making (See appendix A). Project streets may provide some circulation and reduce some impact to regional streets, but are not considered regional in nature. Many of the individual Cities and Towns listed projects are "project streets", ones that the community would not build unless development creates them. A "project" cost reduction is estimated based on community matching cost. Project streets are not typically regionally required, but are essential for local circulation and access.

Note: Coalville, Francis, Oakley, and Kamas each have future network street plans. Henefer has some concepts but none illustrated. These circulation plans are recommended for implementation as

they provide an excellent community benefit. Each of the communities should detail a connectivity plan to include other forms of transportation.

General phasing of the improvements is recommended. As needs occur, solutions and funding plans are in place and prepared. Phasing will be consistent with other plans: 3 phases of roughly 10 years each. Phase 1, current to 2020; Phase 2, 2021-2030; Phase 3, 2031-2040. An additional category may be added and may be referred to as “Visioning” beyond 2040 or unfunded – such as long-range transportation opportunities are considered.

The following are the key points of this Chapter:

- 6.1 - Inclusive projects:
 - Phase 1 current to 2020
 - Phase 2 2021 to 2030
 - Phase 3 2031 to 2040
- 6.2 - Alternative projects:
 - SR-32 Oakley to Kamas
 - Lambert Lane – Francis to SR-248
- 6.3 - Intersections
- 6.4 - Future Public Transit Conditions
- 6.5 - Future Bicycle Path, Trails and Pedestrian Conditions
- 6.6 - Combination of Projects

As stated, alternative modes of transportation are important to the character of the community. As stated in goals, an entity or authority is needed to maintain South Summit trails and lead / preserve the character of rural access. Alternatively, the jurisdictions could designate private maintenance or a special service area. As traffic increases, shoulders and/or separate routes need to be provided to more safely accommodate all users of the transportation system.

6.1 Inclusive Projects:

These alternatives were developed in working sessions with members of County and the Cities and Town’s staff, joint Community Council / Planning Commission staff, and representatives from UDOT. The constraints (shown in Figure 2-2) included existing topography, open space, conservation easements, and locations of known planned development. The remaining alternatives have been evaluated based on their feasibility, potential impacts, and cost effectiveness. These alternatives were then further subdivided into recommended phases based on expected need.

Additional sources are reports and recommendations associated with system improvements including:

- Each Community Plan
- UDOT recommendations – LRTP drafts etc.
- Short Range Transit Plan
- Trails plans
- Wildlife Studies
- Etc.

From the evaluation of these alternatives, the revised and expanded preferred project list was developed, refined, and further analyzed. The preferred lists below implements the principles identified in Chapter 1 and 5. It is to maximize use of the existing infrastructure prior to undertaking expensive roadway enhancements and expansion.

6.1.1 Phase I (2011- 2020)

The recommended Phase I improvements are listed in Table 6.1.

SUMMIT COUNTY PROJECT
COALVILLE CITY PROJECT
FRANCIS TOWN PROJECT
HENEFER PROJECTS
KAMAS PROJECTS
OAKLEY PROJECTS
STATE - UDOT PROJECTS

TABLE 6.1: Phase 1 projects

Eastern Summit County Transportation Master Plan				
master	Phase 1 Projects	location	type	cost \$K
12	Chalk Creek Road	Coalville to Upton	Add bike lane one side/capacity	\$ 3,332
16	West Hoytsville Rd	Coalville to Judd Ln	Minor Widen / improve	\$ 2,626
17	West Hoytsville Rd	Judd Ln to Wanship	Minor Widen / improve	\$ 747
25	Rail Trail Extension - I-80 Cross	Echo Dam Rd to Echo	Convert RR bridge / connect	\$ 314
26	Rail Trail Extension - Historic	Echo to I-80 underpass	Soft surface - I-80 drainage	\$ 190
31	Hoytsville Trail Head	LDS Church-Creamery Ln	Trail head and trail to Rail	\$ 447
32	Wanship SR-32 Sidewalk	Wanship	Trail	\$ 324
35-B	Browns Canyon Bike Lane	SR-32 to SR-248	Add sidewalk and curb	\$ 9
37	SR-32 Trail : Marion to Francis	Marion to Francis	Add Signing and striping	\$ 392
42-B	Lambert Alt - Hallam North	SR-248 - Francis	10' Paved trail	\$ 2,013
46	Intersection Main - 100 S	SR-248 - Francis	New 2 lane collector	\$ 498
53	100 East Improve	Main / 100 S	Capacity increase - 80 S School	\$ 372
56	New 200 North	100 N (Chalk Crk) to 100 S (School)	Widen - curb - walk	\$ 205
74	Main Street walk	Main to Industrial Rd	New 2 lane collector	\$ 44
79	SR-65 - S Henefer Rd	Main to new LDS Church site	Sidewalk	\$ 84
80	300 W Right-of-way	SR-65 South Henefer Intersection	Right-of-way / Minor Widen	\$ 423
93	Main Street - upper	200-300N	New street	\$ 216
97	Pedestrian improvements	Weber Canyon Rd to 4750 N Rodeo grounds to new ln to center	10' multi use trail	\$ 555
103	SR-32 Wanship Walkway	Rail Trail head to Rafter B	6' walk / curb	\$ 324
101-A	SR-32 Widen Oakley/Kamas	New Ln to Kamas/SR-248	expand to 5 lane	\$ 13,951

Between the 1950s and mid 1970's Summit County proceeded to extend Chalk Creek Road from the Utah/Wyoming Corner to Mirror Lake Highway (SR-150). See attached map and deeds recorded such as M-68 (1975) and U-137 (1951). Completion of the corridor would be costly (\$10M) but may have general benefit in reduced travel (25 miles shorter than I-80 to the north slope of the Uintas) and promote general recreational opportunities. Additional research is needed and recommended as a project for Phase One of the E-TMP. Study should include: funding sources such as the Special Service Area #8 and Grants, fiscal impact (specifically to the Coalville area), costs of maintenance construction and right-of-way, and legal matters relative to emergency services needed to the existing cabin area, and alternatives. Updates of the E-TMP should reflect the findings.

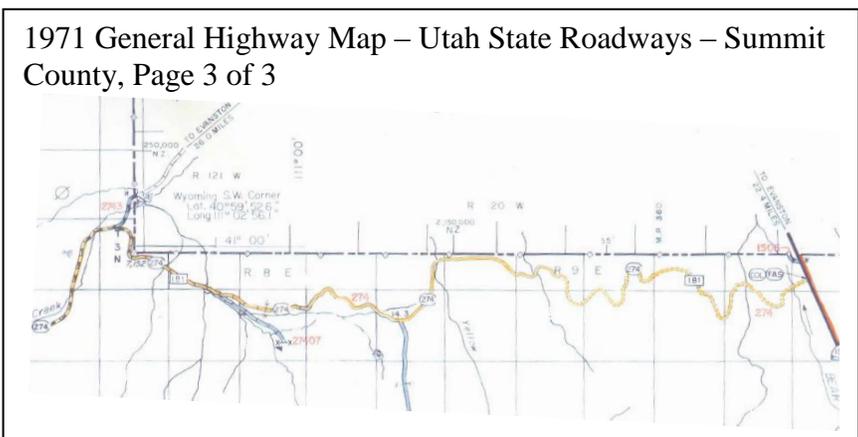
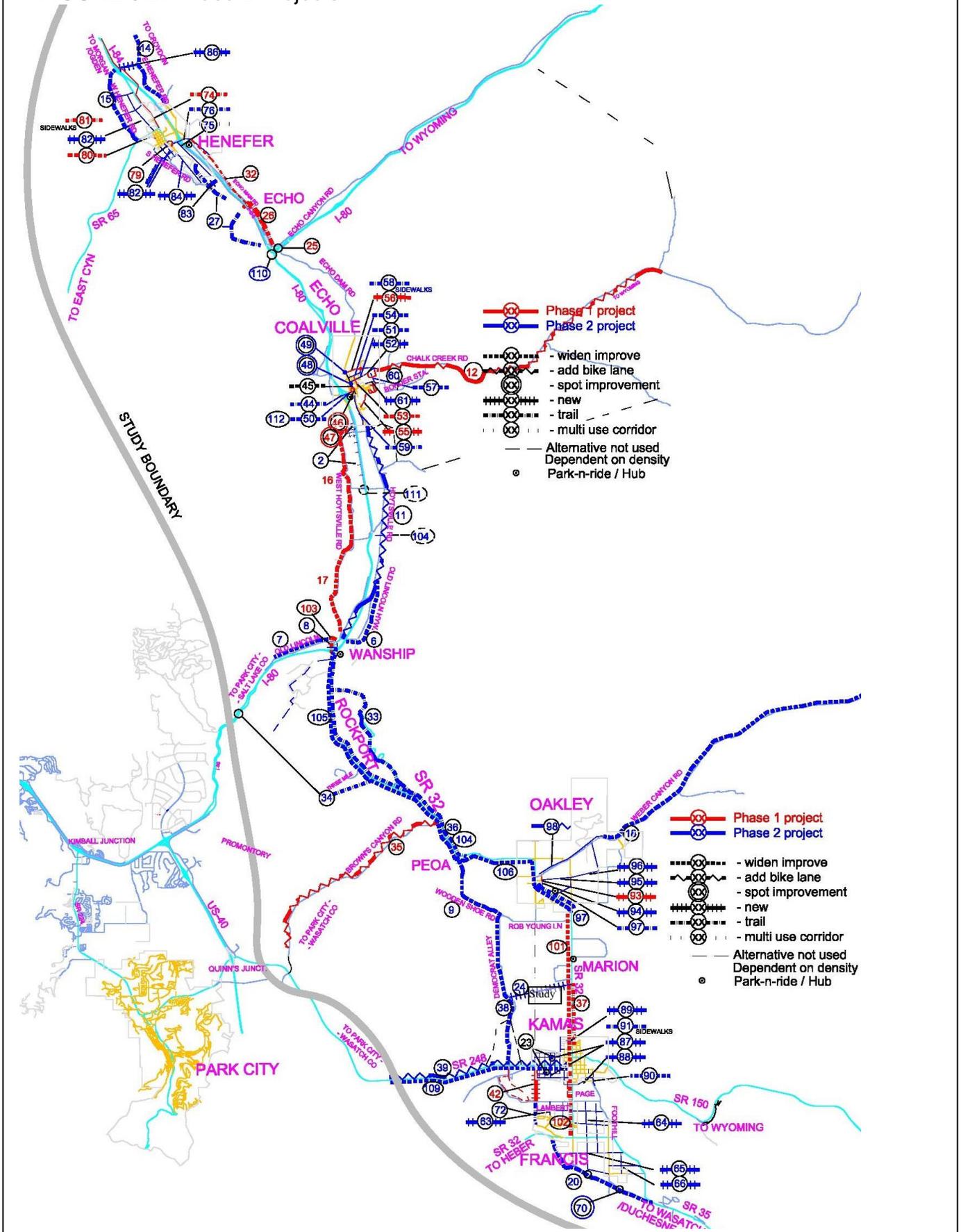


TABLE 6.2: Phase 2 Project

Eastern Summit County Transportation Master Plan				
master	Phase 2 Projects	location	type	cost \$K
2	South Coalville Frontage Pav	Coalville to Creamery	Multi use corridor	\$ 453
6	Old Lincoln Hyw	County Shop to Wanship	Minor Widen / improve	\$ 675
7	Old Lincoln Hyw	Wanship to Blue Sky Ranch	Minor Widen / improve	\$ 631
	Wanship Town Site			
8	Improvements	Wanship streets	Minor Widen / improve	\$ 141
9	Woodenshoe	Peoa to Democrat	Shoulder and align Add bike lane one	\$ 1,273
11	Hoytsville Road	Coalville to Wanship	side/capacity	\$ 2,739
14	East Henefer Road	Henefer to Morgan Co.	Minor Widen / improve	\$ 1,753
15	West Henefer Rd	All	Minor Widen / improve	\$ 2,607
18	Weber Canyon Rd	Oakley to end	Widen / turn lanes / capacity	\$ 2,601
20	Lower River Road	Francis / all	Widen / shoulder / align	\$ 2,009
	Kamas Valley Cross		Consider a new 2 lane	
24	Connection	Marion	collector – study only	\$ -
27	Rail Trail - Weber River	Echo to Henefer	Soft surface river access	\$ 1,024
29	Hoytsville Road - Ped Trail	Coalville to Wanship	10' multi use trail	\$ 7,344
30	Rail Trail Access	Judd, Hobson	Trail head parking	\$ -
33	East Side Rockport Trail	Rockport Reservoir	10' recreational trail	\$ 2,142
38	Democrat Alley Pav	Woodenshoe to SR-248	24' pave / align	\$ 3,847
44	Bridge over I-80 Ped Friendly	Frontage Road to Frontage Rd	Separated Ped lane	\$ 217
47	School Road Access	now park	Alternatives	\$ -
50	SR-280 : 100 South Widen	Main to I-80	Widen - curb - improve	\$ 868
51	50 North Widen	Main to 350 East	Widen to 3 lane	\$ 432
52	50 North Extend	350 East to Chalk Creek	New 2 lane collector	\$ -
54	100 North (Chalk Creek)	Main to Industrial Rd 400 S to Old Farm Road-New	Widen to 3 lane	\$ 611
55	Beacon Hill Dr.	Lane	New 2 lane collector	\$ 104
57	School Road (700 E)	Boarder Station - 150 North	New 2 lane collector Add bike lane one	\$ -
59	Hoytsville Rd/Main S Bike Ln	Main to S to County	side/capacity	\$ 478
61	Boarder Station Widen	within the City	Minor Widen / improve	\$ 306
68	Lambert Ln / Page Ln Widen	All	Minor Widen / improve	\$ 522
69	Spring Hollow	All	Minor Widen / improve	\$ 461
70	South Willow Way-Lower River	Intersection	Intersection improve	\$ 683
72	Hallam Road Trail	Wild Willow to Lambert	trail	\$ -
75	South Echo Frontage	SR-65 - to County	Multi use corridor	\$ 203
76	Echo Main-Old Hyw 30 Trail	In City Limits	Widen for trail	\$ 582
81	Pedestrian improvements	Various	Sidewalk	\$ 473
83	Franklin Canyon Connector	Franklin Canyon to Frontage	New 2 lane connector	\$ 360
88	500 North	100 W to SR-32	New 2 lane collector	\$ 249
89	Foot Hill Drive	All to County	Minor Widen / improve	\$ 370
94	Main Street - lower	4750 N to SR-32/Polar King	New street	\$ 464
98	Weber Canyon Rd - Bike lane	SR-32 to County	5' widening	\$ 2,110
36-A	SR-32 Trail : Wanship - Oakley	Wanship - Oakley Kamas / SR- 248 to Francis / SR-	Soft Separated trail	\$ 1,100
102	SR-32 Widen - Kamas/Francis	35 Wanship Rafter B to Oakley New	12' widen	\$ 4,432
104	SR-32 Wanship / Oakley Trail	Ln	Soft surface separated trail	\$ 3,966
105	SR-32 Widen - Wanship/Browns	Rafter B to Browns Canyon	12' widen	\$ 15,247
106	SR-32 Widen - Browns/Oakley	Browns Canyon to Oakley Nw Ln	12' widen	\$ 21,801
109	SR-248 - 4 Lane	Kamas to Wasatch Co	widen	\$ 15,958
112	SR-280 : 100 South Widen	Main to freeway ramps	Widen / improve	\$ 1,779

FIGURE 6.2: Phase 2 Projects



6.1.3 Phase III (2031-2040)

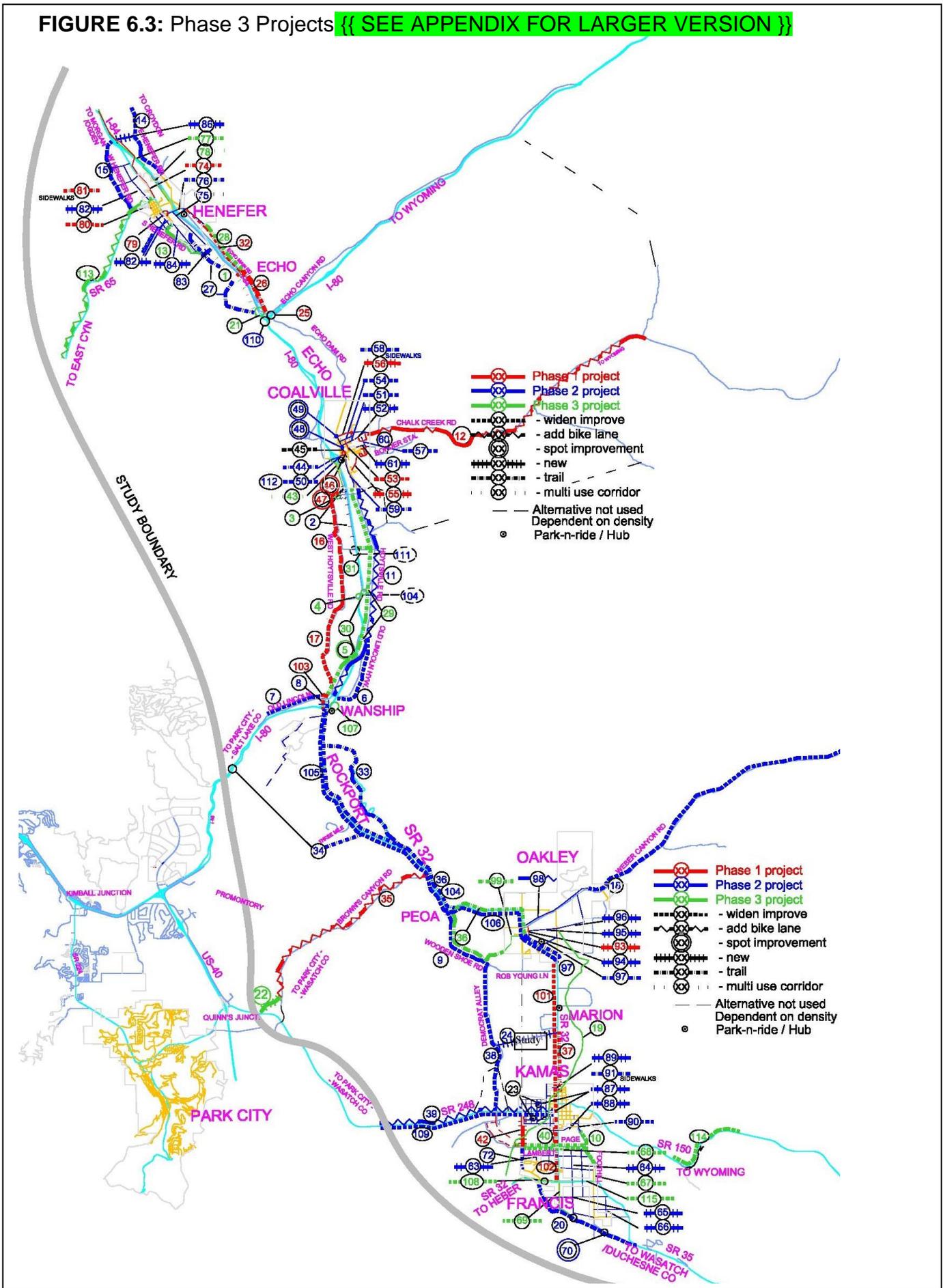
The Phase III improvements are listed in Table 6.3. The recommended Phase III improvements are shown in Figure 6.3.

TABLE 6.3: Phase 3 Projects

Eastern Summit County Transportation Master Plan				
master	Phase 3 Projects	location	type	cost \$K
1	South Echo Frontage	Echo to Henefer	Multi use corridor	\$ 243
3	Hobson Frontage Intersection	Hobson Lane Frontage	Intersections improve - safety	\$ 101
4	Judd Lane Frontage Intersection	Judd Lane Frontage	Intersections improve - safety	\$ 50
5	South River Bend Frontage	Judd to the end	Multi use corridor-trail head	\$ 21
10	Foot Hill Drive	Francis to Kamas	Minor Widen / improve	\$ 708
13	South Henefer Road	Henefer to the end	Minor Widen / improve	\$ 2,548
19	Weber-Provo Diversion Trail	Oakley to Francis	Trail	\$ 3,934
21	South Echo Frontage Alignment	In Echo	Intersections improve	\$ 186
22	Browns Canyon	Near Wasatch Co	New truck by pass	\$ 486
28	Extend Historic Trail	I-80 under pass to Henefer	Soft surface - single track	\$ 1,131
40	Lambert to Page Trail	Hallam to Foothill	Soft surface trail	\$ 2,315
35-A	Browns Canyon Bike Lane	SR-32 to SR-248	Widen shoulder	\$ 3,462
36-B	Woodenshoe Trail Peoa to Oakley	Peoa to Oakley	Soft Separated trail	\$ 3,708
43	500 South Frontage	SR-280 to Hobson	Multi use corridor	\$ 331
48	Intersection Main - 50 N	Main / 50 N	Capacity increase	\$ 556
49	Future Intersection Main - 200 N	Main / future 200 N	Capacity increase	\$ 616
67	Foot Hill Drive	SR-35 to County	Minor Widen / improve	\$ 395
77	Weber River Trail Extend	N. Henefer Frontage Road to Morgan County	Soft surface trail	\$ 938
78	N Henefer Frontage Rd	SR-65 - to end	Multi use corridor	\$ 408
85	NW Henefer exit to E Henefer Rd	Exit toward Croydon	New Bridge - 2 lane connector	\$ 399
99	Pedestrian improvements	Cow alley to County/Peoa	Soft Surface	\$ 791
107	SR-32 Wanship other ramp	Modify Ramps	? Needed	\$ 2,450
108	SR-32 Widen Francis/Wasatch	Francis Main to Wasatch Co	Minor Widen / improve	\$ 4,445
113	SR-65 - Bike Lane	Henefer to Morgan Co.	Add bike lane one side/capacity	\$ 2,259
114	SR-150 - mirror lake hyw	various	Minor Widen / improve	\$ 25,922
115	SR-35 - Francis Widen	SR-32 to Foothill	Minor Widen / improve	\$ 5,506

SUMMIT COUNTY PROJECT
COALVILLE CITY PROJECT
FRANCIS TOWN PROJECT
HENEFER PROJECTS
KAMAS PROJECTS
OAKLEY PROJECTS
STATE - UDOT PROJECTS

FIGURE 6.3: Phase 3 Projects { SEE APPENDIX FOR LARGER VERSION }



The total cost estimated for all phases is \$200 million, with almost ½ inclusive of inflationary cost over the 28 year plan. UDOT Cost are \$112-118M. UDOT already has programmed \$111M in their projected Long Range Transportation Master Plan for the subject area.

6.1.4 Vision / Other Categories

Henefer to Croydon Route from the West Henefer Exit over the Weber River and the Railroad tracks. With a realistic growth in the Henefer and Croydon areas the connection will reduce out of direction travel sufficient to justify further study of the connection.

A road connecting I-80 to Chalk Creek – Not justified based on current projected density.

Rail Trail paving – as an alternative transportation corridor, a study may consider the benefits and disadvantages / costs of paving the rail trail.

6.2 Alternatives analysis:

Two major conditions that require detailed alternatives analysis:

6.2.1 Lambert Lane – Francis to SR-248

6.2.2 SR-32 - Oakley to Kamas : Kamas Valley Corridor

6.2.1 Lambert Lane

6.2.1.1 Background

The most common access to Francis from SR-248 is through Kamas and south along SR-32. Increasingly, South Democrat Alley is used to access Lambert Lane. What should the future of the long term access be? The following 4 general alternatives are considered, see figure 6.4 .

6.2.1.2 Alternatives

A – No significant improvement – leave current alignments / widen SR-32

B – Hallam Road due north to SR-248

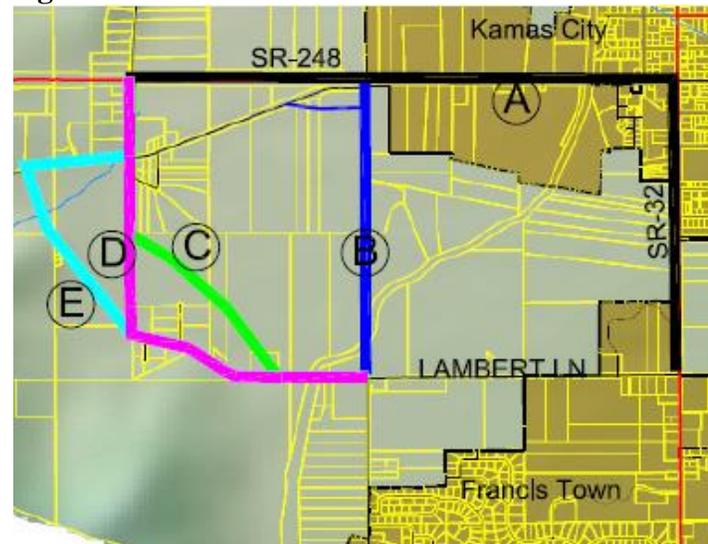
C – Lambert Lane realignment to SR-248

D – Democrat Alley extended to Lambert Lane

E- Existing Lambert alignment

Factors to consider in evaluation of the alternatives: Cost, acres impacted, bridging the Weber-Provo Diversion, commercial area planning, etc. The County Travel Demand Model at Zoning Build-out was used to evaluate traffic impact and effectiveness of the alternatives. Again, travel time is the major factor in expected use of the road and the value of the project.

Figure 6.4: Lambert alternatives



A – No significant improvement – leave current alignments (Est. Cost. \$1.2M, State funds)
By not providing an alternative route, it appears that SR-32 from Kamas to Francis will need to be a five-lane roadway in the 2040 analysis (2 lanes each way plus a center turn lane.)

In alternatives B and C, a three lane road may be sufficient. The out of direction travel (back west on 200 S, then south and east on Lambert Lane will preclude the need of significant enhancement to the current alignment on SR-32 based on expected 2040 volumes. Also in options B and C, minor alignment and improvement changes are needed on the existing roadway segments. These differences in the options are considered in cost estimating.

B - Hallam Road due north to SR-248 (Est. Cost. \$2.0M, State, County, City, etc)

This alternative would require a new crossing of the Weber-Provo Diversion channel. A primary advantage of this alignment is the connection to the end of the proposed Kamas City Commercial area. Services are readily available and lengthening the commercial zoning is less encouraged by a major intersection further removed from the commercial zone. The east end of 200 South would need to be realigned to match Kamas’s proposed street network. The approximate average daily traffic (ADT) in 2040 would be around 3,000. Fewer landowners would be involved and Francis Town appears to currently hold some ownership interest in the required right-of-way.

C – Lambert Lane realignment to SR-248(Est. Cost. \$2.3M, County, City, etc)

This alternative is the most effective at pulling traffic off of SR-248 (7,000 ADT) and has the longest new alignment. It would use the current Lambert Lane crossing of the diversion canal and traverse diagonally from SR-248 to Francis. The greatest number of property owners would be involved/impacted/benefited in this alignment.

D – Democrat Alley extension to Lambert Lane (Est. Cost. \$2.3M, County, City, etc)

This alternative would extend Democrat Alley due south to Lambert Lane. Lambert lane would also require some improvement. This is the smallest of the new alignments options, but runs adjacent to the two subdivisions (little ‘project street’ benefit) and projected effectiveness of a 45 mph roadway is modest, 2,500 ADT.

E – Widen Existing Roads (Est. Cost. \$1.7M, County, City, etc)

This alternative would widen Democrat Alley, 200 South and Lambert Lane. Perfection of and expansion of the right-of-way is required, but no new corridors would be designated. Based on travel demand – little capacity benefit would result based on the travel demand model therefore Option A would likely still be required.

6.2.1.3 Conclusion:

Based on long-term community benefits – Alternative B, to preserve and construct a Hallam Road due north to SR-248, is recommended. This provides the best community circulation with minimal out of direction travel.

Table 6.4: Summary of alternatives – SR-248 to Francis

	A	B	C	D	E
Cost(\$M)	1.2	2.0	2.2	2.3	1.7
Effective	Existing	yes	most	okay	min
ADT	Existing	3,000	7,000	2,500	0
acres	0	8.48	9.33	5.27	5.37
Community Impact	okay	best	fair	fair	min
Rank	2	1	4	3	5

6.2.2 Kamas Valley Corridor.

To analyzed major corridors north of SR-248, routes to and including Peoa or Woodenshoe need to be considered. The future of Democrat Alley is also addressed.

6.2.2.1 Background / Summary

For many years, the concept of a parallel corridor to SR-32, from Oakley to Kamas, has been considered, roughly from Mill Race due south to SR-248 at 200 South. In summary: the expenses and impacts of the alignment need to be carefully balanced with the transportation needs of the Valley. Based on existing and projected zoning: Expansion of SR-32, use of the Democrat Alley and a cross connections are recommended.

6.2.2.2 Alternatives: See Figure 6.5

- A – Use the current alignment – of SR-32.
- B – Mid Valley Corridor, Mill Race due south to SR-248.
- C – Democrat Alley corridor improvement.
- D – Eastern Valley corridor – (not further considered herein based on cost / benefit and probable impact).

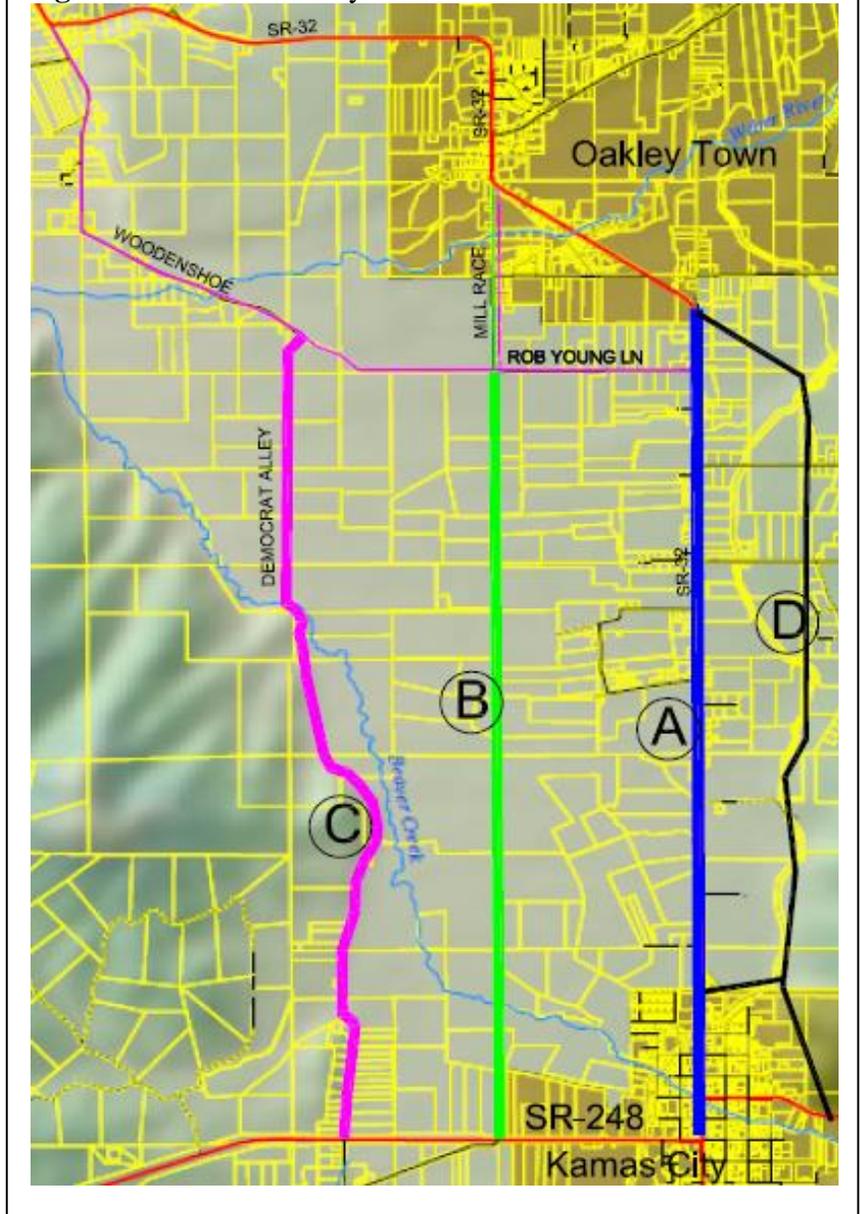
Factors to consider in evaluation of the alternatives: Cost, acres impacted, general area planning, etc. The County Travel Demand Model was again used at Zoning Build-out to evaluate traffic impact and effectiveness of the alternatives. Again travel time is the major factor.

A – Use the current alignment (Est. Cost. \$13.2M)

The concept herein would be to expand existing routes (SR-32) to the extent that sufficient capacity is provided. From Highway Capacity Manual review, the major concern is the access control. Currently there are fewer than 40 access points per mile along the roughly 3.5 mile segment from Oakley to Kamas. The Highway Capacity manual

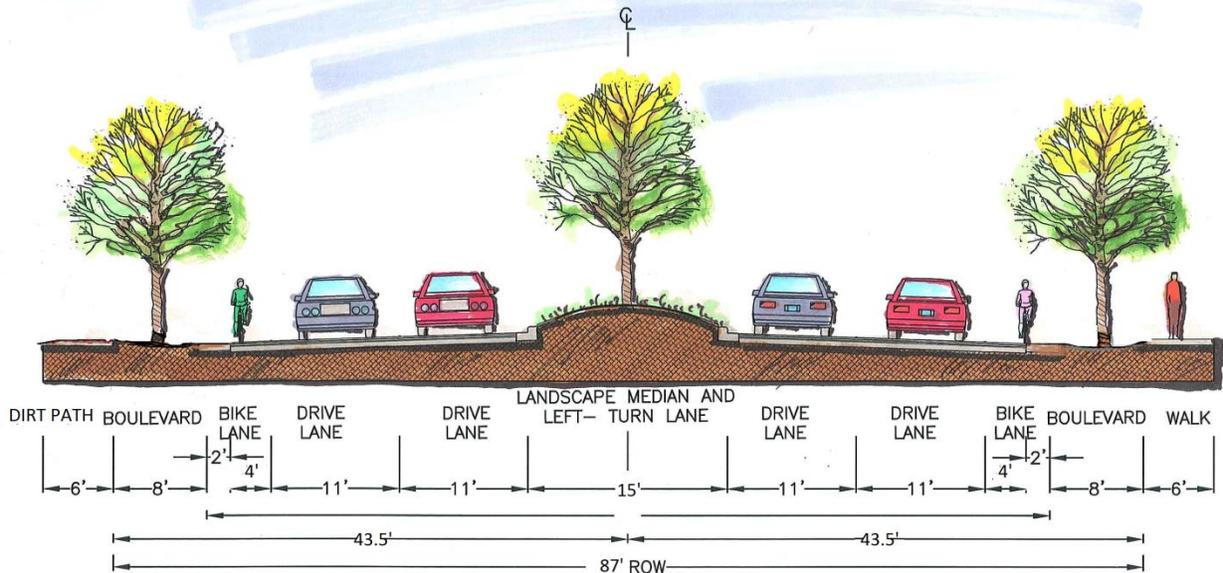
lists 40 access points per mile as threshold before capacity is reduced. Within Kamas city, greater than 40 exist per mile. The current vehicle count is around 6,500 with a projection of 8,900 by 2025 / 'entitled' and just under 16,000 ADT at zoning 'build-out' or 2040. The later would require a 5 lane roadway. The multi use characteristics (agriculture, cyclist, etc.) reduce capacity currently and varied uses are expected to continue to reduce the capacity in the future. Existing right-of-way is around 100 feet in most areas. Within Oakley,

Figure 6.5: Kamas Valley - alternatives

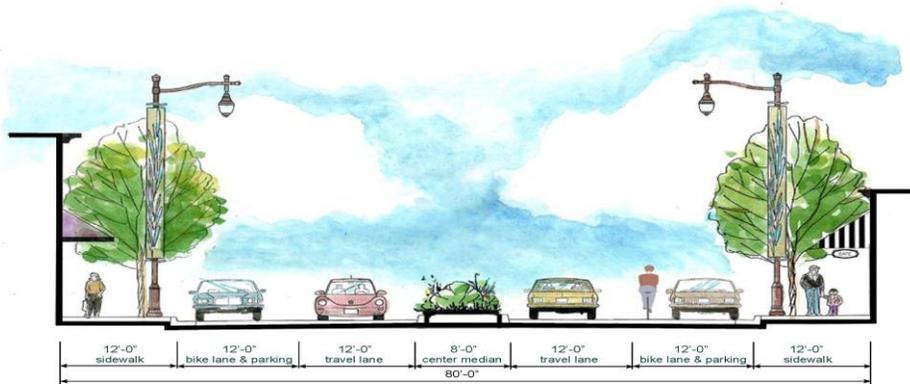


limitations of right-of-way exist. Right of way narrows to around 60 feet and may be prescriptive (not dedicated or part of the adjoining lot). Probable typical street sections are recommended as illustrated below.

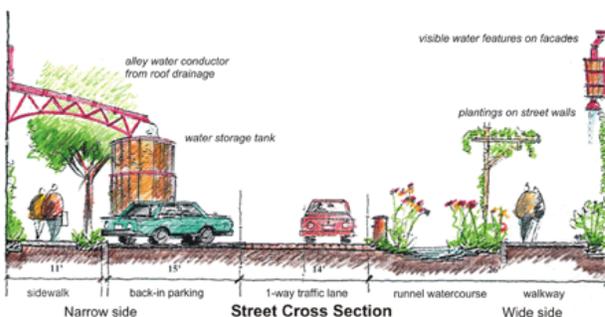
County portion: typically around 99' of Right-of-way exists between the fences.



Within the communities: speeds are reduced and transition of speed and street character is recommended.



Design Notes:
Street light poles carry thematic art. No trees in center medians.



To the extent possible, accesses need to be minimized, combined or eliminated. See Access control discussion in Chapter 2. Medians and some limitations on turn movements is needed to improve safety and capacity.

B – Mid Valley Corridor: Extend Mill Race due south from Oakley to SR-248 (Est. Cost. \$16.5M)
The concept was modeled in the County Travel Demand Model. In summary: If Mill Race were increased in speed to around 50 miles per hour and extended the 4 miles due south, only around 5,000 vehicles per day would use it in the build out, assuming a reasonable remaining capacity on SR-32. The primary advantage of the corridor is relief in the event of an emergency closure of SR-32. Minimally, a 60' right-of-way would impact 30 acres not including secondary development impacts.

If SR-32 were not expanded and service became very poor, then the Mid-Valley / Mill Race road would become beneficial. Thus a primary concern is that even with the mid valley corridor, SR-32 capacity needs to be incrementally expanded. The Mill Race extension would not readily eliminate the need for SR-32's improvements.

Whereas existing zoning and proposed uses are restrictive, the need for the corridor is not expected to be needed in the foreseeable future. Should Oakley, Kamas or Summit County change the long-range vision of the Valley, creating significant addition transportation demands, the corridor does not appear to be justified.

C – Democrat Alley corridor improvement (Est. Cost. \$4.4M)

Again, using the Travel Demand Model, improvement of the Democrat Alley corridor was analyzed in the build-out state. To enable travel times to be beneficial as a major transportation corridor, Woodenshoe, Rob Young and Mill Race would also need to be improved for the preferred travel pattern to shift to the corridor, again assuming a reasonable LOS remaining on SR-32. Even with the Democrat Alley improvements, SR-32 would need to be increase in capacity.

6.2.2.3 Conclusion:

Based on costs and effectiveness of the long-term solution – the recommendation is Option A: Use the current alignments. Additional analysis and comparison of other standards does not exclude elements of option C - Democrat Alley improvements.

The primary concern is access control on SR-32. To the extent possible, accesses need to be minimized, combined or eliminated. See Access control discussion in Chapter 2. Medians and some limitations on turn movements are needed to improve safety and capacity on SR-32.

Study

Cross-valley circulation is also recommended for further study. The need is primarily for emergency circulation. Additional modeling was done to roughly simulate an emergency closing event on SR-32. While the ideal case would be for the Mid Valley Corridor to provide relief with cross-valley connections, Democrat Alley provides essential circulation if one or two cross-valley connector roads were provided. In Chapter 2, collector roads are discussed as being every mile. At two points cross connections should be provided to improve access and circulation, though only one is likely to be consider based on the rural zoning proposed. Thus: SR-32 remains an Arterial Street and the cross streets and Democrat Alley ultimately become collectors. This cross connection would be primarily developed as a 'project street'. Street sections would be roughly as illustrated above for SR-32. Collectors would be to minimum County standards.

	A	B	C	D	X Study
	Existing ROW	MID VALLEY	DEMOCRATE	EASTERN CORRIDOR	CROSS CONECTIONS
Acres of New ROW	~2 – very little needed more	29.36	16.18 – if a major road	Rough guess 40	14.60
Cost	\$13M	\$16M	\$4.5M	\$~20M	\$5.5M
ADT	Existing	5,000	2,000	unknown	n/a – minimal
% project / Remainder by	0% / UDOT	50% / County	25% / County	25% / County	75% / County
# of property owners, visibility,	62 Kamas most commercial 164 County mix commercial, vacant, and residential 33 Oakley, mix	1 Kamas 42 County all new 17 Oakley, mostly residential	47 County + Rob Young / Woodenshoe	~ 30 + Highstar – existing 100E / 400N.	to be determined
Key Notes	Mid Valley is the only one that may keep UDOT from expanding to 5 lane		Likely exceed 400 ADT – so paving is a good idea- The only way to draw regional traffic is to increase speed in Woodenshoe	High impact	Minor roads only – choose 1 or 2 locations: Grant minor additional development right for project

6.3 Future 2040 Intersection Enhancement

An important issue in an estimate of future traffic is signal requirements and intersection capacity. Using the results of the future traffic projections, several intersections were identified where the future traffic volumes will exceed the current intersection capacity, see Table 6.5.

Major Street	Minor Streets
SR-32	All
To Kamas SR-248	All
Coalville - SR-280	Main
SR-32	Hoytsville Road
Coalville Main	Chalk Creek, Center

Summit County operates with an administrative roundabout first policy. Traffic signals should only be installed when and where they are warranted and an intersection justification review provided. Evaluation is based on the Manual on Uniform Traffic Control Devices (MUTCD) handbook produced by the *Federal Highway Administration*. The above intersections will meet one or more of the traffic

signal warrants identified in the MUTCD within the next 30 years. Prior to any County signalization, a detailed review of NCHRP-672 (Roundabout implementation) Section 3.6 etc will be required. This should include macro considerations of capital cost and incremental long-term benefits.

Interstate Ramps are expected to perform to an acceptable LOS. Minor maintenance improvements may be needed.

As the traffic volumes increase within the study area, each of these intersections will become more congested. Interim improvements may be required before the ultimate intersection build out is necessary. These improvements could include one or more of the following upgrades to enhance the operational characteristics of the intersection.

- Intersection control upgrades (one or two way stop to four way stop, etc.)
- Intersection realignment
- Development of left or right turn pockets
- Development of acceleration/deceleration lanes

6.4 Future Public Transit Conditions

The draft Short Range Transportation Plan by Park City and Summit County for the Snyderville Basin considered services outside the area to improve services within the Basin. This includes options to service Eastern Summit County as well as potential connections to Salt Lake and Heber. In general, unless a service meets adopted transit service policies of 10 riders per hour, it is not recommended. Based on that criterion, the following potential services were analyzed. Of these, only the Kamas winter commuter service met the adopted standard and should be considered currently. A 2040 estimate is herein provided by a rough estimate of doubling the ridership based on a roughly doubling of the population. Year round Kamas service may be advisable and should be considered in the long-range projections.

Table 6.6: Transit Demand estimates

Community	Service Type	Season	Riders / hour	
			2015	2040
Kamas to Oakley	Lifeline*	Year Round	3.5	7.5
Kamas	Commuter	Winter	13.6	27.2
Kamas	Commuter	Non-Winter	6.2	12.4
Coalville	Lifeline	Year Round	1.4	2.8
Coalville	Commuter	Winter	4.0	8.0
Coalville	Commuter	Non-Winter	2.9	5.8
Meets the standard				

* Lifeline service is defined as a very limited service designed for transit dependent residents of smaller communities, providing scheduled service into a larger urban center, typically for shopping, medical or social service purposes. While it may be offered more than one day per week, for purposes of this analysis service one day per week (such as every Tuesday) is assumed, with a morning run scheduled to arrive in Park City around 9:00 AM, with a departing run scheduled to depart around 3:00 PM. Once in Park City, of course, passengers could travel around the existing transit service area on other transit routes. A service from Coalville could also serve stops in Kimball Junction.

Based on these findings, a standalone services would not be recommended. However in the long range, opportunities should still be considered such as: rideshare and park-n-rides to promote wise travel opportunities.

6.4.1 Park and Ride Lots

Potential park and ride lots should be included with facilities typical of a commercial hub. The user could change travel modes before entering the Park City area and possible connections to the Wasatch Front via the Kimball Junction. These potential park and ride lot locations would be adjacent to the potential transit hub but most likely a general commercial area. A multi use area is recommended.

Three types of park and ride lots are estimated with respective size and scale to provide trip reduction needs and service.

All of the park and ride lots would need to be designed to work harmoniously within the context of the area place: Commercial, institutional, etc.

Table 6.7: Park-n-Ride Sizes

Type	Approx. size (acres)	Approx. car capacity
1. Regional *	10.0	750
2. Commercial	1.0	110
3. Residential	0.5	55

* not likely required in the subject area.

6.5 Future Bicycle Path, Trails and Pedestrian Conditions

Summit County is a tourist destination with a worldwide reputation as bicycling-hiking area. With the growth of residents and tourism that has been projected, it is time to integrate bicycle/pedestrian commuting facilities into the transportation network.

Cycling development plan: While further refinement of cycling plan is recommended, it is intended to reasonably traverse the entire plan area with minimal conflict with motorists. In the project list, all major routes will accommodate a bike lanes. Minor routes, though not designated as a bike lane, will be widened to the County standard of 24' of paved surface. This widening allows for separation of uses though not a formal designation of a "bike" or "pedestrian" way.

North Summit Recreation and others provide recreational and transportation trail system that can assist in diverting increasing numbers of trips from the road network to the trails system.

6.6 Combination of projects.

Figure 6.6 shows all of the recommended road improvements identified in the Plan. Table 6.8 projects the 2040 travel levels of service, as proposed.

Figure 6.6: All Recommended Improvements {{{ SEE APPENDIX FOR LARGER VERSION }}}

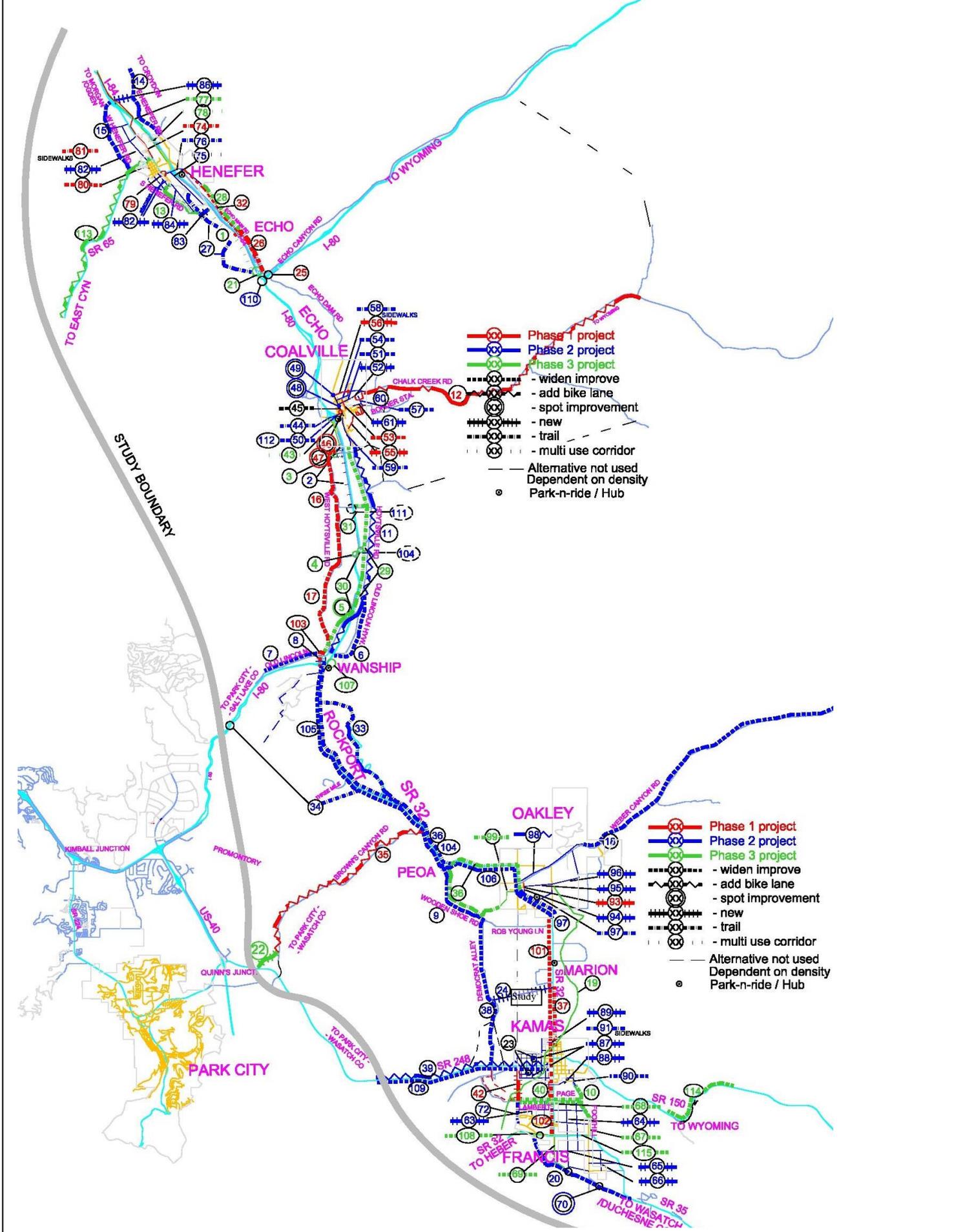


Table 6.8 Future LOS estimate on the new Street network.

Road name	location	ADT	LOS	Road name	location	ADT	future network
Chalk Creek Road+center	Near main	4546	a				
Chalk Creek Road	N of Brd Sta. Rd	2276	a	State Routes - In Cities			
Chalk Creek Road	N of South fork	2041	a	Coalville - SR-280	From I-80 to Main Street	10749	c
Creamery Lane	near hoyt rd	395	a	Oakley SR-32	S of new lane	15952	c
Echo Main Road	henifer end	2081	a	Kamas SR-32	Between Signals	19940	d
Echo Main Road	I-80 end	1944	a	Kamas SR-32	S toward Francis	12773	d
Echo Dam Road	near Coalville	1948	a	Francis SR-32	North of intersection of 35	12623	d
Echo Dam Road	near i-80	895	a	Francis SR-35	Near 32	10937	c
Echo Canyon Road	south end	695	a	Henfer - SR 86	Near 100 S	5280	b
East Henefer Road	near Morgan co	167	a			0	
East Henefer Road	pre land fill	3544	a	State Routes - In County		0	
Hoytsville Road	near 32	2353	a	I-80	Wanship	35402	c
Hoytsville Road	north of shop	2254	a	I-80	Coalville	30385	c
Hoytsville Road	near Coal city	2287	a	i-80	Above Echo	23883	b
Judd Lane	near hoyts rd	451	a	i-80	Wyoming	29309	c
South Henefer Road	near city	1386	a	I-84	Near I-80	17545	b
Old Lincon Hyw	near 32	437	a	I-84	Morgan County	18329	b
West Henefer Road	near 65	1598	a	SR-32	I-80 end - in Wanship	4749	b
2nd South, Kamas	200 south nr 248	1433	a	SR-32	s of I-80 to browns	6045	b
Brown's Canyon Road	top	8118	a	SR-32	N of Peoa	9727	c
Brown's Canyon Road	near 32	6579	a	SR-32	Marrion	16016	d
Democrat Alley	south of 248	1689	a	SR-32	Wasatch County	4671	b
Millrace Road	near Rob Young	400	a	SR-150	out of Kamas - samak	2274	a
New Lane	near 32	3684	a	SR-35	west side of Francis	1387	a
Rob Young Lane	near 32	1063	a	SR-86	N of Henefer	1671	a
Weber Canyon Road	in oakley - near the diner	6615	a	SR-65	Near Henefer	595	a
Weber Canyon Road	n of dump sta	3045	a	SR-248	near Kamas	14767	c
Weber Canyon Road	n of oaklev @40 mph	7240	a				

KEY PROJECT NOTES

- 1: Most intersections that require improvements will be addressed with the street improvement. Few are not associated with UDOT improvements.
- 2: A transportation master plan is not a maintenance plan – cost to rebuild and maintain are not considered here: good practices are required to program the required maintenance.
- 3: Current County public road minimum standard is 24 feet. AASHTO minimum should be a minimum standard in all cases where road width wider than 24 feet are required. This is the traveled surface only. Right-of-way is typically 60’ or greater.

6.7 UDOT Long Range Transportation Master Plan Comparison

Table 6.8 contains a line by line comparison to the UDOT Long Range Plan. Generally costs are comparable, though in this plan, projects have a broader use of the funding. This plan breaks the UDOT project into smaller pieces as shown.

Table 6.8: UDOT Long Range Plan Comparison.

Eastern Summit County Transportation Master Plan				UDOT Long Range Transportation Plan	
		Cost Est.(\$K)		Cost Est. (\$K)	project #
101-A	SR-32 Widen Oakley/Kamas	13,951	SR-32	38,000	09-222002-S01
102	SR-32 Widen - Kamas/Francis	3,252	SR-37		"
103	SR-32 Wanship Walkway	8	SR-38	69,000	09-222002-S02
104	County #36 SR-32 Wanship / Oakley Trail	1,017	SR-39		"
105	SR-32 Widen - Wanship/Browns	15,247	SR-40		"
106	SR-32 Widen - Browns/Oakley	21,801	SR-41		"
107	SR-32 Wanship other ramp	2,450	SR-42		new Study
108	SR-32 Widen Francis/Wasatch	4,445	SR-43	4,000	09-222016-M01
109	SR-248 - 4 Lane	15,958	248	R-3 near	09-326024-S03
110	I-80 / I-84 Capacity	135	I-80		? If needed/grades
111	I-80 Judd or Creamery Ln Exit	0	I-80		not needed
112	SR-280 : 100 South Widen	994	280		new Coalville TMP
113	SR-65 - Bike Lane	2,259	SR-65		new
114	SR-150 - mirror lake hyw	25,922	150		new Study
115	SR-35 - Francis Widen	5,506	SR-35		new Francis area TDM
TOTAL COST ESTIMATES (\$K)		112,945	difference 1,945	111,000	

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7.0 Plan Implementation / Management:

*Recommended to be adopted by County Ordinance and Town and City
Resolution*

Key elements of implementation are:

- 7.1 Adoption
- 7.2 Reporting
- 7.3 Funding

7.1 Adoption:

As a County sponsored plan, public notice and processing will be provided by Summit County via Engineering Department. Each Town and City will have the opportunity to comment and adopt as best suits each, though concepts are provided in Appendix D. Options generally include: from highly integrated funding to a County only plan.

The most integrated alternative plan adoption is by ordinance inclusive of the inter-local agreements and cost sharing arrangements. This would also mandate the most effective traffic coordination but maybe viewed as a loss of autonomy. This level of coordination, though highly effective is generally viewed as over reaching in preliminary reviews.

Many middle ground options include individual Ordnances and Resolutions with an agreement to continue coordination. Funding may not be as interrelated as above other than to the extent funding sources are common, such as the Local Corridor preservation Fund. Great flexibility may occur on specific or general agreements.

A least effective alternative is in a County solo adoption. While the findings of the plan are applicable to all and beneficial to all to see a single picture of the area, Summit County could act independently. As such, the benefits would be greatly diminished.

Preliminary findings indicate a leaning toward adoption by a general resolution by each community. Future capital facilities plans and project planning will be on a case by case basis. Cooperation of continued transportation planning is also recommended. Public hearings will be held at minimum associated with County Ordinance but are welcome concurrent or in conjunction with County process.

7.2 Reporting / Annual review:

To assist in keeping the plan current, continual and annual reporting are recommended. Summit County Engineering will lead this review as currently in process with an Annual Transportation Report. This may include inter jurisdictional traffic monitoring and improvements recommendations. While this plan is not a mandate of improvements to any given stakeholder, the annual report should include communities interests and immediate intents to aid in coordination of efforts. Further, should a significant change in community plans occur, this plan should be a medium of providing a common base for consideration.

Note: This is not a maintenance plan. Normal maintenance and operation of the roadway network is a separate consideration. The only inter-relation to maintenance is in coordination of maintenance efforts and optimization of the capacity improvements as listed. In-other-words, resurfacing of a road one year and expanding the roadway width the following year is not an efficient use of funds.

Also as deemed appropriate, permission to monitor adjacent communities' conditions is helpful in programming improvements of the communities. This will include traffic counts as well as pending and future zone applications, such that the respective impacts may be analyzed based on specific and cumulative impact.

7.3 Funding:

The plan is written with few fiscal considerations. It is based on "what is the ideal" transportation system within a "reasonable standard". This includes all modes of transportation based on probable growth scenarios.

A Future Eastern Summit County Capital Facilities Plan is recommended. A prevailing concept is that "Future growth should carry its fair share" and understand new growth impacts in accord with expected conditions. The goal is to maintain the character of the area in accord with each communities goals and visions as expressed in the respective master plans.

Individual community or cooperative impact fees may be a possible. Funding of regionally significant projects will be addressed with capital facilities planning. Interest in a regional fee or individual community implementation will be a future specific decision.

Appendices:

Appendix A – Project List / map

- **List**
- **Map**

Appendix B – Future Land Use

- **Existing Traffic Counts**
- **Travel Analysis Zone Map**
- **Travel Demand Model Land Uses**
 - **Entitled (2025)**
 - **Build-out (2040)**

Appendix C – Zone Maps – each community.

- **Henefer Zone Map**
- **Coalville City Zone Map**
- **Oakley Zone Map**
- **Kamas Zone Map**
- **Francis Zone Map**

Appendix D – Draft community resolutions / County Ordinance

- **Resolution**
- **Ordinance**

Appendix E - Designated Contacts

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Appendix A – Project List / map
- List

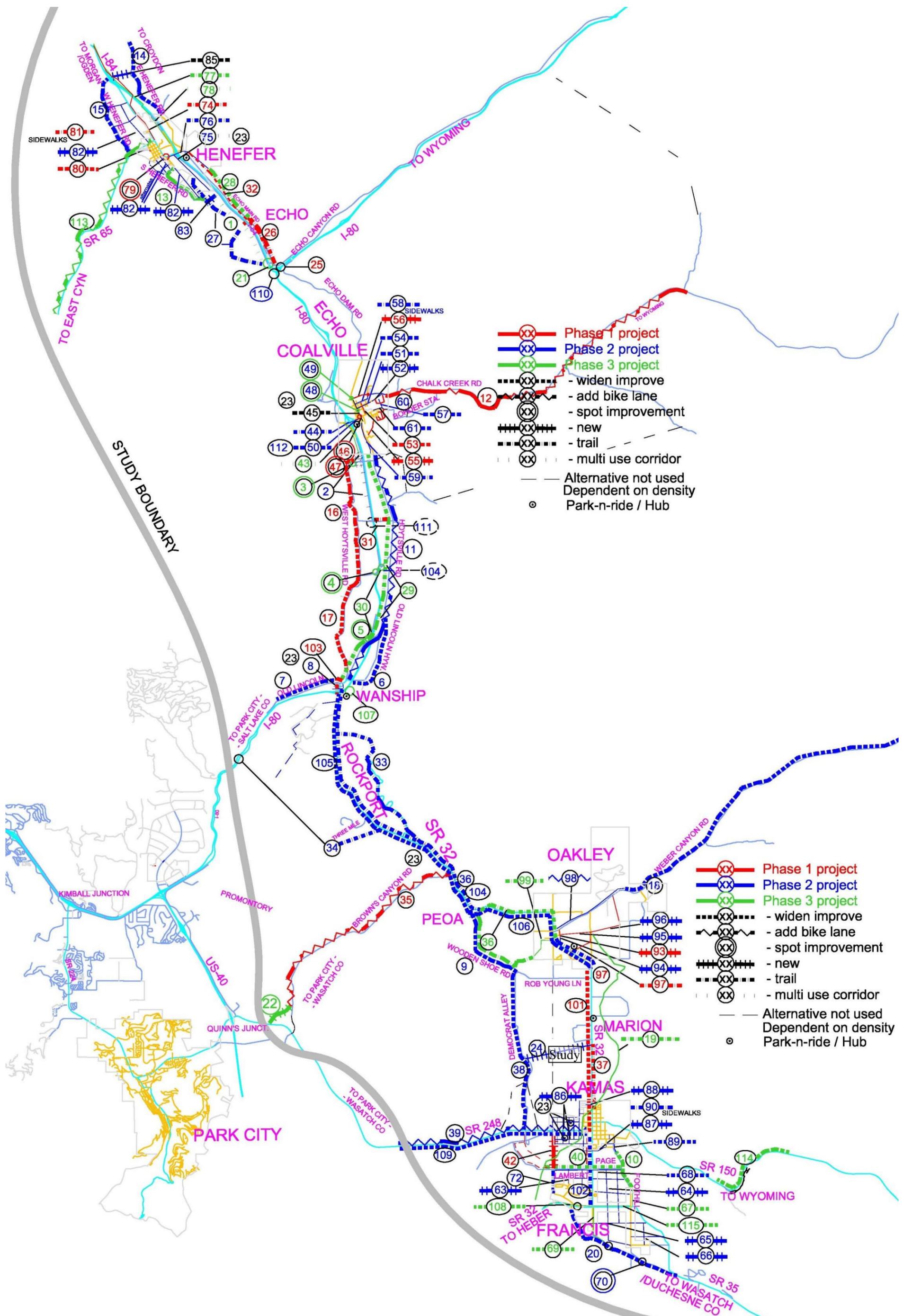
{{{ see attachment 11x17 attachment }}}}

- Map

{{{ see attachment 11x17 attachment }}}}

Eastern Summit County Transportation Master Plan

County Projects		Cost 1,000's	County Projects		Cost 1,000's	Coalville City Projects		Cost 1,000's	Kamas City Projects		Cost 1,000's
1	South Echo Frontage Echo to Henefer Multi use corridor	\$ 243	34-A	Promontory Tollgate Access via Tolgate Soft surface trail	\$ 1,048	43	500 South Frontage SR-280 to Hobson Multi use corridor	\$ 331	86	Future road network - Commercial Commercial area layout development activities	\$ -
2	South Coalville Frontage Coalville to Creamery Multi use corridor	\$ 453	34-B	Promontory to Wanship-SR-32 via gravel haul road Soft surface trail	\$ -	44	Bridge over I-80 Ped Friendly Frontage Road to Frontage Rd Separated Ped lane	\$ 217	87	Future road network - East side East side layout development activities	\$ -
3	Hobson Frontage Intersection Hobson Lane Frontage Intersections improve - safety	\$ 101	34-C	Promontory to Wanship Trail via north private roads NOT NEEDED ?	\$ 795	45	Main Street Widen Main Street Completed 2009-2010	\$ -	88	500 North 100 W to SR-32 New 2 lane collector	\$ 249
4	Judd Lane Frontage Intersection Judd Lane Frontage Intersections improve - safety	\$ 50	34-D	Promontory to Wanship Trail via Browns Canyon EXISTING - SOUTH CANYON TR	\$ -	46	Intersection Main - 100 S Main / 100 S Capacity increase - 80 S School	\$ 498	89	Foot Hill Drive All to County Minor Widen / improve	\$ 370
5	South River Bend Frontage Judd to the end Multi use corridor-trail head	\$ 21	35-A	Browns Canyon Bike Lane SR-32 to SR-248 Widen shoulder	Not Recommended \$ 3,462	47	School Road Access now park Alternatives	\$ -	90	Pedestrian improvements Various approx 1 mile Sidewalk	\$ 361
6	Old Lincoln Hwy County Shop to Wanship Minor Widen / improve	\$ 675	35-B	Browns Canyon Bike Lane SR-32 to SR-248 Add Signing and striping	\$ 9	48	Intersection Main - 50 N Main / 50 N Capacity increase	\$ 556	91	Bridge Replacement 3 canal crossings? preventative / programming	\$ -
7	Old Lincoln Hwy Wanship to Blue Sky Minor Widen / improve	\$ 631	36-A	SR-32 Trail : Wanship - Oakley Wanship - Oakley Soft Separated trail	\$ 1,100	49	Future Intersection Main - 200 N Main / future 200 N Capacity increase	\$ 616	Oakley Town Projects \$ 5,146		
8	Wanship Town Site Improve Wanship streets Minor Widen / improve	\$ 141	36-B	Woodenshoe Trail Peoa to Oakley Peoa to Oakley Soft Separated trail	\$ 3,708	50	SR-280 : 100 South Widen {See #112} Main to I-80 Widen - curb - improve	\$ -	93	Main Street - upper Weber Canyon Rd to 4750 N New street	\$ 216
9	Woodenshoe Peoa to Democrat Shoulder and align	\$ 1,273	37	SR-32 Trail : Marion to Francis Marion to Francis 10' Paved trail	\$ 392	51	50 North Widen Main to 350 East Widen to 3 lane	\$ 432	94	Main Street - lower 4750 N to SR-32/Polar King New street	\$ 464
10	Foot Hill Drive Francis to Kamas Minor Widen / improve	\$ 708	38	Democrat Alley Pave Woodenshoe to SR-248 24' pave / align	\$ 3,847	52	50 North Extend 350 East to Chalk Creek New 2 lane collector	\$ -	95	Future road network - West Various W of Newlane development activities	\$ 565
11	Hoytsville Road Coalville to Wanship Add bike lane one side/capacity	\$ 2,739	39	SR-248 Bike Lanes {see #109} Kamas to Wasatch Co Widen	\$ -	53	100 East Improve 100 N (Chalk Crk) to 100 S (S Widen - curb - walk	\$ 372	96	Future road network - East Various E of Newlane development activities	\$ 444
12	Chalk Creek Road Coalville to Upton Add bike lane one side/capacity	\$ 3,332	40	Lambert to Page Trail Hallam to Foothill Soft surface trail	\$ 2,315	54	100 North (Chalk Creek) Main to Industrial Rd Widen to 3 lane	\$ 611	97	Pedestrian improvements Rodeo grounds to new ln to center 10' multi use trail	\$ 555
13	South Henefer Road Henefer to the end Minor Widen / improve	\$ 2,548	41	Bridge Replacement approximately 16 preventative / programming	\$ 6,638	55	Beacon Hill Dr. 400 S to Old Farm Road-New New 2 lane collector	\$ 104	98	Weber Canyon Rd - Bike lane SR-32 to County 5' widening	\$ 2,110
14	East Henefer Road Henefer to Morgan Co. Minor Widen / improve	\$ 1,753	42-A	Lambert Alt - All SR-248/32 SR-248 - Francis Widen existing UDOT roads	\$ 1,254 UDOT	56	New 200 North Main to Industrial Rd New 2 lane collector	\$ 205	99	Pedestrian improvements Cow alley to County/Peoa Soft Surface	\$ 791
15	West Henefer Rd All Minor Widen / improve	\$ 2,607	42-B	Lambert Alt - Hallam North SR-248 - Francis New 2 lane collector	Recommended \$ 2,013	57	School Road (700 E) Boarder Station - 150 North New 2 lane collector	\$ -	100	Bridge Replacement pionion,new,river rd,mill race preventative / programming	\$ -
16	West Hoytsville Rd Coalville to Judd Ln Minor Widen / improve	\$ 2,626	42-C	Lambert Alt - Diagonal to Democrat SR-248 - Francis New 2 lane collector	\$ 2,200	58	Pedestrian improvements various city wide trails, sidewalks	\$ -	UDOT Projects \$ 115,256 <small>Study</small>		
17	West Hoytsville Rd Judd Ln to Wanship Minor Widen / improve	\$ 747	42-D	Lambert Alt - Democrat South SR-248 - Francis New 2 lane collector	\$ 2,330	59	Hoytsville Rd/Main S Bike Ln Main to S to County Add bike lane one side/capacity	\$ 478	101-A	SR-32 Widen Oakley/Kamas New Ln to Kamas/SR-248 expand to 5 lane	\$ 13,951
18	Weber Canyon Rd Oakley to end Widen / turn lanes / capacity	\$ 2,601	42-E	Lambert Alt - Widen Existing Roads SR-248 - Francis Widen existing County roads	\$ 1,738	60	Future road network-NE etc various city wide development activities	\$ -	101-B	Mid Kamas Valley Corridor Mill Race S to SR-248 New 2 lane collector	Not Recommended
19	Weber-Provo Diversion Trail Oakley to Francis Trail	\$ 3,934	Henefer Town Projects \$ 3,914			61	Boarder Station Widen within the City Minor Widen / improve	\$ 306	101-C	Democrat Alley Pave-plus Pave / widen / Peoa / Oakley to 248 Pave / widen / align	See County Projects
20	Lower River Road Francis / all Widen / shoulder / align	\$ 2,009	74	Main Street walk Main to new LDS Church site Sidewalk	\$ 44	62	Bridge Replacement approximately 4 preventative / programming	\$ -	101-D	East Kamas Corridor Oakley to Kamas New 2 lane collector	Not Recommended
21	South Echo Frontage Alignment In Echo Intersections improve	\$ 186	75	South Echo Frontage SR-65 - to County Multi use corridor	\$ 203	Francis Town Projects \$ 2,061			101-X	Kamas Valley Cross Connection Marion to Democrat Alley New 2 lane collector {See #24}	County
22	Browns Canyon Near Wasatch Co New truck by pass	\$ 486	76	Echo Main-Old Hwy 30 Trail In City Limits Widen for trail	\$ 582	63	Future road network- NW Northwest layout development activities	\$ -	102	SR-32 Widen - Kamas/Francis Kamas / SR- 248 to Francis / SR-32 12' widen	\$ 4,432
23	Park-n-rides - shelters various Mode share	\$ 300	77	Weber River Trail Extend N. Henefer Frontage Road to Morg Soft surface trail	\$ 938	64	Future road network- NE Northeast layout development activities	\$ -	103	SR-32 Wanship Walkway Rail Trail head to Rafter B 6' walk / curb	\$ 324
24	Kamas Valley Cross Connection Marion <small>Study</small> New 2 lane collector	\$ 1,142	78	N Henefer Frontage Rd SR-65 - to end Multi use corridor	\$ 408	65	Future road network- South South layout development activities	\$ -	104	SR-32 Wanship / Oakley Trail Wanship Rafter B to Oakley New Ln Soft surface separated trail	\$ 3,966
25	Rail Trail Extension - I-80 Cross Echo Dam Rd to Echo Convert RR bridge / connect	\$ 314	79	SR-65 - S Henefer Rd SR-65 South Henefer Intersection	\$ 84	66	Future road network- East East layout development activities	\$ -	105	SR-32 Widen - Wanship/Browns Rafter B to Browns Canyon 12' widen	\$ 15,247
26	Rail Trail Extension - Historic Echo to I-80 underpass Soft surface - I-80 drainage	\$ 190	80	300 W Right-of-way 200-300N Right-of-way / Minor Widen	\$ 423	67	Foot Hill Drive SR-35 to County Minor Widen / improve	\$ 395	106	SR-32 Widen - Browns/Oakley Browns Canyon to Oakley New Ln 12' widen	\$ 21,801
27	Rail Trail - Weber River Echo to Henefer Soft surface river access	\$ 1,024	81	Pedestrian improvements Various Sidewalk	\$ 473	68	Lambert Ln / Page Ln Widen All Minor Widen / improve	\$ 522	107	SR-32 Wanship other ramp Modify Ramps ? Needed	Not likely Needed
28	Extend Historic Trail I-80 under pass to Henefer Soft surface - single track	\$ 1,131	82	Future Road Network Illustrate Various Cemetery to 100 S, North development activities	\$ -	69	Spring Hollow All Minor Widen / improve	\$ 461	108	SR-32 Widen Francis/Wasatch Francis Main to Wasatch Co Minor Widen / improve	\$ 4,445
29	Hoytsville Road - Ped Trail Coalville to Wanship 10' multi use trail	\$ 6,730	83	Franklin Canyon Connector Franklin Canyon to Frontage New 2 lane connector	\$ 360	70	South Willow Way-Lower River Intersection Intersection improve	\$ 683	109	SR-248 - 4 Lane Kamas to Wasatch Co widen	\$ 15,958
30	Rail Trail Access Judd, Hobson Trail head parking	\$ -	84	Bridge Replacement center preventative / programming	\$ -	71	Pedestrian improvements various city wide trails, sidewalks	\$ -	110	I-80 / I-84 Capacity interchange Verify Capacity	Current STIP
31	Hoytsville Trail Head LDS Church-Creamery Ln Trail head and trail to Rail Trail	\$ 447	85	NW Henefer exit to E Henefer Rd Exit toward Croydon New Bridge - 2 lane connector	\$ 399	72	Hallam Road Trail Wild Willow to Lambert trail	\$ -	111	I-80 Judd or Creamery Ln Exit Judd / Creamery New exits - not likely needed	Not Needed
32	Wanship SR-32 Sidewalk {see #103} Wanship Add sidewalk and curb	\$ 324	Costs in \$1,000's : Includes Inflation			75	Bridge Replacement None preventative / programming	\$ -	112	SR-280 : 100 South Widen Main to freeway ramps Widen / improve	\$ 1,779
33	East Side Rockport Trail Rockport Reservoir 10' recreational trail	\$ 2,142	PHASE 1 - 2011-2020			Grand Total \$ 200,237			113	SR-65 - Bike Lane Henefer to Morgan Co. Add bike lane one side/capacity	\$ 2,259
			PHASE 2 - 2021-2030			Subject to Change			114	SR-150 - mirror lake hyw various Minor Widen / improve	\$ 25,922
			PHASE 3 - 2031-2040						115	SR-35 - Francis Widen SR-32 to Foothill Minor Widen / improve	\$ 5,506
			OTHER TIMING						Previous Long Range Plan Total for Summit County \$111,000		



- (XX) Phase 1 project
- (XX) Phase 2 project
- (XX) Phase 3 project
- (XX) - widen improve
- (XX) - add bike lane
- (XX) - spot improvement
- (XX) - new
- (XX) - trail
- (XX) - multi use corridor
- Alternative not used
- Dependent on density
- Park-n-ride / Hub

- (XX) Phase 1 project
- (XX) Phase 2 project
- (XX) Phase 3 project
- (XX) - widen improve
- (XX) - add bike lane
- (XX) - spot improvement
- (XX) - new
- (XX) - trail
- (XX) - multi use corridor
- Alternative not used
- Dependent on density
- Park-n-ride / Hub

Appendix B –

- **EXISTING TRAFFIC COUNTS**

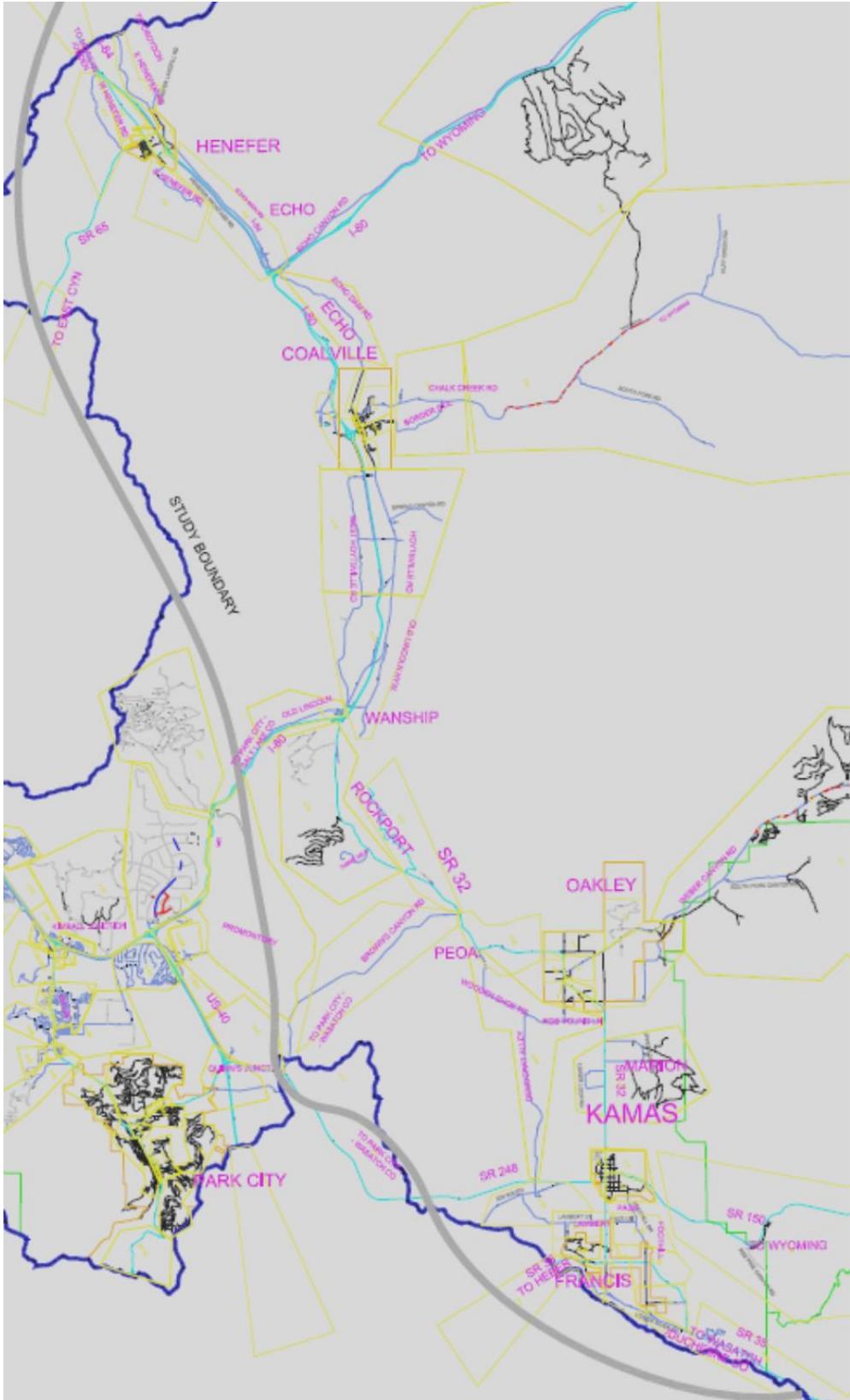
Future Land Use

- **Travel Demand Model Land Uses**

{{ Upon request – contact Kent Wilkerson – kwilkerson@summitcounty.org }}

Existing (2011)

- **Entitled (2025)**
- **Build-out (2040)**
- **Travel Analysis Zone Map**



Existing conditions

Entitled

Build - Out

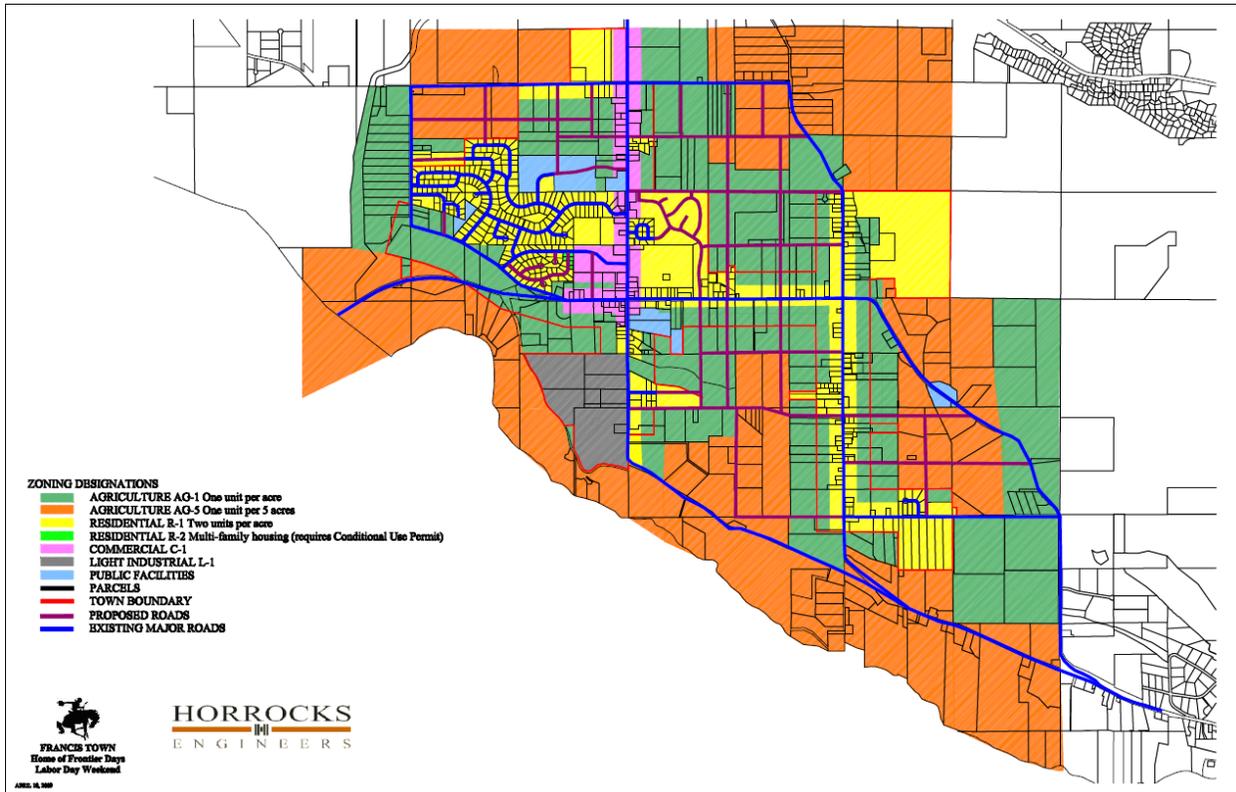
Area	Existing conditions				Entitled				Build - Out			
	Single Family	Multi Family	commercial peak hour hotel units	employee trips	Single Family	Multi Family	commercial peak hour hotel units	employee trips	Single Family	Multi Family	commercial peak hour hotel units	employee trips
Summit County	2696	2811	1753	13627	12285	15094	3777	6005	23211	22152	6190	7738
C-1 North of Hemlock toward Corydon	24	0	0	10	9	0	0	10	254	2	0	0
C-2 Northwest of Hemlock to I-80 - also	13	0	0	1	1	0	0	1	53	8	0	0
C-3 West Hemlock Road	34	0	0	4	4	0	0	4	121	9	0	0
C-4 South of Hemlock - dead end	19	0	0	6	5	0	0	6	88	4	0	0
C-5 Echo Main	34	0	0	9	8	0	0	9	113	51	10	0
C-6 Echo Canyon	91	0	0	9	0	0	0	308	0	0	0	0
C-7 Echo Dam - I-80 to Coalville	14	0	0	17	15	0	0	17	39	0	0	0
C-8 Chalk Creek Coalville to Snyder	69	0	0	12	11	0	0	69	0	12	10	0
C-9 Upper Chalk Creek	88	0	0	7	6	0	0	90	0	7	78	0
C-10 High Uintas	444	0	9	50	45	0	9	635	0	50	0	509
C-11 Haystack Rd Coalville to Judd	219	0	0	59	53	0	0	270	0	59	0	0
C-12 Haystack Rd Judd to Wanship	153	0	0	91	82	0	0	190	0	91	0	0
C-13 Tollgate Canyon	303	0	0	16	14	0	0	649	0	16	0	0
C-14 Wanship - West	75	0	0	265	184	0	0	75	0	200	101	0
C-15 Rockport Estates - SR-32 area	180	0	14	86	77	0	14	558	0	86	559	0
C-16 Promontory	302	0	0	237	213	0	0	1051	0	237	1003	0
C-17 Rockport State Park - SR-32 area	19	0	0	36	33	0	0	25	0	36	35	5
C-18 Browns Canyon	59	0	21	57	51	0	21	57	0	57	96	1
C-19 Glenview	186	0	0	65	58	0	0	425	0	65	427	31
C-20 Jeremy Ranch	1168	125	0	203	183	0	0	1254	127	0	525	1619
C-21 Quarry Village / Junction / Gorgan	4	24	0	757	681	0	0	10	131	0	1308	155
C-22 Summit Park	606	21	0	250	225	0	0	941	21	0	258	1014
C-23 Raamsussen Road - Summit Center	0	0	0	465	445	0	0	0	0	0	625	0
C-24 Raamsussen Road - East end	2	0	34	108	97	0	34	36	0	34	134	37
C-25 Kimball Junction Landmark	0	0	187	836	753	0	0	187	0	187	1462	0
C-26 Tanger Outlets - Powderwood	2	276	0	1609	1448	0	0	2	348	117	1639	350
C-27 Silver Frontage Road	264	312	0	54	48	0	0	272	312	0	108	584
C-28 Kimball Junction Like Blvd	0	0	76	1742	1528	0	0	0	76	1827	0	48
C-29 Newpark	0	186	170	372	335	0	186	170	0	471	167	281
C-30 Redstone	0	251	0	742	668	0	251	0	0	1568	251	283
C-31 Highland Estates, Silver Summit	676	0	0	186	167	0	0	748	0	186	806	92
C-32A Silver Summit east side - Pace N I	1	0	0	360	354	0	0	1	0	0	891	1
C-32B Silver Summit east side - Silver St	3	0	0	711	640	0	0	3	0	0	711	378
C-32C Silver Summit east side - US 40 F	0	0	0	655	590	0	0	0	0	0	3454	600
C-33 Bear Hollow Subdivision	109	329	0	50	45	0	0	190	325	0	50	548
C-34 Silver Springs	726	105	0	362	272	0	0	811	105	0	308	916
C-35 Old Ranch Road	218	0	0	13	12	0	0	248	0	13	401	151
C-36 Bear Hollow - Sun Peak	289	62	45	259	233	0	45	339	62	45	259	464
C-37 Canyons	6	108	1112	1030	1468	0	0	64	630	4825	13176	622
C-38 Around the Canyons	0	390	85	96	86	0	0	28	390	86	164	418
C-39 Park West Village	81	22	0	13	11	0	0	82	22	0	13	104
C-40 White Pine - Colony	108	0	0	61	55	0	0	265	0	0	73	211
C-41 US-40 Frontage - Alderson	0	0	0	135	122	0	0	0	0	0	778	205
C-42 Pines - Browns to Oakley	56	0	0	2	2	0	0	63	0	0	2	120
C-43 Weber Canyon	908	0	0	59	53	0	0	1447	0	0	59	1668
C-45 West Kamas Valley	90	0	0	15	14	0	0	121	0	0	15	259
C-46 Marion	196	0	0	133	120	0	0	364	0	0	194	426
C-47 South of SR-248 to Francis	18	0	0	12	11	0	0	47	0	0	12	151
C-48 Lower Mirror Lake Highway	281	0	0	21	18	0	0	442	0	0	21	477
C-49 SR-35 - Woodland	165	0	0	56	51	0	0	211	0	0	56	306
C-50 Silver Creek Estates	390	8	0	212	191	0	0	529	8	0	245	574
C-51 Pheasant	908	547	0	371	334	0	0	962	549	0	398	1548
c-re-park Research park - Olym. Park	0	165	0	168	97	0	0	0	230	0	4114	165
c-re-woods of Parleys Lane	5	0	0	0	0	0	0	52	0	0	0	71
Coalville (94017)	417	57	85	1060	872	530	57	85	2509	1063	196	183
CV-1 North Main	51	0	0	67	60	0	0	55	0	0	67	143
CV-2 East	93	4	0	71	64	0	0	179	4	0	73	317
CV-3 Main	29	0	25	543	488	0	25	549	0	25	549	29
CV-4 School	109	31	0	94	85	0	0	116	31	0	1515	256
CV-5 South Main	80	22	0	112	100	0	0	96	22	0	112	231
CV-6 West Side	55	0	60	164	175	0	0	55	0	60	164	90
Francis (94036)	373	0	0	102	92	794	0	102	102	1981	0	10
F-1 N of 1700 - East of 32 - Lambert	11	0	0	0	0	0	0	16	0	0	0	120
F-2 N of 1700 - West of 32 - Page	24	0	0	7	6	0	0	42	0	0	7	258
F-3 N of 35 - West of 32 - Hallen	129	0	0	18	17	0	0	367	0	0	18	534
F-4 Main and 32 - commercial	61	0	0	73	66	0	0	73	0	0	73	183
F-5 West of 32 along 35	84	0	0	2	2	0	0	107	0	0	2	406
F-6 S of 35 - East of Spring Hollow - L	4	0	0	0	0	0	0	6	0	0	0	30
F-7 S of 35 - West of Spring Hollow - I	43	0	0	0	0	0	0	61	0	0	0	211
F-8 West of Main - Lower River	17	0	0	2	2	0	0	19	0	0	2	129
Hemlock (94032)	202	0	0	148	132	219	0	148	148	941	107	43
H-1 North	12	0	0	124	111	0	0	15	0	0	124	205
H-2 West Original Plat	126	0	0	6	5	0	0	137	0	0	6	346
H-3 To I-84 - South	40	0	0	13	12	0	0	40	0	0	13	267
H-4 Northwest of I-84	22	0	0	4	4	0	0	27	0	0	4	123
Kamas (94038)	514	34	5	2018	1818	725	42	15	2252	1080	101	30
K-1 West	171	0	0	1155	1076	0	0	219	0	0	1202	266
K-2 North East	180	0	5	367	321	0	0	267	0	15	504	357
K-3 South East	153	34	0	465	419	0	0	209	42	0	465	337
Oakley (94060)	321	0	0	265	195	477	0	228	228	843	12	55
O-1 Maple Ridge	20	0	0	0	0	0	0	47	0	0	0	47
O-2 North	38	0	0	16	15	0	0	60	0	0	16	128
O-3 West	46	0	0	0	0	0	0	62	0	0	0	132
O-4 Center	106	0	0	171	154	0	0	152	0	0	203	152
O-5 East / Weber Canyon	121	0	0	15	13	0	0	156	0	0	15	374
O-6 South	0	0	0	4	3	0	0	0	0	0	4	0
Park City (94068)	3186	5296	4434	8039	5438	3933	5832	4939	8581	11547	8210	8512
PG-1 Park Meadows	589	511	248	78	70	0	0	687	517	248	136	1327
PG-2 Quirks	0	0	0	362	353	0	0	0	0	0	614	33
PG-3 Thayne's Canyon	154	80	60	0	0	187	98	80	0	0	408	204
PG-4 School area	2	0	0	672	635	2	0	0	0	0	672	6
PG-5 Prospector	216	986	757	767	717	272	989	766	1016	1279	1015	875
PG-6 NCMR	0	0	0	7	6	0	0	0	0	0	7	0
PG-7 Old Town	1456	1827	1407	537	484	1662	2080	1874	537	4511	2130	2801
PG-8 Lower Deer Valley	157	174	2	0	0	288	198	2	0	0	695	198
PG-9 Deer Valley	299	787	962	252	227	452	929	962	296	1552	978	1282
PG-10 Main	28	325	378	257	2314	40	338	378	2571	399	352	454
PG-11 Silver Lake - Aerie	179	335	361	96	87	229	272	361	96	617	272	361
PG-12 Empire Plaza	94	121	156	48	43	102	259	156	48	350	259	406
PG-13 Snow Creek	2	272	133	588	530	2	272	133	588	269	274	133

Appendix C – Zone Maps – each community.

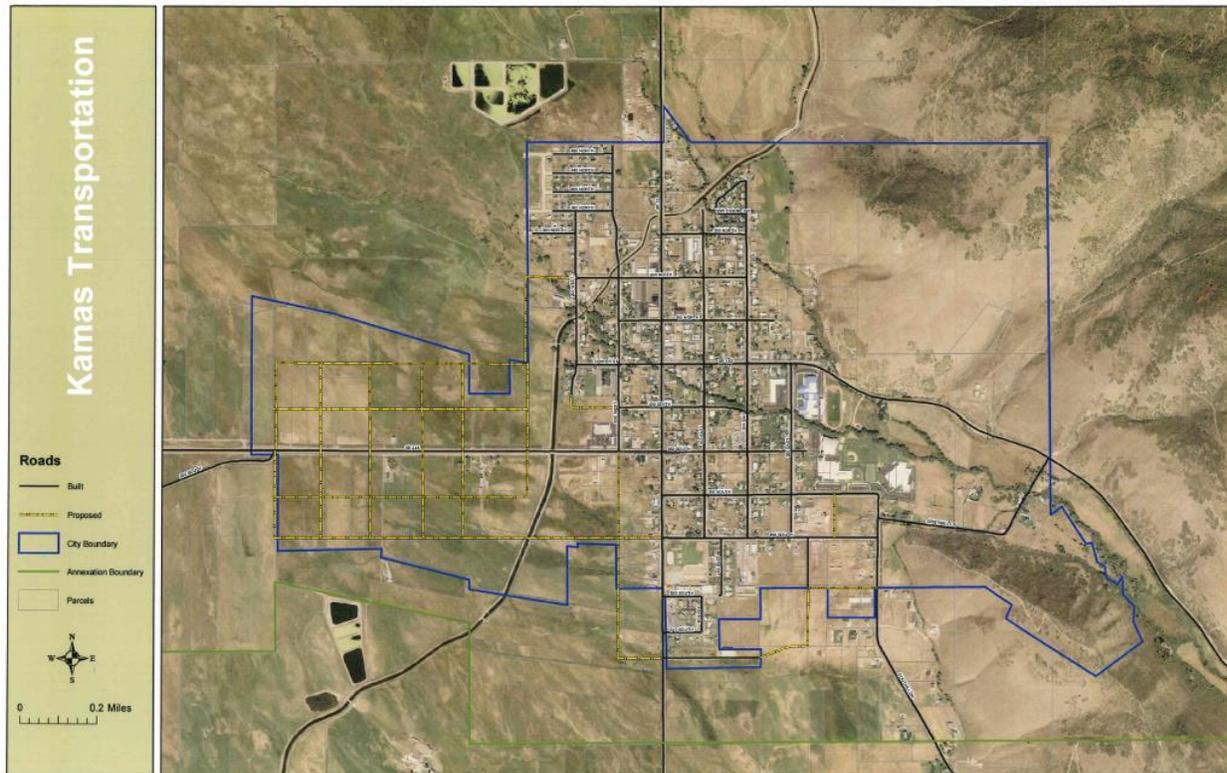
(refer to each Community for the latest version)

- **Henefer Zone Map**
- **Coalville City Zone Map**
- **Oakley Zone Map**
- **Kamas Zone Map**
- **Francis Zone Map**

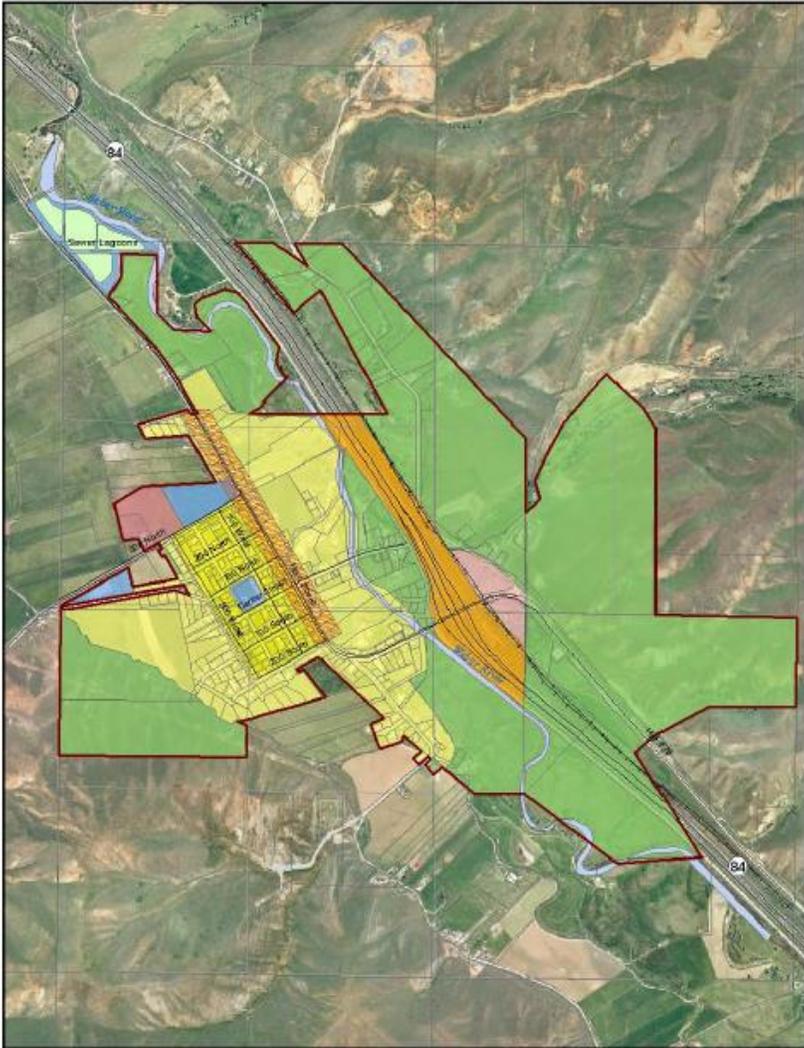
Francis



Kamas



Henefer Town Zoning Map



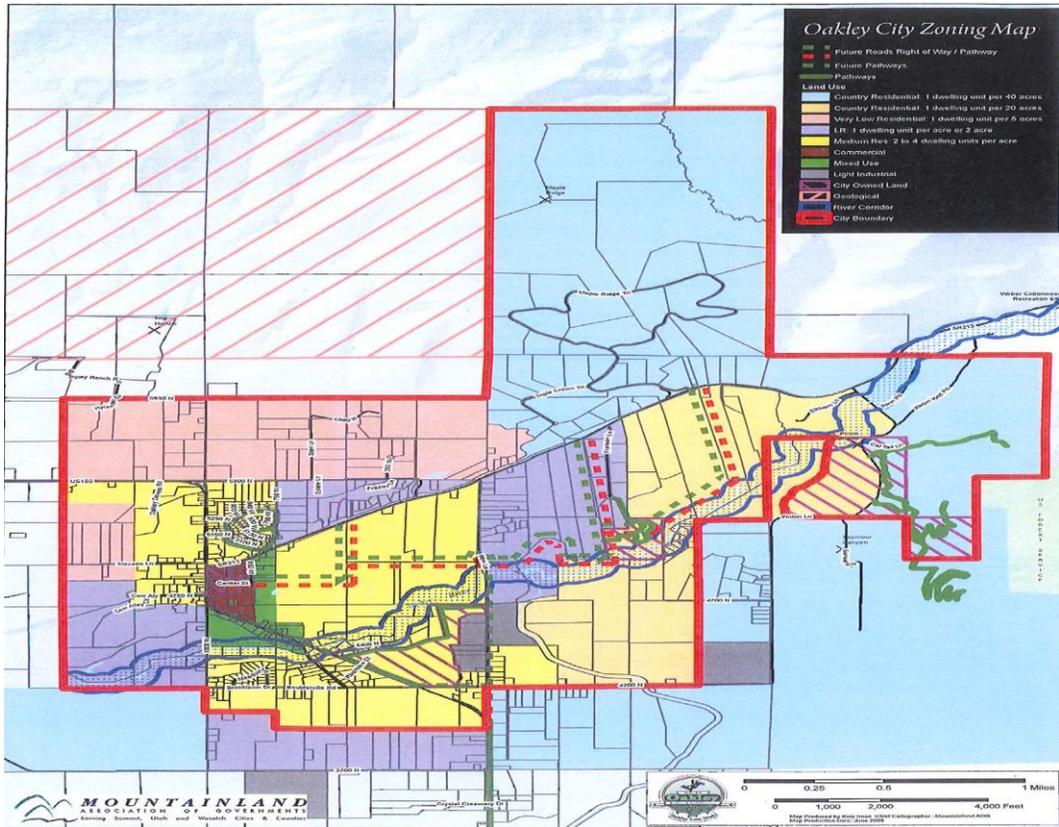
January 2010

Map prepared by
Summit County
435-336-3124

0 500 1,000 2,000 Feet

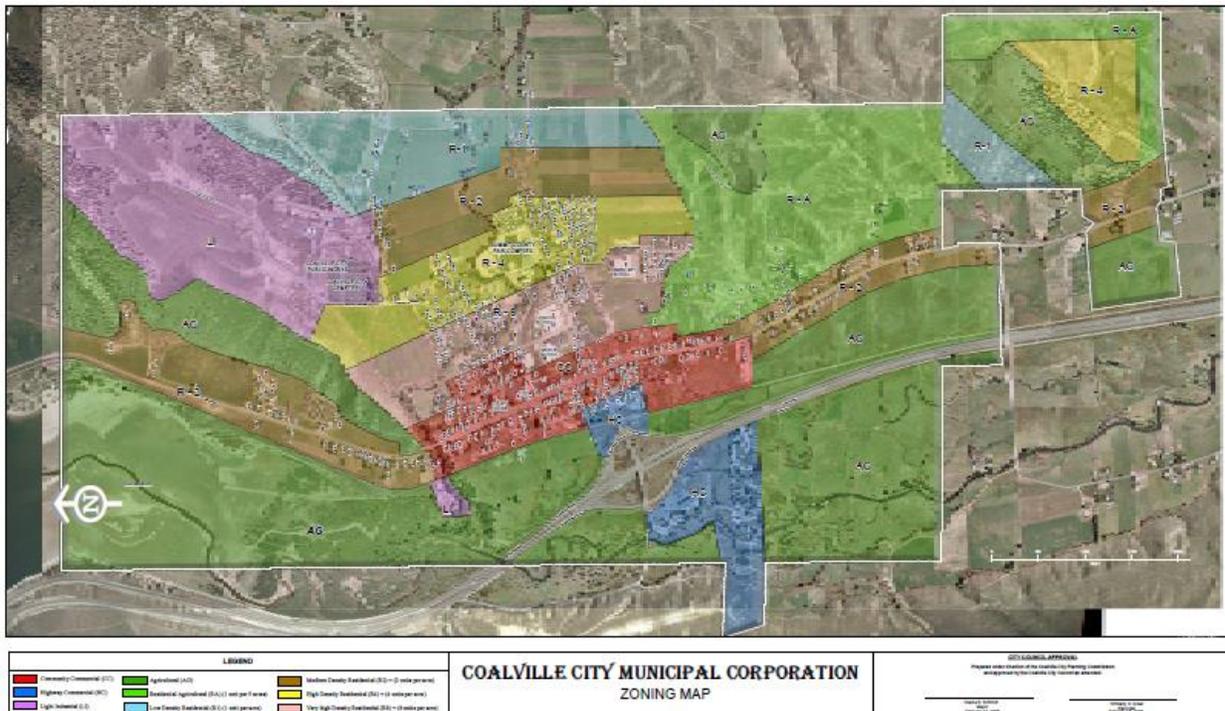


Henefer



Oakley

Coalville



This is a future zone map – refer to Coalville City for Current zoning

Appendix D – Draft Community / County Ordinance

Draft Ordinance

SUMMIT COUNTY, UTAH
ORDINANCE NO. ____

AN ORDINANCE TO ESTABLISH THE EASTERN SUMMIT COUNTY TRANSPORTATION MASTER PLAN

WHEREAS, the Utah Code, sections 17-27a-102 provides for master planning for the benefit of the County; and

WHEREAS, the plan includes Henefer Town, Coalville City, Oakley Town, Kamas City and Francis City (Municipalities) and North Summit Recreation District, and

WHEREAS, hearings and notification have been provided

NOW, THEREFORE, the County Legislative Body of the County of Summit, State of Utah [hereinafter “Council”], ordains as follows:

- Section 1. The Council hereby adopts the Eastern Summit County Transportation Master Plan as attached in Exhibit ‘A’.
- Section 2. The Council, hereby encourages and supports joint planning and cooperation with the Municipalities.
- Section 3. This Ordinance shall take effect after 15 days of the date below and upon publication in a newspaper published and having general circulation in Summit County.

SUMMIT COUNTY COUNCIL, STATE OF UTAH

By: _____
_____, Summit County Council

Council Armstrong voted _____
Council McMullin voted _____
Council Robinson voted _____
Council Ure voted _____
Council Caron voted _____

ATTEST:

_____ County Clerk, Summit County, Utah

Draft Community Resolution

RESOLUTION NO. _____

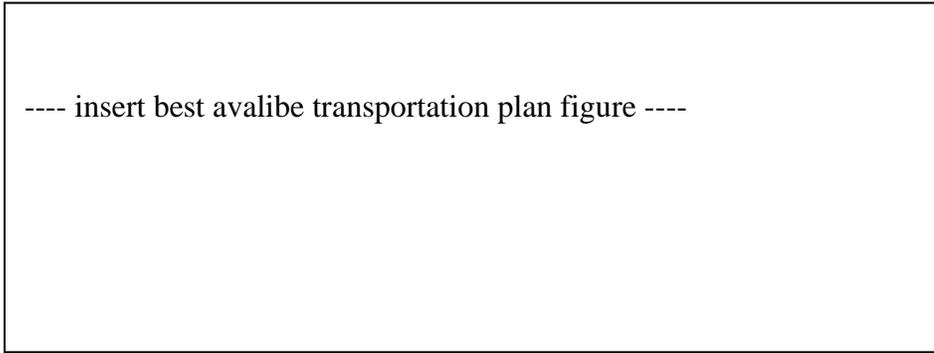
{ COMMUNITY NAME } TRANSPORTATION MASTER PLAN and
THE EASTERN SUMMIT COUNTY TRANSPORTATION MASTER PLAN

WHEREAS, { COMMUNITY NAME } Local municipal Code, provides for master planning for the benefit of the Municipality and HAS ODOPTED A TRANSPORTATION PLAN; and

WHEREAS, the Utah Code, sections 17-27a-102 provides for master planning for the benefit of the County.

NOW, THEREFORE, the Governing Body of { COMMUNITY NAME } the County of Summit, State of Utah [hereinafter "Council"], ordains as follows:

Section 1. AFFIRMS THE { COMMUNITY NAME } TRANSPORTATION MASTER PLAN as illustrated



Section 2. The Council hereby acknowledges and supports coordinated transportation master planning more or less as provided the Eastern Summit County Transportation Master Plan as attached in Exhibit 'A' and as Amended with { COMMUNITY NAME } review.

Section 3. Having so resolved, this does not preclude the City's modifying and amending its Transportation Master Plans. Should the City so do, said plans will be provided to Summit County to facilitate overall transportation coordination.

{ COMMUNITY NAME } COUNCIL, STATE OF UTAH

By: _____

Mayor, _____

ATTEST: _____ Clerk, Summit County, Utah

Appendix E - Designated Contacts

Summit County

- Transportation Planner, Sean Lewis, 60 N. Main/PO Box 128, Coalville UT 84017, slewis@summitcounty.org 435.336.3134 or 435.783.4351 ext 3294
- Transportation Engineer, Kent Wilkerson, PE, 60 N. Main/PO Box 128, Coalville UT 84017, kwilkerson@summitcounty.org 435.336.3294 or 435.783.4351 ext 3294
- Public Works Director, Kevin Callahan, 60 N. Main/PO Box 128, Coalville UT 84017, kcallahan@summitcounty.org 435.336.3978 or 435.783.4351 ext 3294

Henefer Town - Planner: Bob Richins richins@allwest.net 435-336-2234
c 801.552.6815 Council

Coalville City - Planner: Cindy Gooch 801.547.0393 cgooch@jub.com
Craig Giles, Public Works Director Coalville City gilescoalville@allwest.net 336-5980 ,

Oakley - City - Planner, Tami Stevens, 783-5734, tamis@allwest.net

Kamas - City - Planner. Jackie Blazzard, 170 N. Main, Kamas, UT 84036, O. kamasplanner@allwest.net
(435) 783-4641

Francis City - Planner, Alison Weyher, 522 Parleys Road, Park City, UT 94098 aweyher@msn.com
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North Summit Recreation: Po Box 783 Coalville, UT 84017 336-7322 admin@nsrecreation.com

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