MASTER TRANSPORTATION PLAN

LEMHI COUNTY

JUNE 2012

HOLLADAY ENGINEERING CO.
32 North Main • Payette, ID (208) 642-3304

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STATE OF IDAHO
ELWIN T. BUTLER

HOLLADAY ENGINEERING CO.
32 North Main • Payette, ID (208) 642-3304

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Technical Advisory Committee

Lemhi County Commissioners

Lemhi County Road & Bridge Department

Lemhi County Planning and Zoning

Lemhi County Alternate Mobility Team

Lemhi County Emergency Management Department

City of Salmon

Holladay Engineering Company

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EXECUTIVE SUMMARY

Lemhi County Master Transportation Plan identifies impacts on the existing transportation system and future needs of the existing transportation system. Transportation needs are identified as the "Level of Service" to the user. Impacts to the transportation system can be caused by growth, change in land use, as well as the lack of growth. A Surface Management Plan discusses strategies and a course of action to assist decision-makers in maintaining the current level of service to the public. County Road Standards are developed to assist in addressing development and safety issues. Implementation of the standards will promote development paying its own way by not shifting the burden of maintaining poorly constructed roads to the current taxpayers of the county. The report also discusses the future transportation needs by identifying future transportation projects also known as Capital Improvement Plan (CIP) and funding strategies available to fund these future projects.

Following are the key findings of the Master Transportation Plan study:

- **Demographics, Population, and Land use**: Lemhi County has experienced approximately 3.4 percent average annual population growth from 1970 to 1980. Growth has fluctuated since that decade resulting in an overall growth rate of approximately 0.6 percent. This is the value used in projecting population and traffic growth rates. Also, the average age of the county population is getting older.
  As per the revised Lemhi County Comprehensive Plan, Lemhi County predominately consists of; federal lands (approximately 90.7 percent), State Lands (about 1.3 percent), and private lands (about 8.0 percent). The low percentage of private lands (taxable property) has significant financial implementations to the transportation system maintenance and changing economics in the county.
- **Lemhi County Road Network**: Lemhi County currently maintains approximately 400 miles of county roads. Many of Lemhi County roads are not looped generally because of river crossings or access into mountainous canyons. Over 3500 miles of roads accessed from county roads travel through Lemhi County's 2.8 million acres of range and federal lands. Insuring that developments have multiple access routes for emergency services is one of the County's high priorities.
  Local citizens are in favor of a second bridge crossing for emergency vehicles and to

help mitigate the level of service at the intersection of US 93 and Courthouse Drive. A proposed bridge site including phased construction is included in the Connectivity Plan.

- Maintaining the current level of service on county roads and at intersections is also a County goal. Based on current local growth rates and traffic counts, the level of service caused by traffic volumes will have little notable change on county roads. Intersection level of service will require continued monitoring, especially on Airport Road, Lovers Lane, N. St. Charles, and Williams Creek Roads; with traffic counts over 1000 ADT (Average Daily Traffic). Figures are provided to assist with preliminary evaluation of intersections.
- **Functional Classification Map**: The official ITD functional classification map of Lemhi County is provided. Future road functional classifications are shown on the Connectivity Map developed with the assistance of the Transportation Advisory Committee (TAC) of Lemhi County.
- **Road Surface Ratings and Surface Management Plan**: Road surface ratings are provided based on the survey conducted during the summer of 2007, the fall of 2010 and information provided by the Lemhi County Road and Bridge Department. A Surface Management Plan based on current practices and recommendations is provided. The surface management strategy considered annual budget limits and recommends reconditioning each road every 5 to 7 years. Extending reconditioning maintenance longer will ultimately increase maintenance costs to the taxpayers.
- **Public Transportation and Pathways**: Current and future public transit facilities needs are discussed. There is need and support for continued public transit in Lemhi County. Obtaining funding for public transportation is crucial for continuing this service.

  The pathways committee has identified destination bike paths to be extended along all of the scenic byways.
- **Road Standards**: The TAC and Holladay Engineering created a road standards document. This document is included in Appendix F and will be available from the county. Revisions to standards were written so that development pays its own way. The Standards also include an access control policy. This policy prioritizes road

access by way of local and private roads. Collectors and arterials serve as thoroughfares and move traffic at a high rate of speed. Limiting access to these roads, the county is investing in their future and promoting mobility for commerce and the public.

- **Work Plans**: Road maintenance, rehabilitation, and construction projects are identified in the Capital Improvement Plan (CIP). The CIP is included in Appendix E and should be reviewed and updated each fiscal year by the county.
- **Funding Strategies**: Current road maintenance budgets have been reviewed and analyzed to anticipate funding deficits in maintaining the current county roads. These budgets were compared with the Surface Management Plan. It is identified that the current schedule for maintenance is at longer intervals than recommended. Preliminary cost to widen current county roads and maintain the wider roads are presented demonstrating the need for increased maintenance funding. County controlled funding sources are from property taxes, while other funding sources are controlled by federal and state transportation policy.
- **Public Involvement:** In addition to the communication with the County Staff and the TAC, two public involvement workshops were held. The first workshop was held on November 19, 2009 to discuss connectivity, Salmon River bridge crossings and emergency routes located near the City of Salmon. The proposed Standards and the transportation study findings were presented to the public at the second public involvement workshop, held _____. The final Lemhi County Master Transportation Plan was presented to the public for comment and adoption at the public hearing held at a regular commissioners' meeting on February ___, 2012.

CHAPTER 1
INTRODUCTION AND OVERVIEW

Residents of Lemhi County, Idaho Transportation Department (ITD), Department of Lands (DOL), Bureau of Land Management (BLM), and the U.S. Department of Agriculture Forest Service (Forest Service) as well as other agencies each have a vested interest in Lemhi County's Master Transportation Plan, transportation policy, and implementation of the plan and policy. Private and local agencies' interdependence in transportation is critical for local economics and the current way of life in Lemhi County. Sustainability of the existing roads and the current quality of life are linked to the mobility of the county. Private property owners and government agencies will need to continue to unite and work toward common transportation goals in order to maintain and improve the existing quality of life.

PURPOSE AND NEED

A Master Transportation Plan and Capital Improvement Program are documents used as systematic planning tools to maintain and expand the Lemhi County facilities by providing citizens with the necessary resources for life-sustaining accommodations and conveniences. In addition, a Capital Improvement Plan is required for submittal with any request for federal or state funding of road or bridge projects. The 5 year Work Plan is an important criterion in evaluation of projects for federal aid.

There are several funding possibilities from the State of Idaho and the federal government, through the State. These funding agencies require, indirectly, local governments to develop Transportation Plans in order to apply for various funding packages in an organized and thoughtful manner. The indirect requirement of transportation plans is to ensure the local government considers future growth in making judicious choices for transportation improvement.

Lemhi County and surrounding areas are experiencing increasing demand on the transportation system without an increase in budget. This trend is expected to continue into the future resulting in hard decisions of county leaders for transportation facilities. The

historical federal source of transportation funds from timber sales is changing and uncertain. In addition, the need to travel to new destinations for medical services, to work, and to places of commerce has changed over the past decades requiring greater mobility to distant communities essential for life sustaining services. It is necessary to develop a Master Transportation Plan for systematic planning to accommodate increasing traffic demand, economic development, and quality of life. The Lemhi County Master Transportation Plan provides guidelines for future transportation project development, transportation policy, and assists Lemhi County to implement action plans to achieve goals and objectives identified in Lemhi County's Comprehensive Plan.

POLICIES AND GOALS

Lemhi County adopted a Comprehensive Plan in November 2007 (See **Appendix A**). Lemhi County identified eight major transportation polices in their Comprehensive Plan. The intent is "To coordinate the transportation policies with desired growth and development patterns in the county and within the regional context." The Comprehensive Plan provides many policies and goals related to transportation throughout the plan. The following are Policy Statements provided in the Transportation Chapter [1]:

I: ***To develop an efficient, safe and cost-effective public road and trail network which separates traffic by function.***

II: ***To maintain a Level of Service on the county's road network, to ensure a stable flow of traffic without significant delays.***

III: ***To maintain the facilities at the highest level of quality, commensurate with available resources.***

IV: ***To provide the necessary infrastructure improvements to accommodate alternative modes, such as transit, air traffic, and non-motorized methods of travel, or managing the demand for travel.***

V: To provide for the safe and convenient accommodation of special mobility requirements of the county's elderly and physically challenged population.

VI: To seek and support measures in the planning, design, construction, operation, and maintenance of the transportation facilities to minimize air and noise pollution impacts.

VII: To preserve and enhance public enjoyment of such facilities as mountain roads, scenic overlooks, and landscape plantings.

VIII: To continue to systematically plan for future transportation needs within the context of minimizing impacts to fish and wildlife resources.

Transportation Planning is only the first step in meeting the needs of the County identified in the above items. Implementing policy identified in this plan meets the needs of the public and is where the rubber meets the pavement. Transportation policy proposed in this plan is a result of the evaluation and planning efforts by the County Transportation Advisory Committee (TAC) revolving around key policies.

SCOPE OF WORK

Lemhi County entered into the Transportation Study with specific goals in mind. A few of the key policies and goals of Lemhi County include:

Connectivity: The county has expressed a strong desire for improved connectivity to the road network. There are concerns for alternate routes for emergency services. Public involvement and support are necessary to accomplish this task. Through planning and public involvement the general location of these routes have been identified. Connectivity maps showing these routes will assist the county in planning and preservation of public right-of-way.

Standards: Lemhi County Road Standards and Development Code have been prepared with the assistance of the TAC (Appendix F). Standards include road widths based on current and future use. Ballast requirements allowing a minimum typical section without testing and a standard of measure for tested ballast sections. Road construction testing requirements are included in the Standards. If required, on-site inspection by a contract employee with engineering oversight will ensure construction quality. Access control and right-of-way use policies are established providing direction for county staff with right-of-way permits and enforcement.

The Standard's policies tie in with the development code and transportation component of the Comprehensive Plan. These policies are established as a guide for staff when implementing agreements where development pays its own way. To ensure consistency in development review a checklist for new road development and construction is included. A road classification scale is provided identifying thresholds for road construction requirements based on purpose and use.

Financial: Funding strategies include a complement of alternatives allowing the county to select options that best fit the need. These alternatives include latecomers agreements, impact fees, local improvement districts, and federal funding programs. The goal for providing a selection of options is to stretch local dollars for capital improvement projects.

A Surface Management Plan and road inventory are provided. A road inventory is a first step for surface management planning. This inventory is accessed through a GIS system managed by the LCRB. The surface management plan provides goals for the county's road maintenance. By meeting the goals, the county's investment in roads and maintenance dollars are maximized.

Projects: A Capital Improvement Plan (CIP) is a document that identifies health and safety needs, critical maintenances needs, and growth development needs. The CIP projects identified include priority, name, funding source, probable cost, and construction year. The GIS database is expandable to allow for future information. The database inventory identifies the current surface conditions of each road and transportation structures. The database may also track future potential transportation needs and requirements based on road ratings. The road inventory survey uses the existing data previously collected by the county. An evaluation of each county road surface condition and a condition rating for each road can provide strong justification and support of the selected improvements for community understanding and funding applications. The LCRB may track needed improvements and the associated costs using the GIS. Additionally, information for annual updates to the road network may be readily available from the GIS to match potential funding sources.

The scope of work also includes studying historical population census, assessing the existing transportation system, determining future transportation needs, forecasting traffic on major county roads, and providing recommendations for congestion mitigation. The study identifies future growth based projects that are included in the CIP. The CIP is located in Appendix E. Projects in the CIP have been presented to the county at the public meetings for public input on the proposed projects. Each year the Board of County Commissioners should review the CIP with the LCRB adding or deleting projects and setting priorities on projects as the needs of the County may change.

PLANNING PERIOD

The Master Transportation Plan addresses transportation related issues and identifies needs to meet the future transportation demands through the year 2030. The travel demand forecast, population, and land use projections were projected through this planning period.

The current and historical traffic counts at key locations on major roads were collected and provided by the LCRB. Traffic counts and data on state highways were obtained from the Idaho Transportation Department (ITD). Additional traffic information used was from a study of the scenic byway loop that was prepared by DKS Engineering.

A Travel Demand Forecast (TDF) method was developed based on the population, land use projections, growth rates, and the seasonal adjustment factor. The TDF process is limited to projecting traffic volumes on major roads in Lemhi County. A detailed discussion on TDF methodology is provided in **Chapter 3**.

CHAPTER 2

DEMOGRAPHICS, POPULATION, AND LAND USE

Lemhi County is located in central Idaho and shares a border with the state of Montana. The City of Salmon is Lemhi County seat, located approximately 45 miles south of the Montana border along US Highway 93. Lemhi County was established in 1869, named after Fort Lemhi along the Lemhi River. According to the US Census Bureau, Lemhi County has a total area of 4,564 square miles, which is larger than the states of Rhode Island and Delaware combined. Idaho Department of Labor and Commerce lists the population of Lemhi County as 7,936 as of 2010.

This section will review the historical population and land use and provide possible growth rates for the county. Population and land use data was taken from other reports created by other sources and provided for Lemhi County. Population and land use are important for transportation planning in that future traffic volumes are based on this data. Each business and residence produces traffic volume each day that can be used to predict future traffic volumes. These traffic volumes are used to identify future projects, funding, and budget needs. In conclusion, the findings identify a conservative growth rate for the County.

POPULATION AND EMPLOYMENT

Lemhi County demographics were obtained from various sources including the U.S. Census Bureau, Idaho Department of Labor web page, Idaho Power, the Lemhi County Comprehensive Plan, and the 2010 State of the County Report.

Historical Population

Population in Lemhi County has fluctuated since 1970. The change in population can be attributed to the decline of family farming, ranching, timber, and mining industries, and the increase of recreation and tourism industries. Economics and job opportunity is a contributor to the undulating population of the county. The historical population records obtained from the U.S. Census Bureau Data and are shown in Table 1.

Table 1. Lemhi County Historical Census Population Data

Year	Population	Numerical Change	% Change per Year	Median Age in County*
1970	5,600	-	-	
1980	7,500	1,900	3.39%	30.9
1990	6,926	-574	-0.77%	38.1
2000	7,806	880	1.27%	42.7
2001	7,603	-203	-2.60%	
2002	7,599	-4	-0.05%	
2003	7,602	3	-0.04%	
2004	7,660	58	0.76%	
2005	7,704	44	0.57%	
2006	7,792	88	1.14%	
2007	7,781	-11	-0.14%	
2008	7,907	126	1.62%	
2009	7,908	1	0.01%	
2010	7,936	28	0.35%	

Source: U.S. Census Bureau via Idaho Department of Labor
* Lemhi County Comprehensive Plan

The population in Lemhi County increased from the year 1970 to 1980 at an average annual growth rate of 3.4 percent. Lemhi County's population changed at an average annual rate of -0.77 percent and 1.27 percent the next two decades, respectively. The changes in population over the last four decades seem to have followed the change in economics of Eastern Idaho. Lemhi County's population growth has varied since the year 2000. The decrease in population from 2001 to 2002 was countered by an increase in population since 2003. The county has experienced an average annual growth rate of 0.6 percent the last five years.

The population of the county is expected to continue to grow in direct proportion to the local economy in the foreseeable future. Great recreational and tourism opportunities, beautiful natural ambiance with lakes, rivers, forests, and mining ventures appear to be some of the economic drivers of the economy. The demographic population of Lemhi County is expected to change in the future as the median age of the county increases; according to the Comprehensive Plan, "Lemhi County is slowly growing older, indicating that young people are leaving after high school and not returning to raise their own families". The population density in the county is approximately 1.8 people per square mile. The State average density

is 15.64 people per square mile. When examining this comparison, only eight percent of the county land is privately owned.

Future Population Projection

Population projections depend on a number of variables and assumptions. In Lemhi County some of the variables include land use speculation, jobs and salaries, and full time residence versus vacation homes. Changing these variables will yield a range of possible population projections. Population forecasts for the county were developed using a variety of available information on expected growth. The following illustrates the population projection through the year 2030.

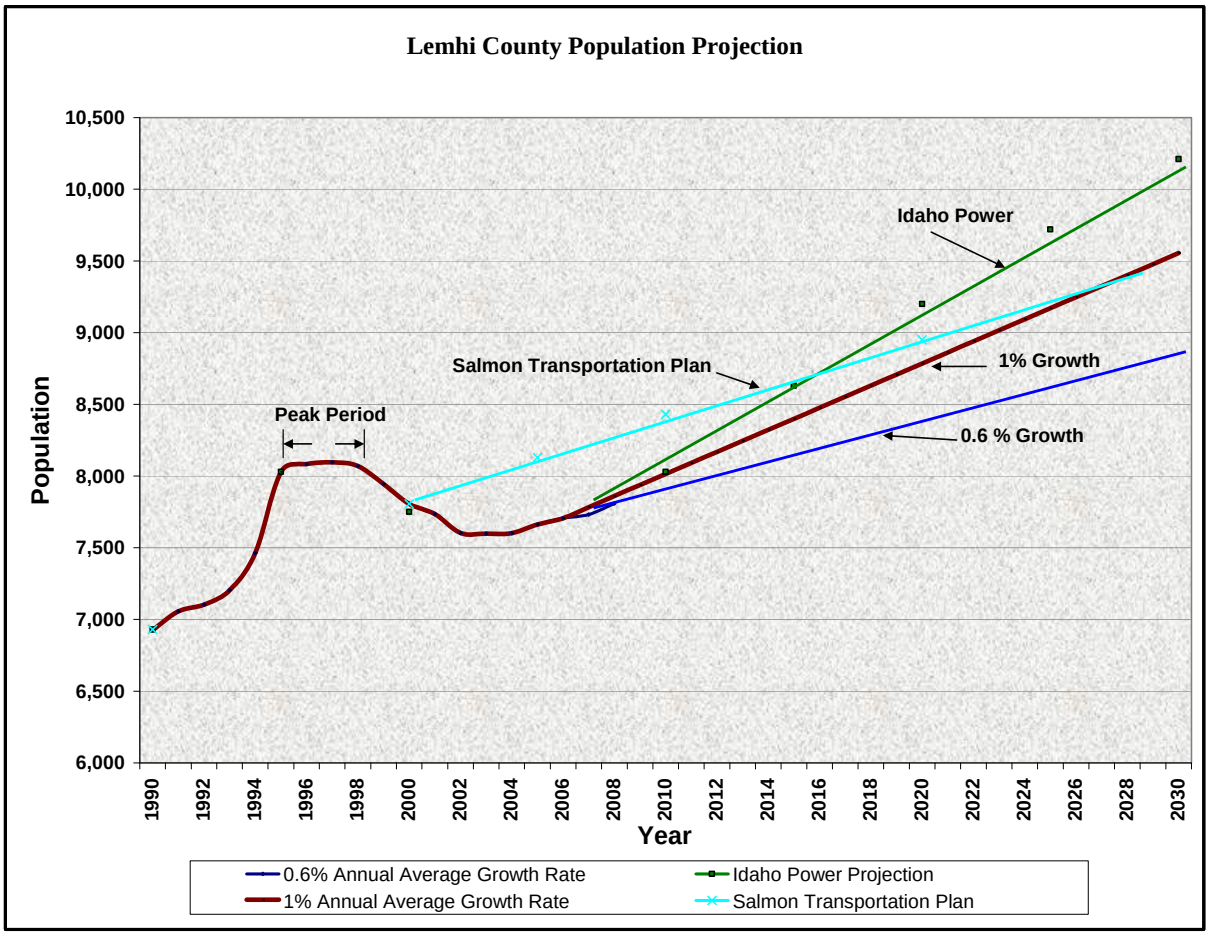


Figure 1. Comparison of Population Projections through 2030

Figure 1 illustrates a comparison of population projections evaluated through three different methods. Population growth rate used for this study is 0.6 percent.

1. The first method used projection information obtained from Idaho Power. Idaho Power Company records the number of services when they receive requests for a new service. Idaho Power provided the historical and projected population census information through 2030.

2. The second method used an average annual growth rate obtained from the historical population census. An average annual growth rate of approximately 0.60 percent was observed from 2003 to 2008, and an average growth rate of 1.00 percent was observed from 2007 to 2008. The population was projected through 2030 with an assumption of 0.60 and 1.00 percent average annual growth rates.

3. The third method used the growth projections provided in the Salmon Transportation Plan. This projection is based on approximately 0.70 percent annual growth from the year 2000 population of 7,806.

ITD, in association with DKS Associates, updated the Eastern Idaho Corridor Loop Plan. DKS Associates developed a population forecast for nine counties in eastern Idaho as a part of the corridor update plan. The following table illustrates population forecasts for nine counties, including Lemhi County.

Table 2. Population Forecasts for Surrounding Counties

	U.S. Census Population Estimates			Growth Rate 1990-2008	Forecast Based on Extrapolation of Growth Rate 1990 to 2008		
	1990	2000	2008		2017	2027	2057
Idaho	1,006,749	1,293,953	1,523,816	1.89%	1,782,350	2,069,609	2,931,387
Bonneville County	72,207	82,522	99,135	1.51%	112,599	127,559	172,439
Butte County	2,918	2,899	2,751	-0.34%	2,668	2,575	2,296
Clark County	762	1,022	910	0.90%	984	1,066	1,313
Custer County	4,133	4,342	4,254	0.16%	4,315	4,382	4,583
Fremont County	10,937	11,819	12,551	0.71%	13,358	14,255	16,945
Jefferson County	16,543	19,155	23,860	1.70%	27,519	31,584	43,779
Lemhi County	6,899	7,806	7,808	0.65%	8,263	8,768	10,283
Madison County	23,674	27,467	37,456	2.04%	44,347	52,004	74,974
Teton County	3,439	5,999	8,833	3.39%	11,530	14,527	23,517
9-County	141,512	163,031	197,558	1.58%	225,581	256,718	350,128
Source: East Idaho Corridor Loop Plan Update, DKS Associates – 2010							

Bonneville and Jefferson counties have experienced an average annual growth rate of more than one percent, whereas Madison and Teton counties have experienced an average annual growth rate of 2.04 percent and 3.39 percent, respectively, from 1990 to 2008. Based on the population forecast methodologies, the population in Lemhi County can be expected to reach between 8,800 and 9,600 by the year 2030.

Employment

Idaho Department of Labor, October 2011 Lemhi County Work Force Trends, reports that the government employs 34 percent of the county's workers. Over 90 percent of the land is federally managed. Agencies such as the BLM, USFS, and the Idaho Fish and Game Department employ many. Trade, transportation, and utilities along with leisure and hospitality employ 27 percent of Lemhi County's labor force. Trade encompasses food stores, restaurants, bars, and auto dealerships; all of which serve not only the surrounding area but also includes the larger geographic area of Montana and Wyoming.

Total employment in Lemhi County in September 2010 was at 3,326 and in September 2011 at 3,214. According to the DOL's report, labor force and employment in Lemhi County is diversifying while capitalizing on its strengths. Summer fires over the last decade, some demanding national help, temporarily boosted employment. The county has rebounded with the support of residents and leaders. Cobalt and rare earth metal mining renews optimism for population and economic growth.

Table 3. Nonfarm Payroll Jobs for 2010

Job Type	Percent
Government	34
Trade, Utilities, & Transportation	15
Leisure & Hospitality	12
Educational & Health Services	10
Professional & Business Services	9
Construction	7
Other Services	6
Financial Activities	3
Manufacturing	3
Information	1

* source: Oct. 2011, Lemhi County Work Force Trends – Idaho Dept. of Labor

Table 4. Major Employers in Lemhi County

Lemhi County Major Employers
Discovery Care Center LLC
Lemhi County
Idaho Department of Fish & Game
Q B Corporation
Salmon Public Schools #291
Saveway Market Inc.
Steele Memorial Hospital
U.S. Government
* source: Oct. 2011, Lemhi County Work Force Trends – Idaho Dept. of Labor

The following Table 5 developed by DKS illustrates historical employment data and future employment forecasts for Lemhi County and surrounding counties.

Table 5: Employment Forecasts for Surrounding Counties

Employment Forecasts by County							
	Idaho Department of Labor Estimate of Employment			Growth Rate 1996 to 2009	Forecast of Employment Based on Extrapolated Growth Rate		
County	**1996**	**2000**	**2009**		**2017**	**2027**	**2057**
Bonneville	42,274	40,212	47,629	0.86%	50,924	55,044	67,401
Butte	1,539	1,401	1,413	-0.69%	1,335	1,239	948
Clark	614	512	521	-1.37%	464	392	178
Custer	2,318	2,475	2,442	0.39%	2,518	2,614	2,900
Fremont	4,185	5,418	5,384	1.71%	6,122	7,044	9,811
Jefferson	9,002	8,694	10,512	1.10%	11,441	12,603	16,087
Lemhi	3,866	3,541	3,417	-1.01%	3,141	2,795	1,759
Madison	8,862	12,391	15,522	3.30%	19,620	24,744	40,113
Teton	2,548	3,558	4,108	2.92%	5,068	6,268	9,868
9-County Area	77,204	80,202	92,957	1.30%	100,633	112,743	149,065
Source: East Idaho Corridor Loop Plan Update, DKS Associates - 2010							

The above table illustrates the employment in Lemhi County decreased from the year 1996 to 2009 as Lemhi County's work environment continues to evolve from family farms and ranching, timber, and mining. Just as employment trends continue to grow in surrounding counties, Lemhi County's employment trends is expected to stabilize and increase as the county employment environment evolves.

EXISTING LAND USE AND ZONING

Lemhi County is mostly a rural county with a population of slightly less than 8,000. The county occupies a varied landscape of irrigated valleys, foothills, and mountains.

Lemhi County's Comprehensive Plan identified four (4) major Policies for land use. They are as follows [1]:

1. *Adopt appropriate regulatory strategies for different scales of development.*
2. *Recognize landscape diversity – provide for future planning efforts.*
3. *Limit land use conflict – protect productive activity.*
4. *City – County cooperation.*

Detailed description of the county goals and policy statements are available in the Lemhi County Comprehensive Plan, adopted in November 2007.

The following figure illustrates the current county-wide land use distribution.

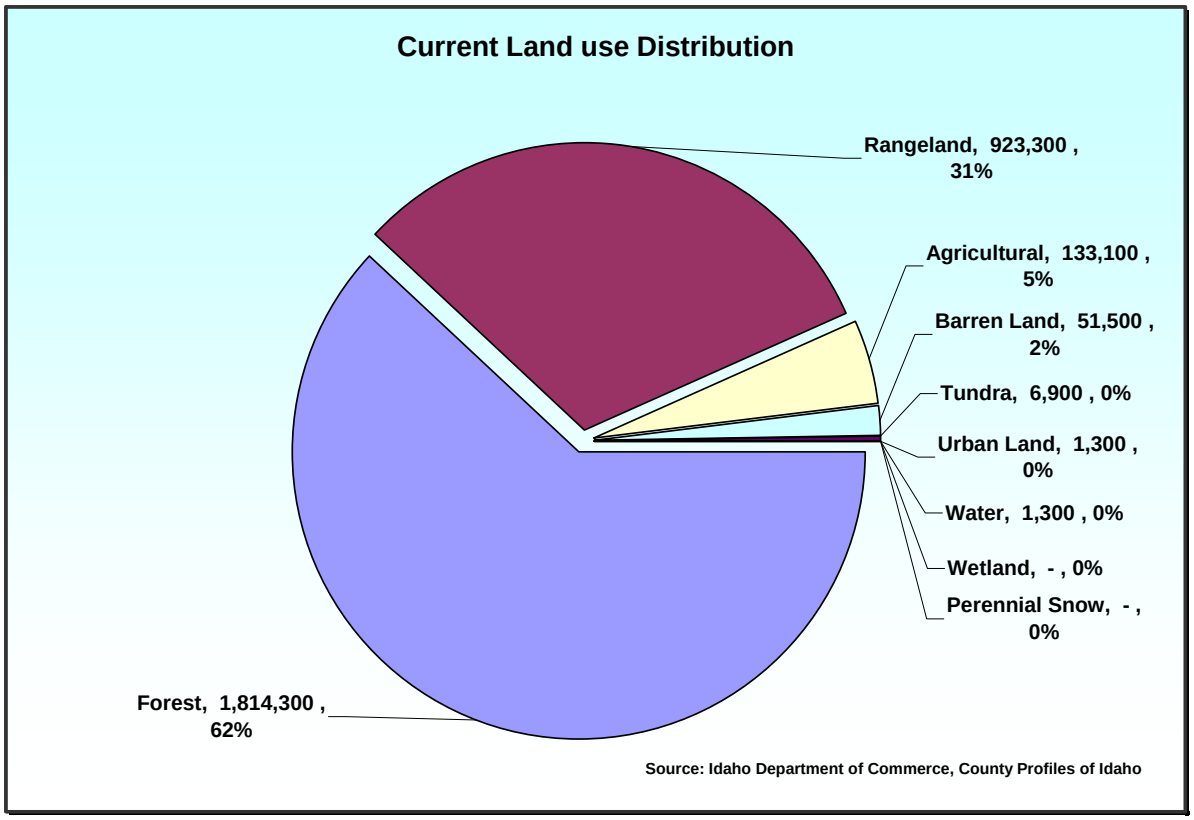


Figure 2. Current Land Use Distribution

Lemhi County is predominately Forest and Rangeland areas that constitute 93 percent of the total county area. The surrounding areas of Salmon, Leadore, Elk Bend, May, and Patterson are predominately rangeland with a potential for future development.

Land Ownership

As per Lemhi County's Comprehensive Plan, *"The total land area is 2,921,152 acres. This consists of 2,648,258 acres federal land (90.7%), 37,829 acres state land (1.3%), 233,189 acres private land (8%), and 1,059 acres county and city land (0.1%)."*

Public lands managed by government agencies have historically been referred to as agency ownership. The following Table 6 illustrates the total land ownership in Lemhi County.

Table 6. Lemhi County Land Management

Land Ownership	Acres[1]	Acres[2]	Acres[3]
Federal Land	**2,648,258**	**2,648,258**	
BLM	574,943		575,555
National Forests	2,073,315		2,073,237
Other	0		
State Land	**37,829**	**37,829**	
Endowment Land	37,267		
Fish and Game	562		
Parks and Recreation	0		
University of Idaho Land	0		
Private Land	**233,189**	**233,189**	
County Land	**1,800**	**1,059[4]**	
Municipal Land	**76**		
Total Taxable Acreage			**232,599**
Agricultural			203,487
Residential			16,078
Total	**2,921,152**	**2,921,152**	**2,921,152**

[1] Source: Idaho Department of Commerce, County Profiles of Idaho (2006)
[2] Source: Lemhi County Comprehensive Plan, November 26, 2007
[3] Source: Econometrics Section, 2009 State of the County Report, Lemhi County
[4] Includes both county and city land

There are few differences between available sources listed in the above table – the differences are between acreages of BLM and National Forests, and acreages of county and municipal land. For additional information, see the individual reports for definitions of lands and variation of acreages. The Lemhi County Land Ownership Map is provided in Appendix

B. Figure 3 illustrates the percentage of total land ownership in Lemhi County (based on the Department of Commerce County Profile).

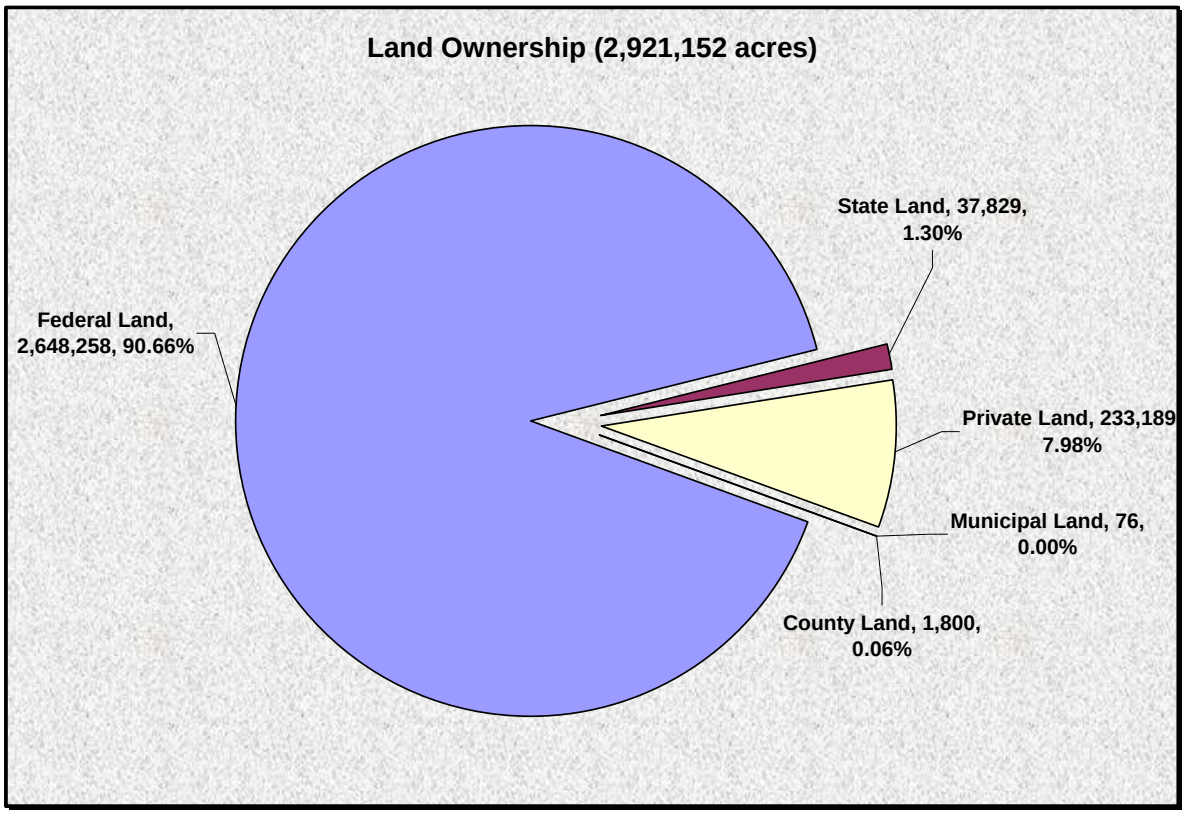


Figure 3. Lemhi County Land Ownership Distribution

Currently, the majority of land is under federal management, comprising almost 91 percent. The majority of private land is concentrated along US Highway 93 and State Highway 28. With over 2.6 million acres of federal managed land next to private land, the County provides residents and visitors with an abundance of recreational opportunities [1].

The quantity of private versus government managed lands impacts the County significantly. The County may take steps to manage the growth and land use of private lands thus protecting personal property rights; however, management of 92 percent of the County is controlled by Federal Government. Access to and through 92 percent of the County is maintained by the County and the ITD. County economics have historically depended on the use of and access to government-managed lands. Indicators show that County economics will continue to require dependency of access to and use of government managed lands.

FUTURE LAND USE AND PLANNING

Land use and transportation planning are two vital elements in the county's development. Decisions made on one element usually affect other elements. Future land use planning enables decision-makers to shape the county's appearance, economy, and living standards. As per the county's comprehensive plan; land use regulations and policies offer essential protection for the quality of life currently existing in the county. The County encourages protection of open range and "right-to-farm" policies.

The County development policy requires new development to be compatible with existing land uses through permitted land us policies and performance standards. Residential developments in rural communities should be closely scrutinized to avoid potential land use conflict. Establishing policies to assist in transferring development rights will aid in achieving these goals.

Access to the county's national forests and government-managed lands frequently pass through private lands. Accessibility to public and forestlands should be preserved and improved to provide continued access and use of public lands.

Land use and transportation planning in Lemhi County includes planning for future needs within the context of minimizing impacts to fish and wildlife resources. The County's involvement with the cooperative efforts of Idaho Department of Fish and Game, National Marine Fisheries Service, and other stakeholders assist in safeguarding these valued resources. Federally-funded transportation projects are required to go through an environmental review process that mitigates project impact and protects wildlife and habitat.

Land use zoning is complex in Lemhi County due to its topographic and geological characteristics. In order to address conflicts and issues related to land use zoning and development, the County has established "zoning districts" to accomplish their comprehensive plan goals. By establishing zoning districts, private property rights of the owner can be protected and proper land use decisions can be made within each zoning district.

Zoning Districts

Lemhi County adopted a development code in January 2009, pursuant to the authority granted by the Local Planning Act of 1975. This code includes zoning and subdivision ordinances required by Idaho Code 67-6511 and Idaho Code 67-6513 respectively. These ordinances are developed to supplement the county's comprehensive plan and to accomplish land use goals.

Lemhi County has established the following 12 zoning districts county-wide to implement into the comprehensive plan.

1. Airport Safety Overlay Zoning District
2. Airport Zoning District
3. Area of City Impact Zoning District
4. Lower Lemhi River Valley Zoning District
5. North Fork-Gibbonsville Zoning District
6. North Salmon Basin Zoning District
7. Pahsimeroi Zoning District
8. Salmon River Mountains Zoning District
9. Special Flood Hazard Overlay Zoning District
10. South Salmon Basin Zoning District
11. South Salmon River Corridor Zoning District, and
12. Upper Lemhi River Valley Zoning District

A detailed description of zoning district boundaries and areas are provided in the County's Development Code. The "Official Zoning Map of Lemhi County" has been adopted and is available to the public at Lemhi County Planning and Zoning.

The county has implemented a "performance" zoning concept for each zoning district. Performance standards for each of the 12 zoning districts were established in the county's Development Code.

FUTURE DEVELOPMENT POTENTIAL

Lemhi County's minimal growth and decline in employment trends over the past five years is at a threshold of change. Lemhi County issues on average 197 building permits per year. In 2004, 252 permits were issued and in 2009, 182 permits were issued. Based on the average, the percentage of permits issued in 2004 is 127% and the percentage for 2009 is 92%. As of November 2011, 178 permits or 90% based on the average were issued. New businesses with job opportunity is currently being explored. Lemhi County has several approved subdivisions with vacant lots. Given the right economic conditions, the County growth rate will increase.

Policies and strategies in the comprehensive plan encourage county-wide growth and developments. The County promotes agricultural, recreation, cottage industry, small and large-scale residential and commercial developments, and industrial park development near the airport. To encourage youth to remain in the county, vocational education is available by local industry. While promoting these polices and strategies the County simultaneously strives to protect private property rights and values while maintaining the current quality of life.

The county encourages infill of existing city, community centers, and impact areas first over expansion into rural areas to accommodate growth in the near future [1]. With Salmon being the county seat, it is a major tourist hub and population center for the county. Several recreational activities draw Lemhi County residents and visitors to the area. Activities include: wildlife and game bird hunting and viewing, cross country ski trails, fishing, sledding, ice skating, horseback riding trails and pack trips, cross-country and downhill skiing and trails, snow machining, OHV/ATV trails utilization, whitewater rafting, floating and boating, jet boat tours, kayaking, ice hockey, skateboarding, golf, mountain biking, airplane sightseeing trips, Lewis and Clark van tours, trapping, hiking, gold panning / rock hounding, and geocaching.

The majority of developments with available building lots are contiguous along US Highway 93 and State Highway 28. There is potential for residential future developments along these

highways and between the cities of Baker and Leadore. Elk Bend, an unincorporated area along US 93, has been identified by the County as a possible area for future development potential. Many retired people are moving to this area. Developments and future development north of Salmon also show growth based on the location of building permits.

CHAPTER 3

LEMHI COUNTY TRANSPORTATION SYSTEM

Lemhi County has five jurisdictions responsible for roads: the LCRB, City of Salmon, USFS, BLM, and ITD. Lemhi County maintains approximately 400 miles of paved and unpaved roads in the County. In addition, there are approximately 3,500 miles of roads on federal and state lands within the County. State maintained roads include State Highways 28, 29, and US Highway 93. US Highway 93 runs north along the Salmon River from Challis in Custer County through the City of Salmon then continues north along the Salmon River then through the National Forest to Montana. State Highway 28 runs from Highway 33 near Mud Lake Northwest along the Lemhi River to the City of Salmon. Highway 28 connects the City of Salmon with the county communities of Tendoy, Lemhi, Leadore, Gilmore, and Nicholia. State Highway 29 (closed in the winter) extends from the City of Leadore North Northeast to the Montana State line.

Major collector roads in Lemhi County, as per the official 2010 ITD functional classification map, are Lemhi Road, Carmen Creek Road, Hayden Creek Road, Pahsimeroi Road, Lee Creek Road, and State Highway 29. US Highway 93 and State Highway 28 are arterials. US Highway 93 and State Highway 28 are also classified as the Salmon River Scenic Byway and the Sacajawea Scenic Byway respectively.

Settlements in Lemhi County have been initiated by mining, trapping, trade, and timber. Lemhi County's topography includes long narrow valleys supporting the Salmon and Lemhi Rivers. Settlements and current communities of Lemhi County tend to be near these rivers. Just as tributaries transport water from the mountains to the rivers, most of the county roads serve as collectors and local roads funneling traffic to US Highway 93 and State Highway 28.

An increasing number of people are utilizing the many trails throughout various parts of the County. Biking, walking, and running are becoming more commonplace among some

community members. Many leave their vehicles at home and bike, walk, or run to and from work. With an ever-increasing interest in health and fitness, the many year-round outdoor recreational activities in Lemhi County offer an inviting variety to community members and visitors.

Lemhi County Alternate Mobility, Transportation Advisory Committee, and county officials have discussed the need for improving key links in the roadway and bikeway networks, including accessibility for the disabled. Providing a safe and convenient accommodation of special mobility requirements of Lemhi County's elderly and physically challenged population, is a priority in the planning efforts as alternative mobility moves forward. This is discussed further in Chapter 4, Alternate Mobility.

PREVIOUS STUDY – EAST IDAHO CORRIDOR LOOP PLAN (EICLP)

ITD developed an EICLP in July 2006 to study the existing and future transportation system of the eastern Idaho region. The EICLP consists of portions of US 93, US 20, SH 28, SH 22, and SH 33 in the eastern Idaho area. This plan addressed the roles of the corridor in terms of economic vitality, environmental issues, right-of-way preservation, and impacts of local land use on corridor operation and safety.

The purpose of the plan was to assess roadway conditions and growth patterns within the study area and to develop recommendations for highway management, capital improvements, and future planning [10]. The following Figure 4 provides a map of recommended improvement projects in the study area.

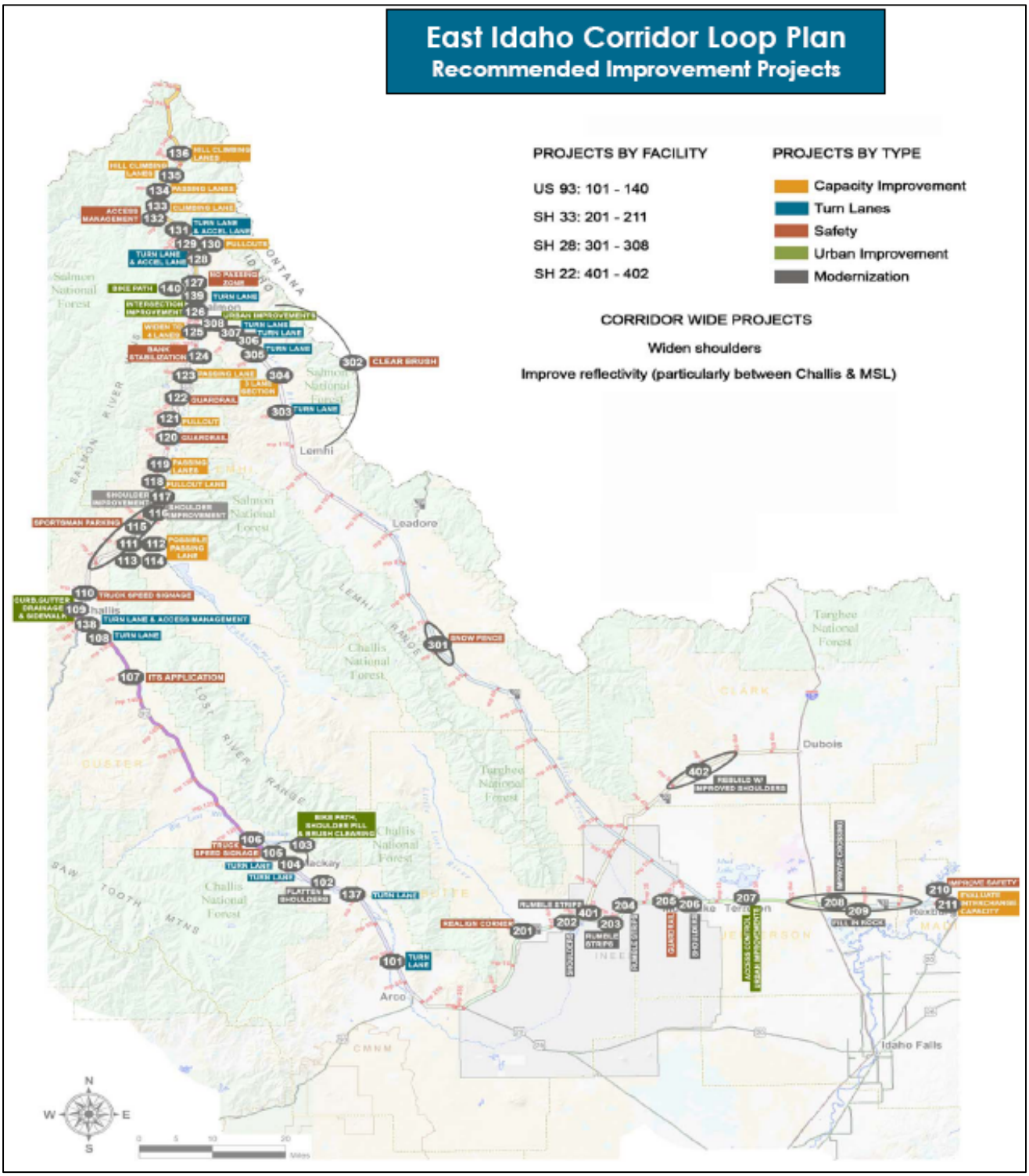


Figure 4. EICLP – Recommended Improvement Projects

A detailed description of recommended improvement projects is available in the plan study report. This report is available at the following ITD website: http://itd.idaho.gov/projects/d6/.

ITD is in the process of updating the EICLP study in association with DKS Associates Inc. The updates are to the portion of the study that is related to future travel demand, corridor needs, assessment of likely timeframe for the needs, and identification of appropriate management strategies and improvements for each highway corridor in the loop.

EXISTING TRAFFIC CONDITIONS

The current traffic counts on Lemhi County roads are important to understand the current travel behavior and pattern. The traffic counts provide a datum for future traffic volume comparisons. The LCRB collected traffic counts for a week at key locations on major county roads during the summer and fall of 2009.

Table 7 shows average daily traffic (ADT) counts on key roads within Lemhi County based on one week of traffic data collection.

Table 7. ADT on County Roads

Segment Code	Road Name	Location	ADT
022904	4th of July Creek Road	At Hwy 93	200
022904	4th of July Creek Road	At End of Pavement	128
017649	Agency Creek Road	At Winter Maintenance Sign	151
022859	Airport Road	East of Hwy 93	1096
022892	Black Rock Road	75 yards off pavement	57
006460	Carmen Creek Road	At Hwy 93	534
006460	Carmen Creek Road	At Y-Intersection Carmen Side	85
022895	Diamond Creek Road	On Pavement	238
022895	Diamond Creek Road	At 1st Cattle Guard	322
022895	Diamond Creek Road	At Morgan Bar	86
022894	Dogwood Lane	At Hwy 93	102

Segment Code	Road Name	Location	ADT
022903	East Tower Creek Road	At East Fork	58
022900	Freeman Creek Road	At Y-Intersection Freeman Side	169
022887	Geertson Creek Road	At Intersection Sign Board	104
002217	Haynes Creek Road	At 1st Speed Sign	117
022883	Kirtley Creek Road	At Low Cattle Guard	556
022885	Kirtley Creek Road	At Whitleys Driveway	471
022859	Landfill Road	East of Sunset Heights Road	379
022893	Leesburg Road	At first power pole off 14th St.	47
002216	Lemhi Road	North side of Allen Bridge	646
002216	Lemhi Road	South of Tendoy	136
022874	Lovers Lane	Near Haven Lane	1047
022862	Mountain View Road	East of S. Cherokee Lane	402
002223	N. St. Charles	At City limits	988
022899	Parmenter Lane	At Speed Sign	105
022890	Pratt Creek Road	1/4 mile from back Road	31
018970	S.St. Charles	At City limits	1390
022846	Sunset Heights Road	At Landfill Lane	339
022902	Tower Creek Road	At Hwy 93	165
017649	Warm Springs Road	At Primitive Road Sign	171
001343	Williams Creek Road	West Side of Shoup Bridge	1067
022889	Wimpey Creek Road	At Chains Advised Sign	51
023497	Withington Creek Road	At 3rd Power Pole	45

ADT on Williams Creek Road, St. Charles Road, Airport Road, and Lovers Lane is more than 1,000 vehicles per day. Lemhi Road, Carmen Creek Road, and Kirtley Creek Road carry traffic volumes in the range of 500 to 1000 ADT.

ADT counts provided in the above table are the average from one week of traffic data collection. Traffic volume and travel behavior vary depending on the day of the week and the season. Seasonal variation volumes are shown in Figure 6 for US 93 and state highway 28. County road volumes may vary similar to the state highways.

Traffic Data on Highways

ITD records traffic counts on US Highway 93 near Salmon (MP 301.50), and State Highway 28 near Leadore (MP 88.314) using a permanent Automatic Traffic Recorder (ATR). An ATR records traffic every day and periodic traffic reports are available on the ITD's website. Understanding the traffic volumes, variation, and the relationship to Lemhi County land use helps to predict future traffic on the county roads for planning purposes. The following Figure 5 shows the variation of traffic volume on US Highway 93 and State Highway 28 for the period from 1990 to 2009. Figure 5 illustrates Annual Average Daily Traffic (AADT), which is the daily traffic averaged over a year.

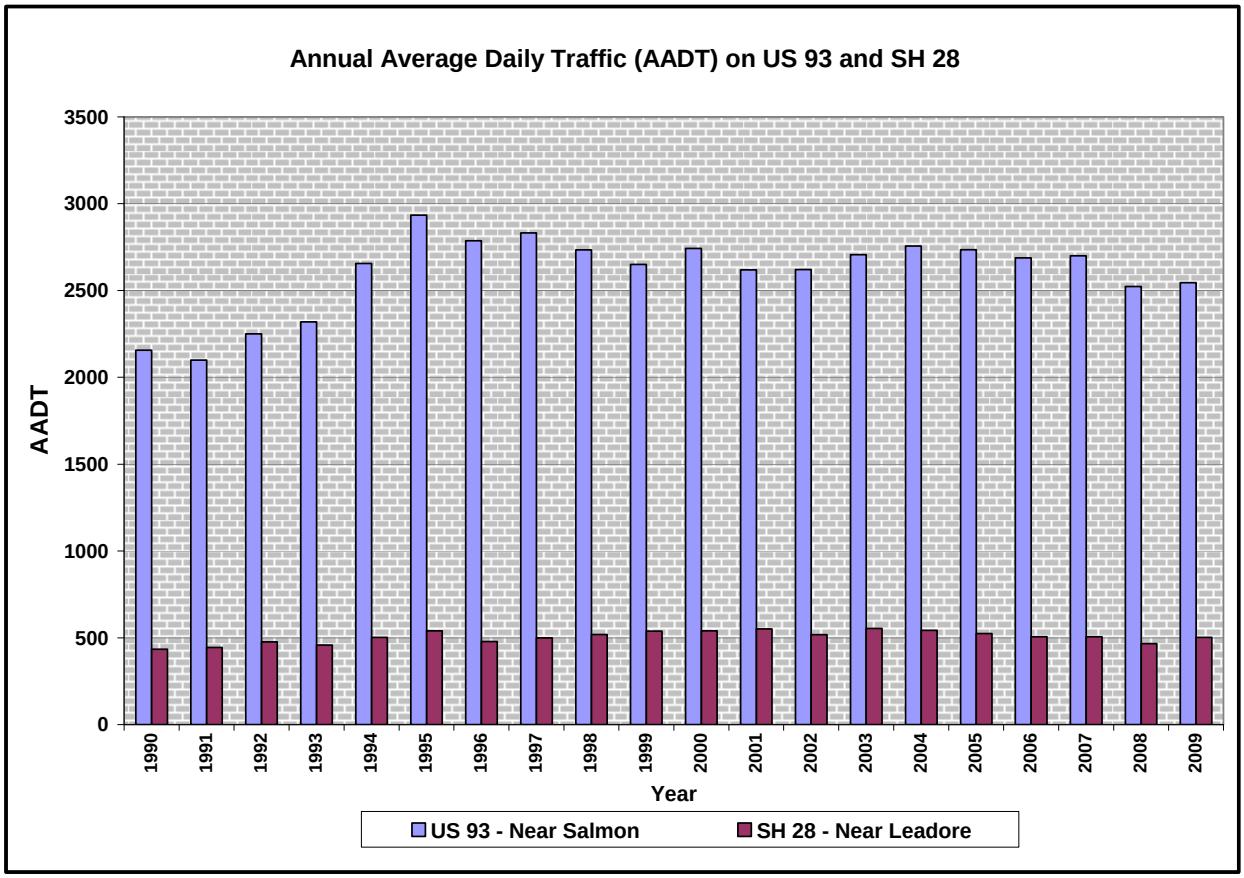


Figure 5. Historical AADT on US 93 and State Highway 28

AADT values on both highways have minor variation for the last decade. The trend in traffic volume indicates that the vehicular traffic growth in the county is slight. Table 8 illustrates AADT on US Highway 93 and SH 28 for the last decade.

Table 8. Historical AADT on US 93 and State Highway 28

Year	AADT		% Change Per Year	
	US 93 Salmon	SH 28 Leadore	US 93 Salmon	SH 28 Leadore
2000	2742	540	3%	0%
2001	2619	551	-4%	2%
2002	2621	519	0%	-6%
2003	2707	553	3%	7%
2004	2756	542	2%	-2%
2005	2735	524	-1%	-3%
2006	2688	506	-2%	-3%
2007	2700	506	0%	0%
2008	2523	466	-7%	-8%
2009	2545	502	1%	8%

There was a slight increase in traffic on both highways from 2003 to 2004 and the growth rate has decreased by a minimal percentage since 2004. This traffic variation trend is consistent with the historical population trend, explained in Chapter 2. The future traffic on highways can be projected using the historical traffic trend.

Seasonal Traffic Variation Factor

US Highway 93 and State Highway 28 serve the Lemhi County area and function as a major route for the recreational and tourist traffic. Variation in seasonal traffic can be expected on both highways due to the presence of recreational and tourist areas in Lemhi County.

The following Figure 6 illustrates the seasonal traffic variation on US Highway 93 and State Highway 28 during the year 2009.

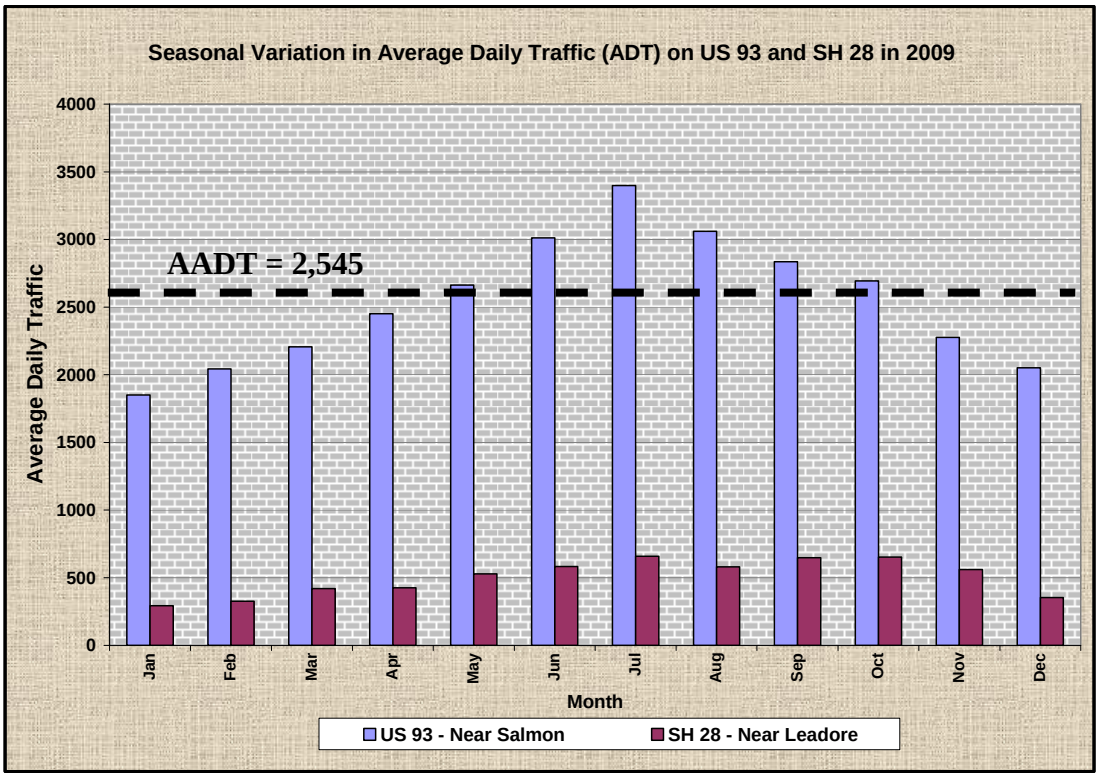


Figure 6. Seasonal Traffic Variation on US 93 and State Highway 28 in 2009

It is evident from the above figure that the traffic volume varies on both highways depending on the time of the year. Maximum traffic can be observed during the summer, especially in July and August. The seasonal traffic variation provides important information to the LCRB crew on the traffic condition and required maintenance work on county roads during the peak season.

A seasonal traffic variation factor was determined using the current traffic volumes on US Highway 93 and State Highway 28. AADT on both highways was considered to determine the seasonal variation factor because it represents average traffic over a year. Peak monthly traffic on highways was observed in July. Traffic in June and August can be expected to reach peak levels in Lemhi County.

AADT on US Highway 93 for 2009 was observed as 2,545 vehicles per day. Average Daily Traffic during peak season on US Highway 93 in July was observed as 3,399 vehicles per day.

Seasonal Variation Factor is given by the following equation:

$$Seasonal\ Variation\ Factor = \frac{Average\ Daily\ Traffic\ during\ Peak\ Season}{Annual\ Average\ Daily\ Traffic}$$

Using the above equation, the Seasonal Variation Factor was found to be **1.33**.

Intersection Traffic Counts and Analysis

DKS Associates Inc., collected traffic counts on October 21, 2009, at key intersections within the County as part of their corridor plan study update. The following table illustrates the existing PM peak hour traffic counts and level of service (LOS) at key intersections within the County.

Table 9. Existing Level of Service at Intersections

Intersection	East Bound			West Bound			North Bound			South Bound			Total	LOS
	LT	THR	RT	LT	THR	RT	LT	THR	RT	LT	THR	RT		
US 93 & SH 28	38	141	118	59	182	26	141	57	64	26	76	40	968	C
US 93 & Courthouse Dr.	21	253	2	3	344	167	1	1	4	135	2	9	942	D
US 93 & Elks Rd.	18	0	9	0	0	0	13	155	0	0	133	11	339	B
SH 28 & SH 29	2	6	9	7	5	12	8	25	11	9	26	3	123	A
SH 28 & Tendoy Lane	2	6	9	7	5	12	0	28	7	4	38	0	118	A
SH 28 & Baker Lane	2	1	2	1	1	6	1	42	2	11	60	13	142	A

Source: East Idaho Corridor Loop Plan Update, DKS Associates - 2010

The LOS characterizes the operating conditions on a facility in terms of traffic performance measures related to speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. The LOS is a description of different traffic operating conditions

which occur on a roadway or at an intersection. The LOS range from 'A' (least congested) to 'F' (most congested).

Refer to Appendix G for LOS definitions. The current LOS at SH 28 and Tendoy Lane, SH 28 and Baker Lane, and SH 28 and SH 29 is 'A' which indicates free traffic flow without congestion. The current LOS at the US 93 and SH 28 intersection is 'C' whereas the intersection of US 93 and Courthouse Dr. is operating at LOS 'D' within the city limits of Salmon. The City of Salmon has identified these two intersections as vital in their master transportation plan for future improvements. Detailed traffic analysis for these two intersections is available in the Salmon's Transportation Plan.

County-wide Crash Data Analysis

The primary objective of an efficient transportation system is to move people and goods safely. It is almost impossible to eliminate all risks involved in moving goods and people through a roadway system. There are several factors involved in highway safety such as geometry of roads, vehicles, weather conditions, and road conditions. Crash data on the county roads were obtained from the ITD's Office of Highway Safety for the years from 2005 to 2009 to evaluate existing safety issues on the county road system. The crash data included accident details that occurred on county roads and the highway system within Lemhi County.

During this time, there were 746-recorded crashes on county roads and highway systems in Lemhi County. Over the last 5 years, there were 21 fatal crashes which account for 3% of all crashes, 328 injury crashes account for 44% and 397 property damage crashes which account for 53% of all crashes in the County. The data provided in this section reflect crashes recorded by ITD and do not include unrecorded incidents. The following table lists crash data information obtained from ITD.

Table 10. Crash History Data by Year

Year	Crash Data						
	Total	Fatal		Injury		PDO	
2005	148	7	4.73%	58	39.19%	83	56.08%
2006	151	3	1.99%	77	50.99%	71	47.02%
2007	133	1	0.75%	72	54.14%	60	45.11%
2008	155	2	1.29%	59	38.06%	94	60.65%
2009	159	8	5.03%	62	38.99%	89	55.97%
TOTAL	**746**	**21**		**328**		**397**	

PDO: Property Damage Only
Source: ITD - Office of Highway Safety

Table 11. Crash History Data by Year and Highways

Year	SH 28			US 93			County Roads		
	Fatal	Injury	PDO	Fatal	Injury	PDO	Fatal	Injury	PDO
2005	0	7	14	5	22	28	2	29	41
2006	2	15	15	1	33	22	0	29	34
2007	0	11	11	0	32	18	1	17	43
2008	2	21	22	0	19	17	0	19	55
2009	0	14	22	5	20	26	3	28	41
TOTAL	4	68	84	11	126	111	6	122	214

PDO: Property Damage Only
Source: ITD – Office of Highway Safety

Table 11 lists crash history data by county roads and state highway systems in Lemhi County for the last five years. Out of total 746 recorded accidents, 342 crashes were recorded on county roads and 404 crashes were recorded on State Highway 28 and US Highway 93. The majority of fatal and injury accidents were recorded on US Highway 93. The contributing circumstances for the majority of crashes on US Highway 93 varies and includes inattention driver, speed too fast for conditions, off roadway overcorrected, and drove left of center.

Approximately 90 accidents are recorded involving animals and vehicles from 2005 to 2009. The majority of accidents, approximately 95%, involving animals, occurred on US 93 and SH 28. The crash information can be used to identify locations with high vehicle/animal crashes and to assist with implementation of mitigation measures. An animal crash data table is included in Appendix B.

Table 12 lists contributing circumstances that led to accidents. It appears that most accidents are the result of driver error.

Table 12. Most Significant Contributing Circumstances for Crashes

Contributing Circumstances	Number of Crashes	
	Total	Percent
None	286	38.34
Inattention	103	13.81
Speed too Fast for Conditions	90	12.06
Off Roadway Overcorrected	49	6.57
Alcohol Impaired	40	5.36
Other	35	4.69
Failed to Yield	30	4.02
Asleep or Drowsy	14	1.88
Drove Left of Center	14	1.88
Distraction In/On Vehicle	11	1.47
Exceeded Posted Speed	11	1.47
Improper Turn	11	1.47
Following too Close	9	1.21
Improper Backing	8	1.07
Vision Obstruction	6	0.80
Disregarded Signal	3	0.40
Fatigued	3	0.40
Improper Overtaking	3	0.40
Other Vehicle Defect	3	0.40
Passed Stop Sign	3	0.40
Physical Impairment	3	0.40
Drug Impaired	2	0.27
Tire Defect	2	0.27
Failed to Signal	1	0.13
Hit and Run	1	0.13
Improper Use of Turn Lane	1	0.13
Improperly Parked	1	0.13
Light Defect	1	0.13
Previous Accident	1	0.13
Sick	1	0.13
	746	

A map showing crash locations in the County and table summary of crash locations are provided in Appendix B. Crash information and locations are used in transportation studies to identify key locations of re-occurring accidents. The crash sites locations in Lemhi County are scattered and do not identify site-specific location(s).

FUTURE TRAFFIC PROJECTION

Future Traffic Projection on County Roads

Future traffic projection is the process of forecasting traffic volumes by extrapolating growth rates from the historical traffic counts. The future traffic are projected using an average annual growth rate of 0.6 percent, consistent with the population growth rate, as illustrated in the following table.

Table 13. Future Traffic Forecast for County Roads

Segment Code	Road Name	Location		ADT			
			2009	2015	2020	2025	2030
022904	4th of July Creek Road	At End of Pavement	128	132	136	140	145
022904	4th of July Creek Road	At Hwy 93	200	207	213	220	226
017649	Agency Creek Road	At Winter Maintenance Sign	151	156	161	166	171
022859	Airport Road	East of Hwy 93	1096	1136	1171	1206	1243
022892	Black Rock Road	75 Yards off Pavement	57	59	61	63	65
006460	Carmen Creek Road	At Hwy 93	534	554	571	588	606
006460	Carmen Creek Road	At Y-Intersection Carmen Side	85	88	90	93	96
022895	Diamond Creek Road	On Pavement	238	247	254	262	270
022895	Diamond Creek Road	At Morgan Bar	86	89	92	95	98
022895	Diamond Creek Road	At 1st Cattle Guard	322	334	344	354	365
022894	Dogwood Lane	At Hwy 93	102	105	109	112	115
022903	East Tower Creek Road	At East Fork	58	60	61	63	65
022900	Freeman Creek Road	At Y-Intersection Freeman Side	169	175	180	186	192
022887	Geertson Creek Road	At Intersection Sign Board	104	107	111	114	118
002217	Haynes Creek Road	At 1st Speed Sign	117	122	125	129	133
022885	Kirtley Creek Road	At Whitleys Driveway	471	489	503	519	534
022883	Kirtley Creek Road	At Low Cattle Guard	556	576	594	612	630
022859	Landfill Road	East of Sunset Heights Road	379	392	404	417	429
022893	Leesburg Road	At first power pole off 14th St.	47	49	50	52	53
002216	Lemhi Road	South of Tendoy	136	141	145	149	154
002216	Lemhi Road	North side of Allen Bridge	646	669	690	711	732
022874	Lovers Lane	Near Haven Lane	1047	1085	1118	1152	1187

Segment Code	Road Name	Location		ADT			
			2009	2015	2020	2025	2030
022862	Mountain View Road	East of S. Cherokee Lane	402	416	429	442	456
002223	N. St. Charles	At City Limits	988	1024	1055	1087	1120
022899	Parmenter Lane	At Speed Sign	105	109	112	116	119
022890	Pratt Creek Road	1/4 mile from back road	31	32	33	34	35
018970	S.St. Charles	At City Limits	1390	1441	1485	1530	1576
022846	Sunset Heights Road	At Landfill Lane	339	351	362	373	384
022902	Tower Creek Road	At Hwy 93	165	171	176	182	187
017649	Warm Springs Road	At Primitive Road Sign	171	177	183	188	194
001343	Williams Creek Road	West Side of Shoup Bridge	1067	1106	1140	1174	1210
022889	Wimpey Creek Road	At Chains Advised Sign Board	51	52	54	56	57
023497	Withington Creek Road	At 3rd Power Pole	45	46	48	49	51

Future traffic projections provide an estimate and guidelines to the County for future roadway improvements and budget planning. The projected peak-season ADT can be obtained by multiplying the non-peak ADT, listed in the above table, with the seasonal variation factor of 1.33.

Future Traffic Projection on Highways

The future traffic projections were provided in the EICLP Update Study developed by DKS Associates, Inc. The traffic projection methodology provides the future year AADT, Design Hour Volume (DHV)[1] and Design Day Volume (DDV)[2]. The future traffic volumes on highways located in Lemhi County were projected based on an extrapolation of historic traffic count volumes.

Traffic Forecast Methodology

DKS Associates Inc. has developed growth trend-line forecasts from historical traffic counts for US Highway 93 and State Highway 28, and State Highway 29 in Lemhi County. A linear

[1] Design Hour Volume is the 30th highest hourly volume of the year.
[2] Design Day Volume is the estimated 24-hour volume for the day on which the Design Hour volume occurs.

regression analysis was performed using historical AADT traffic count data obtained from the ITD Traffic Survey and Analysis Section. In this methodology, the historical traffic counts (the dependent variable) were regressed against time (the independent variable) from 1999 to 2008. The result from the linear regression was an annual growth factor that was applied to the current traffic counts to produce traffic forecasts for highways in the County. For each roadway segment, the growth factor from the nearest count location was applied to produce the travel forecast [9].

Table 14 lists the projected traffic volumes on state highways in Lemhi County for AADT.

Table 14. Future Traffic Forecasts for Highways in Lemhi County

US Highway 93															
US Highway 93 Section		Area	From	To	No. of Lanes	2008 AADT	2008 DDV	Count-Based Growth Rate	2027 AADT		2027 DDV		% Change '08 to '27		% Diff.
Begin MP	End MP								Linear Growth	Compound Growth	Linear Growth	Compound Growth	Linear Growth	Compound Growth	Linear vs Compound
263.85	263.87	Lemhi	COUNTY LINE	FARM TO MARKET RD	2	750	1,140	0.80%	864	873	1,313	1,326	15.20%	16.35%	0.99%
263.87	299.45	Lemhi	FARM TO MARKET RD	WILLIAMS CK RD	2	750	1,140	0.80%	864	873	1,313	1,326	15.20%	16.35%	0.99%
299.45	300.48	Lemhi	WILLIAMS CK RD	AIRPO LN	2	1,400	1,850	0.80%	1,613	1,629	2,131	2,152	15.20%	16.35%	0.99%
300.48	301.48	Lemhi	AIRPO LN	RANCHETTE DR	2	2,100	2,620	0.80%	2,419	2,443	3,018	3,048	15.20%	16.35%	0.99%
301.48	303.49	Lemhi	RANCHETTE DR	DEMICK LN ; LOVERS LN	2	2,500	3,050	0.80%	2,880	2,909	3,514	3,549	15.20%	16.35%	0.99%
303.49	304.26	Lemhi	DEMICK LN ; LOVERS LN	CHALLIS ST & BEAN LN	2	4,300	5,020	0.80%	4,954	5,003	5,783	5,841	15.20%	16.35%	0.99%
304.26	304.68	Lemhi	CHALLIS ST & BEAN LN	JCT SH-28	2	4,300	5,020	0.00%	4,300	4,300	5,020	5,020	0.00%	0.00%	0.00%
304.68	305.34	Lemhi	JCT SH-28	MAIN ST & CONN US93	2	7,000	7,970	0.00%	7,000	7,000	7,970	7,970	0.00%	0.00%	0.00%
305.34	306.30	Lemhi	MAIN ST & CONN US93	ENT ITD MAINTENANCE YARD	2	3,900	4,580	0.00%	3,900	3,900	4,580	4,580	0.00%	0.00%	0.00%
306.30	309.90	Lemhi	ENT ITD MAINTENANCE YARD	CARMEN CR RD (STC 6874)	2	1,800	2,290	0.00%	1,800	1,800	2,290	2,290	0.00%	0.00%	0.00%
309.90	326.35	Lemhi	CARMEN CR RD (STC 6874)	FR 030 (TO SHOUP)	2	1,200	1,630	0.00%	1,200	1,200	1,630	1,630	0.00%	0.00%	0.00%
326.35	350.82	Lemhi	FR 030 (TO SHOUP)	IDAHO/ MONTANA	2	790	1,190	0.00%	790	790	1,190	1,190	0.00%	0.00%	0.00%
State Highway 29															
0	0.3	Lemhi	JCT SH-28	HAWLEY CREEK RD	2	160	350	0.00%	160	160	350	350	0.00%	0.00%	0.00%
0.3	13.61	Lemhi	HAWLEY CREEK RD	MONTANA/IDAHO STATE LINE	2	80	180	0.00%	80	80	180	180	0.00%	0.00%	0.00%
State Highway 28															
51.88	57.60	Lemhi	COUNTY LINE	NICHOLIA RD	2	600	980	1.97%	825	869	1,347	1,420	37.43%	44.87%	5.41%
57.60	83.71	Lemhi	NICHOLIA RD	TEXAS CREEK RD	2	470	840	1.97%	646	681	1,154	1,217	37.43%	44.87%	5.41%
83.71	90.23	Lemhi	TEXAS CREEK	JCT SH-29	2	470	840	1.97%	646	681	1,154	1,217	37.43%	44.87%	5.41%
State Highway 28															

US Highway 93															
US Highway 93 Section		Area	From	To	No. of Lanes	2008 AADT	2008 DDV	Count-Based Growth Rate	2027 AADT		2027 DDV		% Change '08 to '27		% Diff.
Begin MP	End MP								Linear Growth	Compound Growth	Linear Growth	Compound Growth	Linear Growth	Compound Growth	Linear vs Compound
90.23	97.73	Lemhi	JCT SH-29	COTTON LN RT	2	580	960	0.45%	630	632	1,042	1,045	8.55%	8.91%	0.33%
97.73	103.28	Lemhi	COTTON LN RT	MAIRES LN RT & D-C BAR RD	2	540	910	0.45%	586	588	988	991	8.55%	8.91%	0.33%
103.28	109.30	Lemhi	MAIRES LN RT & D-C BAR	HAYDEN CREEK RD (STC 6876)	2	600	980	0.14%	616	616	1,006	1,006	2.66%	2.69%	0.03%
109.30	113.68	Lemhi	HAYDEN CREEK RD (STC 6876)	E LEMHI RD	2	600	980	0.14%	616	616	1,006	1,006	2.66%	2.69%	0.03%
113.68	115.73	Lemhi	E LEMHI RD	TENDOY LANE	2	600	980	0.30%	634	635	1,036	1,037	5.70%	5.86%	0.15%
115.73	120.43	Lemhi	TENDOY LANE	SEVENTEEN MILE LANE	2	600	980	0.30%	634	635	1,036	1,037	5.70%	5.86%	0.15%
120.43	126.34	Lemhi	SEVENTEEN MILE LANE	BAKER LANE	2	1000	1420	0.30%	1,057	1,059	1,501	1,503	5.70%	5.86%	0.15%
126.34	128.82	Lemhi	BAKER LANE	BARRACKS LANE	2	1100	1530	0.30%	1,163	1,164	1,617	1,620	5.70%	5.86%	0.15%
128.82	135.12	Lemhi	BARRACKS LANE	MAIN ST & LEMHI ST	2	3200	3820	0.30%	3,382	3,387	4,038	4,044	5.70%	5.86%	0.15%
135.12	135.65	Lemhi	MAIN ST & LEMHI ST	JCT US-93	2	4400	5130	0.30%	4,651	4,658	5,422	5,430	5.70%	5.86%	0.15%

Source: East Idaho Corridor Loop Plan Update, DKS Associates – 2010

During peak season and special event times, the projected traffic volumes can be expected to be more than the average non-peak seasonal traffic.

HIGHWAY AND COUNTY ROAD CAPACITY

This section is a brief discussion concerning capacity of highways and county roads. For this discussion state maintained highways and county roads will be referred to as highways. If during this discussion reference needs be made to either road agency, the names "state highway" or "county road" will be used.

There are many factors that affect highway capacity. A few include speed, lane width, shoulder treatment and width, terrain grades, percent of trucks, RV's and buses, and frequency of accesses.

The following include a few techniques to alleviate operational and safety problems on highways:

1. Improve sight distance,
2. Pave shoulders and increase shoulder width,
3. Increase road section to a three-lane road including two lanes in one direction such as a passing lane, a center two-way median, or left turn lane,
4. Construct deceleration right turning lanes,
5. Improve intersection operation,
6. Construct turn outs for slow moving vehicles, and
7. Construct short four-lane segments.

Highway capacity is measured in "level of service" as defined in Appendix G. In short, LOS may be thought of as delay time. Highway capacity limits in the following paragraph are based on assumptions of the factors identified in paragraph two of this section. Therefore, these values should be used with caution and for perspective understanding of the capacity range of a two-lane highway.

The capacity limits of a two-lane highway at LOS "E" ranges from 5,400 vehicles per day (vpd) on mountainous terrain to 22,900 vehicles per day on level terrain based on the

previous factors that affect highway capacity. A highway functioning at a LOS "C" is an acceptable range, LOS "D" is not a desirable range, and a LOS "E" suggests that the road or intersection should be considered for improvements. Highway capacity at a LOS "C" is at 1,600 on mountainous terrain and 7,900 in level terrain with optimum factors.

Based on the 2030 traffic projections provided in this study; the probable ADT on St. Charles is 1,575 with a LOS of "C" or above.

Intersections are studied looking at the LOS as well as other warrants. ITD requires at least two warrants to be met before they will consider traffic signals at intersections. This study suggests that intersections where county roads intersect state highways will cause the most significant delays to the residents of Lemhi County. Intersections require directional peak hour traffic flow information to complete a study.

To assist the county in evaluating intersections a Turning Movement Count Form is provided in Appendix G. Also included in this appendix is a Traffic Control Device Figure that will assist the county staff to evaluate intersections based on two-way peak hour volume. A word of caution with this graph; this graph should be used only as an indicator that a study may be required. An ITD Design Guide (Section 450 Highway Approaches, ITD Design Manual) and graphs are included to assist staff in determining when turning lanes are required on state highways at county road intersections. When using the charts in Appendix G keep in mind that the Traffic Control Device Figure requires Peak Hour Volume (PHV). ITD uses Directional Hour Volume (DHV) for turning lane warrants. The Design Day Volume (DDV) provided in Table 11 is not the same as DHV.

In summary, ADT projections indicate that none of Lemhi County two-lane roads currently function at capacity, nor will they within the next twenty years. County roads intersecting with state highways may require attention. Left turning lanes and right turning/deceleration lanes on state highways will increase capacity, reduce delays, and improve safety. Limiting the number of accesses to state highways will preserve and extend the capacity, reduce delays, and improve highway safety.

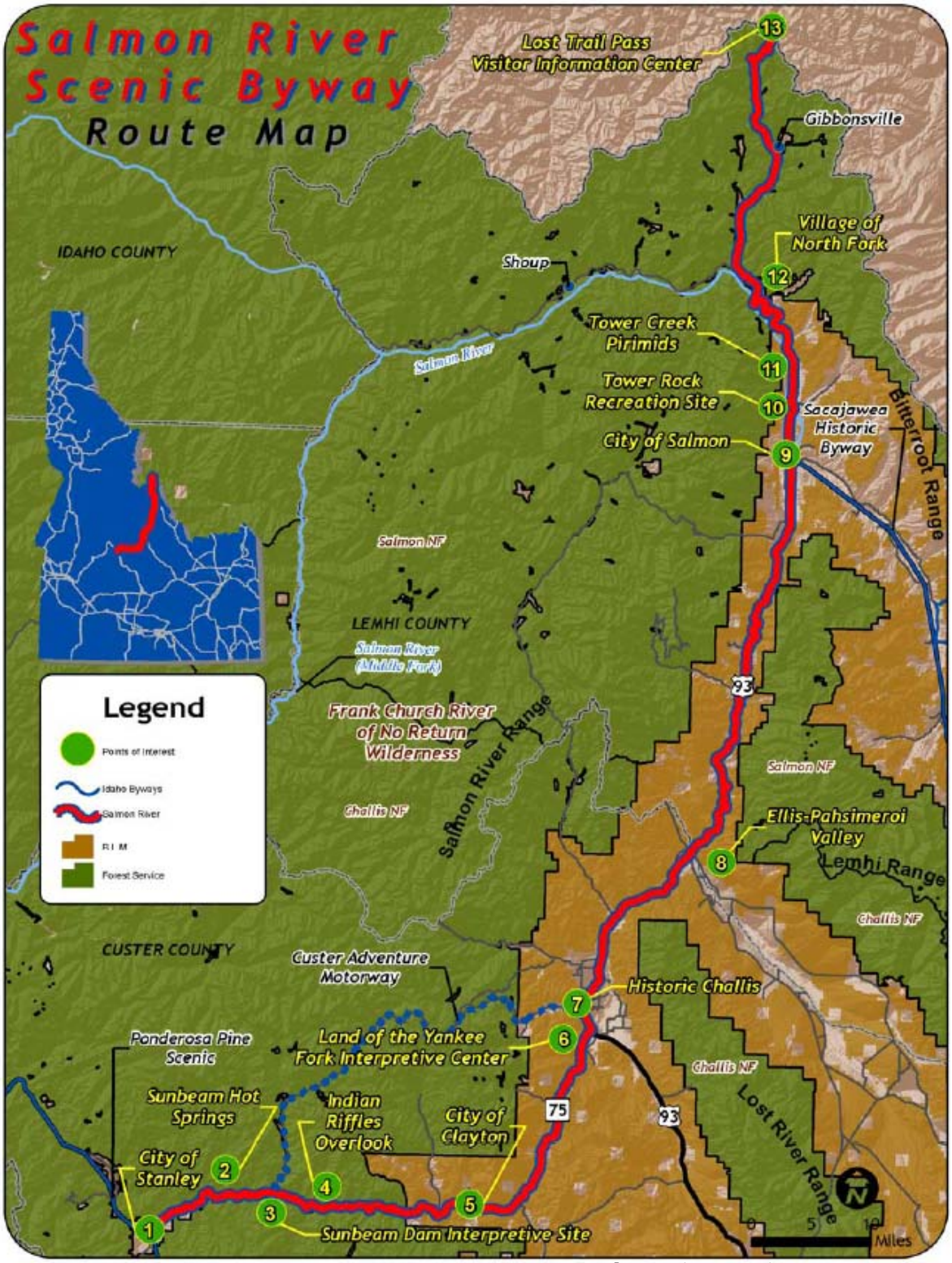
SALMON RIVER SCENIC BYWAY

In early 2006, the Salmon River Scenic Byway Advisory Committee was formed to protect and manage the scenic byway along the Salmon River in Lemhi County and Custer County. The Salmon River Scenic Byway corridor, which is approximately 162 miles, is located primarily along US Highway 93 in Lemhi County and Highway 75 in Custer and Lemhi Counties. Local efforts of residents, officials, and agencies developed a Corridor Management Plan (CMP) that outlines the vision, goals, and action-plans to preserve and protect scenic byway assets. The primary objective of the CMP is to protect the byway's scenic, historic, geologic, cultural, and natural resources. The committee has identified 13 key sites along the byway. The following figure shows the scenic byway and key sites along the route.

A detailed description about key sites along the byway and their significance is available in the Salmon River Scenic Byway Corridor Management Plan, 2007, developed by Planmakers and JUB Engineers.

This plan evaluated roadway performance and capacity of the scenic route in terms of LOS. The LOS was calculated based on two factors: traffic volume and roadway geometry.

The CMP identified funding programs and sources to fund byway improvement projects and maintenance to implement the Byway CMP. The total estimated cost for site improvements along the byway is approximately 1.396 million dollars. The committee identified improvements at each site along the byway and prioritized projects into high, medium, and low. Projects identified in the Lemhi County area include Ellis Pahsimeroi Valley, City of Salmon, Tower Rock Recreation Site, Tower Creek Pirimids, Village of North Fork, and Lost Trail Pass Visitor Information Center. The site improvements are detailed and cost estimates are available in the Salmon River Scenic Byway CMP.



Source: Salmon River Scenic Byway Corridor Management Plan -2007

Figure 7. Salmon River Scenic Byway Route Map

SACAJAWEA HISTORIC BYWAY

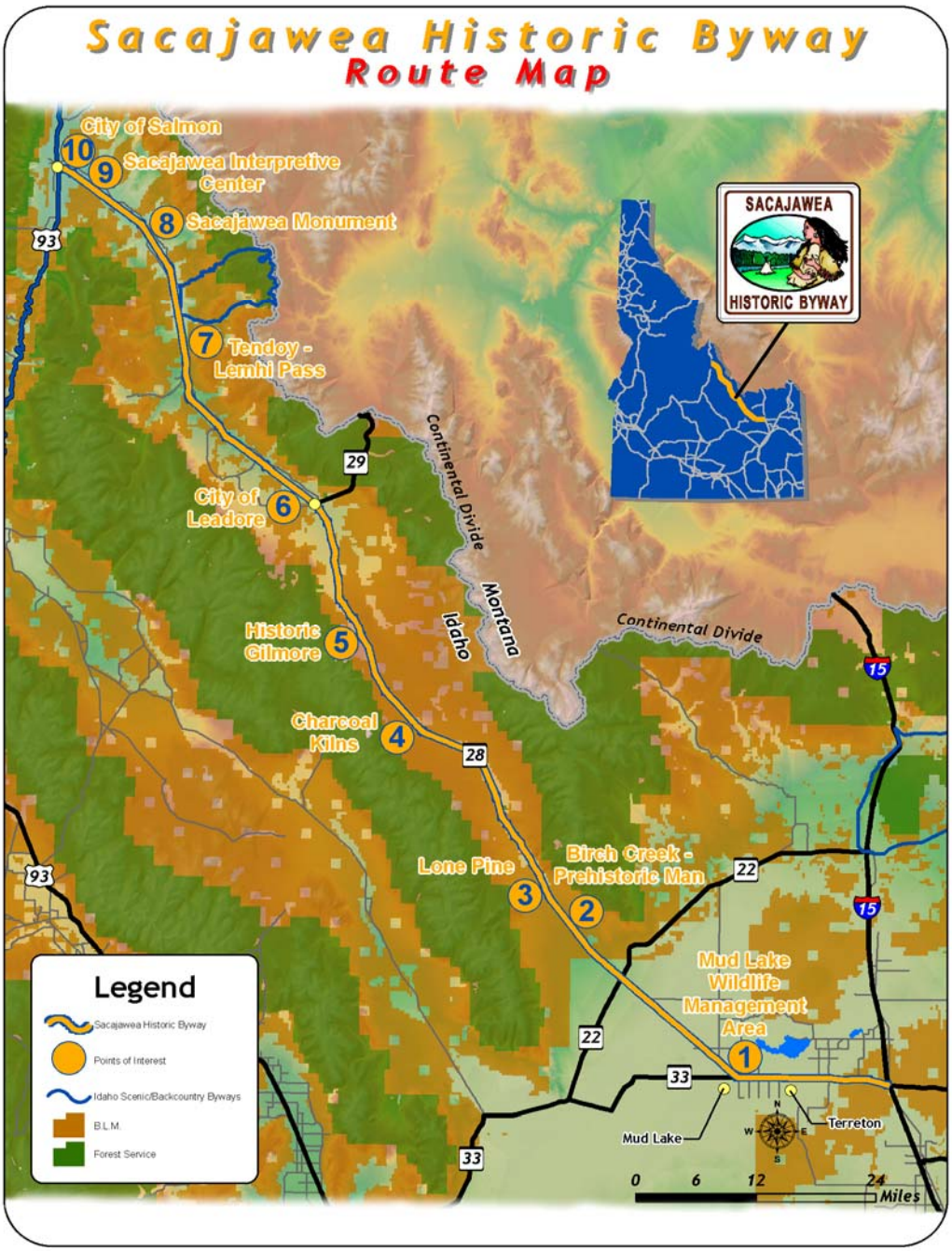
A CMP was developed in 2007 for the Sacajawea Historic Byway that, like the Salmon River Scenic Byway, identified local efforts of residents, officials, and agencies that outline the vision, goals, and action plans to preserve and protect scenic, historic, geologic, cultural, and natural resources. The Sacajawea Historic Byway is located in Lemhi County and parallels the Continental Divide for approximately 100 miles. The byway is 132 miles in length and begins at the intersection of I-15 and SH-33 and becomes SH-28 as it turns north. The two-lane SH-28 travels northward over the Gilmore Divide and the scenic Lemhi River Valley. Birch Creek flows south across the valley floor at the byway's southern end. The high peaks and basins of the Lemhi Range are to the west and the Continental Divide's Beaverhead Mountains, which divide Idaho and Montana, lie to the east.

The small communities along the Sacajawea Historic Byway include Terreton, Mudd Lake, Lone Pine, and Tendoy and the larger populated cities of Leadore, and Salmon.

The following figure shows key sites along the Sacajawea Historic Byway. These sites include: Mud Lake Wildlife Management Area, Sacajawea Historic Byway Portal/Birch Creek-Aboriginal Man Interpretive Site, Lone Pine, Charcoal Kilns, Gilmore Town Site, City of Leadore, Settlement of Tendoy and Lemhi Pass, Sacajawea Monument, Sacajawea Interpretive, Cultural, and Educational Center, and City of Salmon.

CMPs assist in planning and are an instrumental component in the funding application process. The National Scenic Byways Program, SB-2010-ID-56033, Salmon, Idaho Scenic Byways Shared Use Pathways – Phase I is one example of the Salmon Pathway Implementation Team's funding application successes. The construction of Phase I of this pathway will serve as a significant step in meeting the priorities set forth in the Sacajawea Historic Byway CMP; specifically trail system expansion and connectivity of pedestrian-bicycle trails. This grant will finance the construction of a shared use path along 0.48 miles

of the Sacajawea Historic Byway / State Highway 28 on the eastern outskirts of Salmon. Planned completion date for Phase I of the Sacajawea Historic Byway Path is 2012.



Source: Sacajawea Historic Byway Corridor Management Plan -2007

Figure 8. Sacajawea Historic Byway Route Map

Public Transportation and Pathways

Discussion on Lemhi County's public transportation and pathways is provided in Chapter 4, Alternate Mobility.

BRIDGES

Bridges and culverts meeting a span measurement of over 20 feet 6 inches are included in the National Bridge Inventory (NBI). Bridges that do not meet this requirement are inspected by LCRB. Bridges included on the NBI are routinely inspected every 12 to 24 months. Each bridge is assigned an identification number known as the master key number or structure key number. During the data collection, NBI bridges were compiled in the database identified by their master key. Elements included in the database include feature intersected, dimensions, superstructure material type, deck material type, and the sufficiency rating.

Bridge sufficiency rating range from 0 to 100. Bridges rated less than 50 indicate that the bridge is in poor condition and eligible for federal funding (replacement). Federal funds are available for rehabilitation if a bridge is rated between 50 and 80.

Many bridges in Lemhi County are single-lane bridges with a width of less than 18 feet. Table 15 lists Lemhi County bridges that are included in the NBI and their sufficiency rating. A map showing county maintained bridges is provided in Appendix B.

The National Marine Fisheries Service and Salmon Basin Watershed Project have experts available to assist the County in improving fish passages and knowledge of funding entities for grants or matching funds to assist Lemhi County when constructing, maintaining, and improving bridges and culverts.

Table 15. Lemhi County Bridges and Sufficiency Ratings

Master Key #	Year built	Road	Feature Carried	Last Inspection Date	Sufficiency Rating
32750	1956	Rattlesnake Creek Road	Salmon River	7/15/2009	28.0
32695	1950	Lemhi Road	Lemhi River	7/15/2009	28.1
32690	1991	Viola Lane	Lemhi River	7/14/2009	32.2
32755	1948	N St. Charles	Lemhi River	7/15/2009	44.8
32681	1992	Lemhi Road	Lemhi River	7/14/2009	49.0
32665	1965	Iron Creek Road	Salmon River	4/23/2009	51.6
32670	1968	Mabey Lane	Lemhi River	4/23/2009	52.1
32675	1955	Peterson Ranch Road	Hayden Creek	4/23/2009	55.9
32745	1952	Williams Creek	Salmon River	4/23/2009	76.8
32700	1930	Barracks Lane	Lemhi River	7/11/2008	77.6
32720	1950	Cotton Lane	Lemhi River	7/11/2008	80.4
34600	1970	Indian Creek Road	Indian Creek	7/15/2009	81.2
34605	1970	Indian Creek Road	Indian Creek	7/15/2009	82.2
34610	1970	Indian Creek Road	Indian Creek	7/15/2009	82.2
21180	1960	STC 6876, Hayden Creek	Hayden Creek	4/23/2009	87.9
32740	1965	Lemhi Road	Lemhi River	4/23/2009	88.7
32685	1977	Maiers Lane	Lemhi River	4/23/2009	96.0
32705	1977	N. Baker Road	Lemhi River	7/11/2008	98.9
32730	1977	17 Mile Lane	Lemhi River	4/23/2009	99.9
21175	1978	STC 6870, Pahsimeroi	Pahsimeroi River	4/22/2009	99.9

Source: Idaho Transportation Department

SALMON/US 93 BRIDGE

The Salmon/US93 Bridge (NBI Number: 17885) is the only river crossing structure on the Salmon River connecting north and south sections of Lemhi County. The structure length is approximately 438 feet and 36 feet wide. The City of Salmon has identified that the bridge location is a typical point of high traffic congestion during peak hours. The City and County have expressed concern that in emergency situations this bridge is the only crossing. In such a situation, a link between the north and south sections of US Highway 93 in Salmon will be broken. This would jeopardize transportation and emergency services to the public. This bridge was rehabilitated by ITD during 2010 and 2011. Prior to the deck rehabilitation, the sufficiency rating was 63.2. The next inspection is scheduled October 2012.[16]

ROAD FUNCTIONAL CLASSIFICATION

Functional classification is the process of classifying roads and highways into different classes according to the character of service and traffic volume. To classify roads, it is necessary to understand travel behavior and traffic patterns between destination points.

Lemhi County has classified their roads into four basic categories: major collectors, minor collectors, local roads, and private roads. US Highway 93 is classified as rural principal arterial, State Highway 28 is classified as rural minor arterial, and State Highway 29 is classified as rural major collector. Arterials function to move through traffic and generally link counties and cities. They have limited access and are classified to move high volumes of traffic. Collectors are the connecting roadways in the Lemhi County road system. They generally move traffic from local roads to the arterials or other points of interest such as, local cities or serve farm-to-market trips. Local roads provide access to land uses and serve localized purposes such as providing access to residences and places of business. Private roads are public roads maintained by developments or homeowner associations.

Roads classified as arterials and major collectors are eligible for federal-aid funds pursuant to Lemhi County submitting an application to the State. Federal-aid funds are not available to minor collectors and local roads, so road classification is an important element in planning and funding of CIPs.

The ITD Functional Classification Map for Lemhi County is located in Appendix B. Knowing the location of future roads serves as a guide for decision-makers in preserving rights-of-way and required set backs for future developments. Minimum right-of-way requirements, design and construction standards, and typical sections for the various functional classified roads are provided in the Road Standards (Appendix F).

Table 16. Lemhi County Roads Functional Classification

Functional Classification	Official ITD Classification	Proposed Classification
Principal Arterial	US Highway 93	US Highway 93
Minor Arterial	State Highway 28	State Highway 28
Major Collector	State Highway 29	State Highway 29
	Carmen Creek	Carmen Creek
		Airport Road
	Hayden Creek Road	Hayden Creek Road
		Williams Creek Road
	Lee Creek Road	Lee Creek Road
	Pahsimeroi Road	Pahsimeroi Road
		St. Charles Street
		Lovers Lane
		Lemhi Road
Minor Collector	Lemhi Road	Lemhi Road
	Williams Creek Road	
	Indian Creek Road	Indian Creek Road
		Kirtley Creek Road
		Carmen Creek Road

Table 16 shows road names and the corresponding functional classification obtained from the 2010 Rural Functional Classification Map prepared by ITD. The proposed classification column includes existing and proposed classified roads. The Proposed Connectivity Map provided in Appendix H shows the proposed functional classification of county roads.

CHAPTER 4
CONNECTIVITY AND ALTERNATE ROUTES

Lemhi County is predominantly forestland and rangeland. The majority of private lands are located in the vicinity of the Salmon River and Lemhi River. County roads branch out from state highways to access private and public lands. Single access locations include Shoup, Rattlesnake, and Iron Creek Bridges. It is preferred for communities and developments to have multiple access routes. A systematically connected roadway network provides safe and ease of access for residents and for emergency services.

One of the policies adopted by the County in their Comprehensive Plan is to develop an efficient, safe, and cost-effective public road network. To achieve this goal, connectivity routes, as well as alternate river crossings, were presented to the public during the first Lemhi County Master Transportation Plan workshop held on November 19, 2009. Proposed connectivity routes presented at the workshop invited public comments. From public comments and direction from the TAC, a Connectivity Map has been developed (See Appendix I). This map identifies proposed routes and road classifications that will ultimately improve the network of connectivity between existing county roads.

The Connectivity Routes Map is a planning tool. Most of the proposed roads will not be constructed until the surrounding land use changes and development occurs. At the time of development, the County may request the construction of the proposed roads. These proposed routes may be drawn through private property or over an existing home. *It is not the intent to alarm residences but to identify approximate locations, beginning points, and ending points for future road development.* Other routes are located on or near unimproved roads located on BLM lands. It is recommended that the County elect to improve these roads to all-weather roads primarily for emergency vehicle access.

The proposed routes are drawn to promote minimum access to US 93 and SH 28 thus supporting the new access policy. *Backage Roads*, also classified as Local Roads, are similar to frontage roads along freeways except properties exist between the arterials (state

highways) and the local road. *Backage Roads* parallel US 93 or SH 28. These roads are proposed to promote the new access policy.

Each route in the Connectivity Routes Map (Appendix I) is given an identification number to identify the route discussed below. Short sections of connectivity routes are shown on the map without an identification number or discussion.

Routes 1: Located northwest of the City of Salmon. Route 1 extends from Blackrock Road north along an existing private road and on BLM lands, then continues past the fair grounds and intersects Diamond Creek Road and Fairground Road that in turn intersects with US 93. This course should take advantage of existing roads and easements, is adjacent to the west side of the agriculture-developed land, and would provide continued access to the BLM and USFS lands west of the route. It is recommended that this local road initially be an improved all-weather road.

Route 2: Extends north from the end of Bulwer Street, intersects with Aldous Drive, Walter Lane, and Moore Creek Road, then extends around the east side of the fair grounds and ends by intersecting with Fairground Road. This is recommended as a *backage road* and should be constructed to standards of a local road. Preservation of the right-of-way until development or need dictate construction is recommended. Intersecting local roads at regular intervals is also recommended.

Route 3: Proposed as a *backage road* to provide property access and minimize US 93 access points. This parallels US 93 and extends from Pine Street north to Dogwood Lane. This road will likely be preserved and constructed as land development occurs.

Route 4: North St. Charles Street route is proposed to extend north on existing roads as an emergency all-weather road and connect to US 93 just north of the Carmen Creek Road and Salmon River Bridge. This is to be considered a high priority emergency route. This will be approximately three miles long. It is recommended that easements and right-of-way be acquired and LCRB improve short sections of road as budget allows.

Route 6: The strategy is to extend North St. Charles Street to Lemhi Back Road along the north side of Lemhi River. This proposed major collector is approximately 1.1 miles in length and provides a secondary route if either bridge across the Lemhi River is closed. It also provides options for vehicles traveling west bound to enter the City of Salmon by way of North St. Charles Street.

Route 7 Proposed to extend from Cemetery Lane north connecting to Bean Lane. The option of connecting this road to intersect with SH 28 will depend on the City of Salmon. Existing road and easements would be used when available. Total length of improvement is approximately 0.6 miles.

Route 8: Extends Demick Lane east to Cemetery Lane and should be preserved and constructed at the first development opportunity with the understanding that it will provide excellent network connectivity. This project is 1.3 miles long.

Route 9: Will improve Cemetery Lane from Hot Springs Road north to the existing Cemetery Lane and could also be extended to intersect with SH 28.

Route 10: Extends from Ruby Lane northeast across BLM managed lands to Valley View Heights Road that intersects with SH 28. The total length of the proposed route is 2.36 miles.

Route 11: Extends Three Mile Road from Three Mile Lane to Old Stage Road at Baker. This 5 mile road section will act as a local road along SH 28 and provide access to BLM managed lands. It is recommended that the right-of-way for this road be preserved until such time the road can be developed and constructed. It is also recommended that the County continue to perform yearly maintenance on all sections of the road currently available to the County and record maintenance dates and work preformed which will preserve existing easements. Considering the cost of right-of-way and total project cost, the County should consider extending Route 12 to SH 28 and look at the Three Mile Road (Route 11) as a future project.

Route 12: (County Landfill Road) Proposes extension from Airport and Hot Springs Roads, follows the existing road northeast over the hill, past the landfill, to Three Mile Lane and eventually intersects to SH 28. Route 12 could be extended to intersect with SH 28 instead of improving Three Mile Road as an option, if property could be obtained for right-of-way and may be an emergency all-weather road as well as a secondary route to the landfill. At this time Route 12 appears to be a very good option to improve with minimal cost to the County as an improved all-weather surface road. Once developed and maintained it will likely be frequently used by local traffic. This project length is 3 miles from Hot Springs Road to SH 28.

Route 13: Extends from Hot Springs Road north along the east side of the airport connecting to Coiner Road and Apache Way extension (Route 10). The route is 1.5 miles.

Route 14: Extends north from Airport Road to the limits of the City of Salmon and connects to S. Daisy Street and is a *backage road* providing access to properties and limiting access to US 93. Total length is approximately 4 miles. The County should use every opportunity to promote this and preserve right-of-way as a local road.

Route 15: (South Saint Charles Street) This is a recommended collector that extends west from Airport Road to the proximity of the Salmon River, then north connecting West Bannock Drive with South Saint Charles Street. This proposed collector provides a secondary route from St. Charles Street to the airport off Airport Lane. This road will be constructed in sections as a result of development or as a major capital improvement project. The total project length is 5 miles.

Route 17: Route 17: This preferred alternative will extend from Shoup Bridge / Spring Creek Road northerly five miles to connect Edward Road to Arrowhead Drive. This route is located on agriculture-developed land, will cross several drainages, and will require acquisition and negotiations of new easements or rights of way. It is recommended that this be considered a high priority emergency all-weather road.

This will provide a second (emergency) access to Williams Creek, currently accessed via a one lane bridge, and will provide a second (emergency) access for the City of Salmon (US 93 Bridge). Although this route is a large undertaking, it becomes feasible when considering the cost for secondary access bridges across the Salmon River at Williams Creek.

A primary concern is to provide connectivity between north and south sections of Lemhi County with a second river crossing in the vicinity of the City of Salmon. Currently, there is one river crossing for US 93 across the Salmon River near Salmon. In the event the existing bridge becomes impassible, vehicular traffic and emergency vehicles cannot cross the river.

US 93 and Courthouse Drive intersection operates at LOS 'D' with the current traffic conditions. The southbound approach at this intersection operates at LOS 'E' during peak traffic conditions [4]. Although this intersection is located within the city limits of Salmon, it is a major concern for the County and State as both regional and local traffic travel through this intersection. Future growth will significantly reduce the LOS at this intersection.

One of the mitigation measures recommended in the Salmon Transportation Plan is the construction of a US 93 alternate route and river crossing of the Salmon River diverting through traffic from Highway 93 and Courthouse Dr. intersection. An Alternate Route is not popular with the City of Salmon businesses. However, having a secondary crossing for emergency vehicles and local traffic is a preferred alternative. The strategy proposed with this plan is an emergency/secondary bridge crossing.

With an emergency/secondary bridge crossing, alternate crossing locations were presented at public workshop one, comments were solicited, and a location recommended with assistance from the TAC. The preferred bridge location and phased construction is discussed in the following paragraph.

The emergency/secondary bridge crossing located north of Lemhi River convergence with the Salmon River will connect to Elm Street on the north and St. Charles Street on the south. Phase I allows the project to focus on an emergency/secondary bridge crossing with

minimum road construction. Limited access to this new bridge will prevent the route from becoming an alternative route. Phase II will construct new access roads to Infanger Lane (Route 3) and Lemhi Road (Route 6). Phase III is to improve the south access location to the intersection of US 93 and SH 28 as shown on the Proposed River Crossings presented at public workshop one and includes a traffic signal light at Infanger Lane and US 93. After Phase III construction, the route will be considered an alternative route directing destination / truck traffic from the downtown area of the City of Salmon.

Additional connectivity concerns include single lane bridges accessing developments south of Salmon along US 93. There are currently four single lane bridges south of Salmon along US 93. Shoup Bridge, Rattlesnake Creek Road Bridge, Iron Creek Road Bridge near Elks Bend, and Hat Creek Road Bridge near Ellis (this bridge is not maintained by the County). Two proposed bridge locations are identified on Connectivity Map 2 in Appendix I. Location one is north of Ezra Creek and the second location is at the intersection of US 93 and McKim Creek Road. Either bridge will provide access to Route 20 and function as an emergency all-weather road. Either proposed bridge will provide a secondary access to the Cabin Creek Area and the Iron Creek Bridge. The Iron Creek Bridge is a single lane bridge.

PROPOSED ROUTES FOR ROAD CONNECTIVITY

Routes 18, 19, and 20 shown on Connectivity Map 2, use existing unimproved roads along the west side of the Salmon River and improve these existing roads to emergency all-weather roads. In areas without roads, it is proposed to construct new sections of emergency all-weather roads.

Route 18, is 6 miles in length, extends from Rattlesnake Creek north to Lake Creek Road.

Route 19, is 4 miles in length, extends from Iron Creek Road north to Deer Creek, and ultimately to Iron Creek Road Bridge.

Route 20, is 8.2 miles in length, improves existing unimproved roads from the Hat Creek north to the Cabin Creek Area, and ultimately connects to the Iron Creek Road Bridge.

CHAPTER 5
ALTERNATE MOBILITY

Alternative transportation is constantly changing due to new federal funding and policies. Alternative mobility includes public transportation, pathways, bicycle trails, bus, transit, air, rail, rideshare, and walking.

PATHWAYS

Lemhi County has many trails that offer recreational and tourism opportunities for residents and tourists alike. While trail usage in the past was primarily hikers, walkers, bike riders, ATVs, and motorcycles, an increasing number health-conscious residents, youth to seniors, including USFS, Fish & Game, and BLM employees use trails to bike, walk, or jog to and from work. The trails offer a safe transportation alternative in that the trail users are separated from motor vehicle traffic; although they frequently share the trail with ATV and motorcycle traffic. Many of the trails are rough with washed out areas and potholes. Residents and tourists frequently utilize the trails in the areas of Carmen Creek to South 93 (USFS buildings), the USFS helicopter complex near the east side of the Salmon Airport, and the Shoup Bridge south of Salmon. Residents and tourists also utilize the trail from downtown to the Salmon City Park Complex and Sacajawea Center.

The number of Alternate Mobility Team members is steadily increasing. The group is comprised of and consults with Lemhi County community members; Lemhi County commissioners and department heads, Salmon Recreation District, Lemhi County Economic Development, City of Salmon officials, ITD, Horizons Steering Committee, Senior Citizen Center participants, BLM, USFS, Chamber of Commerce, and several other people involved in particular projects involving pathways, planning, trails, and alternate mobility. One of the

primary goals of the Alternate Mobility Team is to create a safe, continuous trail / pathway system for pedestrians / bicyclists / trail users, and improve accessibility for the disabled. Linking trails and pathways creates a win-win scenario for Lemhi County by expanding recreational and tourism opportunities for residents and visitors alike. Increased recreational opportunities and tourism will ultimately result in an increase in revenue for Lemhi County's business community and helps even out economic ups-and-downs of this rural community.

The Alternate Mobility Team's planning discussions include such goals as:

- incorporating and extending areas of connectivity to trails / pathways,
- extending trails / pathways to the south in the Shoup Bridge area and to Perreau and Williams Creek,
- extending trails / pathways to the north to extend to the Carmen Creek area,
- constructing trails/pathways along the Salmon River and Lemhi River area (using the Salmon River Scenic Byways Corridor Management Plan and Sacajawea Historic Byway Corridor Management Plan as a cornerstone for funding requests),
- coordinating efforts with the Army Corps of Engineers to utilize the dykes along areas of the rivers as trails/pathway and working with private property owners in certain areas to allow public usage, and
- working with ITD to improve safety for pedestrians, walkers, joggers, bicycles, and wheelchair users; such as increased roadway shoulder widths, pavement markings, signage, and other mitigating measures.

Lemhi County is the domain for several public and quasi-public recreational activities. May 2012, the County will experience its First Annual 12-hour bike race, which will draw bikers from many states. Tourism and recreation are two important elements in the county's economic development and for generating revenue. The draw of additional trail / pathway users would have a positive impact of Lemhi County's economy. The county's comprehensive plan identified efforts to promote its recreational opportunities, develop tourism, and to expand recreational infrastructure.

Current Planning Efforts

The 2009 Lemhi County Comprehensive Plan acknowledges the interest and need for pathways in and around the Salmon area. Community Transportation Association of Idaho (CTAI) facilitated the I-way planning process which publishes a mobility plan for Local Mobility Management Network 6A, which includes Lemhi County. This plan is updated yearly and all residents are welcome to participate. The mobility plan identified a need for multi-use pathways in the County. The plan also recommends strategies (Local Strategy 6A.L010 and District Strategy 6A.D009) to meet needs and goals outlined by I-Way. These strategies are provided in the Final Mobility Plan for the Local Mobility Management Network 6A (LMMN 6A) http://i-way.org/Community/Networks/lmmn6a

The County, City of Salmon, and ITD District 6A LMMN co-chairs are currently working to develop a pathway plan and promote construction of sidewalks and pathways within the City of Salmon and Area of Impact. District 6A has developed a pathways implementation plan, which specifies pathway routes, right-of-way requirements, probable construction costs, grant funding source and priority. The Proposed Pathway Plan Map prepared by this group is included in Appendix C.

Additional mobility information for District 6 may be obtained from CTAI's Mobility Manager at (208) 559-4401 and at the website: http://www.ctai.org.

Pathways Guidelines

The following guidelines were developed in the Lemhi County Master Transportation Plan study to plan and develop a safe, efficient, and connected pathway system:

1. Pathways are encouraged to be located on pathway easements.

2. For the safety of pedestrians, encourage detached pathways along principal and minor arterials. When this is not feasible, increased roadway shoulder widths, pavement markings, signage, and other mitigating measures should be considered.
3. Pathway sponsor agency should maintain pathways.
4. Multi-use pathways should be designed with pedestrian safety in mind.

Lemhi County Master Transportation Plan supports the Alternate Mobility Transportation goals as defined in this section.

PUBLIC TRANSPORTATION

Public Transportation is a big part of the LMMN6A Plan. The Targhee Regional Public Transportation Authority (TRPTA) is the current bus service for the general public, senior citizens, students, and people with disabilities. TRPTA currently serves Idaho Falls, Rexburg, Salmon, Shelley, Driggs, and surrounding areas with demand response service and four fixed routes in Idaho Falls. Demand response is a door-to-door demand response service that requires prior day notice (by 4 pm). Demand response service covers Idaho Falls and surrounding areas outside of the fixed routes. TRPTA's main office and dispatch center is located at 1810 W. Broadway in Idaho Falls. TRPTA also has an office in Salmon (206 S. St. Charles) and Rexburg (72 W. Main Street). The bus schedule can be obtained from the TRPTA website at the following website address: http://www.trpta.org/IF_ROUTE_SCHEDULES.doc.

The Salmon Senior Center operates a bus (obtained through the I-way planning process) and provides rides for $1 each way in town and $2 each way out of town, to its Seniors. They also transport seniors to the South Lemhi center (in Lemhi, 28 miles south of Salmon) on Tuesdays/Thursdays for their congregate meal program. Salmon River Industries has been granted funds for a bus as well as a voucher program for their clients, but funds for those will be available in the 2013-2014 grant year.

Additionally, there has been an interest in connecting Salmon to Idaho Falls and to Missoula through other transportation service providers. In 2012 transportation services will be expanding to include after hours, 4:00 PM and later, along with weekend services, in order to better serve the public's transportation needs. These expanded hours that are currently not available, but are intended to provide services to connect residents to community events and jobs.

AIR TRANSIT AND AIRPORT

Lemhi County has two airports. One airport is located approximately five miles south of Salmon and the second airport in located in Leadore. The airport near Salmon provides flight services between Salmon, McCall, Idaho Falls, and Boise. McCall Aviation (Salmon Air) is a commuter air carrier and a fixed-base operator (FBO) based in central Idaho, operating charter and commuter flights as McCall Air and Salmon Air along with full service FBOs in both McCall and Salmon. The company specializes in on-demand charters to the Idaho backcountry and city-to-city flights throughout the intermountain West. The company currently operates facilities in McCall, Salmon, and Boise, along with seasonal operations in Stanley. Lemhi County Airport has a paved airstrip 5,150 feel long. Additional information regarding charter flight service can be found at: http://www.mccallaviation.com/ and http://www.salmonair.com/about-us.html.

The Leadore airport is owned and maintained by Lemhi County. This unmanned airport has 2300 feet by 50 feet of asphalt runway that is in poor condition. The total length of the airport is 3500 feet long. Sagebrush, farm equipment, and buildings are near the runway. Airport operational is for STOL single or multi-engine airplanes.

Commuter services that will link the County with larger metropolitan areas are needed for continued economic development. Boise is less than an hour flight, while driving takes over five hours, depending on the time of year and road conditions. Programs for rural communities are available through the Federal Aviation Administration (FAA) and are being examined by the Alternative Mobility Team.

Lemhi County Airport Master Plan

Lemhi County, in association with Toothman-Orton (T-O) Engineers, developed an updated Airport Master Plan that was completed in January 2012. The update includes the traditional master plan elements and includes guidance on airport revenue enhancements, compatible land use, airport compliance issues and management guidance. The Executive Summary and an Airport Layout Plan are included in Appendix A. The CIP for the Salmon Airport is addressed in the Executive Summary in Appendix A, lengthening and widening the runways could start as soon as 2013.

Airport Land Use Overlay Zones and Regulations

The purpose of airport land use overlay zones shall be "to regulate the development of noise sensitive land uses; promote compatibility between Airport and the surrounding land uses; protect the Airport from incompatible development; and promote the health, safety and general welfare of property users"[2]. An Airport Land Use Zoning Map from the Airport Master Plan is provided in Appendix B.

It is recommended that the County complete and adopt an Airport Land Use Overlay zone for both the Salmon and Leadore Airports.

CHAPTER 6

ROAD STANDARDS AND ACCESS CONTROL MANAGEMENT

ROAD STANDARDS

The County expressed a need to update road standards. The existing County Road Standards are provided in the Lemhi County Development Code. The existing County Road Standards were compared with current standards from AASHTO, LHTAC, and other County standards. New standards include items such as basic road design, design for public and private roads, design of roads on expansive clays, culverts, bridges and cattle guards, access management, driveway standards, and road sign standards.

It is a challenging and colossal task to address every condition standard. Therefore, policies have been developed and included in the Standards. The new standards will be included in the Development Code and are designed to be printed as an independent document; that will be available to those planning to develop in Lemhi County.

The LCRB and the Planning and Zoning Department have developed and prepared minimum design and construction standards for public and private roads. These Standards are well prepared and cover critical elements for Lemhi County. The TAC met with Holladay Engineering to review the recommended standards. Road width and access control are two critical topics of concern for the County Staff.

Road width discussions included concerns regarding required road widths for emergency vehicles verses County budget required to maintain wider roads. Other considerations included how to fund and widen existing roads for new development. A brief summary of the cost to widen existing county roads are discussed in Chapter 9, Transportation Funding Options and Strategies. The TAC meetings concluded with a compromise of County agencies to provide the proposed Standards that will best fit the needs of the County today and into the future.

Access management is an ongoing concern in Lemhi County. As local ranches and private properties develop, more and more access requests to arterials and collectors will be processed. Limiting access will preserve these roads to continue to function as their intended use. Once a road designed to carry traffic at high speeds (US 93 & SH 28) has been compromised with unlimited access; the speed limits are reduced for safety. This increases travel time that in turn affects commerce. The result is an alternate route, also known as a bypass route, to function as the arterial or collector and constructed at taxpayer expense.

A Simplified Road Classification Figure is located in Appendix F. This figure will assist with the decision process linking speed limit and access control spacing with functionality of the road.

CHAPTER 7

ROAD SURFACE RATINGS AND SURFACE MANAGEMENT PLAN

Road Surface Ratings

Currently, Lemhi County maintains approximately 400 miles of roads outside of the incorporated cities. Approximately 113 miles are paved roads and approximately 287 miles are gravel roads. In addition, there are over 3,500 miles of un-maintained roads on federal and state lands in the county. LHTAC surveyed some of the county maintained roads in 2007 and provided surface condition attributes to the County. Holladay Engineering Company surveyed the remaining road segments and merged the new inventory data with the LHTAC inventory data.

Roads with poor surface condition attributes result in delays and loss of comfort to the user. To establish a quantitative value to the attributes; each attribute in the inventory data is assigned a numeric value. The road segments are rated based on the cumulative ratings of each attribute. A rating criterion is established for the rating values. Existing (2010) road surface condition ratings for paved and gravel roads are determined using these values.

Paved Road Surface Condition Assessment

Paved road surface conditions are assessed by summing the numerical score or index, called the Pavement Condition Index (PCI), between 100 (best, new like condition) and 0 (poor condition) based on the visible pavement distress. Road ratings are determined using a weighted average of the individual road segment condition. The PCI values assigned are based on the following three surface distress conditions:

1. Surface cracking
2. Surface distortion
3. Surface disintegration

PCI value ranges are described in Figure 9.

SURFACE PCI	RATING	DESCRIPTION
100 to 96	EXCELLENT	New road surface with smooth driving conditions.
95 to 81	VERY GOOD	Road surface with smooth driving conditions, no loss of speed and comfort.
80 to 66	GOOD	Road surface with rough driving surface, potential loss of speed and comfort occasionally and minor safety hazards.
65 to 46	FAIR	Road surface suitable for driving with reduction in speed and driving comfort, and occasional safety hazards.
45 to 26	POOR	Road surface suitable for driving passenger vehicles. Significant reduction in speed due to potholes and other distress, potential damage to vehicles and safety hazard conditions.
25 to 11	VERY POOR	Road surface not suitable for driving passenger cars. Potential damage to vehicles and safety hazard.
10 to 0	FAILED	Road surface not suitable for driving. Road Closed condition.

Figure 9. PCI Scale and Existing Surface Condition Rating

The above figure shows the relationship between the PCI ranges and the road surface conditions. The PCI values are ratings (similar to grades) of road surface conditions as the surface ages. Life span of roads are usually controlled by ADT and time. Due to the low ADT on Lemhi County roads, time is generally the controlling factor. The following table lists paved road segments with low PCI's that should be considered for road maintenance. The surface condition ratings of each road segment and the weighted average of each road are shown in Appendix D.

Table 17. Paved Road Segments with Low PCI's Recommended for Road Maintenance

ROAD NAME	FROM ADDRESS	TO ADDRESS	SEG LENGTH (MILES)	PCI
Airport Ln/Landfill	Hwy 93	Landfill	3.76	46
Oliver Dr/Fulton Rd	South 9th Street	45D10'24.97"N, 113D56'18.91"W	1.37	46
Dowton Lane	Pahsimeroi Road	44D37'11.317"N,113D58'39.230"W	1.23	47
Hawley Creek Rd	Hwy 94	18 Mile Creek	3.82	48
Sunset Heights	Airport Lane/Landfill	Sunflower Road	2.27	49
Pahsimeroi Rd	Little M65organ Creek	44D37'39.032"N,113D56'14.259"W	1.01	49
Hooper Lane	44D33'51.133"N,113D53'46.627"W	44D33'14.935N,113D53'46.457"W	0.77	51
Geertson Creek	Hwy 28	45D9'52.34"N, 113D44'45.55"W	3.69	52
Carmen Creek Rd	Hwy 93	Freeman Creek	5.04	53
Fury Lane	Pahsimeroi Road	44D31'32.258"N,113D50'27.757"W	1.49	53
Pahsimeroi Rd	Little Morgan Creek Road	44D37'25.598"N,113D54'21.026	0.95	54
Hooper Lane	Pahsimeroi Road	44D33'51.133"N,113D53'46.627"W	1.61	54
Pashsimeroi Rd	Dowton Lane	Little Morgan Creek	0.95	55
Pahsimeroi Rd	44D37'25.598"N,113D54'21.026	44D35'52.489"N,113D54'19.934"W	1.48	55
Pahsimeroi Rd	44D32'51.783"N,113D46'10.382"W	44D31'20.100"N,113D42'40.412"W	2.96	59

Unpaved Road Surface Condition Assessment

The surface condition for unpaved (gravel) roads are assessed by calculating a surface condition index (SCI) ranging from 100 to 0 based on visible surface condition, drainage, grade, and dust control. The SCI is similar to the PCI. Gravel road ratings were determined based on the following parameters:

- Gravel Surface Type
- Surface Condition like Washboards, Loose Aggregate, Potholes, and Rutting
- Gravel Surface Width

Gravel road ratings change frequently throughout the year based on traffic volume and the last date of maintenance (grading). Ratings provided in the following table are from the road inventory survey conducted in fall of 2010. The following table lists gravel road segments with low SCI's that should be considered for road maintenance. The surface condition ratings of road segments and the weighted average of each road are shown in Appendix D.

Table 18. Gravel Road Segments with Low PCI's Recommended for Road Maintenance

ROAD NAME	FROM ADDRESS	TO ADDRESS	SEG LENGTH (MILES)	SCI PCI
Kriley Gulch	End	End 45D21'25.656"N,113D55'02.302"W	0.260	21
Carmen Creek	Cattle Guard 45D18M57.632N/113D48M31.332W	Forest Service Line	1.067	40
Antelope Dr	BLM Dr	45D10'18.117"N,113D48'18.953"W	0.731	41
Lake Creek Rd	Williams Lake Rd	45D0'2.75"N, 113D56'12.21"W	1.750	43
Carmen Creek	Carmen Creek (Bridge)	Cattle Guard 45D18M57.632N/113D48M31.332W	0.471	44
Lemhi Rd	Skinner Ranch Rd	45D1'49.13"N, 113D39'15.99"W	6.514	46
Chuckar Circle	End	Pheasant Rd.	0.123	46
Chuckar Circle	Oldstage Rd	Pheasant Rd.	0.056	46
Chuckar Circle	Y Junction	Y Junction	0.426	47
Price Creek Rd	45D04'05.400"N,113D42'34.708"W	17 Mile Ln	2.987	48
Carmen Creek	Freeman Creek	Carmen Creek (Bridge)	2.785	49
Oliver Drive	Private Drive	45D10'22.85"N, 113D56'28.66"W	0.144	49
S Barracks Lane	45D06.603N/113D46.869W	45D6'49.88"N, 113D47'14.11"W	0.368	49
Indian Creek Rd	North Fork Rd 45D24'02.130"N,114D10'05.153"W	End 45D25'28.475"N,114D10'03.213"W	2.234	50
Leeseburg Rd	14TH St	45D11'19.78"N, 113D56'2.46"W	0.888	50

SURFACE MANAGEMENT PLAN

Road surfaces deteriorate over time. Knowing how and when to apply treatments to road surfaces minimizes operational costs. The Surface Management Plan (SMP) is a set of tools or methods that can assist decision-makers in cost-effective strategies for evaluating and maintaining road surfaces in a serviceable condition.

An effective SMP includes:

- up-to-date information of county roads,
- cost-effective treatment strategies,
- pre-determined maintenance methods and probable costs.

An effective SMP can help Lemhi County to:

- create yearly budgets,
- identify road surface treatment and rehabilitation methods
- schedule surface treatments to minimize life cycle costs
- make decisions on funding strategies, and
- enhance the quality and performance of county roads, and
- maximize long-term benefit for the capital expenditures.

The proposed SMP consists of six primary elements. These elements are flexible and may be tailored to Lemhi County's specific needs and maintenance techniques and methodologies can be modified as necessary.

The following are elements in the SMP:

1. Road Inventory and Database (included with this study)
2. Road Surface Condition Assessment (included with this study)
3. Maintenance Techniques
4. Prioritization of Projects
5. Schedule and Funding

6. Documentation (update Road Inventory and Database)

Provided below is a detailed description of the above elements.

Road Inventory and Database

A road inventory survey includes visual inspection of surface type (paved and unpaved) and condition, pavement width, drainage characteristics, location of traffic control devices like sign posts, speed signs, and location of bridges and culverts. A database is developed from the road inventory survey.

A road inventory survey was conducted for some of the County roads in Lemhi County using GPS equipment during the fall of 2010 and a database was developed to allow for frequent updates. This database is merged with the road inventory and survey data gathered by LHTAC in 2009 completing the county road inventory. The road inventory survey and database should be updated at regular intervals.

Unit cost of materials for maintenance can be included in the database. The costs should be updated regularly to account for any variations from year-to-year and to reflect actual unit costs that Lemhi County historically encounters. This information is vital in developing budgets for operation and maintenance of county roads.

Road Surface Condition Assessment

The road surface condition has been assessed from the survey based on severity and extent relative to the surface distress and disintegration. Numerical score or index known as the PCI or SCI between 100 and 0 is assigned to the road segment based on the visible road surface distress. The numerical ratings suggest treatment methods for rehabilitation of the road segment. The database should be updated when road surface treatments are applied.

Asphalt pavements deteriorate slowly during the first years after construction and more rapidly with time. Pavement without treatments fail in approximately 20 years. Therefore, certain treatments and maintenance techniques are adopted to rejuvenate the pavement life. The figure below demonstrates the deterioration curves of pavement due to age with and without maintenance. Studies show that the overall maintenance costs of roads are reduced with asphalt surface treatments every seven years.

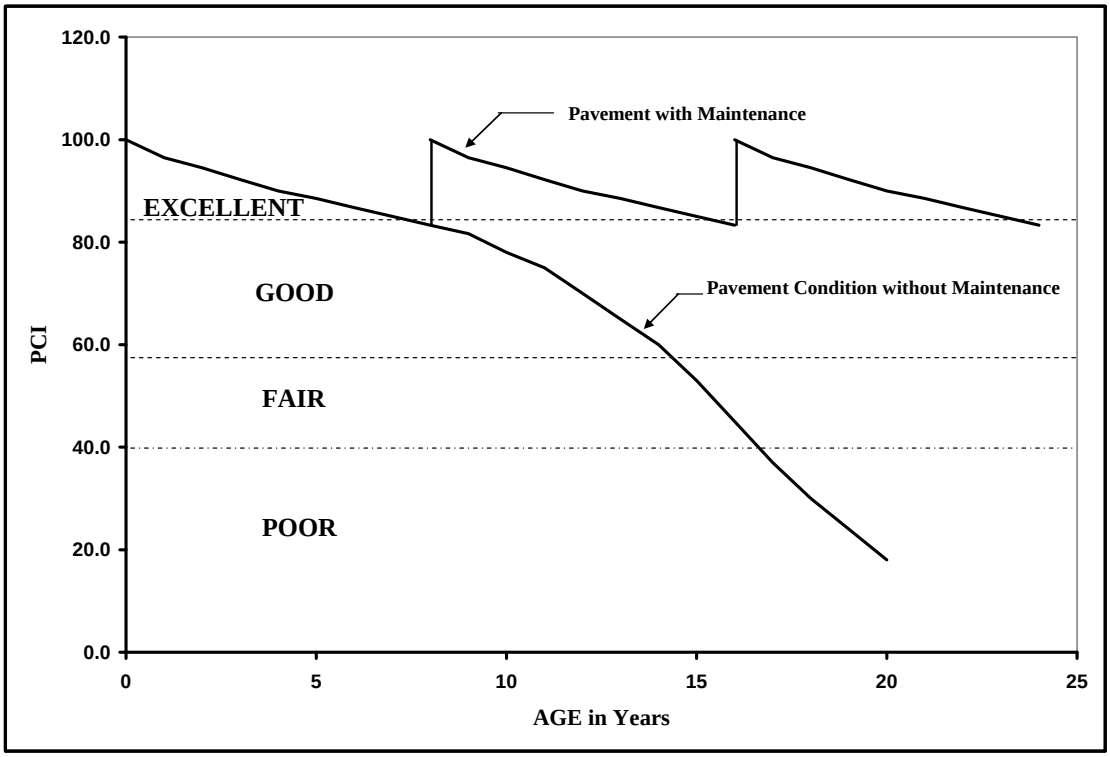


Figure 10. Pavement Condition vs. Age

The above figure allows the reader to visualize the life cycle of asphalt pavement with and without maintenance. With the proper construction and maintenance, the life cycle of pavement are extended. Proper maintenance extends the asphalt life thus reducing capital expenditures of reconstruction of the road sections.

Paved Roads Maintenance Techniques

Maintenance activities on asphalt surfaces preserve the existing pavement surface and prevent further deterioration. Maintenance activities can be divided into four separate categories (as presented in The Asphalt Handbook, Asphalt Institute, 1989):

- Routine Maintenance – the day-to-day work that is necessary to preserve and keep a pavement as close to an as-new condition as possible. This may include crack sealing (annually), pothole patching (as soon as possible), and drainage maintenance (semi annually). These maintenance techniques are recommended for all paved roads.

- Preventive Maintenance - work that is done to prevent deterioration of a pavement, thus reducing the need for more substantial maintenance work. This may include drainage (roadside) maintenance and fog or chip seals (every 5 to 7 years). These maintenance techniques are recommended for application to pavements with PCI ranging between 85 and not less than 50.

- Major Maintenance (rehabilitation) – work which is needed to restore a pavement to an acceptable serviceability condition. It includes base repair, surface treatments, surface recycling, and overlays. These maintenance treatments are recommended for asphalt pavements when PCI rating is less than 50.

- Reconstruction – work includes reconstruction of sub-base, base, and asphalt surface to restore a pavement to its as-new condition. This maintenance technique is recommended for asphalt pavements with PCI less than 30.

PCI	Maintenance Technique	
100 - 85		**Routine Maintenance**
85 - 50		**Preventive Maintenance**
50 - 30		**Major Rehabilitation**
30 - 0		**Reconstruction with Base Treatment**

Figure 11. Pavement Maintenance and PCI Rating

The above figure illustrates the range of PCI values that triggers different maintenance techniques for paved roads. The above figure is a general guide for LCRB regarding road surface condition and appropriate maintenance technique implementation. A field investigation would always take precedence over these general guidelines.

Gravel Road Maintenance Techniques

The majority of Lemhi County roads are unpaved (gravel) roads. LCRB maintains approximately 287 miles of gravel roads. Current adopted maintenance techniques ensure that repair to major roadways and bus routes are addressed when deterioration occurs. Roads with negligible traffic require minimum maintenance and are repaired on an as needed basis. The following Table 20 lists six types of gravel road distresses and the respective maintenance techniques that will assist LCRB in maintaining good serviceability of gravel roads.

Table 19. Gravel Road Surface Distresses and Maintenance Technique

	Gravel Surface Distresses	Maintenance Technique
1	Improper cross-section	Reshape or Re-grade depending on the severity of the distress
2	Inadequate roadside drainage	Re-grade ditches and clean culverts regularly
3	Corrugation	Reshaping or Blading depending on severity
4	Potholes	Blading or Reconstruction depending on severity
5	Rutting	Removing or stabilizing sub-grade and reconstruction
6	Loose Aggregate	Reshaping and additional fines to obtain the proper gradation for stability

Items 1 and 2, listed in the above table, are drainage issues that may compromise the structural integrity of the road base. Items 4 and 5 are indications of an inadequate base. Items 3 and 6 are related to surface blading and daily traffic volumes. When traffic volumes are large enough, it becomes cost-effective to pave the road. Frequent grading is a good indicator that a gravel road should be considered for pavement. Placing pavement over inadequate base and/or poorly drained roads will provide a temporary fix but will result in potholes and cracking within a few years.

The following are recommendations and frequency for maintenance techniques for gravel roads.

- The debris and excess vegetation, such as grass and weeds, should be removed from the bottom of ditches and culverts at the beginning of every fall season.
- The ditches should be graded by removing excess silt and sand sediments and reestablishing longitudinal and side slopes at the beginning of every spring and fall seasons.
- Road cross slope and shoulder slopes should be inspected and graded as required and at a minimum of the beginning of spring and fall seasons.

- Repair and/or upgrade culverts depending on storm water demand and existing culvert capacity each fall season.
- Refresh the wearing surface with new gravel every 7 to 10 years.

The SMP recommended will enhance the level of serviceability of paved and unpaved roads. Good maintenance practices prolong the life of wearing surfaces of gravel and paved roads. Implementation of an effective SMP will reduce the capital expenditure to maintain county roads.

Prioritize Projects

Based on the PCI and SCI values, Lemhi County may identify road sections needing repair or treatment and determine the maintenance technique. Road condition and available funding is one method of prioritization. The goal of prioritization of projects is to provide the greatest benefit to the community for the funds expended on the project.

There are a number of project prioritization approaches. A simple ranking procedure often ranks those road sections with the worst condition as the highest priority; however, this procedure is limited in the number of available parameters. Generally, pavements with poor PCI require substantial rehabilitation or treatment to restore the road to the desired level of serviceability. Maintenance may also be prioritized based on traffic volumes and road classification. Hence, prioritization of projects should be done based on good engineering judgment, safety concerns, net positive impact on the community, and availability of funds. The T2 Center of Idaho recommends a pavement management strategy of maintaining good roads first, then improving poor roads as the budget allows.

Schedule and Funding

Road maintenance studies show that an effective preventative maintenance plan is the best use of tax dollars. As discussed above, completing a surface treatment to paved roads every seven years is the preferred schedule. Gravel refurbishing of gravel roads also should be completed

every seven to ten years. LCRB current maintenance schedule is following this recommended schedule on the higher volume roads as the budget allows. Budget short falls are stretching this plan into a ten-year cycle.

The current Road Budget sources come from the Secure Rural Schools and Community Self-Determination Act (SRSA), Highway User Revenue, sale of assets, and #10 permits. The SRSA is a restructuring of the Craig-Wyden bill that was originally passed in 2000. Following the decline in revenues from timber sales in the year 2000, the Craig-Wyden bill provided funding to Idaho counties that were impacted by the loss of revenue. Lemhi County received funds from the SRSA in 2008 with funding projected to drop 10% per year until 2011 – the ending year of the Act. A detailed description of available funding sources and funding strategies are explained in Chapter 8, Transportation Funding Options and Strategies.

Documentation

Lemhi County road maintenance work should be and currently is being documented. Records should include road name, date, techniques and equipment used, cost of materials, equipment and labor, and time required. An updated unit cost schedule for improvements should be developed and maintained, as it is critical for budget and future planning. This information may be kept within the new GIS database or may continue to be recorded on paper. The road inventory and road surface conditions should also be updated in the database.

RECOMMENDATIONS TO LEMHI COUNTY

Based on the SMP principles, the following are the recommendations to Lemhi County to maintain county roads in the best level of service.

- The GIS component of this project provides LCRB with the current road surface condition survey. A data dictionary and database has also been set up from the road condition survey. This database should be updated when roads, culverts, and sign boards have maintenance work preformed.

- It is recommended to continue to update the unit cost schedule regularly to account for any variations from year-to-year and to reflect actual unit costs that Lemhi County has historically encountered. The updated unit costs should be included in the database to prepare Lemhi County's road maintenance budget.

- It is recommended to apply chip seal to paved road sections where the PCI rating falls less than 80 or every 7 years, whichever criteria is met first.

- It is recommended to continue a program to set aside funds for routine maintenance work every year and to apply for State and/or Federal funds when feasible.

- A Capital improvement project list should be updated annually. From this project list, budgets and funding requests may be validated. By annually reviewing and approving this project list, the public will have the opportunity to be informed.

ASSET MANAGEMENT

Recently, the AASHTO and the Federal Highway Administration conducted workshops and seminars to include asset management concepts in transportation agencies. The following is the definition taken from AASHTO, that was used at the workshops:

"*Asset management is a systematic process of maintaining, upgrading, and operating physical assets cost-effectively*".

Asset management is a critical part of the Lemhi County management. Law requires that counties complete a GASB Statement No. 34 of all publicly own properties. The GIS inventory completed for this study provides Lemhi County with valuable information that allows the assets to be monitored annually with current updates of the database. Based on the value of right-of-way, replacement cost, standard life cycle of asphalt pavements (depreciation), and current surface conditions, the value of the road system may be calculated. An asset valuation report may be generated from the GIS database.

CHAPTER 8
CAPITAL IMPROVEMENT PLAN

A Capital Improvement Plan (CIP) is a major transportation-planning tool. It is the process of systematically inventorying and prioritizing capital improvement projects. The CIP lists projects based on a sense of priority, funding source, probable cost, and construction year. Typically, CIP shows projects for five construction years. However, construction schedules for federal funded projects usually are more than five years out and may be the top priority project.

Benefits for annually developing and adopting a Capital Improvement Plan are:

- The CIP list may be considered a sorting pool. All possible capital improvement and routine maintenance projects should be listed. Next sort the assembled list with most desired projects at the top of the list.
- Probable costs of top projects may then be estimated.
- The source of funding should then be added to the top projects. Funding sources include Local, STP Rural, STP Bridge, LHRIP, and I-Way.
- Identify feasible projects considering the probable cost and source of funding. The highest prioritized project does not have to be scheduled for constructed first.
- Finally, the desired year of construction should be added. State and federal funded projects require 6 to 7 year lead-time for application and design. These projects may now be initiated by submitting funding applications.

Despite many benefits of capital improvement planning, it is necessary to understand that this CIP is a document and serves as a guideline. There can be changes in the prioritized order of projects-for many reasons. Probable costs for the projects and available funds can fluctuate as a result of unforeseen events, changing economic conditions or shifts in public policy, therefore; these CIP projects should be reviewed annually and updated as necessary. A well-maintained GIS database will assist LCRB staff in updating this list.

Project scoring sheets were developed for Lemhi County to assist in project prioritization. These are included in Appendix E.

The table below identifies the top prioritized projects. The entire CIP list may be viewed in Appendix E. The following chapter discusses funding options, funding sources and strategies for major construction and maintenance projects.

Table 20. Ten Capital Improvement Projects 2012 – 2015

Priority	Project Name	Funding Source	Projected Cost	Projected Construction Year					
				2012	2013	2014	2015	2016	PN
1	Kirtley Creek Rd. - Rehabilitation	Local Funds	$350,000	x					
2	Pahsimeroi Rd. - Chip Seal 12.5 miles	Local Funds	$500,000	x					
3	Diamond Creek Rd. - Upgrade	Local Funds	$380,000	x					
4	Airport Highway Approach	Local Funds	$200,000	x					
5	Canyon Creek Bridge	Local Funds	$185,000	x					
6	4th of July Creek bridge	Local Funds	$185,000		x				
7	4th July Creek Rd. - Improvements	Local Funds	$250,000		x				
8	Chief Tendoy Rd	Local Funds	$60,000		x				
9	Old Stage Rd. - Baker to Haynes Creek	Local Funds	$325,000		x				
10	Gibbonsville Rd. - Chipseal	Local Funds	$40,000		x				

Note: * Preliminary Planning and Design
The above listed projects are not included in the current STP.
PN = Planning

Note: All federal funding through the State is restricted to Major Collectors and Arterials in the Surface Transportation Improvement Program (STIP). Some of the proposed projects are not currently listed as Major Collectors in the STIP. Application may be made to the State to change the classification of qualified streets. Federal funded projects time frame is an average of four to six years. Please note that the given approximate costs are for construction only as per current unit costs, costs for application, design engineering, construction engineering, project administration, contingency and other costs associated with a street construction project need to be added based upon site specific review. Project size may have to be varied to meet available funding.

CHAPTER 9

TRANSPORTATION FUNDING OPTIONS AND STRATEGIES

Assessing the current and future budgets is an important step in identifying funding options and strategies for current and future maintenance and improvements. Limited growth in Lemhi County suggests funding sources are not likely to increase on a yearly basis. Therefore, improvements must be carefully planned to fit within the steady year-to-year budget. Major changes to existing roadway design may require additional funding sources.

Current roadway inventory shows there are approximately 400 roadway miles under LCRB jurisdiction of which 31.4 % is paved and 68.6% is gravel. An average paved road in Lemhi County has a width of 19 feet and an average gravel road has a width of 15 feet. Approximately 15 miles of gravel road and 1.3 miles of paved road were added to Lemhi County road inventory from 2004 to 2008.

TRANSPORTATION FUNDS AND EXPENSES

Lemhi County receives an average of $1.36 million in revenue each year from local, state, and federal sources (2005-2008 average). The distribution of source amounts are shown in Figure 11. As illustrated in the figure, state funding accounts for over 72% of Lemhi County's road revenue, federal funding accounts for about 26%, and local funding accounts for less than 2%.

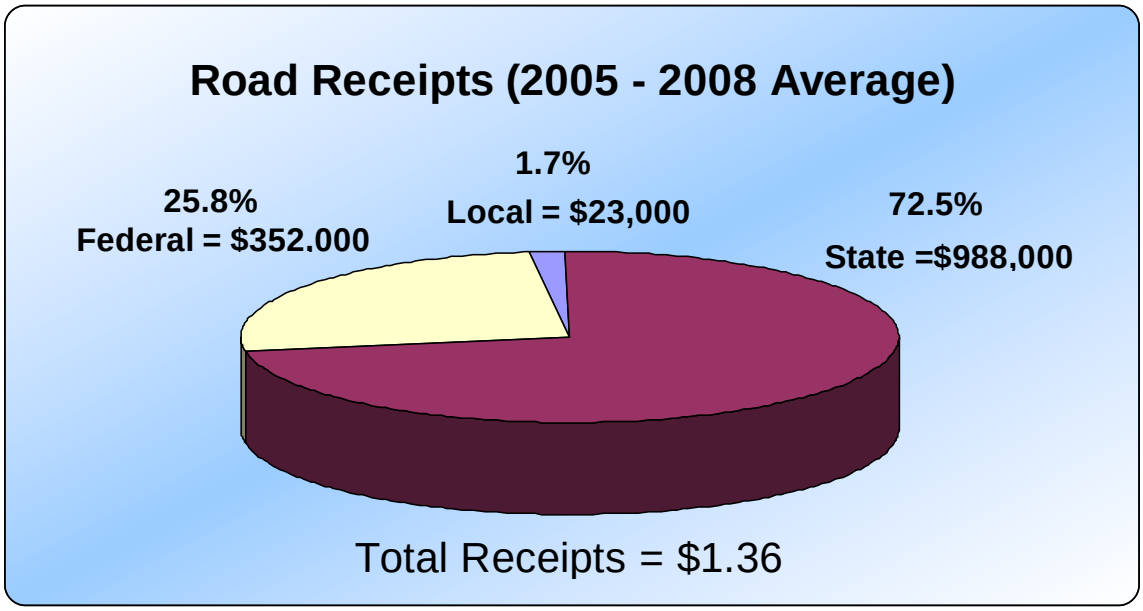


Figure 12. Distribution of Funding Sources

Federal sources consist primarily of the National Forest Service (NFS) apportion but also include No. 10 permits. The NFS apportion is a result of the Secure Rural Schools and Community Self-Determination Act (SRSA). The SRSA is a restructuring of the Craig-Wyden bill that was originally passed in 2000. Following the decline in revenues from timber sales in 2000, the Craig-Wyden bill provided funding to Idaho counties that were impacted by the loss of revenue. Lemhi County received funds from SRSA in 2008 with funding projected to drop 10% per year until 2011 – the ending year of the Act. An average of approximately $352,000 of the total SRSA funds is allocated to road funding per year (2005-2008 average).

State sources, which compose the majority of Lemhi County's road budget, come entirely from the Highway User Revenue. Local sources comprise a small percentage of the overall budget and primarily consist of sale of assets (equipment).

CURRENT MAINTENANCE EXPENSES

Lemhi County spends an average of $1.2 million on its roads each year (2004-2009). Road funds are used for new construction, reconstruction and replacement, routine maintenance,

equipment, administration, and other. Figure 13 demonstrates the funding disbursements for each of these categories. Routine maintenance makes up the largest portion of the spending, followed closely by equipment.

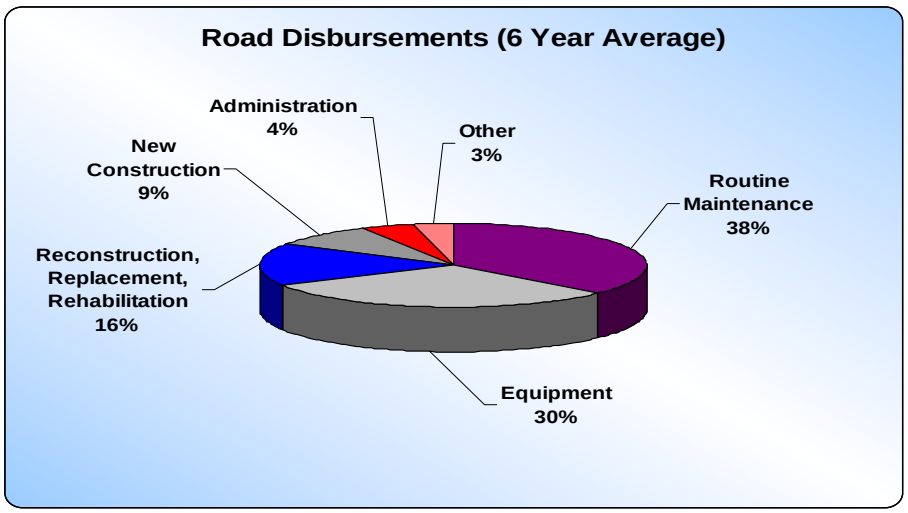


Figure 13. Average Funding Disbursements in last 6 Years

Total maintenance costs per surface area for both paved and unpaved roads were calculated using roadway miles, widths, and disbursements. The total maintenance costs were determined by summing the disbursements line items of reconstruction/replacements, routine maintenance, and equipment – costs associated with new construction, administration, and other were not included. It was determined that an average of $1.02 million is spent on total road maintenance costs each year (6 year average).

Furthermore, the maintenance costs for gravel and paved roads were determined by splitting the line items into tasks specific to each type of surface. The following tasks were assumed to be specific to paved roads: Chip Seal or Seal Coating, and Patching. The following tasks were assumed to be specific to gravel roads: grading/blading. Remaining line items were divided proportionally based on the ratio of paved roads to gravel roads. The results are shown in the following table.

Table 21. Average Maintenance Costs per Road Type

Maintenance Costs per Road Type (2004-2009 Avg.)		
Cost	Paved	Gravel
Per Year	$571,000	$445,000
Per Mile	$4,800	$1,800
Per Square Yard (SY)	$0.44	$0.19

As traffic increases the cost to maintain the roads also increase. This is particularly true of grading/blading of gravel roads. Traffic increase is directly proportionate to the frequency of grading/blading that increases the cost. A rule of thumb suggests when the average daily traffic reaches approximately 400 vehicles per day it becomes cost-effective to consider paving the road.

The other direct cost considered in this study is the balance of funds with the finished surface area of the existing County roads. As road widths are increased for safety and emergency vehicles, the road budget for maintenance will also have to be increased or a loss of current level of service will occur. The following two figures demonstrate the capital costs to increase the width of the existing county roads to 24 feet and the increased maintenance cost that result from this change. TRM in Figure 15 stands for Total Road Maintenance.

Figure 14. Capital Costs to Widen Roads to 24 Feet

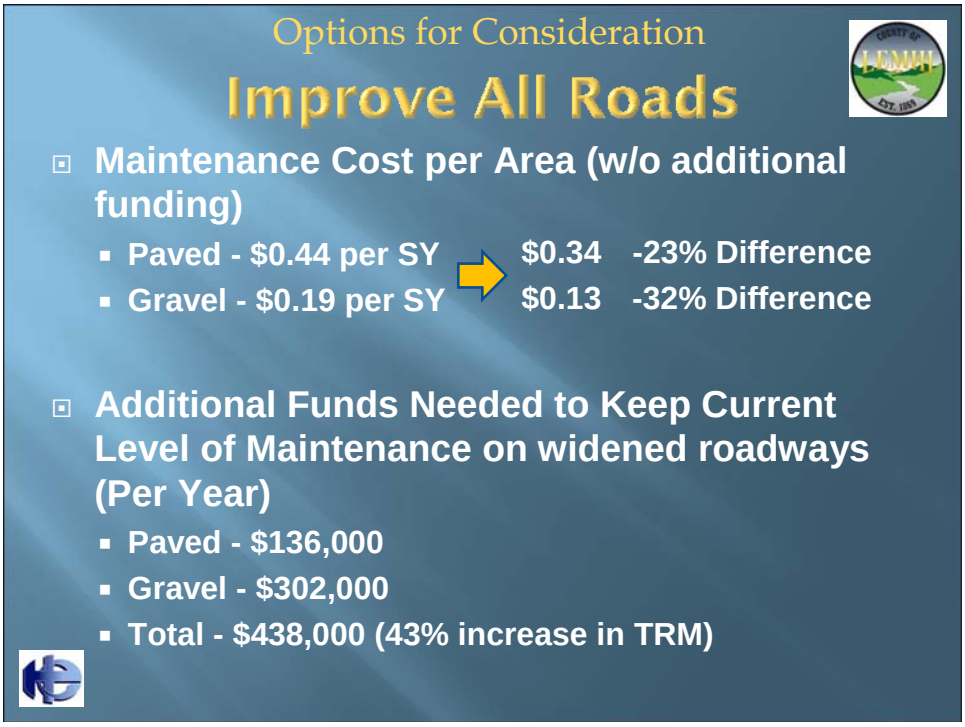


Figure 15. Maintenance Options based on Funding

TRANSPORTATION FUNDING PROGRAMS (State and Federal)

It is anticipated that Lemhi County will continue to receive funding from local, state, and federal levels. The level of funding from these sources, however, is expected to change in the future. Local Funds during the past six years have come almost entirely from the sale of equipment; currently property taxes do not contribute to the Road and Bridge Fund. Local funding sources are the only sources with which Lemhi County has direct control. As a comparison, local budgets for counties that do not receive SRSA funds for their road and bridge budgets consist approximately 24% from property tax.

State funds are comprised of the Highway User Revenue, which is comprised of various transportation related items such as gas tax and vehicle registrations. The amount of gas tax collected depends on the amount of travel in the state and the amount of travel is dependent on the price of gas and economy.

Federal funding to Lemhi County comes entirely from the Secure Rural Schools Act. Funding from this Act is expected to drop 10% per year between 2008 and 2011 – a 27% drop total. After 2011, it is unclear what the level of funding will be as the Act will have to be renewed during the Federal legislative session. The loss of this funding source has the potential to have a devastating affect on LCRB budget.

FUTURE FUNDING ALTERNATIVES

The following funding alternatives are presented in this transportation plan to encourage Lemhi County to review these options as well as others, choose an option, and proceed with a proactive funding plan. As county road miles increase to provide service to new developments and as road width is increased to meet current standards, the need for additional funds for road maintenance is required. As discussed above the probability of increase in the current state and federal revenue is low. The information collected suggests that funding the maintenance of local roads will ultimately fall upon the property owners.

- Should a highway district be considered in lieu of the LCRB Department? A highway district defers decision making from the Board of County Commissioners to the Highway District Board of Commissioners and makes available different taxing options for funding projects and maintenance. It is recommended that a more in-depth study be made before creating a highway district. Regardless of whether road maintenance is through the current LCRB or through a Highway District, additional funding will ultimately come from property owners. Creating a second board to make decisions does not appear feasible when the existing Board of County Commissioners is already capable and available.

- No action. The LCRB would hope for renewal of the SRSA in 2011; however, the funding amount of the renewed Act is uncertain. If the Act is not renewed, then the LCRB will operate on a smaller budget or use existing project reserve funds to operate on the current level. This is not a recommended option.

- Local Property Tax (County). Start increasing the property tax at increments required (3 percent maximum per year) and set aside the money for the Road and Bridge Department. This reserve would be used to transition from the probable loss of the Secure Rural Schools Funds to Local Funds. This is a feasible option.

- Local Improvement Districts (LID). Funds generated from LID's may be used for capital improvements, not for on-going maintenance of an existing system. LID is a local taxing district to improve a local road that directly improves or sustains the required level of service to the local properties. LID's are discussed more in depth later in this chapter. This is not an option for maintenance funds.

- County Bonds. County bond requires a majority vote of the County voting citizens on a specific project. The bond allows the County to make a necessary improvement and pay for the improvement in the future through the collection of taxes. This is a feasible but unlikely option.

Funding available by application to LHTAC by Lemhi County:

- Local Rural Highway Investment Program (LHRIP). These funds are available to the County each year in $100,000 increments for resurfacing and improving local roads. These funds may be applied for each year and may be used on any improvement or maintenance road or bridge project. These funds are not considered federal funds and do not require a local match or other federal funding requirements. These funds may be used for preventive maintenance on local roads such as chip seals and overlays.

- Surface Transportation Program (STP) Local Rural. These funds are allocated for projects in rural areas and may be used for new construction, reconstruction, or rehabilitation of roadways functionally classified with FHWA as rural major collectors. Currently a local match of 7.34% is required. These funds require federal criteria be met; such as environmental clearance, ITD review of plans, public involvement, and FHWA oversight of the funds.

- STP Bridge. These funds are for the replacement or rehabilitation of bridges. The bridge must be at least 21 feet long and be included on the National Bridge Inventory (NBI). Bridges that have a qualifying "sufficiency rating" of 50 percent or lower, structurally deficient, or functionally obsolete may be replaced. Bridges that have a sufficiency rating less than 70 percent qualify for deck replacement or rehabilitation of the deck. Other qualifiers are also required. A local match of 7.34% is required for the STP Bridge funds.

Federally funded applications are increasingly competitive. Good transportation planning including a CIP and SMP helps leverage the chances of obtaining federal funds. These funds can extend local construction dollars making large projects feasible that otherwise are unaffordable. Preliminary Engineering budgets for STP projects average between $160,000 and $249,000 in order to meet federal requirements. The county pays 7.34 percents of this cost. It is suggested, but not required, that federally funded projects be in a minimum range

of $500,000 for construction. The supposition of this recommendation is based on the cost to obtain federal clearance for design and environmental on each project. STP funded projects will take a minimum of 5 to 7 years to be constructed once accepted on the Surface Transportation Improvement Program (STIP).

OTHER FUNDING OPTIONS

Late Comers

Latecomer Agreements, also referred to as recovery contracts or reimbursement agreements, allow a property owner who has installed street or utility improvements to recover a portion of the costs of those improvements from other property owners who later develop property in the vicinity and use the improvements. The term of Latecomer Agreements typically varies between 6 and 15 years.

Latecomer Agreement charges are not to be confused with local improvement district (LID) assessments. While the computation of charges to be recovered under a Latecomer Agreement can be very similar to that of an LID assessment, the procedures are very different under an LID the money goes to the County rather than to the property owner. LID assessments apply to all properties within the reimbursement area, whether or not the property is developed. Latecomer assessments, however, are triggered only if a property owner submits an application for a development that would require similar improvements. Specifics of a Latecomer Agreement and method of calculating credits and payments are contained in an ordinance adopted by the county.

Latecomer Agreements are based on road improvements identified in an adopted plan as prerequisite to property development of an area. Where no plan exists, the county may adopt a site-specific engineering plan on a case-by-case basis. With such a plan in place, the typical process is as follows:

(1) An owner or his agent requests a Latecomer Agreement with the county as a result of the county's requirement to construct certain road improvements in compliance with its adopted plan.

(2) The county formulates an assessment reimbursement area based upon a determination of which undeveloped parcels adjacent to the improvements would require similar road improvements when developed.

(3) The county, following statutory procedures, notifies property owners within the proposed assessment area.

(4) The owner bids the project similar to a public works project and presents the bids to the county. When the county concurs with the bidding process and approves the Latecomer Agreement, the owner may construct the project.

(5) The final contract is recorded and is binding on the county, the owner, and property owners within the assessment area.

There is an administrative cost for the county to track development in the area, collect fees, and disperse the funds. Administrative costs are added as fees to the assessment to benefited properties. If no additional development occurs within the term of the Latecomer Agreement, no reimbursement is made to the initial owner.

Latecomer agreements are useful when a required improvement, such as a road upgrade, benefits surrounding undeveloped properties.

Impact Fees

Impact Fees are assessed on new development, usually through building permits, to link growth-related infrastructure capital cost directly to new demand created by development within a service area. Statutory provisions for Impact Fee studies, ordinances, payment, and credits are found in Idaho Code, Title 67, Chapter 82, of the Idaho Development Impact Fee Act. Impact Fee calculations, along with the Capital Improvement Plan (CIP), are based upon build out of the Comprehensive Plan and the desired level of service for public facilities such as roads and bridges. Impact Fees can only be used for the specific purpose for which

they are collected. Administrative costs of setting up and managing Impact Fees may be recovered in the fee.

Idaho Statutes require establishment of a development impact fee advisory committee to oversee the Impact Fee study and CIPs. An Impact Fee analysis begins with a determination of land use assumptions, existing assets, and level of service. Establishing the level of service is a critical component in the decision to maintain an existing level or to improve the level of service to existing residents. From this analysis a CIP with cost of improvements is prepared along with an analysis of cash flow stemming from Impact Fees and other infrastructure financing sources. The CIP identifies specific system improvements that become the basis for setting an Impact Fee for funding purposes. An Impact Fee cannot fund repair or replacement of facilities.

A developer may elect to construct an improvement in lieu of paying an Impact Fee. The improvement must be from the list of projects that the Impact Fee Committee and County have identified and from which the cost estimates and associated Impact Fee was developed and adopted. In such a case, the developer will receive a credit toward the Impact Fee. Impact Fees are collected at the time a building permit is issued.

The CIP may change over time as funding from sources other than Impact Fees is available to the County. As projects are completed, or as the Impact Fee Committee and County determine necessary, consideration will be given to mitigate the impacts of growth on the levels of service to residents. Should the County wish to improve a level of service over that which exists (improvement of facilities), a method of funding the deficiency from current residents must also be established.

Impact Fees are especially useful when levels of service are declining due to growth, when growth is rapid, or when existing residents and businesses believe that growth is not paying its fair share of infrastructure cost. However, the statute is very explicit on prerequisites for establishing Impact Fees and it is recommended that the County, if elected to pursue this course of funding, solicit experienced team members to guide them through the process.

Local Improvement District

A Local Improvement District (LID) is a specific geographic area formed by the County or a group of property owners to bring about needed capital improvements within that area. Statutory provisions governing LID's are found in Idaho Code, Title 50, Chapter 17. An LID provides a funding mechanism to construct improvements and spread the repayment schedule over the term of the bond, usually 20 years.

Creation of a LID can be initiated by local citizens or the County. If initiated by citizens, a petition of 60% of resident property owners or 66% or all owners is sufficient to create a district. A preliminary engineering design and initial budget is created by an engineer for specified improvements. The LID budget includes engineering and county administration expenses including interim financing interest. A hearing is held on the creation of the LID and, if approved by the Commission, a resolution will be passed to form a district.

Following formation, the engineer will perform surveys, design, and bid documents for the improvements. Upon receiving bids, the Commission will award the bid and construction will proceed until finalized.

When completed, final costs will be compiled and the engineer will create an assessment roll distributing costs by one of the methodologies allowed by law. This assessment roll will be presented at a public hearing. Protests will be considered and documented. Once the assessment roll has been set, each property owner will have 30 days to prepay the assessment in full without additional interest. Any remaining assessments shall be totaled and financing arranged for the term of the bond.

This method of financing is beneficial by allowing participants within the district boundary to fund immediate improvements over time at municipal rates and backed by property owners in the district.

Negotiated Exactions

Negotiated Exactions are determined on a project-by-project basis through the development approval process. Impact fees are based on objective fair share studies and standardized pro-rate formulas.

Development Agreement

A development agreement is a contract created between the county and the developer before or at the time of plat approval. The agreement ties the land use action or approval to certain conditions and performance by the owner or developer. The duties, obligations and specific milestones of both the county and the developer are spelled out. Typically, as each milestone or condition of approval is reached, the developer is required to provide an acceptable deliverable. This process enables both parties to monitor the development process and resolve any problems or issues.

Development Pay Its Way (Policy Recommendations)

As previously discussed, most funding options are for Capital Improvement Projects. Maintenance of roads must come from Federal/State annual road funds and Local property tax. The County has-jurisdiction over local property tax funds. Lemhi County Road Standards have been created in an effort to help preserve the current LOS of County Roads and for "Development Pay Its Way Policy". Private road classification and road standards are this Policy.

Assume there is a new development with one mile of gravel roads, home values are near $120,000, and the county tax levy for road maintenance is 0.0016 of the assessed value. The dollar amount from each home for road maintenance will be $192.00. If the home qualifies for a homeowner's exemption, the dollar amount from each home will be $96.00. Using the LCRB road maintenance cost from Figure 15 of $0.19 per square yard or $2,700.00 per mile, it will require 28 homes with homeowner exemptions to pay for the maintenance cost of the road. The concept of private public roads will require homeowner associations (HOA) to

cover the cost of the road maintenance within their subdivision. The burden of maintenance of new private roads does not fall on existing property owners and LCRB.

Other measures to insure "Development Pay Its Way" are Private and County Road Standards. Strict enforcement of these construction standards will save HOA and LCRB costs for early road repairs for sub-standard road construction. In addition, testing standards are included to promote good construction quality of new roads, resulting in minimizing maintenance costs to LCRB.

CHAPTER 10
PUBLIC INVOLVEMENT

Public involvement is an important component in effective transportation planning and transportation decision-making. Interested persons, groups, and agencies have an opportunity to voice their opinion and interests in planning the County's transportation system. Input from various agencies and the public provide crucial information to decision-makers, policy-makers, ITD, cities in the County, and public transportation providers to fully comprehend the County's long-range plans. Decision and policy-makers can set long-range objectives and have a strategic direction for a systematic transportation system that is based on input from the public and various agencies. Public involvement allows local agencies and the public to be aware of potential impacts, problems, or issues while setting long-range objectives. It also encourages discussion with County officials and other decision-makers to assist in determining options and resolution of potential concerns.

Public involvement is a critical part of this project. A technical advisory committee (TAC) is the county's task force to direct the results of the study. A list of stakeholders in the County who are interested in the County's transportation system and planning was developed. They have been involved in meetings, review processes, planning, and development strategies from the beginning of the project.

PUBLIC INVOLVEMENT ACTIVITIES

A wide variety of public involvement activities were conducted for this project which included one-on-one meetings with key county officials, stakeholder meetings/workshops, public information meetings/workshops, presentations, planning review meetings, and open house workshops. A Transportation Advisory Committee (TAC) was formed to make decisions and provide information on the future transportation planning. The TAC is comprised of elected county officials, LCRB Staff, and representatives from local agencies, cities, and community groups. The planning team met with the TAC on a regular basis to discuss transportation system planning aspects, policies, standards, and strategies. The TAC has reviewed and had input at every stage of the transportation plan development.

An initial start-off meeting was conducted with TAC, stakeholders, and interested persons in the County. The purpose of the meeting was to develop an understanding of the County's needs and requirements for planning the county-wide transportation system. Items taken into account were to identify project specifics, growth patterns, and Commission concerns. Holladay Engineering Company has analyzed and summarized input and information collected from stakeholders and county officials.

FIRST STAKEHOLDERS/PUBLIC WORKSHOP

The first stakeholders/public workshop for the transportation plan was held on November 19th, 2009. This workshop was held as an open house at the County Courthouse Annexure building from 3:00 pm to 7:00 pm. The purpose of the workshop was to present the most recent information gathered from stakeholders and county officials, identify potential problem areas and to gather ideas regarding long-range objectives and planning the future county-wide transportation system. The planning area for the transportation plan included the transportation system maintained under the County's jurisdiction.

Meeting Notification and Presentation

A public notice was advertised in the local newspaper, the Recorder Herald, on October 29, 2009, to notify public regarding the stakeholders' workshop. A copy of the advertisement from the local newspaper is included in Appendix H.

All stakeholders, county officials, decision-makers, local agencies and state officials were invited to attend the workshop. Display boards of size 24" by 36" with available information and potential problem areas were displayed at the workshop. The workshop was held as an open house for the public to walk around display boards and make notes and comments. The planning team, county officials and the LCRB Staff were present at the workshop to answer questions from the public. The following is the list of displays presented at the workshop:

1. Bridge Alternate Locations in Salmon
2. Road Connectivity Routes Map
3. Potential Growth Area Map
4. County Roads Map
5. Functional Classification Map

These displays demonstrated the most recent available information on road connectivity issues, alternate river crossing location across the Salmon River, potential growth areas in the county, and the overall condition of the county's transportation system. Samples of above-mentioned displays are provided in Appendix H.

Comments and Feedback

There were approximately 35 people at the workshop excluding the planning team and County officials. Comment and questionnaire sheets were provided at the meeting to obtain public input and comments. A comment sheet was also made available on the Holladay Engineering Website for the public to send comments electronically. The questionnaire sheet was provided for a survey to determine public opinion: 1) for an alternate river crossing location across the Salmon River in Salmon, 2) for proposed alternate locations for a second bridge across the Salmon River, and 3) for connectivity roads within the County. Comments from the public and results from questionnaire are summarized on the following pages.

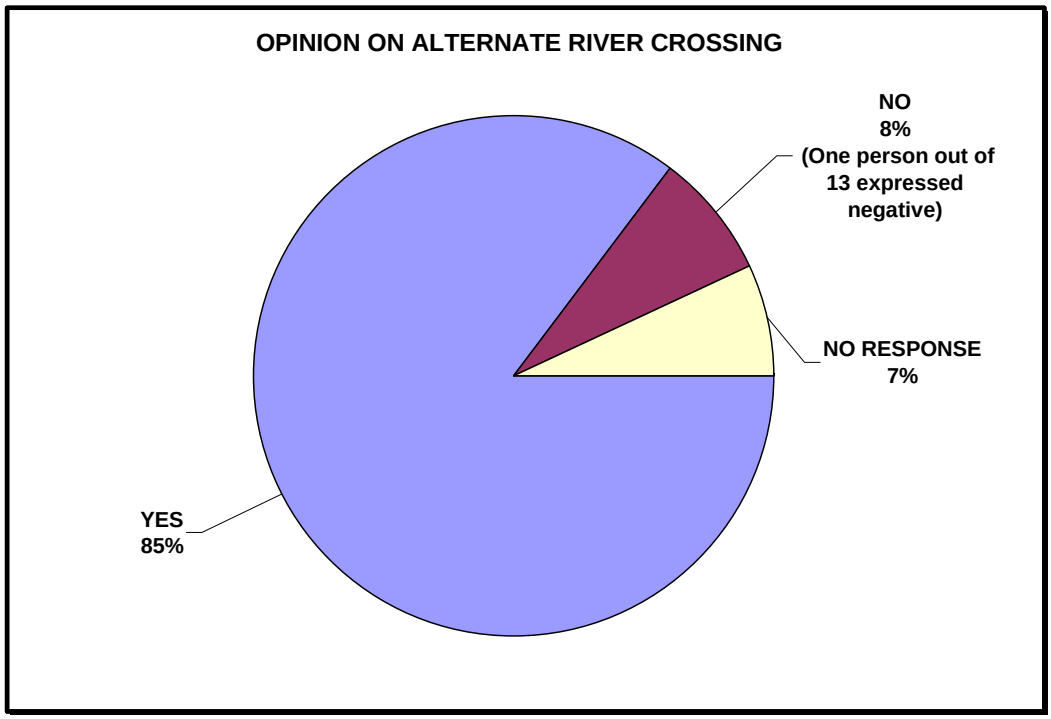


Figure 16. Public Input on Alternate River Crossing

Figure 16 is a summary of the public comments received on the necessity for an alternate river crossing bridge across the Salmon River in the City of Salmon. Of the 13 people that responded, the majority favored an alternative / emergency river crossing near Salmon.

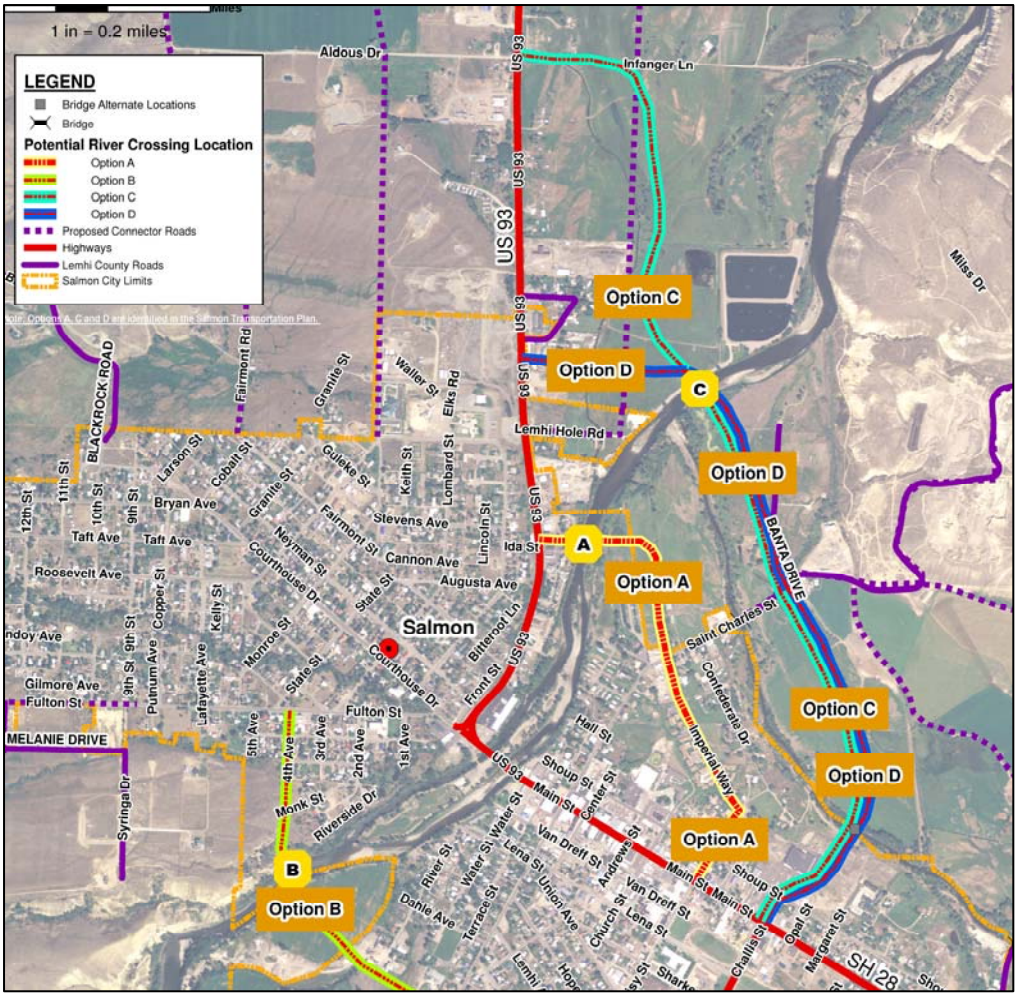


Figure 17. Potential River Crossing Locations and Emergency Routes

The above figure shows three options for an alternate bridge location across the Salmon River in the City of Salmon. **Option A** – Utilizes existing roadways Daisy Street and Imperial Way, extends north to the end of the island where the Salmon River is the narrowest, crosses the river, and connects to US 93. **Option B** – Continues from Willow Avenue (northwest), crosses the Salmon River, and then extends north – connecting with 4th Avenue. **Option C** – Extends north from the intersection of Highway 93 and State Highway 28 (just east of the Saveway Market Inc.), then crosses the Lemhi River, and runs parallel with the Lemhi River until it crosses the Salmon River and then extends north to intersect with Highway 93. **Option D** – Same as Option C; except it extends west and intersects with

Highway 93. Figure 17 is a cropped portion of the Potential River Crossing Locations & Emergency Routes Map that is included in Appendix H.

Pros and cons of each option are discussed below:

Option A:

Pros	**Cons**
Utilizes existing streets and ROW.	Possibly would require relocation of people and residence(s).
Requires the shortest distance of new road and ROW requirements.	Not a viable option as an alternative route due to proximity of City center.
Route is in close proximity to City center.	
Possibly shortest bridge span required.	
Potentially the lowest cost.	

Option B:

Pros	**Cons**
Utilizes existing streets and ROW.	Possibly would require relocation of people and residence(s).
Requires a modest distance of new road and ROW requirements.	Not a viable option as an alternative route due to proximity of residential area.
Route is in close proximity to City center.	
Would function as a secondary / emergency river crossing (not a viable alternate route).	

Option C / D:

Pros	**Cons**
Minimal impact to residents / residence.	Requires two bridges.
On south side of City (zoned commercial).	Most expensive options.
Would function best as an alternative route.	Possible wetland impact.
Best alternative for federal funding.	
Provides most options for connectivity.	

The majority of local residents and local agency officials preferred Option C.

Potential Connectivity Routes display was provided at the workshop to illustrate future routes that provide connectivity with the existing roads. The public and local agencies provided input, comments, and preference for connectivity routes within the County. A map illustrating Potential Connectivity Routes is included in Appendix H. The Connectivity Map is provided in Appendix I.

Public input and comments played a vital role in planning the future transportation system. The final document and maps have been developed based on the public comments, local agencies input, and stakeholders' feedback.

TAC PLANNING MEETING

The planning team met with the TAC on March 4 and 5th, 2010. The purpose of this meeting was to coordinate with the county the recommendations and findings that came out of the first Stakeholders/Public meeting, and to discuss items to be presented at the second Stakeholders/Public meeting.

Items discussed included:

1. Emergency Road Connectivity Conclusions
2. Road Maintenance Costs
3. Road Standards
4. County Access Plan
5. Project Funding Sources

Presentations stimulated discussion with the TAC on key policies and standards for the county. These discussions assisted in providing direction for preparing the Connectivity Map and Road Standards. The Committee agreed to present the transportation plan and standards after the TAC reviews the draft report and standards.

SECOND STAKEHOLDERS/PUBLIC WORKSHOP

Approximately 30 people attended the second stakeholders meeting for an overview of the draft Lemhi County Master Transportation Plan. The meeting was held on March 22, 2012 at Brooklyn Annex, 200 Fulton Street in Salmon.

MEETING NOTIFICATION AND PRESENTATION

A stakeholder meeting notification was e-mailed to approximately 60 stakeholders with a follow-up a post-card that was mailed to the same stakeholders. Copies of the e-mail notification and post-card are included in Appendix H.

The meeting started at 9:30 a.m. with a PowerPoint presentation by Elwin Butler, P.E. with input from Sai Sarepalli, P.E., from Holladay Engineering Company. An overview of each chapter of the draft report was given with a question and answer time after the presentation. The meeting ended at 11:25 a.m. Approximately 25 CDs that contained a copy of the draft report were handed out to meeting attendees. A copy of the draft report was available for review at the Holladay Engineering Company website and the Lemhi County Planning and Zoning website. Comments were accepted for two weeks after the stakeholders meeting (April 5, 2012).

Comments and Feedback

A table containing stakeholder comments are summarized in Appendix H. Comments include: verbal comments voiced during the meeting, written comments received at the meeting, comments received via telephone, comments received via e-mail, and comments received by mail.

FINAL PUBLIC WORKSHOP, MEETING NOTIFICATION, AND PRESENTATION

A final public workshop was held May 22, 2012, from 3 p.m. to 8 p.m., at Brooklyn Annex. The meeting was advertised using several different media outlets. Idaho Transportation Department's Office of Communications prepared a press release and e-mailed the release through the MediaManager press release system. The distribution list included newspapers, television, and radio stations. An e-mail notification was sent to the stakeholders that were invited to the March 22, 2012 meeting and Lemhi County P & Z distributed posters advertising the meeting to local businesses and government buildings. A copy of the news release and poster is included in Appendix H.

A Powerpoint overview of the transportation plan was presented at 3:30 p.m. and 6:30 p.m. A total of 27 people signed in for the meeting. Several people stopped by to look at displays and ask questions. Approximately 17 people attended the first presentation and two attended the second presentation. Meeting attendees were offered a CD that included a draft of the Lemhi County Transportation Plan, a table with County comments, and a table with Stakeholder comments from the March 22, 2012 meeting. All attendees were encouraged to submit comments either on the handouts made available or through Holladay Engineering Company's website. Comments were accepted until April 6, 2012. A summary of these comments is included in Appendix H.

TRANSPORTATION PLAN ADOPTION

This section will be updated and completed by Lemhi County.

References

1. *Lemhi County Comprehensive Plan*
2. *Lemhi County Development Code*
3. *Development By Design: Land Use Planning and Regulation in Rural Communities, Thomas Rowley, January 2001*
4. *Salmon Transportation Plan – City of Salmon, 2003*
5. *Idaho Local Mobility Management Network 6A Mobility Plan – IMAP, December 7, 2009*
6. *http://www.mobilityidaho.org/lmmn/lmmn6a*
7. *Pathways Implementation, Salmon, Idaho*
8. *Salmon River Scenic Byway Corridor Management Plan, 2007, Planmakers and JUB Engineers Inc.*
9. *Corridor Plan Refreshes US 20, US 26 and SH 33, DKS Associates, August 2008*
10. *Land Use Impacts on Transport, Todd Litman, Victoria Transport Policy Institute, January 2010*
11. *Draft Airport Master Plan, T-O Engineers,*
12. *East Idaho Corridor Loop Plan – ITD, HDR Engineering Inc., July 2006*
13. *Airport Safety Overlay Zoning District , Lemhi County*
14. *Transportation Impact Analyses for Site Development, Institute of Transportation Engineers, 2005*
15. *A Policy on Geometric Design of Highways and Streets, AASHTO – 2004 Edition*
16. *Executive Summary Report, Pavement Management Guide, November 2001, prepared by the AASHTO.*
17. *Nationalbridges.com*

APPENDIX A

PLANNING DOCUMENTS

Lemhi County Comprehensive Plan, Transportation Section
Lemhi County Airport, Master Plan Update, Executive Summary &
Airport Layout Plan Map

City of Salmon Comprehensive Plan

August 4th, 2010

Ordinance No. 10-762
Updated and Amended from 1992 Plan
Repealing Ordinance No. 92-547

John Miller - Mayor
City Council
Jim Baker, Bud Bartlett, Ken Gutzman, Jim Kluesner, Leo Marshall, Ron Radford

City Planning and Zoning Commissioners
Dennis Lyle – Chairman
Jesse Bender
Bud Borden
Vance Marvin
Fred Waidely

Teri Ottens – Planning Consultant
Daniel Maiyo – City Zoning Administrator

ELEMENT NINE - Transportation

The City of Salmon is charged with preparing and adopting an up-to-date plan that provides for safe and efficient traffic circulation that addresses the future needs of the City. This element provides an analysis of the systems of major traffic thoroughfares and other traffic ways and/or streets within the city.

Major Roadways

The main mode of transportation in the City of Salmon and Lemhi County is the automobile. There are two major roadways running through the city, Highways U.S. 93 and 28. U.S. Highway 93 enters the city on a north/south route that runs from Challis to the Montana border. This international highway extends from Alaska and through Mexico. Highway 28 intersects with Highway 93 from the east part of the county, connecting Salmon with Idaho Falls and the Snake River Plain.

The Idaho Transportation Department Rural Functional Classification Map identifies arterial and collector streets within the County. The county has jurisdiction over approximately 32 miles of paved roads and 5 miles of unpaved roads, with the exception of state and federal highways. Maintenance of roadways is done on an as-needed basis throughout the year. The Idaho Transportation Department has an access control policy that helps to limit accesses onto the state highways. Improvement of city streets is a continuing process.

The city is bisected by the Salmon River, which is crossed only by the Main Street (U.S. 93) bridge. The lack of a second river crossing does not cause traffic congestion, but there would be no fire department or ambulance access to the western half of the city if the single bridge were blocked by an accident or construction during an emergency. A second bridge might also be proposed as part of a U.S. Highway 93 "by-pass."

On April 7, 2004, a completed 2003 – 2023 Transportation Master Plan was ratified by the City Council and provides background studies to identify and recommend collector streets within the city. On December 16, 2009, the City adopted Resolution 2009-7, which officially adopted a Functional Classification Map designating collectors within the city limits.

The plan sets goals out to 2023 and discusses goals, objectives, and policies in the following areas:

- overall transportation network,
- pathways and sidewalks, and
- public transportation.

It provides a suggested Capital Improvements Plan setting out schedules for existing and future streets. This plan, as adopted and updated, shall serve, by adoption of the Comprehensive Plan update, as the official element of the Salmon Comprehensive Plan.

In 2009, the revised Idaho Local Mobility Management Network 6A Mobility Plan was adopted by the governmental jurisdictions in Lemhi County. This plan addresses public and human services transportation, bicycle/pedestrian services, vanpool and rideshare programs, and Park and Ride lots.

Public and Commercial Transportation
There is a public transportation service available to the area through TRPTA out of Salmon which provides service to Idaho Falls. Funding for this service is provided by Idaho Mobility Access Transportation funding. In addition, negotiations for a national bus system to serve the Salmon area are underway.

There are several commercial entities that provide transportation within and out of the City, mostly in the form of shipping, including both Federal Express and UPS.

Commercial and Private Air Service
The Lemhi County Airport, located five miles south of Salmon, serves the city and county residents. Charter flights are offered at all times by a private service and commercial flights are offered in the summer to Boise and McCall and in the winter to Boise. Many of the completed and planned improvements at the airport are partially funded by the Federal Aviation Administration.

I. Goal
The City of Salmon should update the 2003 City of Salmon's Transportation Plan's recommendations and goals and have the plan accepted by the state so that funding can follow. The City should also review that plan, in conjunction with the County's transportation planning efforts, to ensure that an analysis be prepared in coordination with the local jurisdiction(s) having authority over the public highways and streets, showing the general locations and widths of a system of major traffic thoroughfares and other traffic ways, and of streets and the recommended treatment thereof.

The City of Salmon should also ensure, through the Salmon Development Code, adequate building line setbacks, control of access, street naming and numbering, and a proposed system of public or other transit lines and related facilities, including rights-of-way, terminals, future corridors, viaducts, and grade separations.

The element should include aviation, bridges, emergency evacuation routes, and other related transportation facilities.

Objectives:

a. Coordinate street and highway development so as to enhance overall development of the City and ensure an efficient transportation system for the movement of people and goods.
b. Coordinate with all affected agencies to plan, construct, and maintain the transportation network.
c. Encourage proper design and transportation facilities to ensure maximum safety.
d. Encourage connectivity of street and highway systems.
e. Develop a pathways plan for bicycles, pedestrians, and the disabled, including safe routes to schools.
f. Coordinate evacuation routes with the hospital and emergency services.
g. Ensure unrestricted access for emergency vehicles.
h. Implement the Wildland Urban Interface plan, such as the evacuation routes, addressing catastrophic events such as a major fire.

i. Work to provide better transportation services to the area.

1. POLICY
The City of Salmon should adhere to Element One - Private Property Rights whenever the City seeks to acquire private property for a public right-of-way to prevent unconstitutional takings of private property for public use.

2. POLICY
The City of Salmon should coordinate with Lemhi County in adopting a major transportation plan linking major traffic thoroughfares and other traffic ways within the city limits to major transportation corridors and other traffic ways within the Area of City Impact.

A transportation facilities plan and an official map for highways, arterials, and collectors within the city limits and within the Area of City Impact should be prepared in coordination with the regional state highway district, Lemhi County, and other affected federal and state agencies.

This should be done to prepare for future growth in the City and the Area of City Impact and to reserve sufficient rights-of-way for future construction and widening of highways, arterials, and collectors.

Requests for street vacations should consider future pedestrian or traffic needs and concerns.

3. POLICY
A safe, convenient, and economical transportation system, adequate to serve anticipated growth in the city limits and within the Area of City Impact should be developed to minimize adverse social, economic, and environmental impacts and costs of the transportation systems to assure that development does not overburden roads or bring about excessive costs to the City or individuals.

4. POLICY
The City of Salmon should continue to require performance standards of all new development that requires clear vision at all points of access to a public street, including new intersecting streets and private driveways, to provide safe points of ingress and egress from a right-of-way or intersecting public or private streets, and to assure the safe distance of structures from rights-of-way.

The City should encourage development agreements to specify when and where certain on- and off-site transportation improvements, including curbs, gutters, and sidewalks, will be required. Maintenance needs should also be addressed.

5. POLICY
The City of Salmon should develop an access control plan that addresses the width and spacing of driveways along arterial roads and turning lanes, if necessary, to reduce acceleration, deceleration, and turning movements that reduce the efficiency and safety of arterials.

6. POLICY
The City of Salmon should work with the appropriate agencies to plan and provide for the safe and

convenient transportation of pedestrians, bicyclists, equestrians, the disabled and seniors, and motorized and non-motorized recreational vehicles.

7. POLICY
The City of Salmon should work with the Salmon School District to facilitate safe and efficient pedestrian routes for students to and from schools.

8. POLICY
The City of Salmon should coordinate with Lemhi County, Idaho Department of Transportation, and other affected state and federal agencies to assure emergency service and/or evacuation routes in and through the City and the Area of City Impact, including to and from schools and medical facilities, to protect human life and property, to protect the city watershed, and to protect those natural resources that may be viable to the economic well-being of the city.

This should include the continued exploration of the need for a second bridge across the Salmon River. Cooperation with the Idaho Transportation Department will be an essential part of the implementation of this strategy.

9. POLICY
The City of Salmon should coordinate with Lemhi County to avoid new road alignments, whenever reasonably feasible, that negatively impact farm lands within the Area Of City Impact.

10. POLICY
The City of Salmon should coordinate with Lemhi County to protect the approach and departure zones designated for the Salmon Airport and to protect the clearance areas needed for the hospital helicopter pad.

11. POLICY
The City of Salmon should encourage efforts to study public transportation options for its citizens, particularly for seniors and the disabled, as well as its visitors. This should include improving local services and researching funding options.

12. POLICY
The City of Salmon adopts the goals of the 2009 Idaho Local Mobility Management Network 6A Mobility Plan to address public transportation, pathways and other alternate transportation methods.

AIRPORT EXECUTIVE SUMMARY

LEMHI COUNTY AIRPORT
MASTER PLAN UPDATE

EXECUTIVE SUMMARY

INTRODUCTION

An airport master plan is prepared by the owner of an airport (sponsor) to support the modernization and/or expansion of an existing airport or in some cases the creation of a new airport. The master plan presents the sponsor's strategy for the development of the airport over a 20-year planning period. The development strategy is typically presented in a Capital Improvement Plan (CIP) divided into three planning increments of 0 to 5 years, 5 to 10 years, and 10 to 20 years. Projects contained in the development program are derived from a systematic evaluation of existing airfield facilities, an analysis of current activity and a realistic projection of future activity, an analysis of facilities required to meet projected airfield activities, and an evaluation of alternatives required to meet facility needs. A master plan typically performs a cursory review of environmental factors which may influence alternative selection. Master plans also consider operational issues which could have a bearing on long term viability of an airport, one such issue being compatible land use in the vicinity of the airport.

The goal of a master plan study is to provide the framework at a planning level to guide future airport development and present adequate justification to support proposed development. It must be cautioned, the inclusion of a proposed development in a master plan does not constitute an automatic approval of that project. Project implementation is normally subject to additional environmental approval, justification of demand, and the availability of funding based on the FAA's national system of establishing priorities for project funding.

Master planning projects are completed in accordance with a detailed scope of work prepared by a consultant or consultant team and approved by the FAA and the airport sponsor. The scope of work is prepared to meet the specific needs of each airport in accordance with the general guidance for master plan study elements presented in AC 150/5070-6B.

Airport master plans are routinely updated at airports similar to the Lemhi County Airport (SMN) at approximate 10 year intervals. The most recent planning study completed at SMN was an Airport Layout plan update in 1995, some 16 years ago. An accepted and approved master plan enables Lemhi County to apply for Federal Airport Improvement Program (AIP) Development grants to assist with implementation of eligible projects shown on the Airport Layout Plan (ALP) and presented in the capital improvement program (CIP). The ALP drawing set is a graphic presentation of the culmination of the planning process which depicts current facilities and facilities recommended to meet appropriate design standards and demand requirements.

Aside from traditional master plan elements, this master plan update for Lemhi County Airport also includes guidance on airport revenue enhancements, compatible land use, airport compliance issues and management guidance.

The remaining sections of this Executive Summary provide the reader with an overview of the highlights of each chapter. Additional detailed discussion of plan elements is presented in the complete master plan report.

PUBLIC OUTREACH

Over the course of the planning process, several meetings were held in Salmon, Idaho, to discuss project goals, ideas and status. Public outreach efforts for this master plan included the following: formal Project Advisory Committee (PAC) meetings, public information and involvement meetings with the Lemhi County Board of County Commissioner and both formal and informal project meeting with the Lemhi County Airport Board. Attendance at the public meetings was limited and only minor feedback was received. Comments from the Public, PAC, Commissioners and Airport Board were incorporated as appropriate into the planning documents.

BACKGROUND

The Lemhi County Airport (SMN) is a small general aviation airport situated on approximately 266 acres, three and a half miles south of the City of Salmon, Idaho at an elevation of 4,043 feet. SMN is owned by the County of Lemhi, Idaho with the county seat located in Salmon. SMN provides access to a remote area of the state. The surrounding mountainous terrain makes the area a highly desirable destination and major attractor for outdoor enthusiasts as well as scientific research. The airport is a U.S. Forest Service helicopter base for forest and rangeland firefighting activities as well as serving as the avenue for mail and parcel service for the area, including the only means of communicating with remote areas in the wilderness. Airport expansion projects and the ability to achieve sophisticated instrument approaches may be limited due to the mountainous terrain surrounding of the airport.

The Idaho Airport System Plan, developed in 2008 by the Idaho Transportation Department Division of Aeronautics, recognized the airport's important economic contribution to the region and the city of Salmon. According to this study, SMN generates a direct and indirect combined $19.1 million in annual economic activity and a total of 101 jobs. The system plan defines SMN's role as a Regional Business Airport. It is considered essential to preserve and protect the capital investment and economic value of the airport to the local community and the Idaho aviation system as a whole. Consideration is given to information and recommendations presented in the Idaho System Plan study in the preparation of this master plan study.

AIRPORT INVENTORY

The first step in the planning process is to undertake an airport inventory to determine the type, number, and condition of existing facilities and document the changes that have occurred since the previous planning study was completed. The airfield consists of a 5,150 foot long runway (17-35) and associated parallel taxiway. Lemhi County Airport also offers Avgas and Jet A fuel, several hangars, aircraft parking aprons, and other facilities. The airport annually accommodates nearly 25,000 annual aircraft operations and hosts 50 based aircraft.

AVIATION DEMAND

Airport activity forecasts provide the basis for determining the type, extent, size, location, timing, and to a certain degree even the financial feasibility of capital development. Consequently, demand forecasts influence virtually all subsequent phases of the master planning process. For this reason activity forecasts are subject to the review and approval of the FAA.

Several methodologies are used to develop projections of based aircraft and operational demand. The aviation forecast anticipates continued gradual growth in based aircraft and aircraft operations at the airport over the 20-year planning period. **Table ES-1** presents the estimated annual operations and based aircraft expected from 2010 through 2030. The forecasts offer a guide for facility planning purposes, actual activity will determine the ultimate need for and timing of improvements.

TABLE ES-1: ESTIMATED BASED AIRCRAFT AND ANNUAL OPERATIONS AT LEMHI COUNTY AIRPORT

Year	Based Aircraft	Local Operations	Itinerant Operations	Total Operations
2010 (Base Year)	50	7,595	16,905	24,500
2015	53	8,042	17,900	25,942
2020	55	8,815	18,953	27,468
2030	61	9,547	21,248	30,795

Source: T-O Engineers, Inc.

FACILITY REQUIREMENTS

The facility requirements analysis translates the activity forecasts into needed improvements required to meet demand. Needs are determined by comparing future facility requirements to the airport's current inventory of facilities as well as FAA design criteria associated with demand to assure compliance with standards.

The appropriate Airport Reference Code (ARC) as defined by FAA Advisory Circular 150/5300-13, Airport Design, for SMN is "B-II". This designation is a reflection of the types of aircraft that routinely use the airport. The ARC is used during planning and component design to determine the dimensions of most airfield pavements and separation of key airfield components. Examples of aircraft in the B-II category are illustrated in **Table ES-2**. Critical requirements for SMN result from the recommendation for the airport to meet all B-II design standards.

TABLE ES-2: EXAMPLE B-II AIRCRAFT

Characteristics	King Air B200	Pilatus PC-12
Approach Speed	103 knots	120 knots
Wing Span	54.5 feet	53.4 feet
Length	43.8 feet	47.3 feet
Tail Height	15.0 feet	14 feet
Max. Take-off Weight	12,500 lbs.	10,450 lbs.

Source: T-O Engineers,Inc./Pilatus Aircraft Operators

A number of required and recommended improvements to existing facilities are identified during the planning process. **Table ES-3** summarizes these recommendations.

Some of the requirements are related to compliance with design standards, such as runway width. The projects related to meeting design standards are priority items. Other recommendations are demand driven and should be implemented in a timely manner so as to meet increasing demand.

An important conclusion of requirements analysis is the need to extend the runway by 360 feet to a length of 5,510 feet. This extension is justified by the need to meet the requirements associated with frequent users of the airport and to enhance the ability of the airport to fulfill its multi-faceted and critical role in supporting a remote community. Airports like Lemhi County, provide vital connectivity to outside communities. A runway length of 5,510 feet will serve 100 percent of the small aircraft fleet (small airplanes with less than 10 passenger seats) and is considered justified based on criteria associated with “unusual circumstances” resulting from the airport’s remote location and regional significance within the State of Idaho.

TABLE ES-3: SUMMARY OF FACILITY REQUIREMENTS FOR LEMHI COUNTY AIRPORT

Facility		Existing	Recommended
Runway			
	Length (usable)	5,150’	5,510’
	Width	60'	75’
	Strength	30,000 SWG	30,000 SWG
Taxiways			
	Type	Full Parallel	Full Parallel
	Width	35'	35'
	Strength	Same as RW	Same as RW
Apron			
	Strength	12,500 – 30,000 lbs.	Same as RW and TWY
	Fuel Island	Mid-Apron	Relocate w/ new Above Ground Tanks
Navaids, Visual Aids, and Lighting			
	Approach	GPS RNAV	GPS RNAV
	Automated Weather	AWOS	AWOS
	Runway Lights	MIRL	MIRL
	Taxiway Lights	Reflectors	MITL
	REILs	RW 17	RW 17 & RW 35
	Approach Slope Indicator	PAPI RW 17	PAPI RW 17
	Segmented Circle	No	Yes
Aircraft Storage			
	Box Hangars	37	47
Terminal & Buildings			
	Terminal Building/Pilot Lounge	None	Yes
	FBO	Yes (1)	Yes (1 minimum)
	Snow Removal	Provided by County	Equipment & storage building
Access and Parking			
	Automobile	Paved	Paved
Fuel			
	100LL	Yes	Yes
	Jet-A	Yes	Yes
	Fuel Service	24-hour reader	24-hour reader
Airport Property			
	Land envelope	266 acres	Additional 9.1 acres
Additional Requirements			
	Construct new airport access road from Highway 93 to west side (including land and ROW purchase)		
	Purchase land for west side development		
	East side development		
	New taxilanes to accommodate hangar development and apron development		
	Routine pavement maintenance including seal coat, crack seal and nominal overlay(s)		

Source: T-O Engineers Inc.

CONCEPTUAL ALTERNATIVES

The alternatives evaluation section considers various means to meet the facility requirements identified previously. Multiple options for meeting both airside and landside needs are considered in arriving at the “preferred” alternative depicted in the ALP drawing set. In selection

of the preferred alternative, input was sought and considered from Lemhi County representatives and the Airport Board. In some cases, meeting a facility requirement is straight forward, as is the case for the need to widen the runway. In other instances, such as future hangar development, several approaches may be viable. Further analysis of all demand driven options will be required during specific project formulation and preliminary design. Alternatives to meet the recommended runway length of 5,510 feet are addressed in detail in Chapter 6. This study recommends a 360 foot extension on the south end and the use of declared distances to meet design standards within the current land envelope.

DEVELOPMENT PLAN

The development plan organizes the airport improvement projects into a schedule designed to meet the demand throughout the 20-year planning period. The capital improvement program for SMN is based on short (0-5 year), mid (6-10 year) and long term (11-20 year) development requirements. It is important to emphasize that although projects are arranged in specific time frames, the majority of the CIP program is demand-based. If the demand levels are more or less than forecasted, adjustments to the CIP will be appropriate. **Table ES-4** provides a list of recommended future airport improvements. They represent the projects that could be part of the SMN CIP and considered for the FAA AIP. The 5-year Phase I development depicts the highest priority and most desired airport development projects.

TABLE ES-4: PHASED DEVELOPMENT PLAN FOR LEMHI COUNTY AIRPORT

Short Term (1-5 years)
Widen RW17-35 from 60' to 75'
Overlay RW 17-35
Extend RW 17-35 360 feet (incl. lights and REILs)
Extend Parallel Taxiway
Construct Connecting Taxiways
Reconstruct and Reconfigure Apron including relocate fueling
Construct Terminal Building
Mid Term (6-10 years)
Reconstruct Transient Aprons
Construct Transient Apron (West side)
Construct Taxilanes (South Side)
Acquire 9.1 acres (West Side)
Construct Access Road and Parking
Construct SRE Building and Acquire SRE Equipment
Long Term (11-20 years)
Construct Taxilanes and Hold Aprons (West side)
Construct Hangar Access Roads and Parking
Overlay Parallel Taxiway (West Side)
Install Parallel Taxiway Lighting (West Side)
Overlay Existing Aprons
East Side Development including: parallel taxiway and connectors, aprons, taxilanes, access and parking

Source: T-O Engineers Inc.

The development plan also examines historical and projected revenue and expenses to determine the financial viability of implementing the recommended capital improvement program. The CIP cost estimates for all three phases of development at SMN presented in **Table ES-5** are based on the current (2011) dollar value without consideration being given to inflation.

TABLE ES-5: CAPITAL IMPROVEMENT EXPENDITURE SUMMARY AT LEMHI COUNTY AIRPORT

Phases	Total Project Costs
Short Term Development (1-5 Years)	$3,685,000
Mid Term Development (6-10 Years)	$5,159,000
Long Term Development (11-20 Years)	$4,838,000
TOTAL 20 YEAR	**$13,682,000**

Source: T-O Engineers Inc.

The 20-year capital improvement program for SMN totals nearly $12.4 million. It is anticipated that funding will come primarily from the following sources:

- At the federal level, the FAA's Airport Improvement Program (AIP);
- At the state level, ITD's Idaho Airport Aid Program (IAAP)
- At the local level, the revenue collected at the airport in terms of fuel revenue and lease agreements and other use fees
- Other federal and state grant programs such as Idaho Gem Grants and USDA Rural Development Grants, US DOT Small Community Air Service Development Program
- Private funding sources for projects such as hangar development

Successful development of an airport requires construction of multiple improvements to include elements such as: airfield operational surfaces (runways, taxiways, and aprons); access roads and vehicle parking areas; underground utilities; aircraft storage hangars; and water and sewer systems. Projects eligible for AIP Funding typically relate to aircraft operations and ground movements, other facilities (e.g. hangars) are routinely funded by local or private sources. Additionally, projects which may technically be eligible for AIP Funding shown in the CIP and or on the ALP may not be funded by the FAA as a result of low relative priority to other overall system funding needs or a simple lack of AIP funds.

It is recommended that the sponsor work closely with their FAA representative, the Idaho Aeronautics staff, and their airport consultant as appropriate to maintain awareness of project eligibility and availability and to update their CIP routinely.

While the airport is currently self-sufficient, it may be difficult for SMN to provide the local sponsor share to support the proposed capital improvement program. It is recommended that Lemhi County pursue opportunities to develop additional revenue at SMN to strengthen its

financial capabilities to fund improvements throughout the planning horizons. Additional revenue generation at the airport could be created by:

- Adjusting hangar rental fees
- Collecting additional fees including landing fees, fuel flowage fees, overnight parking charges, and commercial use fees
- Developing aviation-related land leases
- Encouraging special events
- Developing basic infrastructure (utilities, drainage areas, roadway) to encourage private development of airport properties
- Updating Lemhi County's leasing and development policies

AIRPORT COMPLIANCE & AIRPORT MANAGEMENT BEST PRACTICES

As the recipient of AIP grant funding from the FAA and also funding from the State of Idaho, Lemhi County is under contractual obligation to comply with grant assurances, agreements, and other requirements. FAA Order 5190.6B, Airport Compliance Manual, describes the 39 airport grant assurances which are a part of each grant. These assurances range from project contracting to compatible land use to airport revenue. As part of the Idaho Airport Aid Program, ITD also imposes 17 grant assurances which are similar to those of the FAA. SMN's compliance with the federal and state grant assurances as well as land use, environmental, airport user compliance is described in the Master Plan Update. In addition, Airport Management Best Practices have been identified and described to assist the airport in its efforts to comply with these assurances. The Lemhi County Master Plan Update includes a separate chapter on land use policy review and recommendations. The chapter discusses one of the key compliance issues for airports- compatible land use planning. Lemhi County and the City of Salmon have several key airport land use planning tools in place in their current policies.

Recommendations to further protect the land and airspace surrounding the airport are summarized in **Table ES-6**. The table also summarizes additional recommendations to ensure full airport compliance.

TABLE ES-6: RECOMMENDATIONS FOR IMPROVED AIRPORT COMPLIANCE FOR LEMHI COUNTY AIRPORT

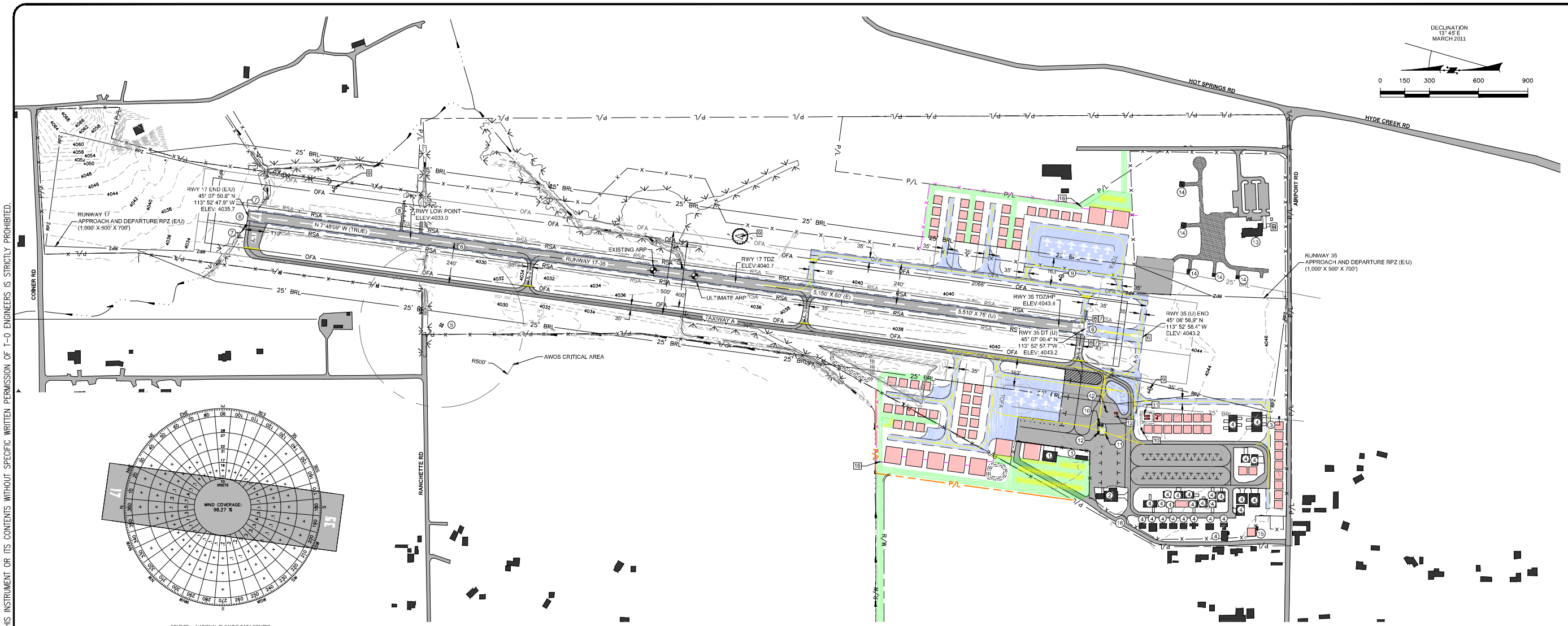
Land Use Compliance Recommendations
✈ Include more specific language about the airport in the Comprehensive and Transportation Plans.
✈ Keep the airport master plan and ALP drawing set current.
✈ Commit to an effective and cooperative airport land use planning effort that is designed to protect and preserve airport operations, economic prosperity, and quality of life realities in addition to safety provisions for both the community and its airport.
✈ Revise the Lemhi County Development Code to address airspace and land use restrictions and zoning requirements. Revisions should also include the creation of a land use map that delineates land uses and a Fair Disclosure Notification to prospective and new property owners.
✈ Create a formal process for policy development that identifies airport land use planning as a continual component of its community and comprehensive planning process.
✈ Coordinate with the City of Salmon to ensure multi-jurisdictional cooperation as it relates to the airport and future land use planning.
Other FAA and State Assurances Recommendations
✈ The County should continue to analyze all existing uses of airport property to ensure that all tenants are appropriately contributing to the airport's revenue stream and compare airport's fee and rental structure that of nearby airports to ensure fair market value.
✈ Familiarize County Commissioners with all FAA and Idaho grant assurances.
✈ Continue to use airport facilities for aeronautical purposes only, unless otherwise specified by the airport and approved by the FAA.
✈ Perform services in a non-discriminatory manner regardless of race, creed, color, national origin, or sex.
✈ Monitor the financial demands of the airport and consider adjustments to existing fees and adding new fees as airport activity and needs dictate.
Airport Environmental Compliance Recommendations
✈ Develop a Stormwater Pollution Prevention Plan
✈ Develop a Spill Prevention Control and Countermeasures Plan
✈ Assess Wildlife hazards and develop an informal Wildlife Control Program
✈ Follow future FAA guidance regarding required wildlife hazard mitigation plans and site assessments.
Airport User Compliance Recommendations
✈ Maintain a current and up-to-date aircraft roster of all based aircraft,
✈ Update Rules and Regulations/Minimum Standards to include additional items including accident procedures and airport security procedures.
✈ Develop additional lease agreements based on the appropriate category of tenant.
✈ Review lease agreements on a regular basis and update as appropriate.
Other Airport Operational Policies and Procedures
✈ Develop an Airport Security Plan and educate airport tenants on appropriate security procedures.
✈ Put an airport emergency plan (AEP) in place, including an up-to-date emergency contact list.
✈ Develop a routine self-inspection program including the creation of a safety inspection checklist.
✈ Perform daily self-inspections.
✈ Review appropriate procedures for required NOTAM and Part 77 FAA notifications.

Source: T-O Engineers Inc.

SUMMARY

The Lemhi County Airport Master Plan Update documents the needed airport improvements over the 20-year planning horizon that will best meet future aviation demand. The goals of the community, the protection of the environment, and the fiscal and operating constraints of Lemhi County are also considered to produce a feasible plan for airport development. The process has

included public coordination, technical evaluations, and community participation. The Master Plan Update is intended to be used as a dynamic tool for airport management and a source to guide the development of the airport.



SOURCE: NATIONAL CLIMATIC DATA CENTER
OBSERVATIONS: JANUARY 2000 TO JANUARY 2009

WIND COVERAGE

CONDITIONS	10.5 KNOT	13 KNOT	16 KNOT	20 KNOT
VISUAL	98.3 %	99.1 %	99.7 %	99.9 %
IFR (CEILING ≥ 1000 AND VISIBILITY ≥ 3 MILE)	98.2 %	99.0 %	99.7 %	99.9 %
IFR (CEILING ≥ 200 AND VISIBILITY ≥ 0.5 MILE)	99.6 %	99.8 %	99.9 %	100 %

AIRPORT DATA

	EXISTING	ULTIMATE
AIRPORT ELEVATION	4043	SAME
A R P COORDINATES (EST.)	45° 07' 26.4"N 113° 52' 52.7"W	45° 07' 23.9"N 113° 52' 30.4"W
MEAN MAXIMUM TEMPERATURE	87.3° F	SAME
AIRPORT REFERENCE CODE	B-I	B-II
DESIGN AIRCRAFT	KING AIR 200 / PC-12	SAME

BUILDING/FACILITIES

EXISTING	FUTURE	DESCRIPTION
1		FBO
2		FBO MAINTENANCE HANGAR
3		ELECTRICAL VAULT
4		HANGAR PRIVATE
5		AWOS
6	6	THRESHOLD LIGHTS
7	7	REIL
8		PAPI
9	9	WINDCONE
10	10	ROTATING BEACON
11	11	FUEL TANKS
12	12	FUEL DISPENSER
13		FOREST SERVICE BUILDING
14		HELI-PAD
15		AIRPORT MANAGERS OFFICE
16	16	AUTOMATIC VEHICLE ACCESS GATE

LEGEND

EXISTING	FUTURE	DESCRIPTION
		AIRPORT PAVEMENT
		AIRPORT PAVEMENT TO BE REMOVED
		ROADS PAVEMENT
		GRAVEL
P/L	P/L	AIRPORT PROPERTY LINE
X	X	SECURITY FENCE
		BUILDING
BRL	BRL	BUILDING RESTRICTION LINE (BRL)
RSA	RSA	RUNWAY SAFETY AREA (RSA)
OFA	OFA	RUNWAY OBJECT FREE AREA (OFA)
RPZ		RUNWAY PROTECTION ZONE (RPZ)
		IRRIGATION LATERAL
		NAVIGATIONAL AID INSTALLATION
		RUNWAY END IDENTIFIER LIGHT
		RUNWAY THRESHOLD LIGHTS
		LIGHTED BEACON
		AIRPORT REFERENCE POINT (ARP)
		AUTOMATED WEATHER STATION
		SECTION CORNER
4038		TOPOGRAPHIC CONTOURS
		DELINEATED WETLANDS
		SEGMENTED CIRCLE/WIND INDICATOR

FUTURE DECLARED DISTANCES

RUNWAY	TORA	TODA	ASDA	LDA
17	5,150	5,150	5,500	5,500
35	5,500	5,500	5,500	5,150

NOTE: THERE ARE CURRENTLY NO DECLARED DISTANCES

RUNWAY DATA

ITEM		RUNWAY 17-35			
		EXISTING		ULTIMATE	
		17	35	17	35
RUNWAY GRADIENT		0.14%		SAME	
WIND COVERAGE		98.3 % (SEE WIND ROSE)		99.1% (SEE WIND ROSE)	
MAXIMUM ELEVATION ABOVE MSL		4043		SAME	
LENGTH/WIDTH		5,150' X 60'		5,510' X 75'	
RUNWAY SURFACE TYPE		ASPHALT CONCRETE		SAME	
RUNWAY STRENGTH		42,000 LBS SW		SAME	
APPROACH - CATEGORY		UTILITY	UTILITY	LARGER THAN UTILITY	LARGER THAN UTILITY
	TYPE	VISUAL	VISUAL	NPI	NPI
	SLOPE	20:1	20:1	34:1	34:1
RUNWAY LIGHTING		MIRL		SAME	
RUNWAY MARKING		VISUAL	VISUAL	NPI	NPI
NAVIGATION AIDS		PAPI-4/REIL	NONE	SAME	REIL
RUNWAY SAFETY AREA					
	WIDTH	120'		150'	
	LENGTH PRIOR TO LANDING	240'		300'	
	LENGTH BEYOND RW END	240'		300'	
RUNWAY PROTECTION ZONE					
	LENGTH	1000'		SAME	
	INNER WIDTH	500'		SAME	
	OUTER WIDTH	700'		SAME	
	INTEREST	FEE	FEE	SAME	SAME
RUNWAY OBJECT FREE AREA WIDTH		400'		500'	

RUNWAY END DATA TABLE

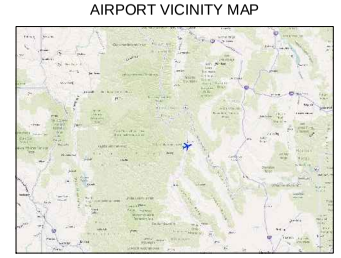
RUNWAY END		EXISTING (5,150)	ULTIMATE (5,500)
17	LATITUDE (NAD83)	45° 07' 50.8"N	SAME
	LONGITUDE (NAD83)	113° 52' 47.9"W	SAME
	TDZ ELEVATION	4040.8'	4040.8'
	END ELEVATION	4035.7'	4035.7'
35	LATITUDE (NAD83)	45° 07' 00.4"N	45° 06' 56.9"N
	LONGITUDE (NAD83)	113° 52' 57.7"W	113° 52' 58.4"W
	TDZ ELEVATION	4043.4'	4043.4'
	END ELEVATION	4043.1'	4043.1'

PAC AND SAC MONUMENTATION

MONUMENT	LATITUDE (NAD83)	LONGITUDE (NAD83)	ELEVATION (NAVD88)
PAC	*	*	*
SAC	*	*	*

SOURCE NGS *DOES NOT CURRENTLY EXIST

AIRPORT VICINITY MAP



AIRPORT LOCATION MAP

NON STANDARD CONDITIONS	PROPOSED DISPOSITION
RUNWAY 17-35 WIDTH IS 60'	WIDEN TO 75'

SPONSOR APPROVAL

COMMISIONER, LEMHI COUNTY — DATE

FAA APPROVAL

MANAGER, SEATTLE AIRPORTS DISTRICT OFFICE — APPROVAL LETTER DATED

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E-FILE NAME
DESIGNED
DRAWN MSD
CHECKED
APPROVED

REVISIONS

NO.	ITEM	DATE

T-O ENGINEERS
CONSULTING ENGINEERS, SURVEYORS & PLANNERS
9777 CHINDEN BOULEVARD
BOISE, IDAHO 83714-2008
PHONE (208) 323-2288 FAX (208) 323-2399
OFFICES ALSO IN: COEUR D'ALENE, IDAHO

LEMHI COUNTY AIRPORT
LEMHI COUNTY, IDAHO
AIRPORT LAYOUT PLAN SET
AIRPORT LAYOUT PLAN

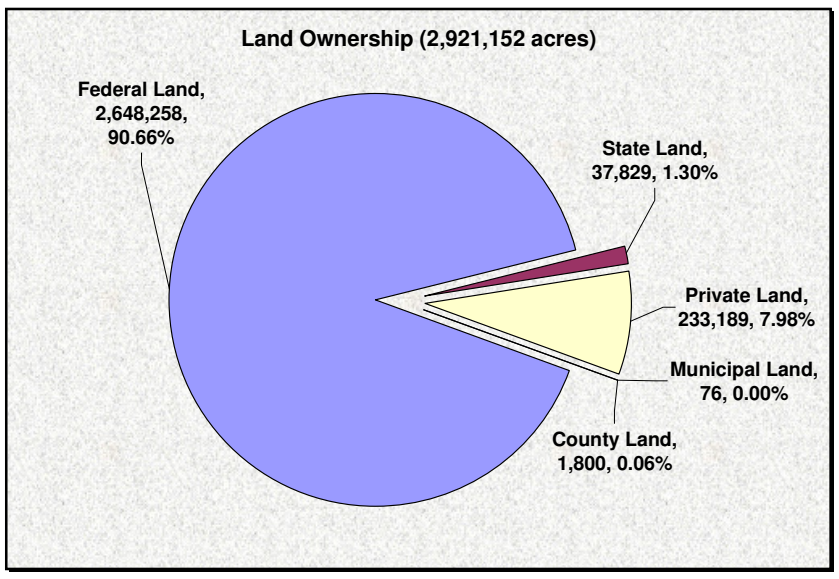
DATE: DECEMBER 2011
PROJECT: 09018

APPENDIX B

MAPS

Land Ownership Map
Functional Classification Map 2015
Bridge Map
Crash History Map
Airport Land Use Map

Land Ownership Distribution

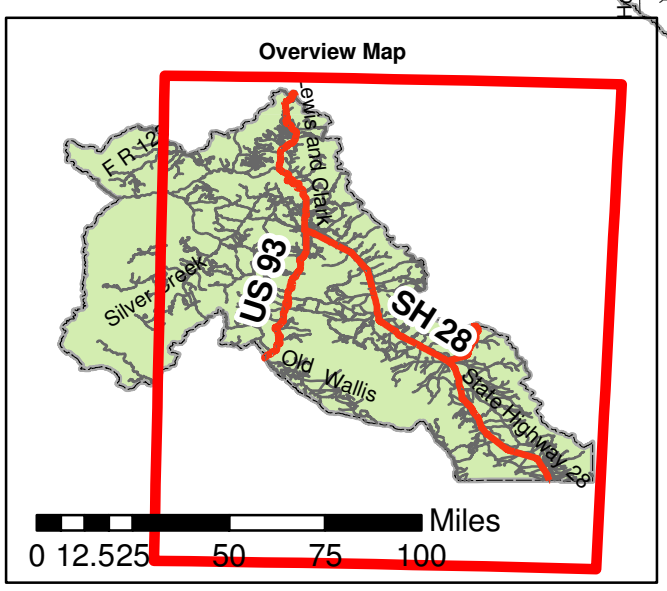


Gibbonsville
North Fork
Shoup
Carmen
Leesburg
Salmon
Baker
Blackbird
Tendoy
Cobalt
Lemhi
Ellis
Leadore
May
Patterson
Gilmore
Nicholia

US 93
SH 28
SH 29

Lewis and Clark
Twin
Fox Creek
Box Springs
Hell Creek
Carl Gulch
Indian Peak
Indian Creek
Sage Creek
Salmon River
Hill
Kelley Gulch
Carmen Creek
Freeman Creek
F D 043
F R 043
Pine Creek
Beaver Creek
Old Leesburg
Rfd 015
Road 98A
Old Lemhi
Williams Lake
Withington Creek
Candy Creek
Haynes Creek
Back
Baldy Basin
Deer Creek
Iron Creek
Cabin Creek
Peel Tree
Silver Creek
Nail Forest Develop Road 055
Basin Creek
Hayden Creek
Old Hwy 28
McKim Creek
NFD 008
D C Bar
State Highway 28
Cottom
Mollies Gulch
Lee Creek
Big 6 Mile
Coleman
Swan Basin
Adams
Eighteenmile
Dowton
Old
Main
Hooper
Farm To Market
Wallis
Big Timber Creek
Deer Creek
Willow Creek
Nicholia
1325

Overview Map



DRAFT

This map represents a compilation of public information from diverse records gathered by Lemhi County and Holladay Engineering Company. The purpose for which this map is prepared is an overall general presentation of positional relationships, and not a definitve description of location of any class of objects or conditions. Hence, no responsibility for eerors can be or is assumed. Lemhi County and Holladay Engineering Company CANNOT AND DO NOT GUARANTEE the absence of errors or the corrections of all information furnished to them for the preparation of this map.

N

Miles
0 2 4 8 12
1 in = 8 miles

HOLLADAY ENGINEERING CO.
ENGINEERS • CONSULTANTS

Legend

- Cities
- Highways
- County Roads
- County Limits

Land use Ownership

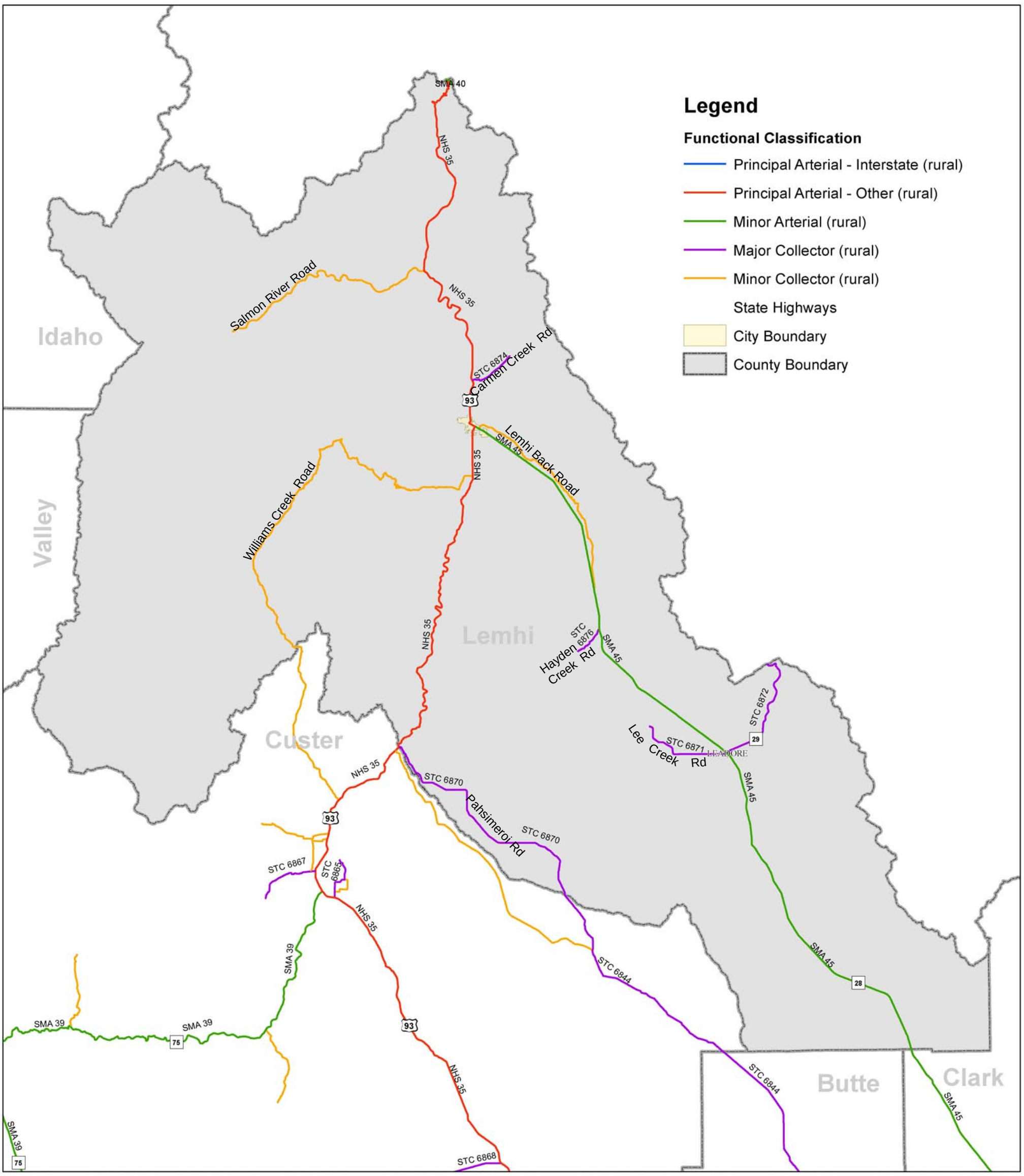
- BLM
- FOREST SERVICE
- GOVT
- PRIVATE
- STATE
- STATE OF IDAHO
- State of Idaho
- UNKNOWN
- USFS

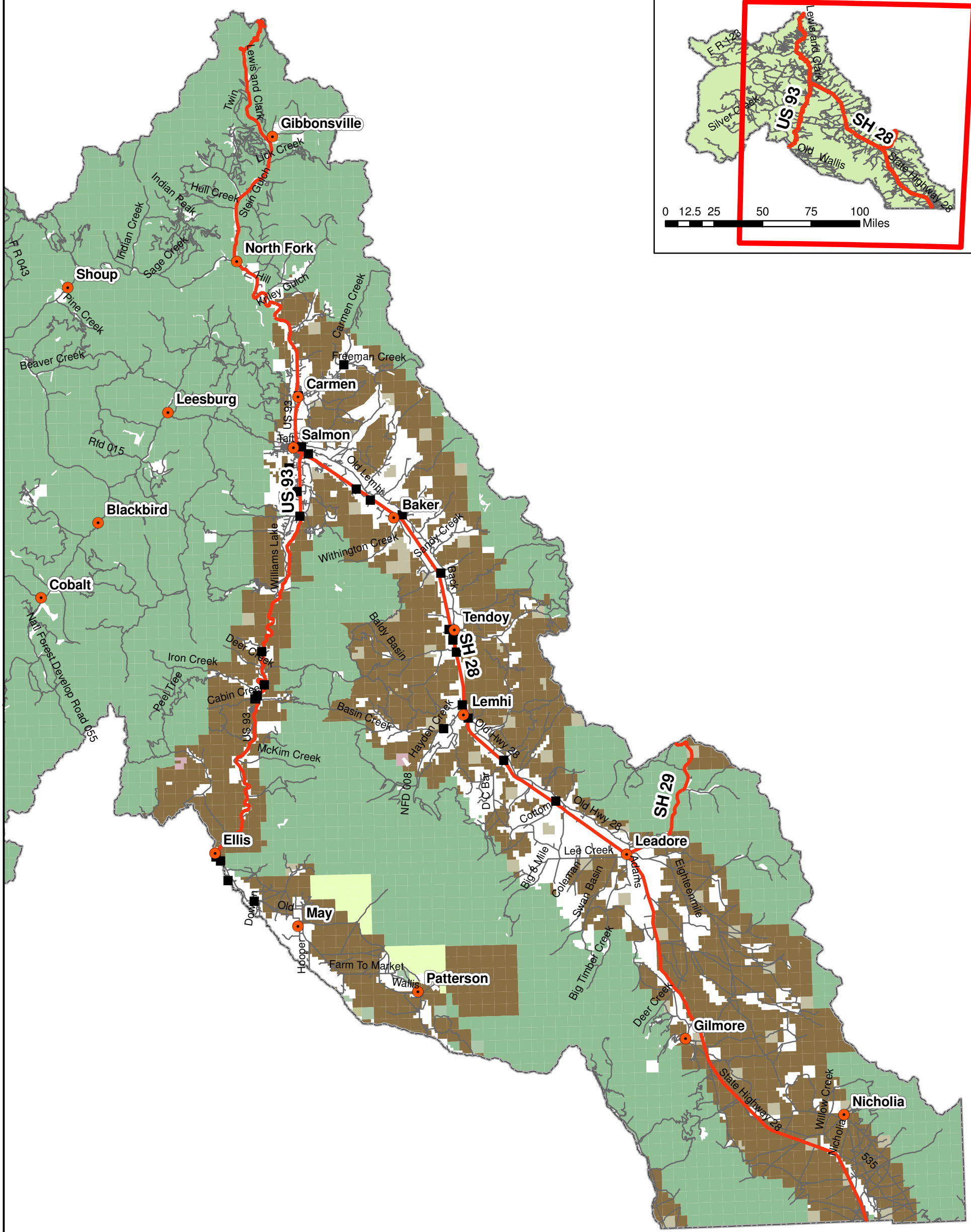
Lemhi County

COUNTY OF LEMHI EST. 1869

Land Ownership

Lemhi County
2015 Rural
Functional Classification





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ENGINEERS • CONSULTANTS

N

0 1 2 4 6 8 Miles

1 in = 8 miles

Legend

- Cities
- Bridge Location
- Highways
- County Roads
- County Limits

Lemhi County

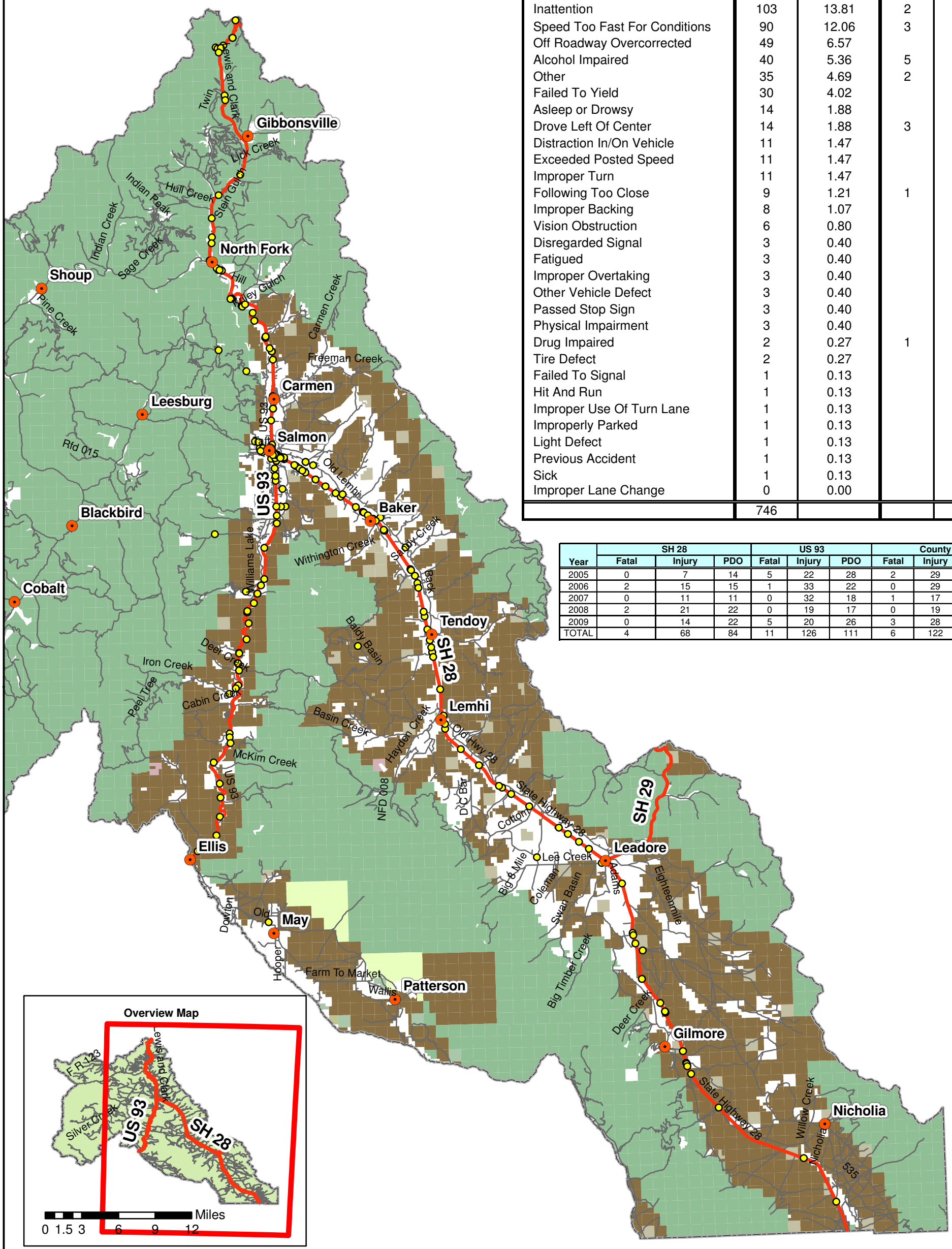
COUNTY OF LEMHI EST. 1869

Bridge Location Map

Summary of Crash Data from 2005 to 2009

Contributing Circumstances	Number of Crashes		Crashes	
	Total	Percent	Fatal	Injury
None	286	38.34	2	100
Inattention	103	13.81	2	54
Speed Too Fast For Conditions	90	12.06	3	44
Off Roadway Overcorrected	49	6.57		25
Alcohol Impaired	40	5.36	5	30
Other	35	4.69	2	15
Failed To Yield	30	4.02		9
Asleep or Drowsy	14	1.88		5
Drove Left Of Center	14	1.88	3	3
Distraction In/On Vehicle	11	1.47		8
Exceeded Posted Speed	11	1.47		6
Improper Turn	11	1.47		1
Following Too Close	9	1.21	1	3
Improper Backing	8	1.07		2
Vision Obstruction	6	0.80		2
Disregarded Signal	3	0.40		1
Fatigued	3	0.40		2
Improper Overtaking	3	0.40		
Other Vehicle Defect	3	0.40		1
Passed Stop Sign	3	0.40		3
Physical Impairment	3	0.40		3
Drug Impaired	2	0.27	1	1
Tire Defect	2	0.27		1
Failed To Signal	1	0.13		1
Hit And Run	1	0.13		
Improper Use Of Turn Lane	1	0.13		
Improperly Parked	1	0.13		
Light Defect	1	0.13		
Previous Accident	1	0.13		1
Sick	1	0.13		1
Improper Lane Change	0	0.00		
	746			

Year	SH 28			US 93			County		
	Fatal	Injury	PDO	Fatal	Injury	PDO	Fatal	Injury	PDO
2005	0	7	14	5	22	28	2	29	41
2006	2	15	15	1	33	22	0	29	34
2007	0	11	11	0	32	18	1	17	43
2008	2	21	22	0	19	17	0	19	55
2009	0	14	22	5	20	26	3	28	41
TOTAL	4	68	84	11	126	111	6	122	214



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N

Miles
0 1.5 3 6 9 12
1 in = 8 miles

Legend

- Cities
- Accident Location
- Highways
- County Roads
- County Limits

Land use Ownership

- BLM
- FOREST SERVICE
- GOVT
- PRIVATE
- STATE
- STATE OF IDAHO
- State of Idaho
- UNKNOWN
- USFS

Lemhi County

COUNTY OF LEMHI EST. 1869

Accident Locations and Summary

ANIMAL CRASH DATA

LEMHI COUNTY

2005 TO 2009

Serial Number	Severity	City	In City Limits	Segment Code	Mile Point	Road Surface Condition	Weather Condition	Light Condition	Street	Reference Street	Number Of Fatalities	Number Of Injuries	Number Of Units	Vehicle Type	Contrib Circumstances	Harmful Event	Driver Action	Accident Date
07C166693	Property Dmg Report	Salmon	N	002220	271.8	Dry	Cloudy	Dark, No Street Lights	US 93	MP 272	0	0	1	Pickup/Van/Panel/SUV	Alcohol Impaired,	Animal - Domestic	Going Straight	3/22/2007
07C177875	C Injury Accident	Ellis	N	006480	4	Dry	Cloudy	Dark, No Street Lights	Pahsimeroi Rd	US 93	0	1	1	Car	Alcohol Impaired,Speed Too Fast For Conditions,	Animal - Domestic	Going Straight	8/11/2007
06C153315	Fatal Accident	Leadore	N	002500	102.9	Dry	Clear	Dark, No Street Lights	SH 28	MP 102	1	0	1	Car	Drug Impaired,	Animal - Domestic	Negotiating Curve	11/19/2006
05C122504	Property Dmg Report	Salmon	N	002220	313.45	Dry	Cloudy	Dark, No Street Lights	US 93	MP 313	0	0	1	Pickup/Van/Panel/SUV	Other,	Animal - Domestic	Going Straight	11/9/2005
09C238919	Property Dmg Report	Salmon	N	002220	313.8	Dry	Clear	Dark, No Street Lights	US 93	MP 313	0	0	1	Pickup/Van/Panel/SUV	Other,	Animal - Domestic	Going Straight	7/19/2009
07C190587	Property Dmg Report	Leadore	N	002500	100.018	Dry	Clear	Dark, No Street Lights	SH 28	MP 100	0	0	1	Pickup/Van/Panel/SUV	Speed Too Fast For Conditions,	Animal - Domestic	Going Straight	10/27/2007
05C122641	B Injury Accident	Leadore	N	002500	88.933	Dry		Dark, Street Lights On	SH 28	MP 89	0	2	1	Car		Animal - Domestic	Going Straight	11/4/2005
06C135107	C Injury Accident	Salmon	N	002220	301.582	Dry	Clear	Dark, No Street Lights	US 93	Ranchette Dr	0	1	1	Pickup/Van/Panel/SUV		Animal - Domestic	Going Straight	2/9/2006
06C141772	B Injury Accident	Leadore	N	002500	52.02	Dry	Clear	Dark, No Street Lights	SH 28	MP 52	0	1	1	Pickup/Van/Panel/SUV		Animal - Domestic	Going Straight	7/14/2006
08C208102	C Injury Accident	Leadore	N	002500	54.5	Dry	Clear	Dawn or Dusk	SH 28	MP 55	0	1	1	Pickup/Van/Panel/SUV		Animal - Domestic	Going Straight	8/1/2008
05C111129	Property Dmg Report	Salmon	N	002500	97.034	Dry	Clear	Dark, No Street Lights	SH 28	MP 97	0	0	1	Pickup/Van/Panel/SUV		Animal - Domestic	Turning Right	4/9/2005
05C111174	Property Dmg Report	Salmon	N	002220	306.75	Dry	Cloudy	Dark, No Street Lights	US 93	MP 306	0	0	1	Car		Animal - Domestic	Going Straight	7/9/2005
05C094939	Property Dmg Report	Salmon	N	002500	103.5	Dry	Clear	Dark, No Street Lights	SH 28	MP 103	0	0	1	Tractor 2 Trailers		Animal - Domestic	Going Straight	1/31/2005
06C152152	Property Dmg Report	Salmon	N	002220	313.5	Dry	Clear	Dark, No Street Lights	US 93	MP 313	0	0	1	Pickup/Van/Panel/SUV		Animal - Domestic	Negotiating Curve	11/11/2006
07C163250	Property Dmg Report	Salmon	N	002500	125.5	Snow	Cloudy	Dark, No Street Lights	SH 28	MP 126	0	0	1	Pickup/Van/Panel/SUV		Animal - Domestic	Going Straight	3/1/2007
07C174987	Property Dmg Report	Salmon	N	002500	129.2	Dry	Clear	Dawn or Dusk	SH 28	MP 129	0	0	1	Pickup/Van/Panel/SUV		Animal - Domestic	Going Straight	7/8/2007
07C166744	Property Dmg Report	Salmon	N	002220	314.7	Dry	Clear	Dark, No Street Lights	US 93	MP 315	0	0	1	Tractor 1 Trailer		Animal - Domestic	Negotiating Curve	3/5/2007
07C175011	Property Dmg Report	Salmon	N	002220	306	Dry	Clear	Dark, No Street Lights	US 93	MP 306	0	0	1	Car		Animal - Domestic	Going Straight	7/26/2007
07C190586	Property Dmg Report	Salmon	N	002500	121.1	Dry	Clear	Dark, No Street Lights	SH 28	MP 121	0	0	1	Pickup/Van/Panel/SUV		Animal - Domestic	Going Straight	10/14/2007
08C190634	Property Dmg Report	Salmon	N	002500	126.336	Dry	Cloudy	Dark, No Street Lights	SH 28		0	0	1	Car		Animal - Domestic	Going Straight	1/4/2008
07C177777	Property Dmg Report	Salmon	N	002220	309	Dry	Clear	Dark, No Street Lights	US 93	MP 309	0	0	1	Pickup/Van/Panel/SUV		Animal - Domestic	Going Straight	8/6/2007
08C202911	Property Dmg Report	Salmon	N	002500	119.9	Dry	Cloudy	Dark, No Street Lights	SH 28	MP 120	0	0	1	Tractor 1 Trailer		Animal - Domestic	Negotiating Curve	3/26/2008

ANIMAL CRASH DATA

LEMHI COUNTY

2005 TO 2009

Serial Number	Severity	City	In City Limits	Segment Code	Mile Point	Road Surface Condition	Weather Condition	Light Condition	Street	Reference Street	Number Of Fatalities	Number Of Injuries	Number Of Units	Vehicle Type	Contrib Circumstances	Harmful Event	Driver Action	Accident Date
08C213984	Property Dmg Report	Salmon	N	002500	133.96	Dry	Clear	Dark, No Street Lights	SH 28	MP 134	0	0	1	Car		Animal - Domestic	Going Straight	9/5/2008
08C219432	Property Dmg Report	Salmon	N	002500	129.6	Dry	Clear	Day	SH 28	MP 130	0	0	1	Truck 2 Axle/6 Tires		Animal - Domestic	Going Straight	8/7/2008
09C234239	Property Dmg Report	Salmon	N	002220	315.08	Dry	Clear	Dark, No Street Lights	US 93	MP 315	0	0	1	Tractor 1 Trailer		Animal - Domestic	Going Straight	5/8/2009
09C235627	Property Dmg Report	Leadore	N	002500	93.02	Dry	Clear	Dark, No Street Lights	SH 28	MP 93	0	0	1	Pickup/Van/Panel/SUV		Animal - Domestic	Going Straight	4/16/2009
09C243414	Property Dmg Report	Leadore	N	002500	103.5	Dry	Clear	Dark, No Street Lights	SH 28	MP 104	0	0	1	Pickup/Van/Panel/SUV		Animal - Domestic	Going Straight	9/3/2009
06C146268	Property Dmg Report	Salmon	N	002220	290.251	Dry	Clear	Day	US 93	MP 290	0	0	1	Pickup/Van/Panel/SUV	Inattention,	Animal - Wild	Going Straight	9/10/2006
09C238118	A Injury Accident	Salmon	N	002220	292.7	Dry	Clear	Day	US 93	MP 292	0	1	1	Motorcycle	Inattention,Drug Impaired,	Animal - Wild	Going Straight	7/4/2009
05C110982	Property Dmg Report	Salmon	N	000000		Dry	Clear	Dark, No Street Lights	Williams Creek Rd	US 93	0	0	1	Car	Off Roadway Overcorrected,	Animal - Wild	Going Straight	3/18/2005
09C248227	Property Dmg Report	North Fork	N	002220	325.2	Dry	Cloudy	Dark, No Street Lights	US 93	MP 325	0	0	1	Car	Other,Fatigued,	Animal - Wild	Negotiating Curve	10/4/2009
05C111208	B Injury Accident	Salmon	N	002220	343.007	Dry	Clear	Day	US 93	MP 343	0	2	1	Pickup/Van/Panel/SUV	Previous Accident,	Animal - Wild	Going Straight	6/8/2005
06C146417	B Injury Accident	Salmon	N	002220	293.2	Dry	Clear	Day	US 93	MP 293	0	2	1	Motorcycle		Animal - Wild	Negotiating Curve	9/3/2006
06C135035	C Injury Accident	Salmon	N	002220	319	Dry	Rain	Dark, No Street Lights	US 93	MP 319	0	1	1	Motor Home		Animal - Wild	Going Straight	2/22/2006
06C146303	C Injury Accident	Salmon	N	002220	329.8	Dry	Cloudy	Dawn or Dusk	US 93	MP 329	0	1	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	9/14/2006
08C208746	B Injury Accident	Salmon	N	002500	134.03	Dry	Clear	Dark, No Street Lights	SH 28	MP 134	0	1	1	Motorcycle		Animal - Wild	Going Straight	8/9/2008
08C213987	C Injury Accident	Salmon	N	002220	309.05	Dry	Clear	Day	US 93	MP 309	0	1	1	Motorcycle		Animal - Wild	Going Straight	9/14/2008
09C237710	Fatal Accident	Salmon	N	000000		Wet	Clear	Day	Iron Creek Rd	US 93	1	1	1	Motorcycle		Animal - Wild	Going Straight	6/20/2009
05C110993	Property Dmg Report	Salmon	N	002500	111	Dry	Clear	Dark, No Street Lights	SH 28	MP 111	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	6/20/2005
05C110988	Property Dmg Report	Salmon	N	002220	330.818	Dry	Clear	Day	US 93	MP 330	0	0	1	Car		Animal - Wild	Going Straight	6/30/2005
05C122660	Property Dmg Report	Salmon	N	002220	331	Ice	Cloudy	Dark, No Street Lights	US 93	MP 331	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	11/27/2005
05C111018	Property Dmg Report	Salmon	N	002220	299	Dry	Clear	Day	US 93	MP 299	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	5/30/2005
05C122536	Property Dmg Report	Salmon	N	002220	275.8	Wet	Cloudy	Dark, No Street Lights	US 93	MP 276	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	9/27/2005
05C114231	Property Dmg Report	Salmon	N	002220	278.1	Dry	Clear	Dark, No Street Lights	US 93	MP 278	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	9/18/2005
05C112601	Property Dmg Report	Salmon	N	002220	310.819	Dry	Clear	Day	US 93	Diamond Creek Rd	0	0	1	Car		Animal - Wild	Going Straight	8/19/2005
05C124506	Property Dmg Report	Salmon	Y	000000		Ice	Clear	Dark, Street Lights On	Roosevelt Ave	9th St	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	12/23/2005
06C126769	Property Dmg Report	Salmon	N	002220	323.45	Dry	Clear	Dark, No Street Lights	US 93	MP 323	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	1/13/2006

ANIMAL CRASH DATA

LEMHI COUNTY

2005 TO 2009

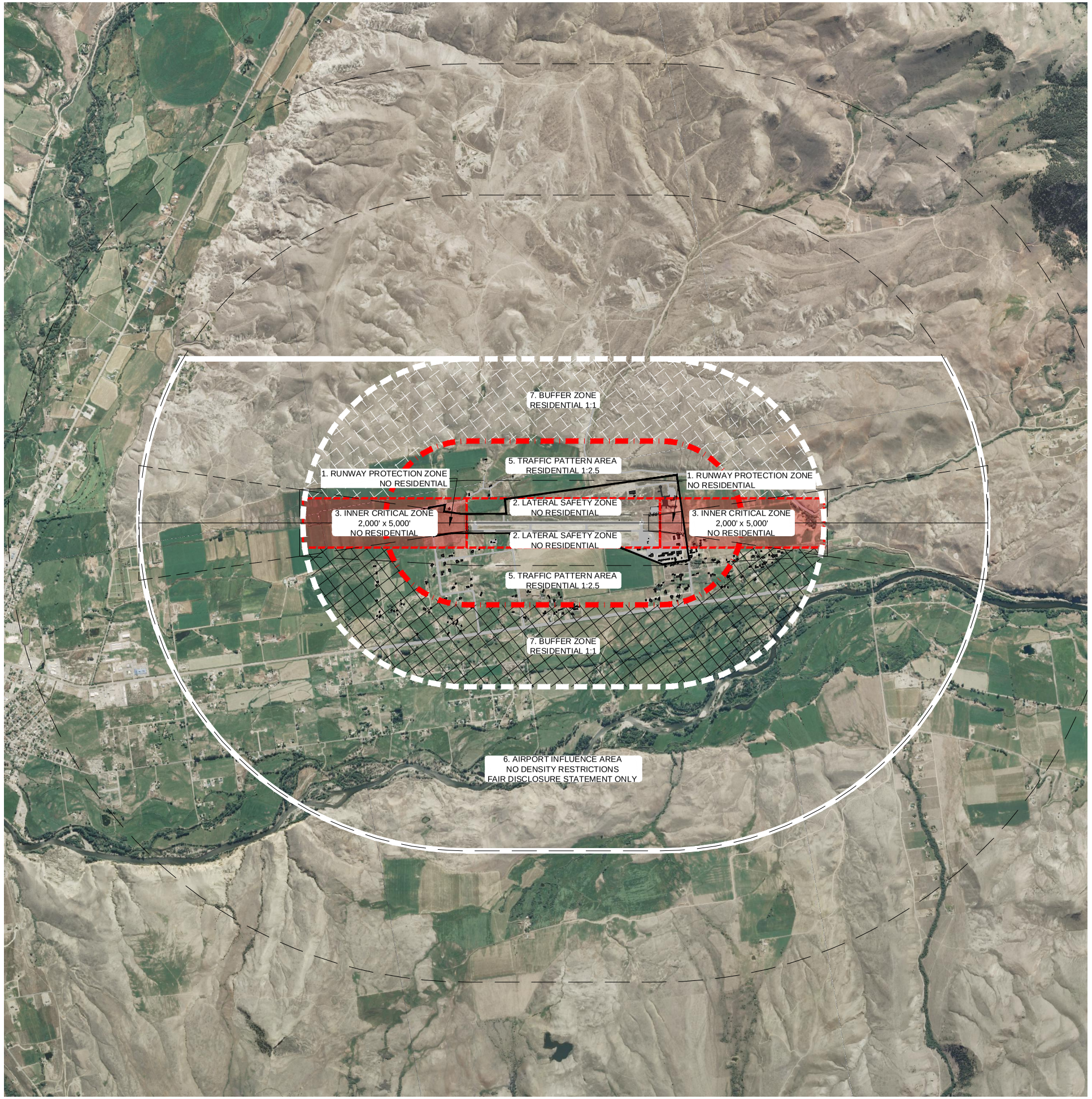
Serial Number	Severity	City	In City Limits	Segment Code	Mile Point	Road Surface Condition	Weather Condition	Light Condition	Street	Reference Street	Number Of Fatalities	Number Of Injuries	Number Of Units	Vehicle Type	Contrib Circumstances	Harmful Event	Driver Action	Accident Date
05C123213	Property Dmg Report	Salmon	N	002500	133.63	Ice	Clear	Dark, Street Lights On	SH 28	MP 134	0	0	1	Car		Animal - Wild	Going Straight	12/16/2005
05C122402	Property Dmg Report	Leadore	N	002500	85	Ice	Clear	Dark, No Street Lights	SH 28	MP 85	0	0	1	Tractor 1 Trailer		Animal - Wild	Going Straight	12/7/2005
06C127671	Property Dmg Report	Salmon	N	002220	323.2	Dry	Cloudy	Dark, Street Lights Off	US 93	MP 323	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	1/28/2006
06C130360	Property Dmg Report	Salmon	N	002500	124.1	Dry	Clear	Day	SH 28	MP 124	0	0	1	Tractor 1 Trailer		Animal - Wild	Going Straight	2/23/2006
05C096351	Property Dmg Report	Salmon	N	002220	302.251	Dry	Clear	Dark, No Street Lights	US 93	Airport Rd	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	2/22/2005
06C143896	Property Dmg Report	Salmon	N	002220	326	Dry	Clear	Dark, Street Lights On	US 93	MP 326	0	0	1	Car		Animal - Wild	Going Straight	8/8/2006
06C141745	Property Dmg Report	Salmon	N	002500	116.5	Dry	Clear	Dark, No Street Lights	SH 28	MP 117	0	0	1	Car		Animal - Wild	Going Straight	7/1/2006
06C141762	Property Dmg Report	Salmon	N	002220	334	Dry	Clear	Dark, No Street Lights	US 93	MP 334	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	6/30/2006
06C236557	Property Dmg Report	Salmon	N	002220	322.981	Dry	Clear	Dark, Street Lights Off	US 93	MP 323	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	1/16/2006
07C169420	Property Dmg Report	Salmon	N	002500	107.8	Dry	Clear	Dark, No Street Lights	SH 28	MP 108	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	4/29/2007
07C993601	Property Dmg Report	Salmon	Y	002220	305.34	Dry	Cloudy	Day	US 93	Main St	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	6/3/2007
07C180083	Property Dmg Report	Salmon	N	002220	313.9	Dry	Clear	Dark, No Street Lights	US 93	MP 314	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	9/26/2007
06C234260	Property Dmg Report	Salmon	N	002500	134.8	Dry	Clear	Dawn or Dusk	SH 28	Lemhi Ave	0	0	1	Car		Animal - Wild	Going Straight	6/28/2006
08C190601	Property Dmg Report	Salmon	N	002220	332	Ice	Cloudy	Dawn or Dusk	US 93	MP 332	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	1/6/2008
08C192858	Property Dmg Report	Salmon	N	002220	310.1	Snow	Cloudy	Dark, No Street Lights	US 93	MP 310	0	0	1	Car		Animal - Wild	Going Straight	1/11/2008
08C208760	Property Dmg Report	Salmon	N	002220	313.819	Dry	Cloudy	Day	US 93	MP 313	0	0	1	Car		Animal - Wild	Going Straight	8/19/2008
08C207756	Property Dmg Report	Leadore	N	002500	99.9	Dry	Clear	Day	SH 28	MP 100	0	0	1	Car		Animal - Wild	Going Straight	4/26/2008
08C201333	Property Dmg Report	Salmon	N	002220	285.3	Dry	Clear	Day	US 93	MP 285	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	4/17/2008
08C208774	Property Dmg Report	Salmon	N	002220	306.005	Dry	Clear	Dawn or Dusk	US 93	MP 306	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	8/19/2008
08C213951	Property Dmg Report	Salmon	N	002500	131.03	Dry	Clear	Dark, No Street Lights	SH 28	MP 131	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	8/28/2008
08C197690	Property Dmg Report	North Fork	N	002220	325.03	Dry	Clear	Dark, No Street Lights	US 93	MP 325	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	3/6/2008

ANIMAL CRASH DATA

LEMHI COUNTY

2005 TO 2009

Serial Number	Severity	City	In City Limits	Segment Code	Mile Point	Road Surface Condition	Weather Condition	Light Condition	Street	Reference Street	Number Of Fatalities	Number Of Injuries	Number Of Units	Vehicle Type	Contrib Circumstances	Harmful Event	Driver Action	Accident Date
08C218008	Property Dmg Report	Salmon	N	002500	117.01	Dry	Clear	Dark, No Street Lights	SH 28	MP 117	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	11/21/2008
08C219439	Property Dmg Report	Salmon	N	002500	116	Dry	Cloudy	Day	SH 28	MP 116	0	0	1	Truck 3+ Axle		Animal - Wild	Going Straight	6/6/2008
09C235668	Property Dmg Report	Salmon	N	002500	115.09	Dry	Clear	Day	SH 28	MP 115	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	2/27/2009
09C235621	Property Dmg Report	Salmon	N	002220	286.7	Dry	Clear	Dark, No Street Lights	US 93	MP 287	0	0	1	Car		Animal - Wild	Going Straight	5/10/2009
09C235689	Property Dmg Report	Salmon	N	002220	308.001	Dry	Clear	Dark, No Street Lights	US 93	MP 308	0	0	1	Car		Animal - Wild	Going Straight	6/2/2009
09C243588	Property Dmg Report	Salmon	N	002220	313.839	Dry	Clear	Dawn or Dusk	US 93	MP 313	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	8/31/2009
09C239357	Property Dmg Report	Leadore	N	002500	71.99	Dry	Clear	Dark, No Street Lights	SH 28	MP 72	0	0	1	Car		Animal - Wild	Going Straight	7/23/2009
09C244531	Property Dmg Report	Salmon	N	002220	314.094	Dry	Clear	Dark, No Street Lights	US 93	MP 314	0	0	1	Car		Animal - Wild	Going Straight	9/15/2009
09C244559	Property Dmg Report	Salmon	N	002500	127.3	Wet	Rain	Dawn or Dusk	SH 28	MP 127	0	0	1	Car		Animal - Wild	Going Straight	9/16/2009
09C244488	Property Dmg Report	Salmon	N	002500	126.037	Dry	Clear	Dark, No Street Lights	SH 28	MP 126	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	9/19/2009
09C244511	Property Dmg Report	Salmon	N	002500	114.5	Dry	Clear	Dark, No Street Lights	SH 28	MP 114	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	9/23/2009
09C250788	Property Dmg Report	Salmon	N	002500	119.5	Dry	Clear	Dark, No Street Lights	SH 28	MP 120	0	0	1	Car		Animal - Wild	Going Straight	11/19/2009
09C250755	Property Dmg Report	Salmon	N	002500	98.01	Dry	Clear	Dark, No Street Lights	SH 28	MP 98	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	11/15/2009
09C250401	Property Dmg Report	Salmon	N	002500	125.1	Dry	Clear	Dark, No Street Lights	SH 28	MP 125	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	10/25/2009
09C254192	Property Dmg Report	Salmon	N	002500	121.1	Dry	Cloudy	Day	SH 28	MP 121	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	12/21/2009
09C239812	Property Dmg Report	Salmon	N	002500	121.2	Dry	Cloudy	Dark, No Street Lights	SH 28	MP 121	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	8/5/2009
09C240776	Property Dmg Report	Leadore	N	002500	71.1	Dry	Clear	Dark, No Street Lights	SH 28	MP 71	0	0	1	Pickup/Van/Panel/SUV		Animal - Wild	Going Straight	7/27/2009
09C249232	Property Dmg Report	Salmon	N	002500	135.5	Dry	Clear	Dark, No Street Lights	SH 28	MP 135	0	0	1	Car		Animal - Wild	Going Straight	10/29/2009



LEGEND

- AIRPORT INFLUENCE AREA
- CRITICAL ZONES
- TRAFFIC PATTERN AREA
- BUFFER ZONE
- AIRPORT PROPERTY LINE

0 750 1500 3000 4500

NOTES:

1. AIRPORT COMPATIBLE LAND USE ZONES HAVE BEEN ESTABLISHED FOR THE PURPOSE OF REGULATING THE DEVELOPMENT OF NOISE SENSITIVE LAND USES TO PROMOTE COMPATIBILITY BETWEEN THE AIRPORT AND THE SURROUNDING LAND USES, TO PROTECT THE AIRPORT FROM INCOMPATIBLE DEVELOPMENT AND TO PROMOTE THE HEALTH, SAFETY AND GENERAL WELFARE OF PROPERTY USERS.

2. EXCEPT AS OTHERWISE PROVIDED IN THE ORDINANCE, NOTHING SHALL BE ERECTED, ALTERED, MAINTAINED, OR ALLOWED TO GROW IN ANY AIRPORT ZONE CREATED BY THE ORDINANCE TO A HEIGHT GREATER THAN THE HEIGHT LIMIT ESTABLISHED FOR SUCH ZONE.

ATTACHMENT A
LAND USE COMPATIBILITY TABLE

Land Use*	1 Runway Protection Zone	2 Lateral Safety Zone	3 Inner Critical Zone	4** Outer Critical Zone	5 Traffic Pattern Area	6 Airport Influence Area	7 Buffer Transition Zone
Residential							
Single-family, nursing homes, multi-family, apartments, condominiums, mobile home parks	X	X	X	C (1,2,6)	C (1,3,6)	C (1,6)	C (1,4)
Transient lodging (i.e. hotels and motels)	X	X	X	C (1,6)	C (1,6)	C (1,6)	C (1)
Services							
Schools, libraries, churches	X	X	X	X	C (1,6)	C (1,6)	C (1,6)
Parking and cemeteries	X	P	P	P	P	P	P
Manufacturing, Transportation, Trade & Extraction							
Offices, retail trades, light industrial, general manufacturing, utilities, extractive industry	X	C (1)	C (1,5)	C (1,6)	C (1)	C (1)	C (1)
Airport revenue-producing enterprises	X	C (1)	C (1,5)	C (1,6)	C (1)	C (1)	C (1)
Agricultural, Cultural, Entertainment and Recreation							
Cropland	P	P	P	P	P	P	P
Livestock breeding, zoos, golf courses, riding stables, water recreation	X	X	C (6,7)	C (6,7)	C (7)	P	C (7)
Outdoor spectator sports, parks, playgrounds	X	X	X	C (1,6)	C (1,6)	C (1,6)	C (1,6)
Amphitheaters	X	X	X	X	C (1,6)	C (1,6)	C (1,6)
Open space	P	P	P	P	P	P	P
Bird and Wildlife Attractants							
Sanitary Landfills	X	X	X	X	X	C (7)	X
Water treatment plants, water impoundments	X	X	X	X	X	C (7)	X
Wetlands Mitigation	X	C (7)	C (7)	C (7)	C (7)	C (7)	C (7)

Land Use Compatibility Criteria
X - Not Allowed, P - Permitted, C – Conditional
*Land use activities represented herein compare with Appendix L of the Lemhi County Development Code, page 129. For further clarification of land use activities, please refer to Appendix L of the Development Code.
**OUTER CRITICAL NOT APPLICABLE TO LEMHI COUNTY AIRPORT

CONDITIONS
All facilities should be configured to comply with FAR Part 77 requirements.

1. If allowed, Fair Disclosure Statement must be required as a condition of development.
2. Limit residential density to 1 unit per 5 acres.
3. Limit residential density to a maximum of 1 unit per 2.5 acres. It is recommended that the County utilize cluster development or other similar land use planning mechanisms where reasonable and necessary in the Traffic Pattern Area to ensure minimum residential density while providing for maximum safety of aircraft operators and surrounding residents as well as reduced impacts on the quality of life of residents. Refer to the Lemhi County Development Code, as amended.
4. Limit residential density to 1 unit per 1 acre.
5. Avoid High Intensity commercial uses such as large retail box stores (i.e. Walmart, Home Depot). Use should be located as far from extended centerline as possible.
6. If no reasonable alternative exists, use should be located as far from extended centerline as possible.
7. Such uses may present a bird and wildlife attractant. If allowed, consideration of the proximity of the airport and potential negative impacts should be considered. Refer to FAA Advisory Circulars (AC) 150/5200-33B and 150/5200-34A, as amended, for guidance.

NO.	REVISIONS ITEM	DATE	E-FILE NAME
			DESIGNED NSC
			DRAWN NSC
			CHECKED CP
			APPROVED CP

T-O ENGINEERS
CONSULTING ENGINEERS, SURVEYORS & PLANNERS
9777 CHINDEN BOULEVARD
BOISE, IDAHO 83714-2008
PHONE (208) 323-2288 FAX (208) 323-2399
OFFICES ALSO IN: COEUR D'ALENE, IDAHO

LEMHI COUNTY AIRPORT
LEMHI COUNTY, IDAHO
AIRPORT LAYOUT PLAN SET
OFF AIRPORT LAND USE

DATE: DECEMBER 2011
PROJECT: 09018

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APPENDIX C

PATHWAYS

Pathways Planning Statement Background/Connectivity Map
City of Salmon Comprehensive Plan - Adopted August 4, 2010 - Relevant Sections
Pathways Map

Background Planning Statements

Salmon, Idaho
Pathways Implementation

Table of Contents

1. City of Salmon Master Transportation Plan 2003-2023.....3

2. Salmon Community Review 2004.....6

3. Lemhi County Comprehensive Plan 2007.....7

4. Sacajawea Historic Byway Corridor Management Plan—2007.....10

5. City Comprehensive Plan 2010 DRAFT.....11

1. 2003 City of Salmon Transportation & Capital Improvement Plan (pp 24, 40, 41, 45, 56)

Scenic Byways
A byway committee is seeking state designation of SH-28 as The Sacajawea Scenic/Historic Byway. In 2003, an advisory committee is asking Lemhi, Jefferson, Clark, and Butte counties and their highway districts, governmental agencies, and Cities adjacent to SH-28 to join the effort.

9 – Pathways / Sidewalks

The City's active Pathway Committee has completed extensive research with respect to proposed pathway needs for Salmon and developed a pathway plan identifying specific pathway routes. Importantly, the pathways plan received substantial public interest and support. As a part of this plan, the committee has identified five routes totaling approximately 13.0 miles (see Figure 3-3: City of Salmon Pathways Network).

- Jesse Creek Loop (1.1 miles)
- 93 North (1.2 miles)
- Lemhi Trail Access (2.3 miles)
- Kids Creek Loop (1.9 miles)
- S-Hill Trail Loop (6.5 miles)

Each of the proposed trails is unique with respect to terrain, required pathway surface (i.e. gravel vs. paved), as well as right-of-way requirements. Accordingly, the costs associated with constructing each of the pathway routes will vary as will funding availability.

Generally, construction of 10-foot wide paved pathways can vary from roughly $50,000 - $125,000 per mile, dependent upon construction conditions and funding requirements. ITD offers an Enhancement Funding Program that will fund up to $500,000 for a pathway project with a required match of up to 10 percent. The Enhancement Funding Program is very competitive statewide and requires that the pathway project design meet federal construction and environmental regulations.

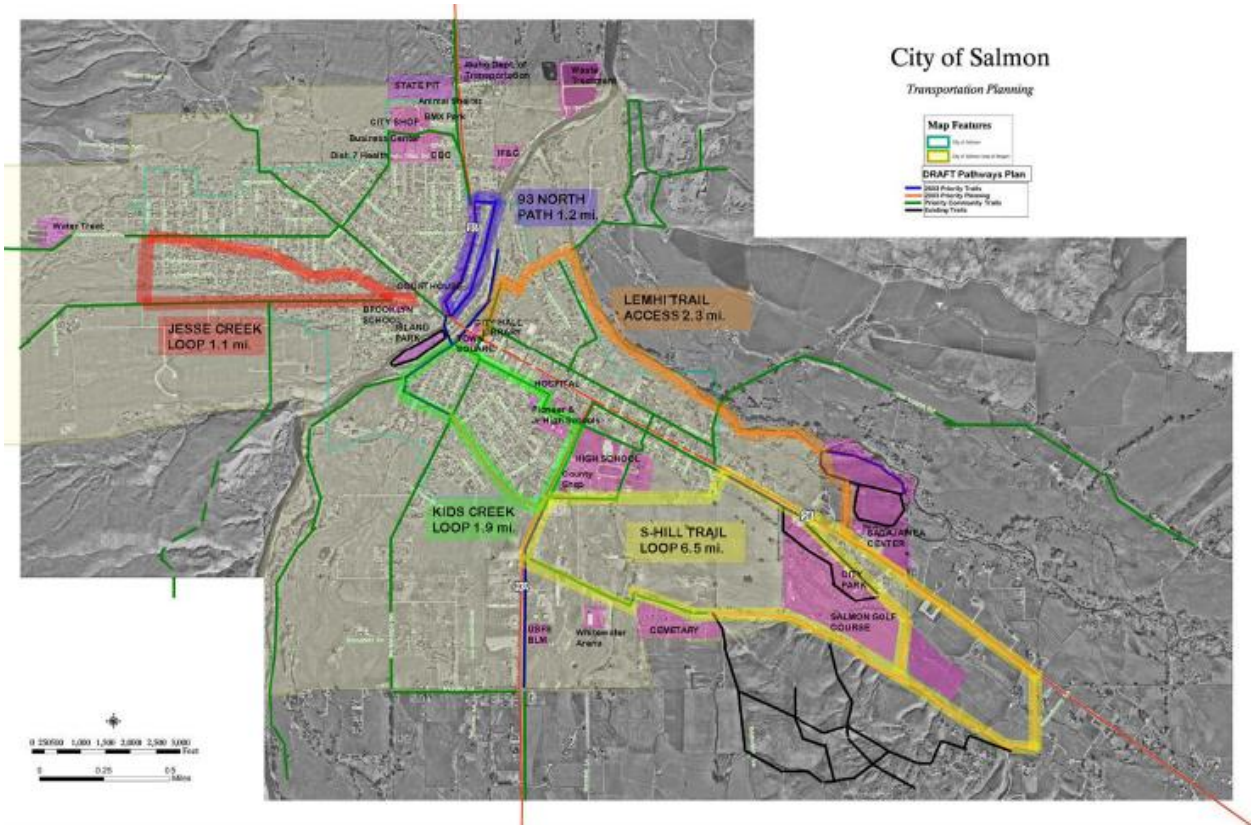
Chapter 3 of this plan outlines a proposed

construction schedule for installing new concrete sidewalks throughout the City based on observed pedestrian traffic patterns. This plan should be reviewed by the City on a yearly basis and updated as necessary based on budgetary changes or other mitigating factors.

<u>It is recommended that the City continue to work with the Pathways Committee and budget a yearly amount that can be used either for pathway and sidewalk construction or to offset match requirements for federal funding to complete a larger project.</u>

Funding Source: ITD Enhancement Funding, City Local Funds, and State Grant Programs, Local Improvement Districts (LID's)

Estimated Cost: Varies depending on the type of pathway constructed and funding source. Paved pathways estimated at $50,000 - $125,000 per mile. Concrete sidewalks estimated at $4.25 per square foot (2003 dollars) assuming City crew involvement during construction.



While the proposed trails and pathways identified above provide recreation opportunities for tourists and City residents, a lack of a defined sidewalk pedestrian network has raised several safety concerns, particularly relating to children walking to and from school. The elementary / middle school campus located near Sharkey and US-93 is largely void of sidewalks on the surrounding streets, forcing pedestrians to use existing borrow ditches or the street itself for pedestrian access. Sidewalks along portions of the south side of Fulton Street provide some pedestrian access to Brooklyn School, however, the vast majority of residential streets on Bar Hill do not have sidewalks and adequate pedestrian access facilities. In general, many primary pedestrian routes in the Bar Hill area and southern and eastern Salmon lack adequate sidewalk facilities, causing potential pedestrian / vehicle safety conflicts.

Future Conditions - Sidewalks

Constructing sidewalks for all existing neighborhood streets is estimated to require an additional 1.6 million square feet of concrete sidewalk with an estimated construction cost of $7.0 million (2003 dollars). As this construction cost is prohibitive based on existing funding availability, it is recommended that the City instead embark on a yearly sidewalk improvement program, utilizing existing City general budget funds, to gradually expand the sidewalk facilities.

The sidewalk expansion would be incrementally constructed in strategic areas that optimize access to and from highly utilized pedestrian areas (i.e. schools, downtown, etc.), while also complimenting the proposed recreation trails network shown in **Figure 3-3**.

Based on conversations with the City Administrator, it is estimated that approximately $30,000 annually (2003 dollars) will be available from the City general fund to construct new sidewalks. An additional funding alternative would be to establish local improvement districts (LID'S) in key neighborhoods with high pedestrian use. Funding from an LID would allow the City to accelerate construction of the sidewalks while utilizing the additional long term financing paid by adjacent property owners. All new sidewalk construction should include ADA approved pedestrian ramps at the intersections and at mid-block (as needed) and should be constructed in accordance with the latest edition of the Idaho Standards for Public Works Construction.

2. 2004 Salmon Community Review (pp 25,26)

"The City has many existing recreational opportunities including the city park complex, a golf course, downtown pocket park, skate park, ice hockey rink, and the BMX park. However, not all the existing facilities are centrally located and there aren't recreational opportunities within walking distance for a majority of the City's residents.

Existing facilities need to be examined to ensure that they are accessible. All new facilities that are constructed will need to comply with Americans with Disabilities Act (ADA) requirements.

A Master Trail Plan has been completed for the City of Salmon. This plan takes advantage of Kids Creek, Lemhi River, and the Salmon River to provide pedestrian linkages and recreation".

Recommendations

Parks and Recreation Director. A full time position could supervise consistent maintenance of current assets, oversee planning for future needs, coordinate recreational opportunities, and seek funding sources for the Parks and Recreation Department on behalf of the community and the county.

Master Trail Plan. Finalization and implementation of the proposed plan is needed to provide pedestrian connections to existing facilities. Obtaining Right of Ways and funding for construction will be a worthwhile challenge. Seek volunteer groups to donate time and materials to construct and maintain the new trails.

Smaller Parks. Provide smaller city parks that provide passive and active recreation opportunities that are more centrally located to residents.

Resources

Design. Contact the Dept of Landscape Architecture at the Univ of Idaho or Utah State. The expertise of professors and students can be used to provide design ideas and park master plans at no cost to the City.

Funding. Apply for grant funding from any source available, especially federal and state grants. The Idaho Department of Parks and Recreation administers the following grants: Land and Water Conservation Funds, Idaho Recreational Vehicle Program, Waterways Improvement Fund, and Recreational Trails Fund. Call the IDPR East Region Grant Specialist 525-7121.

3. Lemhi County Comprehensive Plan 2007 (pp 44, 45, 46)

ELEMENT 10: Recreation

The key component to the recreation element is a description and interpretation of current recreation facilities and sites and future facilities and sites. These sites are intertwined with natural resources of the area; preservation and low-impact enhancement of one is critical to the other.

Access to public lands and waterways, and the recreational opportunities they offer, is one of the foremost benefits of life in Lemhi County. The Salmon National Forest and the Salmon District of the Bureau of Land Management provide campgrounds, picnic grounds, trailheads, boat landings, and other developed recreational facilities, as well as the public lands on which local outdoor recreation occurs. The state also provides outdoor recreation activities and facilities through the Idaho Fish and Game Department.

Recreation is a huge part of the lifestyle in Lemhi County providing both economic and recreational benefits to the residents. It provides four seasons of activities that is part of a $100 million industry in Idaho. Hunting alone brings over $14 million to Lemhi County, with related sales topping $23 million.

Lemhi County has involvement in recreation programs through waterways (boating) and snowmobile programs funded by rebates of license fees and fuel taxes. These rather limited funds are used primarily to assist land management agencies or volunteer groups in the provision of facilities.

The most popular recreation activities which both residents and visitors partake in are:
• Wildlife and game bird hunting and viewing
• Cross country ski trails
• Fishing (primarily salmon, trout and steelhead)
• Sledding, ice skating, horseback riding trails and pack trips
• Cross-country and downhill skiing and trails
• Snow machining
• OHV/ATV trails utilization
• Whitewater rafting, floating and boating
• Jet boat tours
• Kayaking
• Ice Hockey
• Skateboarding
• Golf
• Mountain biking
• Airplane sightseeing trips
• Lewis and Clark van tours
• Trapping

• Hiking
• Gold Panning/Rock Hounds
• Geo-caching
The potential for the expansion of these and the development of others is great.

Recreation and tourism represent an important segment of Lemhi County's economy by bringing in millions of dollars from outside the County by people who wish to recreate and enjoy the natural resources found in Lemhi County. Lemhi County should continue to support efforts to promote its abundant recreational opportunities, and to develop an expanded tourism and recreational infrastructure, which will promote increased prosperity for the County's citizens, create new jobs, and allow for long term sustainable use of the County's recreational natural resources, especially those found on public land."

The county is home to several public and quasi-public recreational facilities and activities. These include:
• County Fairgrounds – the County Fairgrounds are located north of Salmon and are county owned. The fairgrounds are home to the county fair as well as other activities throughout the year.
• Rifle Range – the rifle range, located outside of Salmon is for public use and also serves as the Interagency Training Facility for law enforcement in the area.
• Motocross track – This track is on BLM land at Discovery Hill and maintained by volunteers for the public's use.
• RC Airport – this "airport" also located on BLM land at Discovery Hill is a miniature airplane flying site and maintained by volunteers.
• Sacajawea Center
• Salmon City Park – located on county owned land including a community baseball field
• Lemhi County Museum – The historical museum is located in Salmon in a building owned by the Eagles and leased to the museum by agreement. The museum is operated by volunteers and is funded through donations and the county residents.
• Island Park – Located under the Main Street Bridge and includes a skate park and boat ramps
• Hockey Park
• Cavaness Park
• Leadore Outdoor Event Center
• Whitewater Therapeutic Riding Association
• Various trails

The county currently is the recipient of a grant to help to inventory all of the recreational opportunities in Lemhi County and to develop a brochure that will assist tourists in finding activities.

Policy Statements

I. Enhance accessibility to the many recreation sites and opportunities in the area and promote these as both short and long-term attractions as well as those business that provide these services. Provide diversity in recreational opportunities to citizens and

tourists alike.

Goals:
A. Enhance visitor services that emphasize and interpret Lemhi County's unique fish and wildlife-based recreational attributes. Promote Lemhi County as a destination location for visitors and develop meeting and lodge facilities to bolster this image. Seek funding to accomplish these goals.
B. Promote increased tourism and the improvement of local services to tourists to encourage them to spend their dollars in Lemhi County. Use this promotion to encourage tourism in all four seasons.
C. Encourage county and city parks, recreation departments and local school districts to work together in program development and coordination so as not to compete with one another or overlap expenditures. The county should work with the cities and other agencies to accomplish the maintenance and improvements of local parks and recreation facilities, including the local rifle range. Explore the possibilities of a county-wide recreation district to help fund these and other improvements.
D. Work with federal and state agencies to maintain diversity of use on their lands
E. Encourage the use of voluntary conservation easements to protection recreational areas in the county.
F. Support maintaining of existing trails and roads on federal lands, but especially in order to access and maintain natural resources. Retain a balance between motorized and nonmotorized trails. Encourage enforcement of regulations concerning trail abuses.
G. Explore the possibilities of a trail system along the county's main highways.
H. Work to develop more parking along access to federal lands to avoid parking on private lands.
I. Support the restoration of wild salmon and steelhead populations.
J. Maintain historical and traditional access to public grounds through both public and private lands in ways that maintain current resource values and not at the expense of the private property owners. Accomplish this through the following methods:

- Provide education to those crossing private lands for access on their responsibilities to respect the private property
- Provide education to new property owners on their responsibilities of preserving and maintaining access.

Use tools such as land trades, formal access agreements, subdivision dedications and voluntary conservation easements to provide incentives to owners to provide or maintain access.

4. Sacajawea Historic Byway Corridor Management Plan—2007

Site Recommendations

- Install a Welcome to Salmon sign on SH-28 at the Sacajawea Interpretive, Cultural, and Educational Center.
- Prepare a self-guided walking and auto tour to link the historic sites in Salmon to the byway. These local historic sites should be identified by local signage and a self-guided tour map prepared by the city, Lemhi County Historical Museum, and Salmon Valley Chamber of Commerce. Sites should include the Lemhi County Historical Museum, 1874 Odd Fellows Hall, Shoup Building, Salmon Odd Fellows Hall, Episcopal Church of the Redeemer, and Lemhi County Courthouse.
- Support the city of Salmon on the key strategy of revitalizing its compact and charming downtown though the renovation of historic buildings and expansion of commercial services to support the byway. Complete and implement a downtown development plan.
- Support the development of Salmon Town Square on the banks of the Salmon River and Main Street. Interpretive information should tell the story of the ferry and various bridges at this site and highlight the early boatman who provided supplies down the Salmon River. Other signs should identify the river's freshwater aquatic life.
- Support a highway entryway beautification program.
- Expand the trail system along the Salmon River and Lemhi River, including the old stage road.
- Install a replica of the statue of Senator Shoup in the city of Salmon.
- Form a cooperative among the museums and centers in Lemhi and Custer Counties to ensure their future success. Assistance could be provided for grant writing, staffing and internships, collections, exhibits, programming, brochures, and membership. The cooperative could play a greater role in providing professional assistance to the museums and responding to the growing number of visitors. Cooperative museums and centers could include the Stanley Museum, Clayton Museum, Custer Museum, Land of the Yankee Fork Interpretive Center, North Custer Historical Museum, Lemhi County Historical Museum, Leadore Railroad Museum, Gibbonsville Relic Museum, and Sacajawea Interpretive, Cultural, and Educational Center.

Site Improvements

Improvement Estimated Cost

Welcome sign $10,000
Self-guided walking and auto tour $10,000
Downtown Salmon development plan and rehabilitation $100,000
Salmon Town Square signage and interpretive information $15,000
Highway entryway beautification support To be determined
Trail system expansion To be determined
Replica of Senator Shoup statue To be determined
Lemhi-Custer Museum Cooperative $25,000

Management

City of Salmon Lemhi County Historical Society
Salmon Urban Renewal Agency Idaho Heritage Trust
Salmon Valley Arts Council Bureau of Land Management Salmon Office

5. Proposed City Comprehensive Plan 2010 (pp 21, 44, 45, 50)

7. POLICY: (econ dev)
For a diverse and sustainable economy and to promote Salmon as a center for the study of geological, agricultural, and environmental sciences, the City of Salmon should actively promote outdoor recreational opportunities and tourism as one of its most valuable natural resource based industries, encourage the development of a wildlife education center, and explore the ossibilities of promoting Salmon as a wildlife education center for the region.

8. POLICY (econ dev)
The City of Salmon should continue to support, promote, and enhance the Sacajawea Center as a valuable resource tool for introducing new business and cultural diversity to the community. This effort should highlight the Center's usefulness as a visitor information center and as an accurate measure of the impacts of tourism to the region, to prepare for the changing needs of the community and people passing through the area, and to promote Salmon as the regional multicultural, educational, tourism, and economic center.

6. POLICY (transportation)
The City of Salmon should work with the appropriate agencies to plan and provide for the safe and convenient transportation of pedestrians, bicyclists, equestrians, the disabled and seniors, and motorized and non-motorized recreational vehicles.

7. POLICY (transportation)
The City of Salmon should work with the Salmon School District to facilitate a safe and efficient pedestrian route for students to and from schools.

Objectives (recreation)
a. Continue to reevaluate City park and recreation plans to ensure that facilities and services meet existing and changing needs.
b. Continue to encourage a variety of recreational activities.
c. Encourage accessibility and availability of varied recreation activities to people of all ages including the disabled.
d. Encourage bicycle and walkways within the City.

City of Salmon Comprehensive Plan

August 4th, 2010

Ordinance No. 10-762
Updated and Amended from 1992 Plan
Repealing Ordinance No. 92-547

John Miller - Mayor
City Council
Jim Baker, Bud Bartlett, Ken Gutzman, Jim Kluesner, Leo Marshall, Ron Radford

City Planning and Zoning Commissioners
Dennis Lyle – Chairman
Jesse Bender
Bud Borden
Vance Marvin
Fred Waidely

Teri Ottens – Planning Consultant
Daniel Maiyo – City Zoning Administrator

ELEMENT FOUR - Economic Development

The City of Salmon is charged with preparing and adopting an up-to-date economic development plan that includes an analysis of the economic base of the area including employment, industries, economies, jobs, and income levels. This element focuses on the analysis of the economic base of the area including employment, industries, economies, jobs, and income levels.

The county's basic economic sectors are services and retail (tied to tourism and ranch/farm activities), government, agriculture (ranching and mining), and construction (Source – Idaho Department of Commerce and Labor). Government (including schools) is a basic sector of the economy in many small, rural economies like Salmon because it brings tax revenues from the state and federal levels into the community.

Of the total number of jobs in all of Lemhi County (year 2000):

Wage and salary jobs – 60%
Agricultural jobs – 9%
Non-farm proprietors – 31%
Total – 100%

Lemhi County had a total of 4,330 jobs in 2001 with 308 businesses in the county with 60 retail establishments. The majority of these are located within the City of Salmon or within its area of impact.

Local economic development resources include the Chamber of Commerce and the Lemhi County Economic Development Council. In addition Salmon has Gem Community status, a designation given by the state once a community has met, planned for, and begun implementing economic development strategies. Also, such state agencies as the Idaho Department of Commerce can offer technical assistance and financial assistance in helping to seek out and locate businesses in the City of Salmon.

The Salmon Urban Renewal Agency impacts the downtown area in which some property taxes are returned to pay for public improvements. The downtown was revitalized several years ago with a downtown landscaping and parking plan to enhance the traffic flow and beautify the area for tourism.

Tourism has increasingly become a focus for the City of Salmon businesses. Visitors use the city as a base to participate in hunting, fishing and float trips on the Middle Fork and Main branches of the Salmon River, as well as general sightseeing and visits to historical sites. Another source of income is retirement and pension money coming into the county as retirees continue to choose the Salmon area as a place to retire. This income is not tracked by the state but should show a significant contribution to Salmon's economic picture when the 2010 census is completed.

The following table provided by the Idaho Department of Commerce showing tourism figures from 2005 for Lemhi County:

US$ millions	Transp-ortation	Food	Lodging	Entertain-ment	Shopping	Total	% of Total County Sales	% of State Tourism Sales
Visitor Spending	3.57	1.67	3.86	1.32	4.17	14.59	4%	0%

	Direct	Indirect	Induced	Total
Gross State Product (US$)	8,831,990	2,337,036	2,429,736	13,598,762
Wages (US$)	3,579,513	1,457,812	1,619,008	6,656,333
Employment	232	48	59	338

Federal Taxes (US$)	State & Local (incl. lodging tax, US$)	Total Tourism Taxes (US$)
1,288,936	856,707	2,145,642

The Sacajawea Historic Byway runs through Lemhi County and the City. This byway is ranked in the top ten in the Rockies and has received national recognition. The Sacajawea Interpretive, Cultural and Educational Center also serves to bring and keep visitors in the community that extra critical day to enjoy what Salmon has to offer. The Bitterroot Scenic Byway was recently awarded on Lost Trail Pass.

I. Goal

The City of Salmon should work with and through other federal, state and local agencies to support and stimulate economic development and growth that will diversify and strengthen the traditional mix of economic activity in the local marketplace and provide economic employment opportunities for local residents and to support timber, mining, agriculture, recreation, and other land uses that are compatible with existing uses and the lifestyles of the people of the area.

Objectives:

a. Identify the needs for economic stability and diversity for the next five years.
b. Recognize the potential challenges of transportation costs of both goods and people.
c. Coordinate economic development strategies between public government and agencies and private business.
d. Provide opportunities and incentives to attract new and innovative technologies to support living wage business.
e. Encourage proactive training and recruitment programs with local educational organizations.
f. Continue efforts to support economic opportunities related to the reestablishment of Native American cultural diversity and to promote and utilize existing resources, such as the Sacajawea Center.
g. Examine the possible uses of alternate sources of revenue.
h. Concentrate the focus of our local economy on agriculture, tourism, mining, timber, and light industry. Explore the impact and benefits on the influx of retirees and how they can be served.
i. Work towards identifying and developing alternative sustainable energy resources such as biofuels.
j. Identify vacant and underutilized commercial and industrial lands within the City and the Area of Impact that are not environmentally constrained (wetlands, high water table, flood zone, noise, air pollution, odor, lighting) that are suitable for development.

k. Work to identify and provide signage to markets, transportation systems, public facilities, police, and fire protection.
l. The City should recognize and encourage the economic opportunities and types of businesses that are best located within the city versus those best located out in the county.
m. Develop an accurate measure of the impacts of visitors to the region.

1. POLICY
The City of Salmon should work with federal, state and local agencies to explore opportunities and incentives that will encourage value-added, living wage businesses to expand and locate in the community; to attract new and innovative technologies, and identify existing resources that support sustainable living wage business; to diversify the mix of commerce and industry and employment opportunities for local residents; and to capitalize on the changing opportunities in the local and regional marketplace.

2. POLICY
The City of Salmon should coordinate and cooperate with Lemhi County, Lemhi County Economic Development Association (LCEDA), the Association of Idaho Cities (AIC), the governor's office, and the federal government to promote biofuels development within the County. This will encourage the utilization of sustainable natural resources, promote energy conservation, promote a sustainable economy, and to provide a location for the containment and transfer of biofuels for a future use in a biofuels plant.

3. POLICY
The City of Salmon should encourage labor training programs that match the mix of skills and occupations with the employment requirements of businesses now operating in the community or that are suitable prospects for locating in Salmon to catch a skilled labor force and prevent leakage to communities outside the region. The City shall also continue to promote and enhance the utilization of the Salmon Valley Business Innovation Center (SVBIC), the Incubator and the Industrial Park at the Salmon Airport.

4. POLICY
The City of Salmon should monitor the City's land development requirements concerning commercial and industrial development and remove any unwieldy restrictions and requirements to encourage the development of project ready sites.

5. POLICY
The City of Salmon should continue to support completion of Salmon Urban Renewal projects and to explore the creation of an economic resiliency plan to document the lessons learned and plan for Salmon's economic future.

6. POLICY
The City of Salmon should actively support and promote the county's efforts to preserve productive agricultural lands as one of its most valuable natural resource based industries.

As part of this effort the City shall support and encourage the development of locally grown

farm products, support and promote name face value for the sales of farm products, provide suitable locations in the city for the processing and sale of farm products, encourage and promote the utilization of sustainable natural resources, promote a sustainable regional economy and the preservation of productive agricultural lands and valuable natural resource based industries.

7. POLICY:
For a diverse and sustainable economy and to promote Salmon as a center for the study of geological, agricultural, and environmental sciences, the City of Salmon should actively promote outdoor recreational opportunities and tourism as one of its most valuable natural resource based industries, encourage the development of a wildlife education center, and explore the possibilities of promoting Salmon as a wildlife education center for the region.

8. POLICY
The City of Salmon should continue to support, promote, and enhance the Sacajawea Center as a valuable resource tool for introducing new business and cultural diversity to the community. This effort should highlight the Center's usefulness as a visitor information center and as an accurate measure of the impacts of tourism to the region, to prepare for the changing needs of the community and people passing through the area, and to promote Salmon as the regional multi-cultural, educational, tourism, and economic center.

II. Goal
The City of Salmon should maintain a healthy central business district which has few vacancies, and is attractive, clean and user friendly.

1. POLICY
The City of Salmon should continue to preserve the Historic District potential of downtown Salmon. The historic significance of several of the buildings has been recognized by their placement on the National Register of Historic Places. These buildings are all in the central part of Salmon and, along with a number of "contributing" structures, may form the nucleus of an historic district. The City should continue to support and promote publications on the downtown buildings and the businesses in them, and to support proper signage to recognize these facts.

2. POLICY
The City of Salmon should continue to update and implement the Downtown Plan, including reviewing urban renewal opportunities. The downtown development plan should continue to guide Salmon in capitalizing on this asset as a joint responsibility of city government and downtown property owners and tenants. The plan addresses circulation, parking, design, and management issues.

ELEMENT NINE - Transportation

The City of Salmon is charged with preparing and adopting an up-to-date plan that provides for safe and efficient traffic circulation that addresses the future needs of the City. This element provides an analysis of the systems of major traffic thoroughfares and other traffic ways and/or streets within the city.

Major Roadways

The main mode of transportation in the City of Salmon and Lemhi County is the automobile. There are two major roadways running through the city, Highways U.S. 93 and 28. U.S. Highway 93 enters the city on a north/south route that runs from Challis to the Montana border. This international highway extends from Alaska and through Mexico. Highway 28 intersects with Highway 93 from the east part of the county, connecting Salmon with Idaho Falls and the Snake River Plain.

The Idaho Transportation Department Rural Functional Classification Map identifies arterial and collector streets within the County. The county has jurisdiction over approximately 32 miles of paved roads and 5 miles of unpaved roads, with the exception of state and federal highways. Maintenance of roadways is done on an as-needed basis throughout the year. The Idaho Transportation Department has an access control policy that helps to limit accesses onto the state highways. Improvement of city streets is a continuing process.

The city is bisected by the Salmon River, which is crossed only by the Main Street (U.S. 93) bridge. The lack of a second river crossing does not cause traffic congestion, but there would be no fire department or ambulance access to the western half of the city if the single bridge were blocked by an accident or construction during an emergency. A second bridge might also be proposed as part of a U.S. Highway 93 "by-pass."

On April 7, 2004, a completed 2003 – 2023 Transportation Master Plan was ratified by the City Council and provides background studies to identify and recommend collector streets within the city. On December 16, 2009, the City adopted Resolution 2009-7, which officially adopted a Functional Classification Map designating collectors within the city limits.

The plan sets goals out to 2023 and discusses goals, objectives, and policies in the following areas:

- overall transportation network,
- pathways and sidewalks, and
- public transportation.

It provides a suggested Capital Improvements Plan setting out schedules for existing and future streets. This plan, as adopted and updated, shall serve, by adoption of the Comprehensive Plan update, as the official element of the Salmon Comprehensive Plan.

In 2009, the revised Idaho Local Mobility Management Network 6A Mobility Plan was adopted by the governmental jurisdictions in Lemhi County. This plan addresses public and human services transportation, bicycle/pedestrian services, vanpool and rideshare programs, and Park and Ride lots.

Public and Commercial Transportation
There is a public transportation service available to the area through TRPTA out of Salmon which provides service to Idaho Falls. Funding for this service is provided by Idaho Mobility Access Transportation funding. In addition, negotiations for a national bus system to serve the Salmon area are underway.

There are several commercial entities that provide transportation within and out of the City, mostly in the form of shipping, including both Federal Express and UPS.

Commercial and Private Air Service
The Lemhi County Airport, located five miles south of Salmon, serves the city and county residents. Charter flights are offered at all times by a private service and commercial flights are offered in the summer to Boise and McCall and in the winter to Boise. Many of the completed and planned improvements at the airport are partially funded by the Federal Aviation Administration.

I. Goal
The City of Salmon should update the 2003 City of Salmon's Transportation Plan's recommendations and goals and have the plan accepted by the state so that funding can follow. The City should also review that plan, in conjunction with the County's transportation planning efforts, to ensure that an analysis be prepared in coordination with the local jurisdiction(s) having authority over the public highways and streets, showing the general locations and widths of a system of major traffic thoroughfares and other traffic ways, and of streets and the recommended treatment thereof.

The City of Salmon should also ensure, through the Salmon Development Code, adequate building line setbacks, control of access, street naming and numbering, and a proposed system of public or other transit lines and related facilities, including rights-of-way, terminals, future corridors, viaducts, and grade separations.

The element should include aviation, bridges, emergency evacuation routes, and other related transportation facilities.

Objectives:

a. Coordinate street and highway development so as to enhance overall development of the City and ensure an efficient transportation system for the movement of people and goods.
b. Coordinate with all affected agencies to plan, construct, and maintain the transportation network.
c. Encourage proper design and transportation facilities to ensure maximum safety.
d. Encourage connectivity of street and highway systems.
e. Develop a pathways plan for bicycles, pedestrians, and the disabled, including safe routes to schools.
f. Coordinate evacuation routes with the hospital and emergency services.
g. Ensure unrestricted access for emergency vehicles.
h. Implement the Wildland Urban Interface plan, such as the evacuation routes, addressing catastrophic events such as a major fire.

i. Work to provide better transportation services to the area.

1. POLICY
The City of Salmon should adhere to Element One - Private Property Rights whenever the City seeks to acquire private property for a public right-of-way to prevent unconstitutional takings of private property for public use.

2. POLICY
The City of Salmon should coordinate with Lemhi County in adopting a major transportation plan linking major traffic thoroughfares and other traffic ways within the city limits to major transportation corridors and other traffic ways within the Area of City Impact.

A transportation facilities plan and an official map for highways, arterials, and collectors within the city limits and within the Area of City Impact should be prepared in coordination with the regional state highway district, Lemhi County, and other affected federal and state agencies.

This should be done to prepare for future growth in the City and the Area of City Impact and to reserve sufficient rights-of-way for future construction and widening of highways, arterials, and collectors.

Requests for street vacations should consider future pedestrian or traffic needs and concerns.

3. POLICY
A safe, convenient, and economical transportation system, adequate to serve anticipated growth in the city limits and within the Area of City Impact should be developed to minimize adverse social, economic, and environmental impacts and costs of the transportation systems to assure that development does not overburden roads or bring about excessive costs to the City or individuals.

4. POLICY
The City of Salmon should continue to require performance standards of all new development that requires clear vision at all points of access to a public street, including new intersecting streets and private driveways, to provide safe points of ingress and egress from a right-of-way or intersecting public or private streets, and to assure the safe distance of structures from rights-of-way.

The City should encourage development agreements to specify when and where certain on- and off-site transportation improvements, including curbs, gutters, and sidewalks, will be required. Maintenance needs should also be addressed.

5. POLICY
The City of Salmon should develop an access control plan that addresses the width and spacing of driveways along arterial roads and turning lanes, if necessary, to reduce acceleration, deceleration, and turning movements that reduce the efficiency and safety of arterials.

6. POLICY
The City of Salmon should work with the appropriate agencies to plan and provide for the safe and

convenient transportation of pedestrians, bicyclists, equestrians, the disabled and seniors, and motorized and non-motorized recreational vehicles.

7. POLICY
The City of Salmon should work with the Salmon School District to facilitate safe and efficient pedestrian routes for students to and from schools.

8. POLICY
The City of Salmon should coordinate with Lemhi County, Idaho Department of Transportation, and other affected state and federal agencies to assure emergency service and/or evacuation routes in and through the City and the Area of City Impact, including to and from schools and medical facilities, to protect human life and property, to protect the city watershed, and to protect those natural resources that may be viable to the economic well-being of the city.

This should include the continued exploration of the need for a second bridge across the Salmon River. Cooperation with the Idaho Transportation Department will be an essential part of the implementation of this strategy.

9. POLICY
The City of Salmon should coordinate with Lemhi County to avoid new road alignments, whenever reasonably feasible, that negatively impact farm lands within the Area Of City Impact.

10. POLICY
The City of Salmon should coordinate with Lemhi County to protect the approach and departure zones designated for the Salmon Airport and to protect the clearance areas needed for the hospital helicopter pad.

11. POLICY
The City of Salmon should encourage efforts to study public transportation options for its citizens, particularly for seniors and the disabled, as well as its visitors. This should include improving local services and researching funding options.

12. POLICY
The City of Salmon adopts the goals of the 2009 Idaho Local Mobility Management Network 6A Mobility Plan to address public transportation, pathways and other alternate transportation methods.

ELEMENT 10 – RECREATION

The key component to the Recreation Element is a description and interpretation of current recreation facilities and sites and future facilities and sites.

Popular seasonal recreational activities which both residents and visitors partake in include:

- Hunting and fishing
- Cross country ski trails and skiing
- Sledding and snow machining
- Floating and boating
- 4x4 trails utilization (ATV/motorcycles)
- Baseball/Softball
- Hockey
- Golf
- Horseback riding
- Mountain biking
- Hiking
- Swimming and pool related activities
- Soccer
- Skateboarding
- Wildlife and bird watching
- Tennis
- Kayaking

The potential for the expansion of these and the development of other recreational activities is great. All of these activities add to the tourism that Salmon experiences.

One aspect of Lemhi County's economy is continued development of recreation and tourism to stimulate the economy. The City of Salmon should continue to support the efforts to establish safe, environmentally-friendly recreational opportunities to promote increased prosperity for the City's citizens, new jobs for young people, and high quality community growth that emphasizes better pay, better public facilities, and a more diverse business community.

An inventory of Salmon recreation areas includes:

1) Island Park – This 16 acre park is located between channels of the Salmon River within the city limits. The park provides opportunities to explore natural areas, picnic locations, a six station fitness circuit, two boat ramps, a skateboard park, and more. The site has a pedestrian bridge that connects it to the Town Square Park on the other side of the Salmon River. A kayak park is planned for this site, to be built when funding becomes available.
2) Kid's Creek Park – This 7 acre park provides a small developed area with a playground and a pond for recreational activities. It is located along Highway 93 as a gateway to the city.
3) Town Square Park – This small park provides a green area in downtown and next to the Salmon River. The one acre park has landscaping and picnic areas for use by downtown employees, city residents and tourists alike.
4) Salmon City Park – Located east on Highway 28 is a 20 acre park providing ball fields and

parking areas. It also has facilities for horseshoe pits, tennis, basketball, volleyball, baseball and softball. The park is also the location of the only public swimming pool in Salmon. The pool is opened during the summer months and offers lessons, water aerobics, and open swim time.

5) Sacajawea Interpretive, Cultural and Education Center – This facility sits on 71 acres on Highway 28 just east of the city. It is dedicated to honoring and providing education about Sacajawea, an Agai Dike Lemhi Shoshone, and her role in the Corps of Discovery. It offers a museum, classrooms for public use, gardening programs, access to the Lemhi River, a nature trail, and other educational and recreational amenities.
6) Golf Course – The Salmon Valley Golf Course lies adjacent to the City Park and is a nine hole course. It is the site of many tournaments.
7) History Park – This small pocket park is located downtown and provides a compact local history lesson for the observer.
8) Hockey Rink – This hockey rink is owned by the City and leased to the hockey association. It is located a short distance off Highway 93 North, on the "Bar."

In addition to facilities, the local leagues offer many organized sports outside of the school system including:

- Baseball/Softball
- Basketball
- Football
- Soccer
- Hockey
- Bowling

The City of Salmon maintains a part-time staff to run recreational programs and facilities. These programs include tennis, golf, swimming, and horseback riding. Through fund raising efforts the City also offers scholarships to children who cannot afford to pay for programs. There is also a senior recreation program offered at the Senior Center involving various exercise and recreation programs for the seniors.

Tourism and Wildlife:

A 2001 National Survey of Fishing, Hunting and Wildlife-Associated Recreation for Idaho revealed that 868,000 Idaho residents and nonresidents 16 years and older fished, hunted, or wildlife-watched in Idaho in 2001, logging an astounding 9.8 million recreationist days. This translated to an annual statewide expenditure totaling $982 million.

Fish and wildlife recreation is a cornerstone of the conservation ethic and heritage of the nation, Idaho, and Lemhi County. The public's ability to access the lands and waterways that are the source of fish and wildlife-based recreation is key to fostering a conservation ethic for future generations. The City should continue to work with federal and state governments, developers, and private property owners to ensure that permanent public access is available to public lands and opportunities for new, environmentally-compatible access are encouraged.

I. Goal

The City of Salmon should provide and maintain sufficient parks and open space for the enjoyment of its residents and visitors.

Objectives

a. Continue to reevaluate City park and recreation plans to ensure that facilities and services meet existing and changing needs.
b. Continue to encourage a variety of recreational activities.
c. Encourage accessibility and availability of varied recreation activities to people of all ages including the disabled.
d. Encourage bicycle paths and walkways within the city.

1. POLICY
The City of Salmon should continue to develop Island Park as a major attraction. Salmon should take advantage of the location, size, and visibility of this site to provide a recreational amenity, such as a kayaking or water park, for residents and an attraction that will encourage travelers to linger in downtown Salmon.

2. POLICY
The City of Salmon should continue to work with Lemhi County Waterways on developing and improving boat ramps.

3. POLICY
The City of Salmon should continue efforts to maintain and improve Kid's Creek Park including better signage.

4. POLICY
The City of Salmon should work with the appropriate agencies and public groups to explore the future creation of a recreation district.

5. POLICY
The City of Salmon should actively promote compatible development along the Salmon and Lemhi Rivers as a valuable natural resource in order to:

- Assure quality development and public access to the Salmon and Lemhi Rivers,
- Encourage recreational and sportsmen use of Salmon and Lemhi Rivers, and
- Encourage tourism use of the rivers.

6. POLICY
The City of Salmon should continue to maintain and enhance the senior recreation program.

7. POLICY
The City of Salmon should continue to support the County and organizations that bring in multi-recreational events, such as equine, motorcycle, kayaking, biking, running, and arts events, and to likewise promote such events.

8. POLICY

The City of Salmon should continue to address needs of the physically challenged and increase both recreational programs and accessibility capacities for this population group.

9. POLICY
The City of Salmon should continue to explore, with other organizations and the private sector, the possibility of a kayaking park.

10. POLICY
The City of Salmon should continue to support the outdoor recreational industry.

11. POLICY
The City of Salmon should utilize the Development Code to encourage development of overnight accommodations in areas within the city to encourage visitors to the area to stop and remain for a time, to include camping sites and picnic areas, overnight restroom facilities, RV parks, and dump stations.

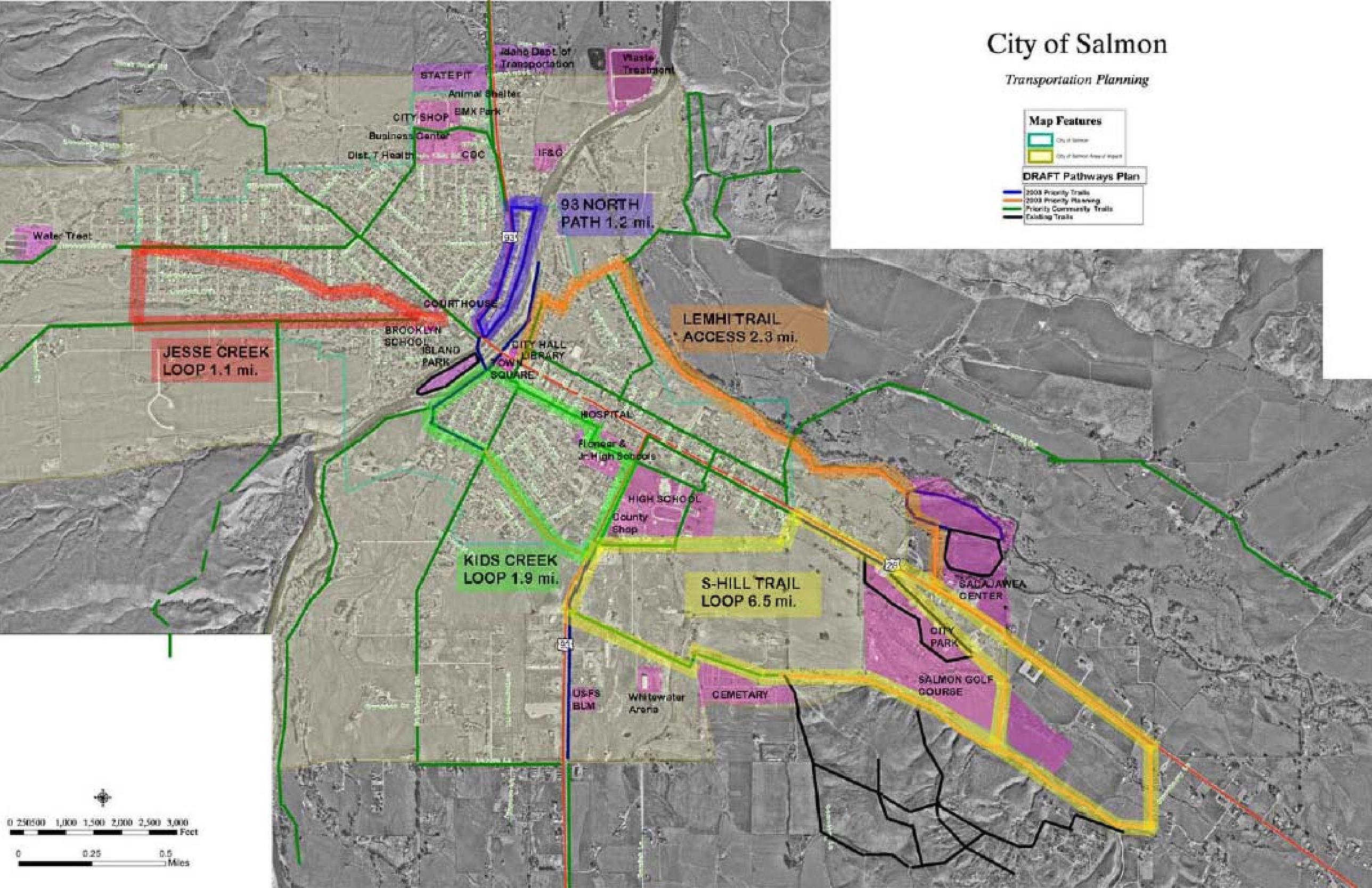
12. POLICY
Support fish and wildlife resource protection, restoration, and management that supports fish and wildlife-based recreation by:

- Maintaining and managing traditional public accesses and develop new public access in a manner consistent with fish and wildlife resource protection goals.
- Encourage private land owners to offer public access to recreational opportunities on public lands.
- Enhancing visitor services that emphasize and interpret the City of Salmon's unique fish and wildlife-based recreational attributes.

13. POLICY
The City should support a study of exploration of mixed use on the river within the city limits for safety and appropriateness and proper actions taken from recommendations of that study.

City of Salmon

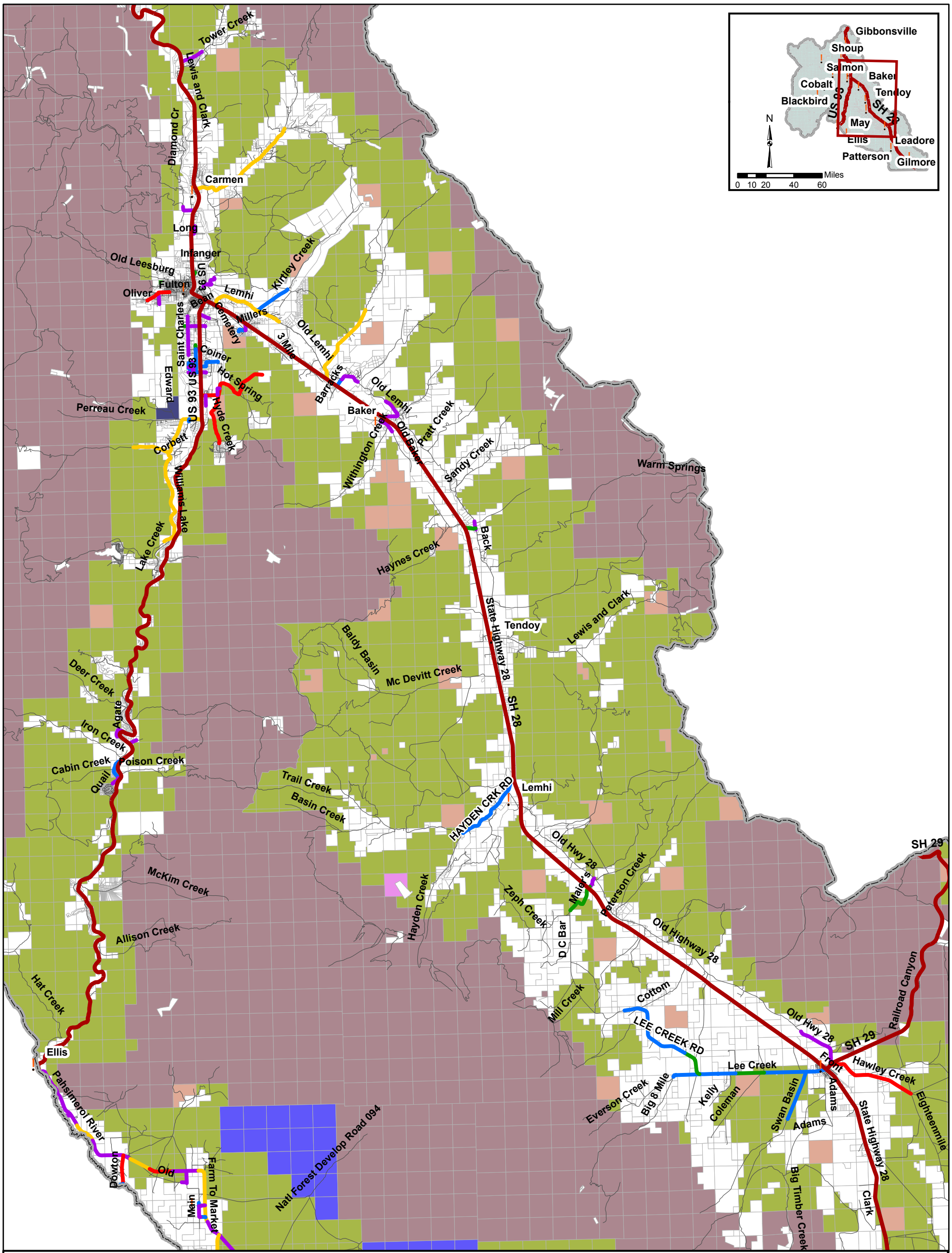
Transportation Planning



APPENDIX D

ROAD RATINGS

Paved Road Rating Map and Data
Gravel Road Rating Map and Data



This map represents a compilation of public information from diverse records gathered by Lemhi County and Holladay Engineering Company. The purpose for which this map is prepared is an overall general presentation of positional relationships, and not a definitve description of location of any class of objects or conditions. Hence, no responsibility for eerors can be or is assumed. Lemhi County and Holladay Engineering Company CANNOT AND DO NOT GUARANTEE the absence of errors or the corrections of all information furnished to them for the preparation of this map.

HOLLADAY ENGINEERING CO.
ENGINEERS · CONSULTANTS

N

Miles
0 1 2 4 6 8

1 in = 4 miles

Legend:

- Cities
- Lemhi County Limits
- Highways

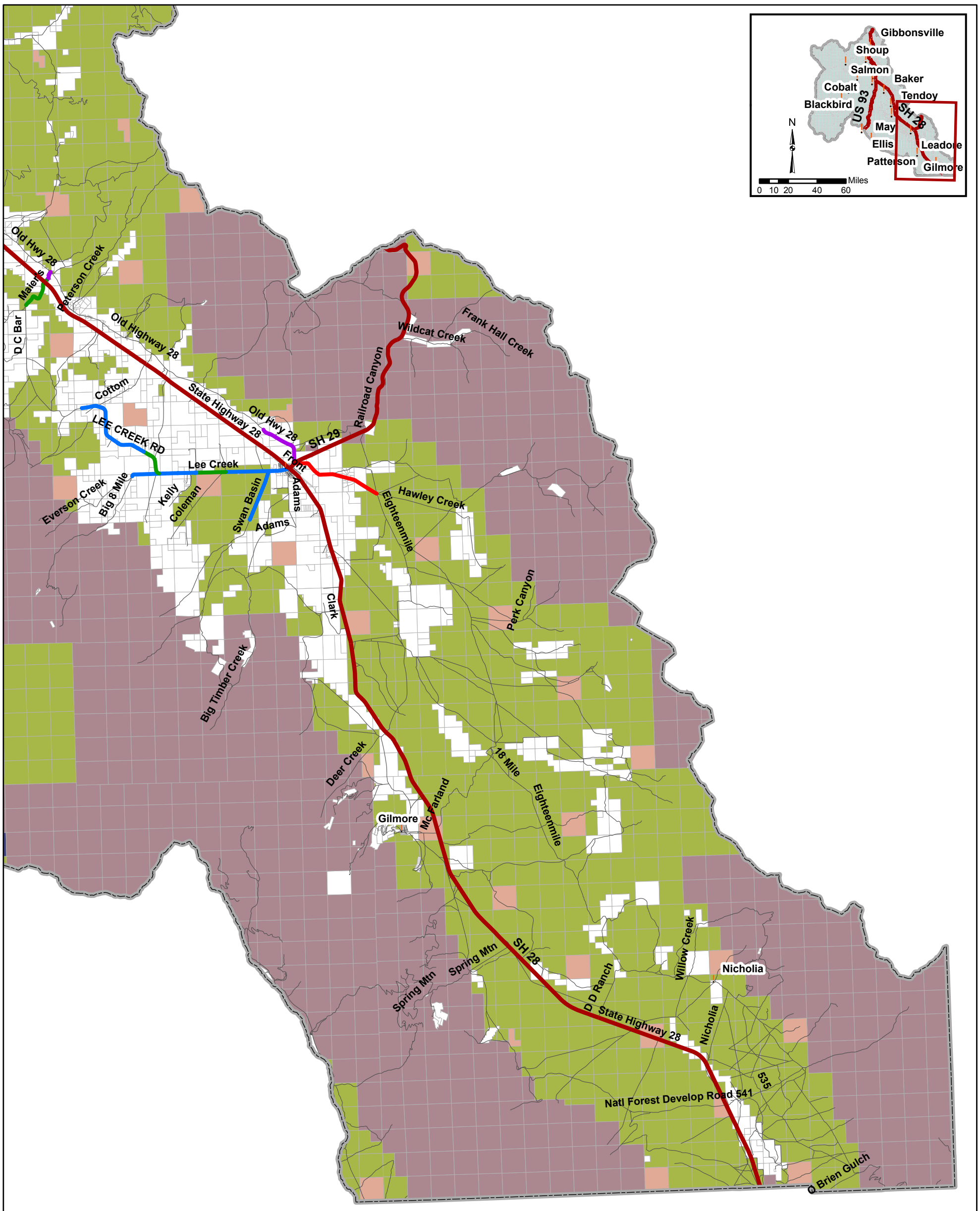
Paved Roads Rating

- 10.00 - 50.00
- 50.01 - 65.00
- 65.01 - 85.00
- 85.01 - 95.00
- 95.01 - 100.00

Lemhi County

COUNTY OF LEMHI EST. 1869

Paved Roads Rating - North



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HOLLADAY ENGINEERING CO.
ENGINEERS • CONSULTANTS

N

Miles
0 1 2 4 6 8

1 in = 4 miles

Legend:

- Cities
- Lemhi County Limits
- Highways

Paved Roads Rating

- 10.00 - 50.00
- 50.01 - 65.00
- 65.01 - 85.00
- 85.01 - 95.00
- 95.01 - 100.00

Lemhi County

COUNTY OF LEMHI EST. 1869

Paved Roads Rating - South

ROAD RATINGS for PAVED ROADS
(Sorted by Alphabetical Order)

ROAD NAME	SEGMENT LENGTH (MI)	PCI
17 MILE LN	0.468	97
AIRPORT LANE/LANDFILL	3.762	46
APACHE WAY	0.179	84
ARROWHEAD DR	0.453	74
BERSTEDT LN	0.345	79
BIG 8 MILE RD	1.201	95
CARMEN CREEK ROAD	5.042	53
CEMETERY ST / LANE	0.46	77
COINER LANE	0.946	88
CORBETT LANE	0.103	86
COTTONWOOD AVENUE	0.247	100
CROW ROAD	0.135	88
DEMICK LANE	0.271	81
DIAMOND CREEK ROAD	0.620	78
DOGWOOD LANE	0.458	79
DOWTON LN	1.483	55
E BANNOCK DR	0.046	81
E UTE ROAD	0.068	70
ELKHORN RD	0.548	77
FOURTH OF JULY CREEK	1.629	73
FUREY LN	1.899	57
GEERTSON CREEK	3.688	52
GIBBONSVILLE RD	0.983	60
GOLDBUG RD	0.346	81
HAMMON DRIVE	0.482	81
HAWLEY CREEK RD	3.823	48
HAYDEN CRK RD	3.417	91
HOOPER LN	2.390	53
IDEAL ACRES	0.446	84
INDUSTRIAL LANE	0.361	68
IRON CRK RD	0.062	81
ISLAND FARM	0.141	98
KIRTLEY CREEK ROAD	1.627	88
LEE CREEK RD	12.156	96
LEMHI RD	2.170	83
LEMHI ROAD	5.370	68
LOVERS LANE	0.478	70
MAIERS LN	0.522	80
MAIN ST	0.874	80

ROAD RATINGS for PAVED ROADS
(Sorted by Alphabetical Order)

ROAD NAME	SEGMENT LENGTH (MI)	PCI
MAY ACCESS RD	0.249	84
MOUNTAIN VIEW ROAD	0.525	84
N CHEROKEE LANE	0.164	98
NORTH BAKER ROAD	0.592	75
NORTH BARRACKS LANE	0.347	95
NORTH ST. CHARLES STREET	0.859	76
OLD HWY	0.211	67
OLD STAGE RD	1.218	86
OLIVER DRIVE/FULTON ROAD	1.370	46
PAHSIMEROI RD	26.826	72
PETERSON LN	0.520	76
RANCHETTE DRIVE	0.281	85
S CHEROKEE LANE	1.012	86
SOUTH BAKER ROAD	0.890	72
SOUTH ST CHARLES	1.290	73
SOUTH ST CHARLES	0.778	79
SOUTH ST CHARLES	2.068	75
SUMMER CREEK DRIVE	0.020	85
SUNSET HEIGHTS	2.267	49
THOMAS AVENUE	0.358	91
TIMBER CREEK RD	2.195	86
TOWER CREEK ROAD	1.001	71
VALLEY VIEW HEIGHTS	0.289	82
W BANNOCK DR	0.429	92
W UTE ROAD	0.149	80
WILLIAMS CREEK ROAD	3.989	63
WILLIAMS LAKE ROAD	5.208	61

PAVED ROAD RATINGS BY SEGMENT
(Sorted by Rating)

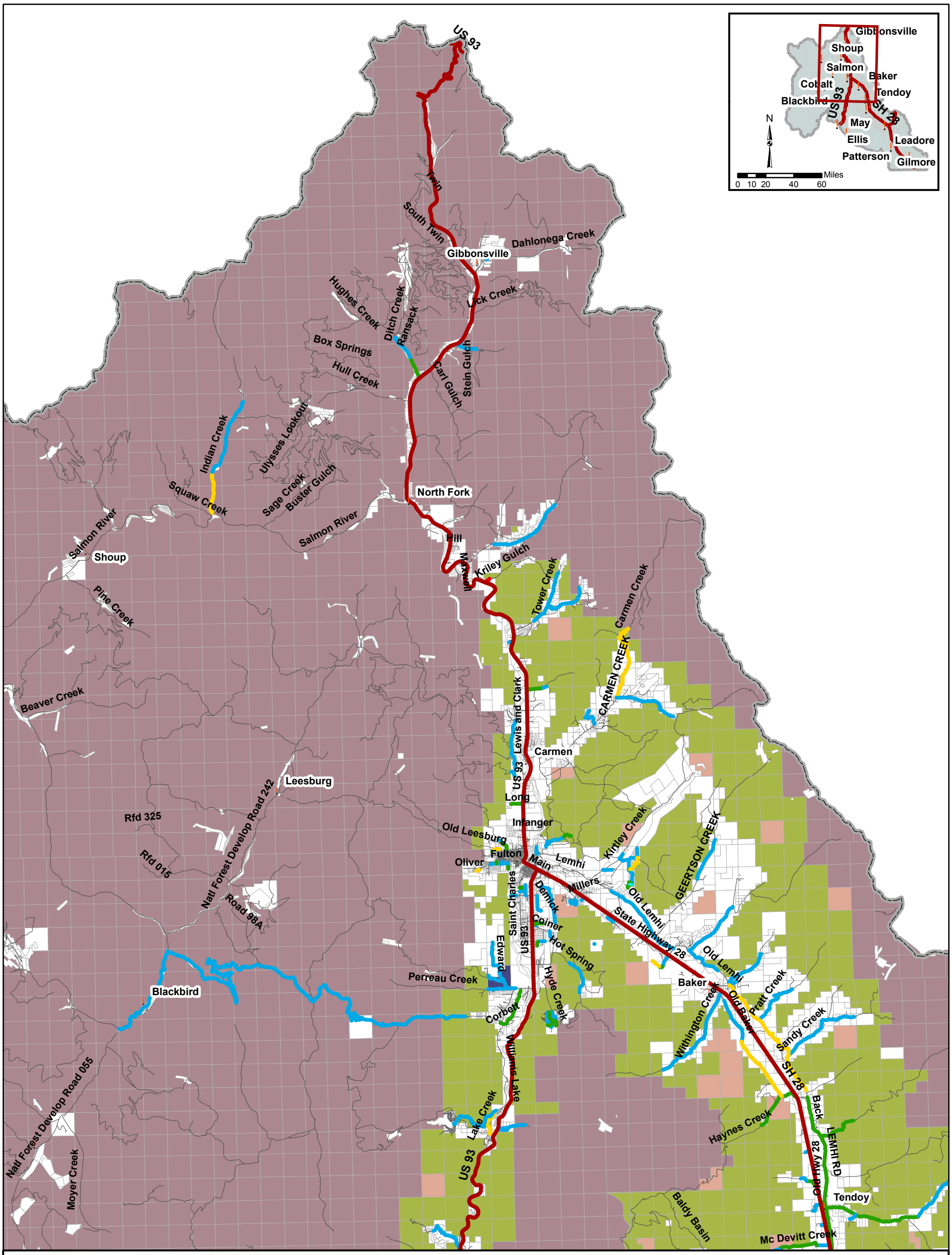
Road Name	From Address	To Address	Segment Length (mi)	PCI
AIRPORT LANE/LANDFILL	HIGHWAY 93	LANDFILL	3.76	46.0
OLIVER DRIVE/FULTON ROAD	SOUTH 9TH STREET	45D10'24.97"N, 113D56'18.91"W	1.37	46.0
DOWTON LN	PAHSIMEROI RD	44D37'11.317"N,113D58'39.230"W	1.23	47.0
HAWLEY CREEK RD	HIGHWAY 29	EIGHTEEN MILE CREEK	3.82	48.0
SUNSET HEIGHTS	AIRPORT LANE/LANDFILL	SUNFLOWER ROAD	2.27	49.0
PAHSIMEROI RD	LITTLE MORGAN CREEK	44D37'39.032"N,113D56'14.259"W	1.01	49.0
HOOPER LN	44D33'51.133"N,113D53'46.627"W	44D33'14.935N,113D53'46.457"W	0.77	51.0
GEERTSON CREEK	HWY 28	45D9'52.34"N, 113D44'45.55"W	3.69	52.0
CARMEN CREEK ROAD	HWY 93	FREEMAN CREEK	5.04	53.0
FUREY LN	PAHSIMEROI RD	44D31'32.258"N,113D50'27.757"W	1.49	53.0
PAHSIMEROI RD	LITTLE MORGAN CREEK RD	44D37'25.598"N,113D54'21.026	0.95	54.0
HOOPER LN	PAHSIMEROI RD	44D33'51.133"N,113D53'46.627"W	1.61	54.0
PAHSIMEROI RD	DOWTON LN	LITTLE MORGAN CREEK	0.95	55.0
PAHSIMEROI RD	44D37'25.598"N,113D54'21.026	44D35'52.489"N,113D54'19.934"W	1.48	55.0
PAHSIMEROI RD	44D32'51.783"N,113D46'10.382"W	44D31'20.100"N,113D42'40.412"W	2.96	59.0
GIBBONSVILLE RD	HIGHWAY 93 45D32'45.7"N,113D55'46.838"W	END 45D33'22.696"N,113D55'10.532"W	0.98	60.0
PAHSIMEROI RD	44D39'13.76"N,114D00'45.751"W	44D38'31.566"N,114D00'03.441"W	0.98	60.0
WILLIAMS LAKE ROAD	WILLIAMS CREEK RD	LAKE CREEK RD	5.21	61.0
WILLIAMS CREEK ROAD	HIGHWAY 93	45D4'54.57"N, 113D57'14.23"W	3.99	63.0
LEMHI ROAD	CITY LINE	END OF PAVEMENT	3.30	63.0
PAHSIMEROI RD	44D37'39.032"N,113D56'14.259"W	LITTLE MORGAN CREEK	1.12	66.0
OLD HWY	44D37'13.69"N, 113D55'33.01"W	PETERSON LN	0.21	67.0
INDUSTRIAL LANE	AIRPORT LANE/LANDFILL	AIRPORT LANE/LANDFILL	0.36	68.0
LEMHI ROAD	45D1'49.13"N, 113D39'15.99"W	17 MILE RD	0.36	68.0
PAHSIMEROI RD	HOOPER LN	FALLS CREEK	1.36	69.0
LOVERS LANE	SOUTH ST.CHARLES ST	HWY 93	0.48	70.0
E UTE ROAD	HAMMON DR	45D7'52.16"N, 113D53'56.00"W	0.07	70.0
TOWER CREEK ROAD	HIGHWAY 93 45D19'22.990"N,113D54'12.551"W	START OF UNPAVED SECTION	1.00	71.0
SOUTH BAKER ROAD	HIGHWAY 28	45D5'16.20"N, 113D43'30.11"W	0.89	72.0
PAHSIMEROI RD	44D38'18.236"N,113D59'40.323"W	DOWTON LN	1.06	72.0
FUREY LN	44D31'32.258"N,113D50'27.757"W	COUNTY LINE	0.40	72.0
SOUTH ST CHARLES	ISLAND FARM RD	45D8'19.82"N, 113D54'12.00"W	1.29	73.0
FOURTH OF JULY CREEK	HIGHWAY 93 45D21'54.096"N,113D56'36.868"W	START OF DIRT SEGMENT	1.63	73.0
LEMHI ROAD	45D6'24.98"N, 113D43'47.90"W	SKINNER RANCH ROAD	0.84	73.0
PAHSIMEROI RD	FALLS CREEK	44D33'02.198"N,113D50'41.701"W	1.48	73.0
MAIN ST	44D35'54.559"N,113D54'39.617"W	MAY ACCESS RD 44D36'18.445"N,113D54'40.381"W	0.50	73.0
ARROWHEAD DR	45D10M115.985/113D55M40.910W	FULTON ROAD	0.45	74.0
PAHSIMEROI RD	44D40'32.584"N,114D01'50.756"W	BERSTEDT LN	1.30	74.0
NORTH BAKER ROAD	LEMHI ROAD	HWY 28	0.59	75.0
PAHSIMEROI RD	44D38'31.566"N,114D00'03.441"W	44D38'18.236"N,113D59'40.323"W	1.02	75.0
NORTH ST. CHARLES STREET	COUNTY LINE	45D11'09.475"N,113D52'43.154"W	0.86	76.0
PETERSON LN	OLD HWY	PAHSIMEROI RD	0.52	76.0
CEMETERY ST / LANE	HIGHWAY 93	45D9'41.58"N, 113D53'3.93"W	0.46	77.0

PAVED ROAD RATINGS BY SEGMENT
(Sorted by Rating)

Road Name	From Address	To Address	Segment Length (mi)	PCI
PAHSIMEROI RD	P MILLER RD	COUNTY LINE	3.10	77.0
MAIERS LN	LEMHI RD	BRIDGE	0.44	77.0
ELKHORN RD	ANTELOPE RD	ANTLER WAY	0.17	77.0
ELKHORN RD	ANTLER WAY	SAGE WAY	0.07	77.0
ELKHORN RD	SAGE WAY	CAMAS WAY	0.06	77.0
ELKHORN RD	CAMAS WAY	LUPINE WAY	0.06	77.0
ELKHORN RD	LUPINE WAY	ASPEN WAY	0.08	77.0
DIAMOND CREEK ROAD	HWY 93	STORMY PEAK ROAD	0.62	78.0
DOGWOOD LANE	HWY 93	45D13'10.93"N, 113D53'42.81"W	0.46	79.0
SOUTH ST CHARLES	COUNTY LINE	ISLAND FARM RD	0.78	79.0
BERSTEDT LN	PAHSIMEROI RD	COUNTY LINE	0.34	79.0
ELKHORN RD	HWY 93	ANTELOPE RD	0.09	79.0
OLDSTAGE RD	REDWOOD RD	BLUE HERON DR	0.37	79.0
MOUNTAIN VIEW ROAD	HAMMON DR	END 45D7'40.47"N, 113D54'13.65"W	0.21	80.0
W UTE ROAD	HAMMON DR	BANNOCK	0.15	80.0
PAHSIMEROI RD	HIGHWAY 93	44D40'32.584"N,114D01'50.756"W	0.81	80.0
PAHSIMEROI RD	BURSTEDT LN	44D39'13.76"N,114D00'45.751"W	0.87	80.0
DEMICK LANE	HIGHWAY 93	45D9'23.40"N, 113D53'16.60"W	0.27	81.0
HAMMON DRIVE	MOUNTAIN VIEW RD	45D8'4.94"N, 113D54'1.46"W	0.48	81.0
E BANNOCK DR	HAMMON DR	45D7'45.71"N, 113D53'56.15"W	0.05	81.0
GOLDBUG RD	HWY 93	CUL D SAC	0.35	81.0
IRON CRK RD	HWY 93	OLD STAGE RD	0.06	81.0
VALLEY VIEW HEIGHTS	HIGHWAY 28	EDIE ST	0.29	82.0
LEMHI RD	JUNCTION RD	HWY 29	0.83	82.0
IDEAL ACRES	AIRPORT LANE/LANDFILL	45D6'24.66"N, 113D53'20.38"W	0.45	84.0
APACHE WAY	HWY 93	CHEROKEE LANE	0.18	84.0
PAHSIMEROI RD	44D35'52.489"N,113D54'19.934"W	HOOPER LN	1.12	84.0
MAY ACCESS RD	PAHSIMEROI RD	MAIN ST	0.25	84.0
LEMHI RD	END OF GRAVEL	JUNCTION RD	1.34	84.0
RANCHETTE DRIVE	SUMMER CREEK RD	HIGHWAY 93	0.28	85.0
SUMMER CREEK DRIVE	RANCHETTE DR	45D7'39.29"N, 113D53'17.67"W	0.02	85.0
LEMHI ROAD	NORTH BARRACKS LANE	BOHANNON CREEK ROAD	0.86	85.0
S CHEROKEE LANE	APACHE WAY	MOUNTAIN VIEW RD	1.01	86.0
MOUNTAIN VIEW ROAD	HAMMON DR	HWY 93	0.32	86.0
CORBETT LANE	PERREAU CREEK	45D5'50.18"N, 113D54'15.88"W	0.10	86.0
MAIN ST	PAHSIMEROI RD	44D35'54.559"N,113D54'39.617"W	0.22	86.0
TIMBER CREEK RD	END GRAVEL RD	LEE CREEK RD	2.20	86.0
LEE CRK RD	END OF GRAVEL	COTTOM LN	0.69	86.0
CROW ROAD	HAMMON DR	W BANNOCK ST	0.14	88.0
COINER LANE	HIGHWAY 93	45D8'2.62"N, 113D52'38.52"W	0.95	88.0
KIRTLEY CREEK ROAD	LEMHI ROAD	KIRTLEY CREEK HEIGHTS	1.63	88.0
PAHSIMEROI RD	FUREY LN	44D32'51.783"N,113D46'10.382"W	4.01	88.0
OLD STAGE RD	IRON CRK RD	BALSAM RD	0.43	88.0
OLD STAGE RD	EAGLE CR	BALSAM RD	0.15	88.0
PAHSIMEROI RD	44D31'20.100"N,113D42'40.412"W	P MILLER RD	0.56	90.0
OLD STAGE RD	EAGLE CR	BLUEBIRD CR	0.20	90.0
OLD STAGE RD	REDWOOD RD	BLUEBIRD CR	0.07	90.0
THOMAS AVENUE	EDIE ST	45D9'10.57"N, 113D51'30.57"W	0.36	91.0

PAVED ROAD RATINGS BY SEGMENT
(Sorted by Rating)

Road Name	From Address	To Address	Segment Length (mi)	PCI
HAYDEN CRK RD	HWY 28	LEMHI RD	0.58	91.0
HAYDEN CRK RD	LEMHI RD	44D51'23.01"N,113D38'11.77"W	0.50	91.0
HAYDEN CRK RD	LEMHI RD	BRIDGE	1.72	91.0
HAYDEN CRK RD	BRIDGE	BASIN CRK RD	0.62	91.0
W BANNOCK DR	HAMMON DR	45D8'2.46"N, 113D54'11.65"W	0.43	92.0
DOWTON LN	44D37'11.317"N,113D58'39.230"W	COUNTY LINE	0.26	92.0
MAIN ST	MAY ACCESS RD 44D36'18.445"N,113D54'40.381"W	44D36'26.32"N, 113D54'40.40"W	0.16	93.0
LEE CREEK RD	BIG CULVERT	COTTOM LN	3.25	93.0
NORTH BARRACKS LANE	HWY28	LEMHI ROAD	0.35	95.0
PAHSIMEROI RD	44D33'02.198"N,113D50'41.701"W	FUREY LN	0.69	95.0
LEE CREEK RD	HWY 28	TIMBER CREEK RD	0.88	95.0
LEE CREEK RD	TIMBER CREEK RD	PURCELL LN	1.81	95.0
LEE CREEK RD	MUSTANG RD	Y INTERSECTION	1.59	95.0
BIG 8 MILE RD	LEE CREEK RD	TWO DOT RANCH	0.86	95.0
BIG 8 MILE RD	TWO DOT RANCH	END PAVEMENT	0.34	95.0
17 MILE LN	HWY 28	LEMHI RD	0.47	97.0
ISLAND FARM	SOUTH ST CHARLES ST	45D9'25.37"N, 113D54'22.52"W	0.14	98.0
N CHEROKEE LANE	APACHE WAY	45D8'41.94"N, 113D53'49.09"W	0.16	98.0
MAIERS LN	BRIDGE	HWY 28	0.08	98.0
COTTONWOOD AVENUE	HWY 93	HWY 93	0.25	100.0
LEE CREEK RD	PURCELL LN	MUSTANG RD	1.24	100.0
LEE CREEK RD	BIG 8 MILE RD	1228 LEE CREEK	0.66	100.0
LEE CREEK RD	1228 PETERSON	BIG CULVERT	0.55	100.0
LEE CREEK RD	HWY 28	END OF PAVEMENT	1.49	100.0



This map represents a compilation of public information from diverse records gathered by Lemhi County and Holladay Engineering Company. The purpose for which this map is prepared is an overall general presentation of positional relationships, and not a definitive description of location of any class of objects or conditions. Hence, no responsibility for eerors can be or is assumed. Lemhi County and Holladay Engineering Company CANNOT AND DO NOT GUARANTEE the absence of errors or the corrections of all information furnished to them for the preparation of this map.

HOLLADAY ENGINEERING CO.
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N

Miles
0 1 2 4 6 8

1 in = 4 miles

Legend:

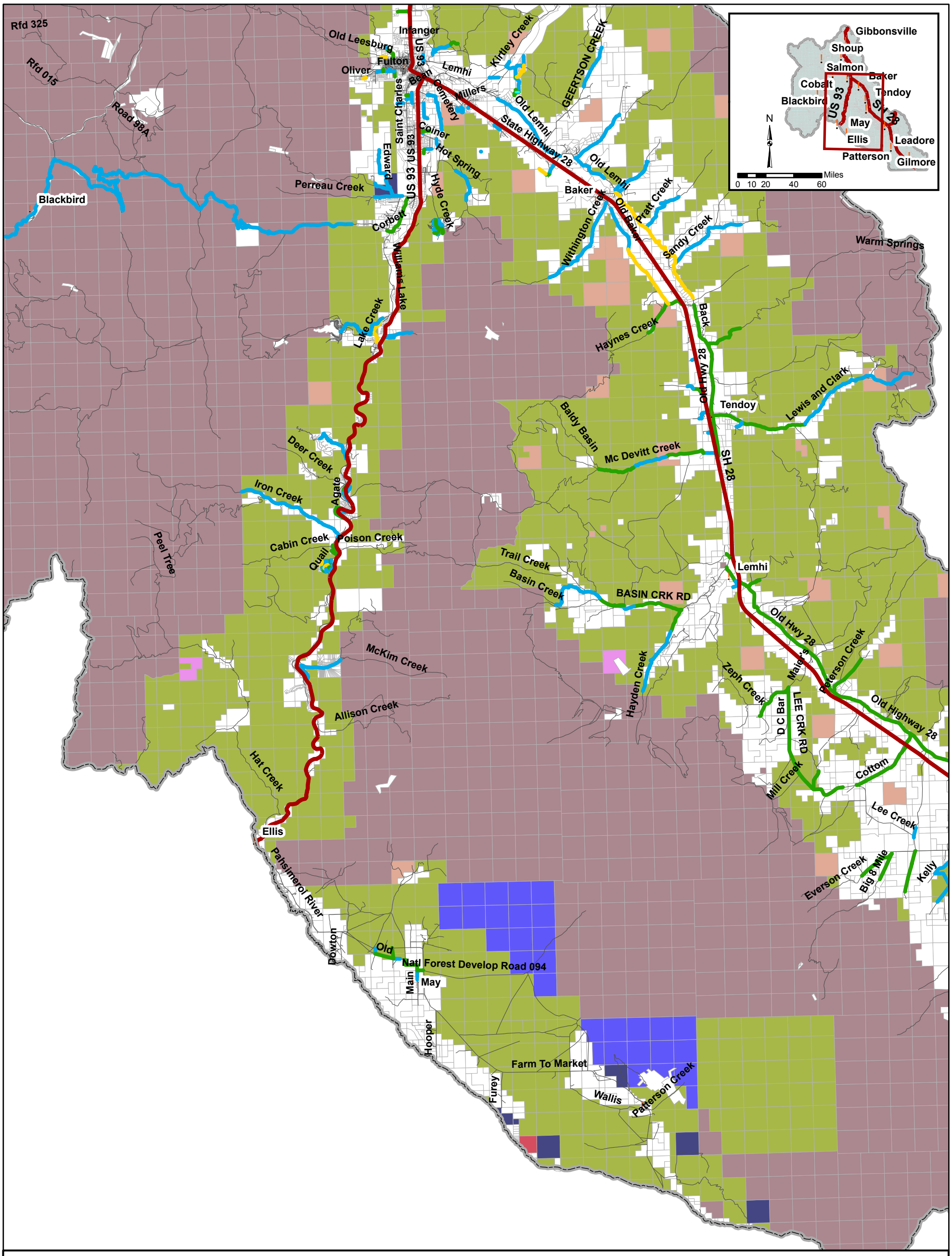
- Cities
- Lemhi County Limits
- Highways

Gravel Roads Rating

- 10.00 - 30.00
- 30.01 - 50.00
- 50.01 - 85.00
- 85.01 - 100.00

Lemhi County

Gravel Roads Rating - North



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N

Miles
0 1 2 4 6 8

1 in = 4 miles

Legend:

- Cities
- Lemhi County Limits
- Highways

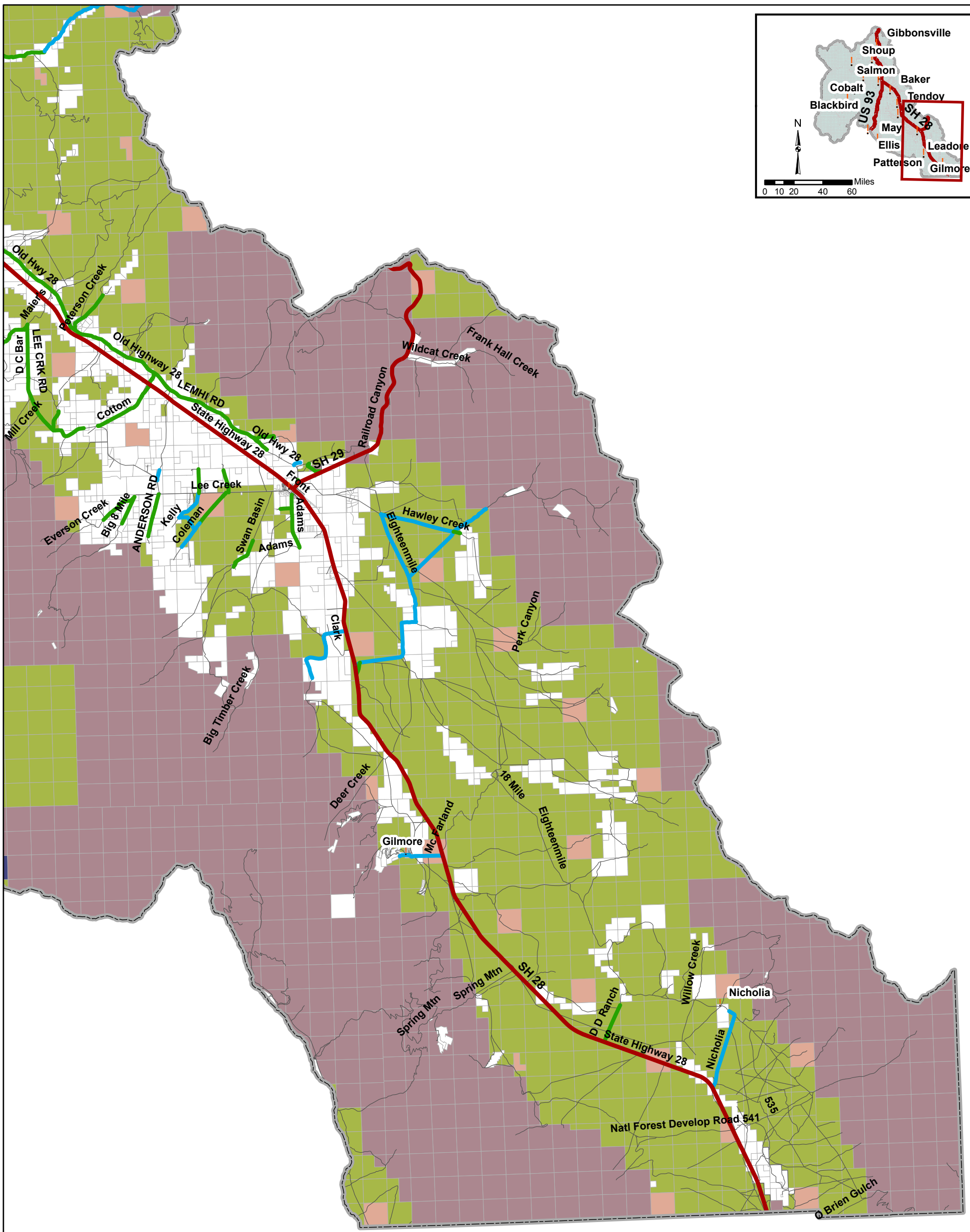
Gravel Roads Rating

- 10.00 - 30.00
- 30.01 - 50.00
- 50.01 - 85.00
- 85.01 - 100.00

Lemhi County

COUNTY OF LEMHI EST. 1869

Gravel Roads Rating - Central



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N

Miles
0 1 2 4 6 8

1 in = 4 miles

Legend:

- Cities
- Lemhi County Limits
- Highways

Gravel Roads Rating

- 10.00 - 30.00
- 30.01 - 50.00
- 50.01 - 85.00
- 85.01 - 100.00

Lemhi County

Gravel Roads Rating - South

ROAD RATINGS FOR GRAVEL ROADS
(Sorted by Alphabetical Order)

Road Name	Length (mi)	SCI
12 MILE CRK RD	1.20	81
12 MILE LN	0.43	63
3 MILE LANE	0.45	66
ADAMS DRIVE	0.12	80
ADAMS RANCH RD	2.28	93
AGATE DR	0.86	85
AGENCY CRK RD	10.20	83
AIRPORT LANE/LANDFILL	0.02	74
ANDERSON RD	1.83	90
ANN LANE	0.09	86
ANTELOPE RD	0.49	90
ANTLER WAY	0.10	100
APPLE WAY	0.07	93
ASPEN WAY	0.07	100
BALDY BASIN LN	0.91	83
BALDY MOUNTAIN RD	1.27	74
BALSAM RD	0.10	89
BANTA DRIVE	0.32	80
BASIN CRK RD	7.35	85
BIG 8 MILE RD	1.23	88
BITTEROOT RD	0.08	100
BLACKROCK ROAD	1.16	75
BLM DRIVE	0.44	73
BLUE ASH DR	0.13	76
BLUE CAMAS ROAD	0.45	83
BLUE HERON DR	0.52	76
BLUE SPRUCE RD	0.10	86
BLUEBELL LANE	0.14	88
BLUEBIRD CR	0.28	88
BOHANNON CREEK RD	2.79	65
BUTTERCUP LANE	0.14	88
CABIN RD	0.08	89
CAMAR WAY	0.08	100
CANYON CR	0.77	95
CARMEN CREEK	4.32	46
CEDAR DR	0.12	76
CEMETERY ST / LANE	2.25	69
COCKRELL ROAD	0.40	85
COINER LANE	0.33	59
COLD SPRINGS RD	3.50	80

ROAD RATINGS FOR GRAVEL ROADS
(Sorted by Alphabetical Order)

Road Name	Length (mi)	SCI
CORBETT LANE	1.99	88
COTTOM LN	3.62	95
CRYSTAL RD	0.11	77
DEEP CREEK ROAD	11.53	72
DEMICK LANE	0.76	72
DIAMOND CREEK ROAD	2.98	71
DIRT ROAD	0.25	81
DRIVEWAY	0.67	93
DRIVEWAY	0.17	93
E CHUKAR CIR	0.48	50
EAGLE CR	0.21	89
EAST TOWER CREEK ROAD	2.09	61
EIGHTEEN MILE RD	9.29	72
ELKHORN RD	0.76	81
EVERGREEN ROAD	0.26	73
FAWN LN	0.05	90
FOURTH OF JULY CREEK RD	4.42	63
FREEMAN CREEK	3.04	68
GALENA GRADE RD	0.53	79
GARNET RD	0.07	80
GEERTSON CREEK	1.92	82
GIBBONSVILLE ROAD	0.07	62
GILMORE CREEK	1.82	80
GORLEY CREEK	2.09	76
GRADY RD	1.71	89
GRANITE RD	0.06	87
GUTH ROAD	0.43	75
HAWLEY CREEK RD	3.39	82
HAYDEN CRK RD	4.11	82
HAYNES CREEK LANE	2.34	90
HEATHER LANE	0.16	80
HOT SPRINGS RANCH LANE	0.76	88
HOT SPRINGS RANCH RD	0.39	79
HOT SPRINGS ROAD	1.61	78
HUGHES CK ROAD	2.18	87
INDIAN CREEK ROAD	5.72	60
IRIS LANE	0.32	88
IRON CRK RD	5.07	79
ISLAND FARM	0.25	74

ROAD RATINGS FOR GRAVEL ROADS
(Sorted by Alphabetical Order)

Road Name	Length (mi)	SCI
JADE DR	0.21	82
JENSON LN	0.18	80
JOKES CANYON	1.00	97
JUNCTION RD	0.31	85
KELLY CIRCLE	0.06	79
KIRTLEY CREEK HEIGHTS	0.45	64
KIRTLEY CREEK ROAD	0.65	67
KNIGHT RANCH RD	0.37	77
KRILEY GULCH	0.26	21
LAKE CREEK ROAD	1.75	43
LEE CRK RD	6.29	88
LEESBURG ROAD	0.89	50
LEMHI RD	24.59	94
LEMHI ROAD	11.98	56
LORI LANE	0.14	73
LUPINE WAY	0.08	100
MABEY LN	0.18	75
MCDEVITT CRK RD	5.53	87
MCKIM CRK RD	2.61	65
MELANIE DRIVE	0.77	72
MOORE CREEK ROAD	0.52	86
MORSE CREEK RD	0.25	88
MUD CREEK	1.67	88
MUSTANG LN	0.96	81
MUSTANG RD	3.34	80
NICHOLIA RANCH RD	3.46	74
NORTH HAWK RD	0.11	92
NORTH PRIMROSE DRIVE	0.37	88
NORTH ST. CHARLES STREET	1.53	84
OAK DR	0.12	76
OBSIDIAN RD	0.29	68
OLD HWY	1.10	89
OLDSTAGE RD	0.88	74
OLIVER DRIVE	0.14	49
OPAL RD	0.04	82
PANTHER CREEK ROAD	5.08	77
PARMENTER ROAD	0.89	56
PERREAU CREEK	2.67	84
PETERSON CRK RD	1.96	92

ROAD RATINGS FOR GRAVEL ROADS
(Sorted by Alphabetical Order)

Road Name	Length (mi)	SCI
PETERSON LN	1.79	80
PHEASANT RD	0.92	87
PRATT CREEK ROAD	2.48	76
PRICE CREEK ROAD	3.54	48
PRIMROSE LANE	0.11	79
PURCELL LN	3.89	84
QUAIL RD	0.56	90
RAMSEY MTN RD	0.65	90
RANCH CREEK RD	4.37	77
RANCHETTE DRIVE	0.26	74
RATTLESNAKE CRK RD	0.06	80
RED ROCK STAGE ROAD	1.94	74
REDWOOD RD	0.49	90
RUBY LANE	0.37	90
SAGE BRUSH AVE	0.13	92
SAGE HEN RD	0.31	69
SAGE WAY	0.09	100
SAGEBRUSH AVENUE	1.08	74
SANDY CREEK ROAD	3.76	70
SHEEP CREEK ROAD	1.32	69
SHORT ROAD	0.24	90
SILVERCLOUD LN	0.16	75
SKINNER RANCH ROAD	0.37	58
SLEEPING BEAUTY	0.41	71
SOUTH 9TH STREET	0.34	86
SOUTH BARRACKS LANE	1.10	70
SOUTH HAWK RD	0.19	95
STORMY PEAK ROAD	0.93	81
STRAWBERRY LANE	0.16	67
SUMMER CREEK DRIVE	0.17	90
SUNFLOWER ROAD	0.86	83
SUNSET HEIGHTS	0.45	88
SYRINGA DR	0.19	89
TENDOY LN	0.18	87
THOMAS AVENUE	0.11	67
TIMBER CR RD	1.46	96
TOWER CREEK ROAD	2.53	60
TWIN PEAK RANCH RD	2.01	80
TWIN SISTER CIRCLE	0.07	78

ROAD RATINGS FOR GRAVEL ROADS
(Sorted by Alphabetical Order)

Road Name	Length (mi)	SCI
VIOLA LN	0.60	74
W ADAMS RANCH RD	0.47	92
W CHUKAR CIR	0.39	50
WAGONWHEEL ROAD	0.45	74
WARM SPRINGS RD	1.90	92
WAXWING RD	0.17	83
WHISPER RIDGE DRIVE	0.41	71
WHISPER RIDGE RD	1.50	42
WHITETAIL DR	0.31	66
WHITWORTH DR	0.46	86
WILD ROSE RD	0.17	88
WILLIAMS CREEK ROAD	13.77	70
WILLIAMS LAKE ROAD	3.25	61
WILLOW TREE DR	0.14	76
WIMPEY CREEK ROAD	2.02	76
WITHINGTON CREEK ROAD	4.49	61
ZEPH CRK RD	2.05	91

GRAVEL ROAD RATINGS BY SEGMENT
(Sorted by Rating)

Road Name	From Address	To Address	Segment Length (mi)	SCI
KRILEY GULCH	HIGHWAY 93 45D21'12.959"N,113D55'36.623"W	45D21'25.656"N,113D55'02.302"W	0.26	21.0
CARMEN CREEK	CATTLE GUARD 45D18M57.632N/113D48M31.332W	FOREST SERVICE LINE	1.07	40.0
WHISPER RIDGE RD	BLM DRIVE	45D10'18.117"N,113D48'18.953"W	0.73	41.0
WHISPER RIDGE RD	BLM DRIVE	45D10'18.117"N,113D48'18.953"W	0.73	41.0
LAKE CREEK ROAD	WILLIAMS LAKE RD	45D0'2.75"N, 113D56'12.21"W	1.75	43.0
CARMEN CREEK	CARMEN CREEK (BRIDGE)	CATTLE GUARD 45D18M57.632N/113D48M31.332W	0.47	44.0
LEMHI ROAD	SKINNER RANCH ROAD	45D1'49.13"N, 113D39'15.99"W	6.51	46.0
W CHUKAR CIR	END	OAK DR	0.12	46.0
W CHUKAR CIR	44D52'01.64"N, 113D59'16.64"W	OAK DR	0.15	46.0
W CHUKAR CIR	OLDSTAGE RD	44D52'01.64"N, 113D59'16.64"W	0.06	46.0
E CHUKAR CIR	Y JUNCTION	Y JUNCTION	0.43	47.0
PRICE CREEK ROAD	45D04'05.400"N,113D42'34.708"W	HAYNES CREEK LANE	2.99	48.0
PRICE CREEK ROAD	45D04'05.400"N,113D42'34.708"W	45D02'52.06"N, 113D41'45.60"W	0.54	48.0
CARMEN CREEK	FREEMAN CREEK	CARMEN CREEK (BRIDGE)	2.79	49.0
OLIVER DRIVE	PRIVATE DRIVE	45D10'22.85"N, 113D56'28.66"W	0.14	49.0
SOUTH BARRACKS LANE	45D06.603N/113D46.869W	45D6'49.88"N, 113D47'14.11"W	0.37	49.0
INDIAN CREEK ROAD	NORTH FORK RD 45D24'02.130"N,114D10'05.153"W	45D25'28.475"N,114D10'03.213"W	2.23	50.0
LEESBURG ROAD	14TH ST	45D11'19.78"N, 113D56'2.46"W	0.89	50.0
INDIAN CREEK RD	EAST FORK	WEST FORK	0.79	54.0
OLDSTAGE RD	QUAIL RD	END	0.10	55.0
PARMENTER ROAD	CARMEN CREEK ROAD	45D16'18.25"N, 113D50'16.56"W	0.89	56.0
DIAMOND CREEK ROAD	MORGAN BAR	45D16'14.28"N, 113D54'16.04"W	1.52	57.0
WHITETAIL DR	ELKHORN RD	END OF ROAD	0.09	57.0
EAST TOWER CREEK ROAD	TOWER CREEK RANCH 45D20'15.409"N,113D51'44.034"W	FOREST SERVICE LINE 45D20'30.261"N,113D50'46.324"W	0.71	58.0
SKINNER RANCH ROAD	LEMHI ROAD	45D6'0.15"N, 113D42'48.21"W	0.37	58.0
COINER LANE	45D8'2.62"N, 113D52'38.52"W	45D7'46.01"N, 113D52'34.28"W	0.33	59.0
FREEMAN CRK	FEEMAN CK	BLM	0.86	59.0
TOWER CREEK ROAD	START OF UNPAVED 45D19'44.636"N,113D53'04.897"W	END 45D21'22.470"N,113D51'51.667"W	2.53	60.0
OLDSTAGE RD	CEDAR DR	BLUE ASH DR	0.06	60.0
WILLIAMS LAKE ROAD	LAKE CREEK RD	45D0'52.56"N, 113D57'57.86"W	3.25	61.0
WITHINGTON CREEK ROAD	RED ROCK STAGE ROAD	FOREST SERVICE LINE	4.49	61.0
IRON CRK RD	CATTLE GUARD	SALMON NATIONAL FOREST SIGN	0.56	61.0
EAST TOWER CREEK ROAD	TOWER CREEK RD 45D20'14.792"N,113D52'21.305"W	EAGLE TOWER RANCH 45D20'15.409"N,113D51'44.034"W	1.38	62.0
GIBBONSVILLE ROAD	GIBBONSVILLE RD PAVED 45D33'22.696"N,113D55'10.532"W	FOREST SERVICE LINE 113D33'26.697"N,113D54'47.580"W	0.07	62.0
LEMHI ROAD	END OF PAVEMENT	NORTH BARRACKS LANE	3.85	62.0
HOT SPRINGS RANCH RD	CULVERT2	GATE	0.15	62.0
MCKIM CRK RD	CASCADE ESTATES	FOREST BOUNDARY	0.82	62.0
FOURTH OF JULY CREEK RD	BEGGINING OF DIRT 45D22'39.168"N,113D55'05.392"W	FOREST SERVICE LINE 45D23'57.864"N,113D52'00.766"W	4.42	63.0
12 MILE LN	HWY 93	CATTLE GUARD	0.32	63.0
12 MILE LN	CATTLE GUARD	PRIVATE FENCE	0.11	63.0
MCKIM CRK RD	IRRIGATION PIPE	CATTLE GUARD	0.64	63.0
KIRTLEY CREEK HEIGHTS	KIRTLEY CREEK ROAD	SAGEBRUSH AVE	0.45	64.0
MCKIM CRK RD	IRRIGATION PIPE	BURDEN RD	0.83	64.0
BOHANNON CREEK RD	LEMHI ROAD	45D8'47.94"N, 113D42'54.78"W	2.79	65.0

GRAVEL ROAD RATINGS BY SEGMENT
(Sorted by Rating)

Road Name	From Address	To Address	Segment Length (mi)	SCI
EIGHTEEN MILE RD	EIGHTEEN MILE RD	44D35'27.263"N,113D16'10.685"W	1.41	65.0
3 MILE LANE	HIGHWAY 28	45D8'20.18"N, 113D49'15.91"W	0.45	66.0
BLACKROCK ROAD	JOY LANE (PRIVATE)	45D11M50.668N/113D55M33,253W	0.61	66.0
BALDY BASIN LN	CATTLE GUARD	PRIVATE GATE	0.31	66.0
THOMAS AVENUE	45D9'10.57"N, 113D51'30.57"W	KELLY CIR	0.11	67.0
STRAWBERRY LANE	HIGHWAY 28	45D9'10.81"N, 113D50'55.48"W	0.16	67.0
KIRTLEY CREEK ROAD	KIRTLEY CREEK HEIGHTS	45D11'9.99"N, 113D48'26.70"W	0.65	67.0
HAYDEN CRK RD	PRIVATE FENCE	FOREST SERVICE LINE	1.03	67.0
CEMETERY S T / LANE	AGENCY CRK RD	PRIVATE RD	0.34	68.0
OBSIDIAN RD	GARNET RD	CUL D SAC	0.14	68.0
OBSIDIAN RD	GARNET RD	CUL D SAC	0.14	68.0
CEMETERY S T / LANE	45D9'41.58"N, 113D53'3.93"W	45D8'33.18"N, 113D52'22.47"W	1.71	69.0
SHEEP CREEK ROAD	HIGHWAY 93 45D30'18.983"N113D56'39.055"W	END 45D29'59.933"N,113D55'49.576"W	1.32	69.0
INDIAN CREEK ROAD	3RD BRIDGE	END MAINTENANCE	2.31	69.0
WHITETAIL DR	ELKHORN RD	ELKHORN RD	0.22	69.0
SAGE HEN RD	QUAIL RD	WAXWING RD	0.20	69.0
SAGE HEN RD	BLUE HERON DR	WAXWING RD	0.12	69.0
INDIAN CREEK ROAD	INDIAN CREEK GUEST RANCH 45D25'28.475"N,114D10'03.213"W	45D25'42.928"N,114D09'57.370"W	0.39	70.0
WILLIAMS CREEK ROAD	45D4'54.57"N, 113D57'14.23"W	WILLIAMS CREEK SUMMIT	13.77	70.0
SANDY CREEK ROAD	LEMHI ROAD	45D4'32.54"N, 113D36'37.29"W	3.76	70.0
PRICE CREEK ROAD	45D04'05.388"N,113D42'34.700"W	45D04'05.400"N,113D42'34.708"W	0.00	70.0
RANCH CREEK RD	HAWLEY CREEK RD	44D39'34.527"N,113D11'44.383"W	1.64	70.0
PETERSON LN	44D36'26.32"N, 113D54'40.40"W	MORSE CREEK RD	0.39	70.0
FREEMAN CREEK	CARMEN CREEK	45D16'19.17"N, 113D46'31.47"W	2.18	71.0
WHISPER RIDGE DRIVE	BLM DRIVE	45D11'5.25"N, 113D47'55.08W	0.41	71.0
SLEEPING BEAUTY	THOMAS AVENUE	45D9'9.06"N, 113D51'12.20"W	0.41	71.0
MUSTANG RD	CULVERT	LEE CREEK RD	0.61	71.0
VIOLA LN	BRIDGE	CULVERT	0.44	71.0
OLDSTAGE RD	WILLOW TREE DR	OAK DR	0.15	71.0
BLUE HERON DR	APPLE WAY	OLDSTAGE RD	0.21	71.0
DEMICK LANE	45D9'23.40"N, 113D53'16.60"W	45D8'49.16"N, 113D53'5.53"W	0.76	72.0
DEEP CREEK ROAD	WILLIAMS CREEK SUMMIT	PANTHER CREEK RD	11.53	72.0
MELANIE DRIVE	ARROWHEAD DR	SOUTH NINTH STREET	0.77	72.0
EIGHTEEN MILE RD	HAWLEY CREEK RD	EIGHTEEN MILE RD	4.78	72.0
EIGHTEEN MILE RD	44D35'27.263"N,113D16'10.685"W	HIGHWAY 28	2.61	72.0
EVERGREEN ROAD	BLUE CAMAS RD	45D4'49.92"N, 113D52'28.34"W	0.26	73.0
LORI LANE	FULTON ROAD	45D10'35.61"N, 113D55'4.26"W	0.14	73.0
BLM DRIVE	KIRTLEY HEIGHTS ROAD	WHISPER RIDGE RD	0.44	73.0
MUSTANG RD	PRIVATE PROPERTY	CULVERT	0.78	73.0
AGENCY CRK RD	CATTLE GUARD	CULVERT	0.75	73.0
AGENCY CRK RD	CULVERT	LEMHI PASS SIGN BOARD	2.29	73.0
WAXWING RD	PHEASANT RD	BLUE HERON DR	0.06	73.0
AIRPORT LANE/LANDFILL	END OF PAVEMENT	LANDFILL	0.02	74.0
ISLAND FARM	45D9'25.37"N, 113D54'22.52"W	45D9'24.00"N, 113D54'40.93"W	0.25	74.0
WAGONWHEEL ROAD	LOVERS LN	45D9'48.09"N, 113D53'53.83"W	0.45	74.0
RANCHETTE DRIVE	SUMMER CREEK RD	45D7'40.36"N, 113D52'54.67"W	0.26	74.0
SAGEBRUSH AVENUE	KIRTLEY CREEK ROAD	45D9'44.00"N, 113D48'13.41"W	1.08	74.0
BALDY MOUNTAIN RD	PERREAU CREEK	45D6'25.61"N, 113D55'57.68"W	1.27	74.0
RED ROCK STAGE ROAD	END OF PAVEMENT	45D04'05.400"N,113D42'34.708"W	1.94	74.0
NICHOLIA RANCH RD	HIGHWAY 28	44D21'24.70"N, 113D0'16.22"W	3.46	74.0
OLDSTAGE RD	WILLOW TREE DR	BLUE ASH DR	0.06	74.0
BLUE HERON DR	END	WAXWING RD	0.05	74.0
W CHUKAR CIR	OLDSTAGE RD	PHEASANT RD	0.06	74.0

GRAVEL ROAD RATINGS BY SEGMENT
(Sorted by Rating)

Road Name	From Address	To Address	Segment Length (mi)	SCI
E CHUKAR CIR	Y JUNCTION	PHEASANT RD	0.06	74.0
GUTH ROAD	HIGHWAY 93	COINER LN	0.43	75.0
SILVERCLOUD LN	PARAMENTER ROAD	45D16'2.21"N, 113D50'30.86"W	0.16	75.0
OLD HWY	44D37'14.873"N,113D55'54.295"W	START OF PAVEMENT	0.27	75.0
MABEY LN	HWY 28	PRIVATE GATE	0.18	75.0
12 MILE CRK RD	CATTLE GUARD	CAMPSITE	0.46	75.0
CEMETERY S T / LANE	GATE	PRIVATE PROPERTY LINE	0.20	75.0
OLDSTAGE RD	QUAIL RD	CHUKAR CR	0.16	75.0
GORLEY CREEK	SPRING CREEK RD	45D07'09.295"N,113D55'43.395"W	2.09	76.0
WIMPEY CREEK ROAD	LEMHI ROAD	45D06M59.422N/113D41M31.786W	2.02	76.0
PRATT CREEK ROAD	LEMHI ROAD	45D05M28.968N/113D40M25.867W	1.97	76.0
PURCELL LN	CULVERT	CATTLE GUARD	1.25	76.0
GALENA GRADE RD	PRIVATE DRIVEWAY	CUL D SAC	0.18	76.0
CEDAR DR	PHEASANT RD	OLDSTAGE RD	0.12	76.0
BLUE ASH DR	PHEASANT RD	OLDSTAGE RD	0.13	76.0
WILLOW TREE DR	PHEASANT RD	OLDSTAGE RD	0.14	76.0
OAK DR	PHEASANT RD	OLDSTAGE RD	0.08	76.0
OAK DR	CHUKAR CR	OLDSTAGE RD	0.04	76.0
PANTHER CREEK ROAD	DEEP CREEK RD	BLACKBIRD RD	5.08	77.0
PRATT CREEK ROAD	45D05M28.968N/113D40M25.867W	BLM 45D5'38.75"N,113D39'52.37"W	0.51	77.0
PETERSON LN	LEE CREEK RD	CATTLE GUARD	0.44	77.0
KNIGHT RANCH RD	LEMHI RD	PROPERTY GATE	0.37	77.0
CRYSTAL RD	HWY 93	JADE DR	0.04	77.0
CRYSTAL RD	JADE DR	AGATE DR	0.07	77.0
GARNET RD	JADE DR	OBSIDIAN DR	0.03	77.0
ELKHORN RD	HWY 93	WHITETAIL DR	0.03	77.0
ELKHORN RD	WHITETAIL DR	WHITETAIL DR	0.30	77.0
HOT SPRINGS ROAD	AIRPORT LANE/ LANDFILL	45D5'42.54"N, 113D51'8.63"W	1.61	78.0
TWIN SISTER CIRCLE	SLEEPING BEAUTY	45D9'1.01"N,113D51'15.31"W	0.07	78.0
SOUTH BARRACKS LANE	HWY 28	45D06.598N/113D46.734W	0.59	78.0
OLDSTAGE RD	QUAIL RD	BLUE HERON DR	0.07	78.0
OLDSTAGE RD	QUAIL RD	BLUE SPRUCE RD	0.07	78.0
OLDSTAGE RD	CEDAR DR	BLUE SPRUCE RD	0.06	78.0
BLUE HERON DR	APPLE WAY	SAGE HEN RD	0.05	78.0
MCKIM CRK RD	HWY 93	CATTLE GUARD	0.09	78.0
PRIMROSE LANE	SUNFLOWER RD	45D4'30.81"N, 113D52'54.66"W	0.11	79.0
KELLY CIRCLE	THOMAS AVENUE	45D9'4.03"N, 113D51'30.10"W	0.06	79.0
IRON CRK RD	CATTLE GUARD	PEEL TREE RD	1.71	79.0
BANTA DRIVE	NORTH ST CHARLES ST	45D11'13.51"N, 113D53'15.00"W	0.32	80.0
ADAMS DRIVE	SOUTH ST.CHARLES ST	45D9'34.70"N, 113D54'3.14"W	0.12	80.0
HEATHER LANE	HIGHWAY 93 45D18'56.282"N,113D54'16.267"W	END 45D18'56.141"N,113D54'25.023"W	0.16	80.0
GILMORE CREEK	HIGHWAY 28	FOREST SERVICE LINE	1.82	80.0
COLD SPRINGS RD	HIGHWAY 28	44D33'58.20"N, 113D20'48.62"W	3.50	80.0
HUGHES CK ROAD	CATTLE GUARD	DITCH CK RD	1.16	80.0
JENSON LN	HWY 28	PRIVATE GATE	0.18	80.0
RATTLESNAKE CRK RD	HWY 93	TWIN PEAKS RANCH RD	0.06	80.0
TWIN PEAK RANCH RD	RATTLESNAKE RD	PRIVATE GATE	1.89	80.0
TWIN PEAK RANCH RD	RATTLESNAKE RD	GATE	0.13	80.0
GALENA GRADE RD	HWY 93	PRIVATE DRIVEWAY	0.35	80.0
RANCH CREEK RD	HAWLEY CREEK RD	EIGHTEEN MILE RD	2.72	81.0
DIRT ROAD	PAHSIMEROI RD	MORGAN CREEK RD	0.25	81.0
STORMY PEAK ROAD	DIAMOND CREEK ROAD	45D14'9.45"N, 113D54'52.36"W	0.93	81.0
MUSTANG LN	PURCELL LN	MUSTANG RD	0.96	81.0
BASIN CRK RD	BASIN CRK RANCH	CATTLE GUARD	2.09	81.0
BASIN CRK RD	CATTLE GUARD	44D50'25.21"N,113D46'49.01"W	0.70	81.0

GRAVEL ROAD RATINGS BY SEGMENT
(Sorted by Rating)

Road Name	From Address	To Address	Segment Length (mi)	SCI
BASIN CRK RD	44D50'25.21"N,113D46'49.01"W	TURN AROUND	0.08	81.0
MCDEVITT CRK RD	HWY 28	CATTLE GUARD	0.56	81.0
IRON CRK RD	CATTLE GUARD	PEEL TREE RD	0.58	81.0
PHEASANT RD	WAXWING RD	QUAIL RD	0.32	81.0
BLUE HERON DR	PHEASANT RD	WAXWING RD	0.16	81.0
BLUE HERON DR	PHEASANT RD	SAGE HEN RD	0.06	81.0
GEERTSON CREEK	45D9'52.34"N, 113D44'45.55"W	45D11'20.10"N, 113D43'45.72"W	1.92	82.0
LEMHI ROAD	BOHANNON CREEK ROAD	45D6'24.98"N, 113D43'47.90"W	1.62	82.0
HAWLEY CREEK RD	EIGHTEEN MILE RD	RANCH CREEK RD	3.11	82.0
AGATE DR	GARNET RD	OPAL RD	0.23	82.0
AGATE DR	OPAL RD	CUL D SAC	0.11	82.0
OPAL RD	HWY 93	AGATE RD	0.04	82.0
GARNET RD	JADE DR	AGATE RD	0.04	82.0
JADE DR	GARNET RD	CRYSTAL RD	0.09	82.0
JADE DR	CRYSTAL RD	CUL D SAC	0.11	82.0
ELKHORN RD	HWY 93	WHITETAIL DR	0.03	82.0
SUNFLOWER ROAD	WILD ROSE RD	SUNSET HEIGHTS RD	0.86	83.0
BLUE CAMAS ROAD	SUNSET HEIGHTS RD	BUTTERCUP LN	0.45	83.0
VIOLA LN	HWY 28	BRIDGE	0.15	83.0
NORTH ST. CHARLES STREET	45D11'09.475"N,113D52'43.154"W	45D11'35.028"N,113D51'45.964"W	1.16	84.0
PERREAU CREEK	WILLIAMS CREEK RD	45D5'58.94"N, 113D57'41.36"W	2.67	84.0
IRON CRK RD	CATTLE GUARD	OLD STAGE RD	2.22	84.0
MCKIM CRK RD	CASCADE ESTATES	BURDEN RD	0.22	84.0
DIAMOND CREEK ROAD	STORMY PEAK ROAD	MORGAN BAR	1.46	85.0
COCKRELL ROAD	KIRTLEY CREEK ROAD	45D10'18.04"N, 113D49'15.66"W	0.40	85.0
JUNCTION RD	LEMHI RD	CEMETERY FENCE	0.31	85.0
HAYDEN CRK RD	CULVERT	CATTLE GUARD	1.61	85.0
HAYDEN CRK RD	CATTLE GUARD	PRIVATE FENCE	0.39	85.0
BASIN CRK RD	CATTLE GUARD	CATTLE GUARD	0.54	85.0
BASIN CRK RD	CATTLE GUARD	CATTLE GUARD	0.37	85.0
MCDEVITT CRK RD	IRRIGATION HEADGATE	CATTLE GUARD	1.55	85.0
AGENCY CRK RD	CAMPGROUND ENTRANCE	CATTLE GUARD	2.90	85.0
12 MILE CRK RD	HWY 93	CATTLE GUARD	0.74	85.0
ELKHORN RD	ASPEN WAY	BITTEROOT RD	0.13	85.0
ELKHORN RD	BITTEROOT RD	ANTELOPE RD	0.11	85.0
ELKHORN RD	ANTELOPE RD	FAWN LN	0.08	85.0
ELKHORN RD	FAWN LN	CUL D SAC	0.07	85.0
NORTH ST. CHARLES STREET	45D11'35.028"N,113D51'45.964"W	45D11'36.33"N, 113D51'23.54"W	0.37	86.0
MOORE CREEK ROAD	HWY 93	45D12'51.40"N, 113D54'32.70"W	0.52	86.0
BLACKROCK ROAD	TENTH AVE	JOY LANE (PRIVATE)	0.55	86.0
SOUTH 9TH STREET	FULTON DRIVE	45D10'25.31"N, 113D54'46.66"W	0.34	86.0
ANN LANE	FULTON ROAD	MELANIE DRIVE	0.09	86.0
PETERSON LN	MOORES CREEK RD	MORGAN CREEK RD	0.96	86.0
WHITWORTH DR	44D37'14.873"N,113D55'54.295"W	PAHSIMEROI RD	0.46	86.0
PURCELL LN	LEE CREEK RD	CULVERT	1.69	86.0
LEE CRK RD	ZEPH CRK RD	CATTLE GUARD	2.24	86.0
BLUE SPRUCE RD	PHEASANT RD	OLDSTAGE RD	0.10	86.0
EIGHTEEN MILE RD	44D34'28.156"N,113D18'22.354"W	HIGHWAY 28	0.49	87.0
MCDEVITT CRK RD	CATTLE GUARD	BALDY BASIN JUNCTION	1.65	87.0
TENDOY LN	HWY 28	LEMHI RD	0.18	87.0
AGENCY CRK RD	CATTLE GUARD	DRIVEWAY	1.70	87.0
AGENCY CRK RD	DRIVEWAY	CAMPGROUND ENTRANCE	1.44	87.0
GRANITE RD	HWY 93	AGATE DR	0.06	87.0
AGATE DR	CUL D SAC	GRANITE RD	0.18	87.0
AGATE DR	GRANITE RD	CRYSTAL RD	0.22	87.0

GRAVEL ROAD RATINGS BY SEGMENT
(Sorted by Rating)

Road Name	From Address	To Address	Segment Length (mi)	SCI
AGATE DR	CRYSTAL RD	GARNET RD	0.12	87.0
REDWOOD RD	EAGLE CR	BLUEBIRD CR	0.17	87.0
REDWOOD RD	EAGLE CR	BALSAM RD	0.07	87.0
REDWOOD RD	CABIN RD	BALSAM RD	0.07	87.0
REDWOOD RD	CABIN RD	END	0.01	87.0
BLUEBIRD CR	OLDSTAGE RD	END	0.16	87.0
SUNSET HEIGHTS	BLUE CAMAS RD	WILD ROSE RD	0.45	88.0
WILD ROSE RD	BUTTERCUP LN	SUNFLOWER RD	0.17	88.0
IRIS LANE	EVERGREEN RD	45D4'29.31"N, 113D52'26.28"W	0.32	88.0
BUTTERCUP LANE	IRIS LN	WILD ROSE RD	0.14	88.0
BLUEBELL LANE	SUNFLOWER RD	45D4'31.44"N, 113D52'52.69"W	0.14	88.0
NORTH PRIMROSE DRIVE	SUNFLOWER RD	SUNSET HEIGHTS RD	0.37	88.0
HOT SPRINGS RANCH LANE	HIGHWAY 93	45D17'12.94"N, 113D52'40.19"W	0.76	88.0
WHISPER RIDGE RD	45D10'18.117"N,113D48'18.953"W	SAGEBRUSH AVENUE	0.04	88.0
CORBETT LANE	45D5'50.18"N, 113D54'15.88"W	WILLIAMS LAKE RD	1.99	88.0
SOUTH BARRACKS LANE	45D06.598N/113D46.734W	45D06.603N/113D46.869W	0.15	88.0
HAWLEY CREEK	RANCH CREEK RD	44D39'03.665"N,113D13'04.823"W	0.28	88.0
MUD CREEK	HIGHWAY 28	44D20'26.62"N, 113D6'37.13"W	1.67	88.0
MORSE CREEK RD	MAIN ST	PAHSIMEROI RD	0.25	88.0
BIG 8 MILE RD	GRADY RD	END PAVEMENT	1.23	88.0
GRADY RD	CATTLE GUARD	CATTLE GUARD	0.84	88.0
LEE CRK RD	CATTLE GUARD	MILL CRK RD	1.61	88.0
BASIN CRK RD	HAYDEN CRK RD	CATTLE GUARD	2.16	88.0
WAXWING RD	QUAIL RD	SAGE HEN RD	0.06	88.0
WAXWING RD	PHEASANT RD	SAGE HEN RD	0.06	88.0
CABIN RD	REDWOOD RD	OLDSTAGE RD	0.08	89.0
BALSAM RD	REDWOOD RD	OLDSTAGE RD	0.10	89.0
EAGLE CR	REDWOOD RD	OLDSTAGE RD	0.12	89.0
EAGLE CR	END	OLDSTAGE RD	0.09	89.0
SYRINGA DR	BLUEBIRD CR	EAGLE CR	0.19	89.0
BLUEBIRD CR	REDWOOD RD	SYRINGA DR	0.06	89.0
BLUEBIRD CR	OLDSTAGE RD	SYRINGA DR	0.06	89.0
RUBY LANE	GUTH RD	45D8'20.89"N, 113D53'0.74"W	0.37	90.0
SHORT ROAD	WAGONWHEEL RD	SOUTH ST.CHARLES ST	0.24	90.0
SUMMER CREEK DRIVE	45D7'39.29"N, 113D53'17.67"W	45D7'30.62"N, 113D53'19.81"W	0.17	90.0
HAYNES CREEK LANE	HIGHWAY 28	HAYNES CREEK	2.34	90.0
PURCELL LN	LEE CRK RD	CATTLE GUARD	0.27	90.0
PURCELL LN	CATTLE GUARD	PRIVATE DRIVEWAY	0.68	90.0
MUSTANG RD	LEE CREEK RD	CATTLE GUARD	0.25	90.0
MUSTANG RD	CATTLE GUARD	DRIVEWAY APPROACH	0.75	90.0
GRADY RD	BIG 8 MILE RD	CATTLE GUARD	0.88	90.0
ANDERSON RD	BIG 8 MILE RD	CATTLE GUARD	1.57	90.0
COTTOM LN	HILL TOP	HILL BOTTOM CATTLE GUARD	0.63	90.0
PETERSON CRK RD	CATTLE GUARD	PRIVATE FENCE	1.12	90.0
LEMHI RD	PETERSON CRK RD	MAIERS LN	1.98	90.0
ZEPH CRK RD	LEE CRK RD	ZEPH CRK RD	0.34	90.0
ZEPH CRK RD	CATTLE GUARD	ZEPH CRK RD	0.11	90.0
ZEPH CRK RD	ZEPH CRK RD	PRIVATE GATE	0.10	90.0
LEE CRK RD	MILL CRK RD	616 LEE CRK	0.90	90.0
LEE CRK RD	616 LEE CRK	CATTLE GUARD	1.23	90.0
LEMHI RD	MAIERS LN	CULVERT	2.01	90.0
LEMHI RD	CULVERT	RAMSEY MTN RD	2.45	90.0
RAMSEY MTN RD	LEMHI RD	CATTLE GUARD	0.43	90.0
RAMSEY MTN RD	CATTLE GUARD	FOREST SERVICE LINE	0.22	90.0
HAYDEN CRK RD	BASIN CRK RD	CULVERT	1.08	90.0

GRAVEL ROAD RATINGS BY SEGMENT
(Sorted by Rating)

Road Name	From Address	To Address	Segment Length (mi)	SCI
BASIN CRK RD	CATTLE GUARD	BASIN CRK RANCH	1.19	90.0
HOT SPRINGS RANCH ROAD	CULVERT	CULVERT2	0.23	90.0
FAWN LN	HWY 93	ELKHORN RD	0.05	90.0
ANTELOPE RD	BITTEROOT RD	ELKHORN RD	0.13	90.0
ANTELOPE RD	BITTEROOT RD	ASPEN WAY	0.10	90.0
ANTELOPE RD	LUPINE WAY	ASPEN WAY	0.05	90.0
ANTELOPE RD	LUPINE WAY	CAMAS WAY	0.04	90.0
ANTELOPE RD	SAGE WAY	CAMAS WAY	0.04	90.0
ANTELOPE RD	SAGE WAY	ANTLER WAY	0.05	90.0
ANTELOPE RD	ELKHORN RD	ANTLER WAY	0.07	90.0
QUAIL RD	OLDSTAGE RD	PHEASANT RD	0.07	90.0
QUAIL RD	SAGE HEN RD	PHEASANT RD	0.07	90.0
QUAIL RD	SAGE HEN RD	WAXWING RD	0.14	90.0
QUAIL RD	APPLE WAY	WAXWING RD	0.07	90.0
QUAIL RD	APPLE WAY	PHEASANT RD	0.14	90.0
QUAIL RD	OLDSTAGE RD	PHEASANT RD	0.08	90.0
PHEASANT RD	QUAIL RD	BLUE SPRUCE RD	0.06	90.0
PHEASANT RD	CEDAR DR	BLUE SPRUCE RD	0.06	90.0
PHEASANT RD	CEDAR DR	BLUE ASH DR	0.06	90.0
PHEASANT RD	WILLOW TREE RD	BLUE ASH DR	0.06	90.0
PHEASANT RD	WILLOW TREE RD	OAK DR	0.05	90.0
PHEASANT RD	CHUKAR CR	OAK DR	0.11	90.0
PHEASANT RD	CHUKAR CR	QUAIL RD	0.10	90.0
PHEASANT RD	WAXWING RD	BLUE HERON DR	0.11	90.0
LEMHI RD	AGENCY CK RD	AGENCY CK RD	1.85	91.0
ADAMS RANCH RD	GALENA ST	W ADAMS RANCH RD	0.57	92.0
ADAMS RANCH RD	W ADAMS RANCH RD	CATTLE GUARD	1.00	92.0
W ADAMS RANCH RD	ADAMS RANCH RD	HANGN HOOTERS RANCH	0.47	92.0
ANDERSON RD	CATTLE GUARD	CATTLE GUARD	0.26	92.0
LEMHI RD	CULVERT	PETERSON CRK RD	1.55	92.0
ZEPH CRK RD	CATTLE GUARD	CATTLE GUARD	0.91	92.0
ZEPH CRK RD	CATTLE GUARD	PRIVATE GATE	0.59	92.0
LEE CRK RD	CATTLE GUARD	END OF GRAVEL	0.27	92.0
LEMHI RD	RAMSEY MTN RD	HWY 28	0.40	92.0
BASIN CRK RD	HAYDEN CRK RD	PROPETY FENCE	0.22	92.0
MCDEVITT CRK RD	CATTLE GUARD	RANCH DRIVEWAY	0.75	92.0
MCDEVITT CRK RD	RANCH DRIVEWAY	IRRIGATION HEADGATE	1.02	92.0
AGENCY CRK RD	HWY 28	LEMHI RD	1.11	92.0
BALDY BASIN LN	HWY 28	CATTLE GUARD	0.60	92.0
WARM SPRINGS RD	LEMHI RD	KIOSK	0.70	92.0
WARM SPRINGS RD	KIOSK	JUNCTION	0.44	92.0
WARM SPRINGS RD	JUNCTION	SHARKEY HOT SPRINGS	0.76	92.0
SAGE BRUSH AVE	NORTH HAWK RD	JUNCTION	0.13	92.0
NORTH HAWK RD	SAGE BRUSH AVE	CUL D SAC	0.11	92.0
OLDSTAGE RD	WILLOW TREE DR	CHUKAR CR	0.15	92.0
OLD HWY	44D37'26.583"N,113D56'50.606"W	44D37'14.873"N,113D55'54.295"W	0.83	93.0
COTTOM LN	CATTLE GUARD	HWY 28	0.80	93.0
DRIVEWAY	LEE CRK	CATTLE GUARD	0.67	93.0
DRIVEWAY	CATTLE GUARD	PRIVATE GATE	0.17	93.0
APPLE WAY	BLUE HERON DR	QUAIL RD	0.07	93.0
CANYON CR	PRIVATE GATE	CATTLE GUARD	0.20	95.0
CANYON CR	CATTLE GUARD	CATTLE GUARD	0.51	95.0
CANYON CR	CATTLE GUARD	HWY 28	0.05	95.0
TIMBER CR RD	FOREST SERVICE SIGN	END GRAVEL RD	1.26	95.0
ADAMS RANCH RD	CATTLE GUARD	PRIVATE PROPERTY	0.71	95.0
COTTOM LN	HWY 28	BRIDGE	0.18	95.0

GRAVEL ROAD RATINGS BY SEGMENT
(Sorted by Rating)

Road Name	From Address	To Address	Segment Length (mi)	SCI
COTTOM LN	BRIDGE	LEMHI RD	0.36	95.0
COTTOM LN	COTTOM LN	LEMHI RD	0.04	95.0
LEMHI RD	COTTOM LN	CULVERT	2.33	95.0
PETERSON CRK RD	LEMHI RD	PETERSON CRK RD	0.84	95.0
COTTOM LN	LEE CRK RD	COTTOM LN	0.07	95.0
HUGHES CK ROAD	SH93	CATTLE GUARD	1.02	95.0
LEMHI RD	17 MILE	SUBSTATION	0.95	95.0
SOUTH HAWK RD	SAGE BRUSH AVE	CUL D SAC	0.19	95.0
LEMHI RD	SUBSTATION	WARM SPRINGS RD	1.06	96.0
LEMHI RD	WARM SPRINGS RD	TENDOY RD	2.82	96.0
LEMHI RD	TENDOY RD	AGENCY CK RD	0.25	96.0
REDWOOD RD	OLDSTAGE RD	BLUEBIRD CR	0.18	96.0
COTTOM LN	CATTLE GUARD	HILL TOP	1.09	97.0
LEMHI RD	COTTOM LN	CULVERT	0.82	97.0
LEMHI RD	CULVERT	CULVERT	1.04	97.0
LEMHI RD	CULVERT	CULVERT	2.13	97.0
LEMHI RD	CULVERT	JOKES CANYON	1.14	97.0
JOKES CANYON	LEMHI RD	OLD CEMETERY	1.00	97.0
LEMHI RD	HWY28	HAYDEN CRK RD	0.91	97.0
TIMBER CR RD	CARLSON RANCH	FOREST SERVICE SIGN	0.20	100.0
COTTOM LN	LEE CREEK RD	CATTLE GUARD	0.45	100.0
LEMHI RD	JOKES CANYON	END OF GRAVEL	0.77	100.0
LEMHI RD	LEMHI RD	HWY 29	0.14	100.0
LEE CRK RD	END OF PAVEMENT	ZEPH CRK RD	0.05	100.0
ANTLER WAY	ELKHORN RD	ANTELOPE RD	0.10	100.0
SAGE WAY	ELKHORN RD	ANTELOPE RD	0.09	100.0
CAMAR WAY	ELKHORN RD	ANTELOPE RD	0.08	100.0
LUPINE WAY	ELKHORN RD	ANTELOPE RD	0.08	100.0
ASPEN WAY	ELKHORN RD	ANTELOPE RD	0.07	100.0
BITTEROOT RD	ELKHORN RD	ANTELOPE RD	0.03	100.0
BITTEROOT RD	HWY 93	ANTELOPE RD	0.05	100.0

APPENDIX E

CAPITAL IMPROVEMENT PROJECTS

CIP List

CIP Decision Tree

LEMHI COUNTY CAPITAL IMPROVEMENT PLAN

PROJECT LIST

Priority	Project Name	Funding Source	Projected Cost	Projected Construction Year					
				2012	2013	2014	2015	2016	PN
1	Kirtley Creek Rd. - Rehabilitation	Local Funds	$350,000	x					
2	Pahsimeroi Rd. - Chip Seal 12.5 miles	Local Funds	$500,000	x					
3	Diamond Creek Rd. - Upgrade	Local Funds	$380,000	x					
4	Airport Highway Approach	Local Funds	$200,000	x					
5	Canyon Creek Bridge	Local Funds	$185,000	x					
6	4th of July Creek bridge	Local Funds	$185,000		x				
7	4th July Creek Rd. - Improvements	Local Funds	$250,000		x				
8	Chief Tendoy Rd	Local Funds	$60,000		x				
9	Old Stage Rd. - Baker to Haynes Creek	Local Funds	$325,000		x				
10	Gibbonsville Rd. - Chipseal	Local Funds	$40,000		x				
11	Lemhi Rd. - Leadore toward Tylers	Local Funds	$225,000			x			
12	Allen Bridge Replacement	Local Funds	$1,336,000			x			
13	Anderson Creek Bridge	Local Funds	$100,000				x		
14	Rattlesnake Bridge Replacement	Local Funds	$1,500,000				x		
15	Landfill Road – 1st Part	Local Funds	$400,000				x		
16	Williams Lake Rd. - Chipseal	Local Funds	$90,000					x	
	Emergency Bridge Crossing	Multi-Agency							x
	Emergency Route # 4	Local Funds							x
	Emergency Route # 17	Local Funds							x
	Landfill Road Reconstruct	LHRIP/Local							x

Note: * Preliminary Planning and Design
The above listed projects are not included in the current STP.
PN = Planning

Sunset Heights Rd. - Rebuild 1 mile-----2016 $300,000
Airport Ln. and Landfill Road - 2nd Part---2017 $550,000

CIP DECISION TREE

Scoring Guidelines

CIP PRIORITIZATION

The CIP evaluation using the forms provided in this document allows County Staff to provide quantitative recommendations to the Board of County Commissioners concerning capital improvement projects (CIP).

Funding of projects is not part of the prioritization process. Source of funds and availability of funds are determined after project priorities are established.

The year to be constructed is also not part of the process of prioritization. The construction year may be determined only after funds are identified for the project. The number 1 project in priority may not be scheduled to be constructed for seven years. Other projects with lower priority may be constructed during this time as funds are available.

Overreaching Goals:

- Connections—Provide for safe access and mobility in a cost-effective manner.
- Coordination—Achieve inter-area coordination of transportation and land planning.
- Maintenance—Maintain the existing transportation infrastructure
- Capacity—Expand capacity or increase efficiency of the transportation system.
- Connectivity—Develop and implement transportation alternatives to achieve multi-access networks.
- Economic—Preserve freight travel as a priority in order to insure Lemhi County's economic competitiveness.
- Environmental—Minimize transportation impacts to people, cultural resources, and the environment.

Definitions of Projects:

Improvement Projects: Projects whereas the primary objective is to improve the infrastructure. Such projects could include new roadways, roadway widening, reconstruction of failed roadways, new bridges, reconstruction of bridges, and new pathways.

Maintenance Projects: Projects having a primary objective of maintaining existing roadways. Maintaining a roadway costs less than rebuilding a roadway. Maintenance projects should be approved when the segment is in the optimal time for the project's life cycle such as overlays, chipseal (sealcoat), and refresh gravel surface of gravel roads. Routine Maintenance items should not be included.

Community: This term is used to identify cities, developments, and even a collection of homes in a general area.

CIP DECISION TREE

Scoring Guidelines for
IMPROVEMENT PROJECTS

Criterion	Assessment	Score Range	Project Score
System Continuity Regional Importance—benefits multiple communities Local Importance—benefits only a local community	Project will complete or improve road segment/bridge that connects two or more intersections and helps to provide continuous link between multiple (3 or more) communities. Project will complete or improve road segment/bridge that improves one intersection and helps connects or improves a continuous link between communities Project will complete or improve efficiency of a corridor, intersection, or bridge that enhances a local community Project is of individual importance	16—20 11—15 6—10 1—5	
Safety Enhancement—points of repeated crashes due to geometry or traffic volume	Site of multiple crashes and loss of life Site of multiple crashes Site of single or no crash with safety concerns Enter zero if no safety concerns	11—20 6—14 0—8	
Accessibility—to private, commercial, or public lands Route refers to road or bridge or combination	Route will complete an access to multiple communities or of regional importance. Route will complete an emergency (secondary) access to local community	16—20 5—15	
Corridor/Route—Importance	This criteria is based on a comparison of this project with other projects. Freight (farm-to-market) corridor important to economics of the community or route services a concentration of employment, commercial, recreational activity, or bus route	1—20	
Public Support	This criteria is based on a comparison of this project with other projects. Project with high public support scoring highest.	0—5	
Mobility	Project includes alternate mobility (pathway/public transit)	0—5	
Capacity Enhancement—Project will improve capacity and geometry of existing roadway	Route is operating at a LOS E or F and project will improve capacity and LOS. Route is operating at a LOS D or above and project will improve capacity and LOS.	6—10 1-5	

TOTAL SCORE: _____

CIP DECISION TREE

Scoring Guidelines for
MAINTENANCE PROJECTS

Criterion	Assessment	Score Range	Project Score
Life Cycle Cost – Roads and Bridges with higher cost efficiency receive higher points	Road and Bridges in this category should be in the optimal time for the life cycle (5—9 years)	16—20	
	Roads and Bridges in this category just past optimal time for the life cycle but not beyond the end of the life cycle for maintenance to be cost effective (9—12 years)	11—15	
	Roads and bridges beyond the end of the life cycle for maintenance to be cost effective (12 plus years)	5—10	
	Roads and bridges less than optimal time for life cycle (less than 5 years)	0—5	
Condition Index— Road Section Surface Rating:	Index number falls in the medium ranking category (50-80)	11—20	
	Index number falls in the high or low ranking category (greater than 80 or less than 50)	1—10	
Roadway Volume	This criteria is based on the comparison of this project with other projects. Roads with highest volume (ADT) receive the higher points. (Greater than 1000 ADT)	20—25	
	600 to 1000 ADT	16—20	
	150 to 600 ADT	11—15	
	50 to 150 ADT	5—10	
	Less than 50 ADT	0—5	
Functional Classification	Major Collector	10—15	
	Minor Collector	5—10	
	Local Road	1—5	
Corridor/Route— routes may be identified as community importance based on concentration of activity	This criteria is based on a comparison of this project with other projects.		
	Freight Corridor, Emergency Access, Bus Route, Landfill Road, Concentration of employment, or Recreational activity	1—20	

Note: Roads or bridges requiring reconstruction should be moved to an improvement project.

TOTAL SCORE: _____

APPENDIX F

STANDARDS

Lemhi County Road Standards
Standard Drawings
Design Standards Checklist
Simplified Road Classification Figure

LEMHI COUNTY ROAD STANDARDS

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Section A

A.1 Authority of Lemhi County Road & Bridge

A.1.1 The authority of Lemhi County (County) within the State of Idaho is set forth in Title 40 of the Idaho Code, as amended.

A.1.2 Lemhi County Board of Commissioners (Board) has adopted Road Standards (Standards) for roads and ancillary roadway components. Lemhi County also refers to the following as referenced Road Standards:

a. American Association of State Highway and Transportation Officials, (AASHTO), A Policy on Geometric Design of Highways and Streets, 2004 and Roadside Design Guide, 2006

b. Idaho Standards for Public Works Construction, Division 200, 800 and Section 1105, 2008 edition (ISPWC)

c. Local Highway Technical Assistance Council (LHTAC) Manuals, Highway & Street Guidelines for Design and Construction, 2001, Use of Public Right-of-Way, 2001

d. U.S. Department of Transportation, Manual on Uniform Traffic Control Devices (MUTCD)

e. Idaho Transportation Department (ITD), Standards Specifications for Highway Construction, 2004

f. Transportation Impact Analysis for Site Development, by the Institute of Transportation Engineers, 2005

A.1.3 Lemhi County Road & Bridge (LCRB) is authorized and directed by the Board of Commissioners to operate and maintain the County Roads.

A.1.4 To insure the safety of the public, Lemhi County is authorized to inspect the construction and maintenance of Private Roads and associated right-of-way or easements.

A.2 Need for Control and Uniformity

A.2.1 All County Roads within the County are classified under the Highway Functional Classification System developed for roadways in the United States.

A.2.2 The operation and maintenance of County Roads are the responsibility of LCRB. The function of these Standards is to provide the construction of uniform roads to minimize the need for maintenance, repair, and cost to the public while enhancing travel safety.

A.2.3 The operation and maintenance of Private Roads are the responsibility of the private owner, home owners association, or others identified by the plat, development agreement, or CC&R's (COVENANTS, CONDITIONS, AND RESTRICTIONS) to maintain and operate the PRs (Private Roads). Lemhi County has authority to enforce the Development Agreement. The function of these Standards is to provide for the construction of uniform public roads to minimize the need for maintenance, repair, and cost to the public while enhancing travel safety.

A.2.4 Variation from these Standards may be sought under the criteria and procedures identified in the Lemhi County Development Code (LCDC).

A.2.5 Nothing herein shall be construed to impose an obligation or duty upon LCRB to improve existing roadways to comply with these Standards. The existing roadways will be maintained and/or reconstructed to conform to these standards as budget and right-of-way limitations allow.

A.3 Applicability

A.3.1 The provisions of the Standards, except as hereinafter provided, shall apply to public roads, roads developed in conjunction with platting, private roads (PR) within subdivisions approved after the effective date of the adoption of the Standards and agricultural roads. Revisions or additions to existing land divisions shall be subject to the Standards.

A.3.2 The provisions of these Standards shall apply only to unincorporated areas in the County.

A.3.3 The provisions of the Standards shall apply to the repair, maintenance, widening, straightening and improving of any road existing at the time of the adoption of these Standards except as specifically exempted by Section A.2.4.

A.3.4 The provisions of the Standards shall not apply to any roads situated on lands managed by the State of Idaho or the United States except to the extent the State of Idaho or the United States grants written permission to apply the provisions of this ordinance.

Section B

B.1 Road Design Standards and Construction Conditions

B.1.1 All work shall be completed in accordance with the latest edition of the Standards.

B.1.2 Conflict in Design or Construction Standards parameters shall be resolved in the following way: LHTAC Standards shall defer to ISPWC, ISPWC shall defer to AASHTO, and AASHTO shall defer to these Standards.

B.1.3 Only road and approach/driveway plans stamped “Approved for Construction” shall be used for project construction. Approved plans shall bear the signatures of both the LCRB and Planning and Zoning.

B.1.4 Construction Time Period: Construction of facilities included in the approved construction drawings shall be completed within a period of one (1) year following such approval by the County.

B.1.5 Failure to follow the procedure as outlined in this Section may result in non-acceptance of the completed roadway facility for maintenance by the County and may further result in corrective action by the County. Such corrective action costs shall be borne by the Owner.

B.1.6 WARRANTY of new roads constructed and appendages constructed for or adopted by the County shall be for the period of one year. An irrevocable Letter of Credit for 100 percent of actual construction cost shall be issued to the County for the same period to cover any defect that may be discovered in the warranty period. In the final month of the warranty period, a walkover shall be conducted by the County. Any identified deficiencies shall be corrected by the Owner or shall be repaired by the County using funds from the Letter of Credit.

B.2 Fees for Plan Review and Construction Observation

B.2.1 The Owner will be charged for all costs incurred by the County in reviewing the construction drawings and providing construction observation. All charges will be based on the County’s actual costs. The charges will include the County’s professional or agent fees, Planning and Zoning inspection fees, the LCRB's hourly wage rate, and any other costs associated directly with the Owner's project. The fees shall be payable when billed to the Owner, and final acceptance of the roadway and improvements into the County's system shall not be granted until all fees are paid in full.

B.2.2 Construction observation is required of all construction completed within the County's boundaries for roads and ancillary facilities.

B.3 Acceptance into the County Road Maintenance

Acceptance by the Board of County Commissioners of a road for county road maintenance may be made by application to the County. If the application is approved the LCRB will own and maintain the road and right-of-way to LCRB Maintenance Standards. Roads accepted for maintenance through application shall be subject to the conditions of this section.

The intended use of this section refers to roads requested to be included in the LCRB maintenance by Application. Road ownership and/or maintenance initiated by the County shall be exempt from this section and subject.

B.3.1 No roadway, existing or new, will be accepted for maintenance by LCRB until the conditions of this Section have been met, or a variance granted by the County's Planning and Zoning.

B.3.2 A request for acceptance of a roadway shall be filed with the County and must establish that the request meets the following requirements and is accompanied by the following:

1) Road right-of-ways have been dedicated and filed with the County.

2) Construction has been completed in accordance with current standards and specifications.

3) All required testing has been completed, reviewed, and the results accepted by the County.

4) A pre-acceptance walk-through shall be conducted at the project location with the following representatives in attendance:

- Project Owner
- Project Engineer
- Contractor
- Lemhi County Road and Bridge
- Lemhi County Planning and Zoning

5) The engineer-of-record shall provide as-built drawings and an engineer's statement of roadway completion with required submittals establishing that the improvements have been constructed in accordance with the approved construction drawings, specifications, and these Roadway Standards.

6) Warranty: The Owner and Project Engineer shall warrant workmanship, materials, and engineering design for one (1) full year from the time of acceptance by the County. The Owner or Project Engineer, at their own expense, can be required to correct any defects which may exist, which they are notified of within one (1) year of acceptance. Whenever an Owner or Project Engineer is required to make corrections or repairs to any defect, the warranty period for that correction or repair area shall be extended for one full year on the repaired portion of work after said repairs or corrections are completed.

7) Owner has paid all fees and charges.

8) Application to be approved and signed by P & Z, LCRB, and County Commission

B.3.3 In any platted subdivision with undeveloped public or private roadways, those roadways shall be developed to the appropriate standard prior to granting any building permit by the County.

Section C

C.1 Testing

C.1.1 All testing required by the County shall be the responsibility of the Owner at no cost to the County and be in accordance with ISPWC. All tests shall be performed by an independent certified testing laboratory and certified test results shall be submitted to the County. Work performed without certified test results shall not be accepted.

C.1.2 Any testing required by the County (other than supplemental testing), but not provided by the Owner, may be completed by the County, and all costs associated therewith shall be paid by the Owner.

C.1.3 In the event of marginal or failed results, the County may require supplemental tests to be taken on the materials or construction. The Owner shall make such additional tests. The cost for the supplemental tests shall be borne by the Owner.

C.1.4 The following is a summary of the testing requirements that shall be submitted to the County for quality assurance. The Owner is responsible for quality control. Owner shall notify the County 24 hours before testing and allow the County personnel to be present at all testing.

1) Embankment
- Density Tests
  - Minimum of one test per layer per 2,500 sq ft of fill surface area.

2) Trench Backfill
- Density Tests
  - Minimum of one test per 2 ft lift of material placed per crossing.
  - Minimum of one test per 300 lineal ft of pipe or portion thereof when located within the road section.

3) Pressure / Air Tests
- The contractor shall perform pressure and/or air tests of all applicable pipe lines in accordance with the ISPWC after backfilling and compacting of the trenches, but prior to paving.

4) Subgrade
- Fill Sections – Density Tests
  - Minimum of one test per 500 ft of roadway per travel lane located in the middle of each travel lane.
  - Minimum of one test per lift.
  - Minimum of two tests per road.
- Cut Sections – Proof Rolling
  - Use a loaded dump truck, or equivalent.
  - Deflection to be witnessed by the County.

5) Base Course – 12" of 6"-minus pit run crushed aggregate
A visual inspection of the subgrade by the LCRB must be conducted prior to bringing in pit run.

- Gradation Tests
  - Minimum of one test per 2,000 ft of roadway.
  - Minimum of two tests per road.
- Density Tests & Depth Measurement
  - Minimum of one test per 500 ft of roadway per travel lane located in the middle of each travel lane.
  - Minimum of two tests per road.

6) Leveling Course – 3" of ¾"-minus crushed aggregate (road mix)
A visual inspection of the pit run by the County must be conducted prior to bringing in road mix.

- Gradation Tests
  - Minimum of one test per 2,000 ft of roadway.
  - Minimum of two tests per road.
- Density Tests & Depth Measurement
  - Minimum of one test per 500 ft of roadway per travel lane located in the middle of each travel lane.
  - Minimum of two tests per road.
  - Depth of road mix shall be no less than three-inches (3"). Additional material shall be required if depth measurement is less than minimum.

7) Finishing Course – 3" of hot mix asphalt
A visual inspection of the road mix by the County must be conducted and copies of all test results shall be submitted prior to paving.

- Extraction Gradation Tests
  - Minimum of one test per 2,000 ft of roadway.
  - Minimum of two tests per road.
- Density Tests
  - As frequent as necessary at the beginning of paving operations to determine an acceptable roller pattern.
  - Minimum of one test per 300 ft of roadway per travel lane located in the middle of each travel lane.
  - Minimum of two tests per road.
- Core Tests
  - Minimum of one test per 1,000 ft of roadway.
  - Minimum of two tests per road.
  - Core holes shall be filled with non-shrink grout mix.

C.1.5 Pavement not meeting the specifications within acceptable tolerances shall be removed or overlaid as determined by the County.

Section D

D.1 Road Service Classification

Standards for design and construction depend on Service Classes of the County and state roads. The service classes for County roads established by these Standards are the following: Arterial, Major Collector, Minor Collector, Local Road, and Private-Local Road (PR).

D.1.1 Arterial – A principle highway corridor including state or county highways connecting cities and having regional continuity for interstate commerce.

D.1.2 Major Collector – A public road that provides for regional traffic movement within neighborhoods of the County and between arterial roads and local roads.

D.1.3 Minor Collector – A public secondary collector road with fewer average daily traffic (ADT) but functions as a sub-regional corridor to local roads.

D.1.4 Local Road – A public road that provides direct access to residential, commercial, industrial, or other abutting land for local traffic movements and connects to collector and/or arterial roads. All roads owned or maintained by the County that are not classified Arterials or Collectors are "Local Roads."

D.1.5 Private Road (PR) – A privately owned and maintained road in accordance with this standard and/or through a Development Agreement constructed on a right-of-way or easement dedicated for public use.

D.1.6 Road right-of-way and easement requirements shall be established by defining road service potential based on lots that may be accessed within the current subdivision and adjacent properties.

D.1.7 Agricultural Roads (AR) – as identified by the Army Corps of Engineers are road for agricultural use, shall be a maximum width of 16 feet, shall cause minimum elevation change in flood plain or flood way locations and shall not be constructed for the purpose of access to any habitable structure.

D.1.8 Other Roads (OR) – are identified as roads within the County Road System that are managed by Government Agencies such as the US Forest Service, the Bureau of Land Management, the Idaho Department of Lands and State Lands.

Section E

E.1 Right-of-Way

E.1.1 Right-of-way width shall vary according to the Service Classification per Table No.1, General Design Standards in Section F.

E.1.2. Final plat approval for roads requires dedication of right-of-way in accordance with Idaho Code Title 50, Chapter 13. Road right-of-way is any land dedicated and open to the public and under the jurisdiction of the County. The County has no obligation to maintain said right-of-way for vehicular traffic. Private-Local Road right-of-way is land dedicated to the public but privately maintained under a Development Agreement with the County through the P&Z in accordance with Idaho Code Title 67, Chapter 65.

E.2 Restricted Right-of-Way Activities Allowed by Permit

E.2.1 Any use of public right-of-way used for County and Private roads for purposes other than a travel way shall be by permit only, obtained from the County. Any such activity shall not be commenced without application for and receipt of a permit.

E.2.2. Restricted activities shall include, but shall not necessarily be limited to, installation, construction, and replacement or repair of the following:

a. New or amended road approaches - public or private,

b. New or amended driveway approaches,

c. Buried pipes, conduits, wires, or lines - new, repair, or replacement,

d. Utility boxes, poles, meters, and other structures - overhead or underground,

e. Storm water swales, catch basins, and sediment curtains,

f. Signs and fences,

g. Culverts and Bridges, and

h. Landscaping located within the right-of-way including, but not limited to, boulders greater than four inches, ties, gates, lights, natural vegetation greater than six inches in height, or any other private property that may pose a safety hazard.

E.2.3 The use of right-of-way for other than vehicular travel and items listed above shall be in accordance with the LHTAC Manual for Use of Public Right-of-Way, Standard Approach Policy, 1997, Permits for Utilities and Encroachments, 2001 and Lemhi County Ordinance 2008-2. Any such activity shall also be completed in accordance with these Standards, or in the absence of any existing standard, in accordance with sound engineering principles.

E.2.4 Any disturbed area within the right-of-way shall be restored to equal or better than condition prior to the disturbance as soon as practicable after the surface has been disturbed. The surface shall be maintained in a smooth, drivable condition until final restoration is completed and accepted. Roadways shall be freely passable by emergency and service vehicles.

E.3 Prohibited Right-of-Way Activities

E.3.1 Any use of a road right-of-way other than as a travelway constitutes an obstruction or encroachment, and to the extent that such obstructions or encroachments are incompatible with the safe usage of a road right-of-way, the same shall be prohibited by the County.

E.3.2 Obstructions within the right-of-way which are prohibited shall include, but are not necessarily limited to, the following:

a. Livestock loading or feeding,

b. Crop harvesting, planting, or other farm activities, and

c. Parking for social functions, auctions, recreational activities, gatherings, or any other reason for longer than eight (8) hours during any twenty-four (24) hour time period.

E.3.3 Encroachments within a right-of-way which are prohibited shall include, but are not necessarily limited to, the following:

a. Fences, hedges, shrubbery, and trees,

b. Crop plantings,

c. Irrigation head or waste articles, sprinklers, control structures, or other irrigation appurtenances,

d. Irrigation discharge either from pressurized sprinklers or surface runoff. Permitted and historical irrigation crossings in maintained structures are not included,

e. Decorative structures and commercial or other private signs as prohibited in the right-of-way by County Code,

f. Disposal of irrigation water in roadside drainage ditches (borrow pits),

g. Endangerments through landslide or potential landslide creation by creating excessively steep cut or fill banks on adjacent property,

h. Mailbox supports more rigid than wood posts of ordinary size (up to 4”x 4”) unless beyond the boundary identified as the Clear Zone by AASHTO.

i. Irrigation pipelines parallel with roadways within the right-of-way, and

j. Piles of wood, fruit boxes, or any other objects or materials that create a safety hazard.

E.3.4 Endangering nuisances and damaging or unsafe conditions which originate from adjacent properties shall be prohibited. These include, but shall not be limited to the following:

a. Drain or irrigation water overflowing onto the roadway (LC Ord. 1997-1). Excess sediment and animal wastes should not be allowed to build up and block drainage pipes. If the blockage constitutes a hazard, the removal of the hazard will be at the expense of whosoever created the problem. When drain and irrigation ditches run parallel with right-of-ways, dirt and cleaning materials from ditch maintenance shall not be put on the road right-of-way. Blockage of drainage pipes in the right-of-way by irrigation pipelines or other pipes such as stock-watering pipes, hoses, electrical wires or other foreign objects, is prohibited.

b. Foreign objects attached to bridges.

c. Visibility impairment from dust, water from sprinkler, steam, and smoke.

d. Nuisances such as mud causing slippery conditions and dumping of garbage.

e. Defacing road or placement of other signs (yard sale signs or auctions) upon road signs.

E.3.5 Removal per Idaho Code 40-2319: In the event obstructions prevent the safe or timely passageway of the public, the governing jurisdiction shall request the abutting Property Owner to remove or correct the obstruction immediately. In the event such obstructions or use are prohibited, the governing jurisdiction personnel shall request the Owner to remove, remedy, and restore or correct the obstruction within ten (10) days. If the abutting Property Owner does not comply, the County may petition the court for an order directing the Property Owner to remove or correct the obstruction. After ten (10) days the County may make the necessary removal, repairs, and/or corrections and assess the cost incurred to the responsible party. Any court costs incurred shall be paid by the responsible party. Any repairs or corrections shall be in accordance with these Road Standards.

In the event the obstruction blocks or restricts the travel way or posses safety concerns that may cause injury or loss of life as determined by the County the obstruction shall be removed immediately by the County or a Sub-Contractor to the County. Any and all costs of such removal and restoration of the travelway shall be paid for by the Property Owner.

E.3.6 Damaging of a roadway is prohibited. This includes, but is not limited to, construction and farm machinery not mounted on rubber tires (such as harrows and discs), any equipment with cleated tracks, and backhoe outriggers that are not padded. Any other object that will damage roadways is not to be dragged, driven, or used on any paved surface.

E.3.7 Penalty: A violation of these provisions is a misdemeanor in accordance with Idaho Code Title 18, Chapter 1, punishable by imprisonment in a County jail not exceeding six months, or by a fine not exceeding one thousand dollars. Either or both such imprisonment and fine may be imposed; in addition thereto, any person so convicted shall pay such costs as the court may assess, together with restitution for any damages caused by said violation.

E.4 Utility and Alternative Travel Easements

The intent of this section is to provide a standard for public easements used for pathways, utilities, etc. located outside the existing right-of-ways. Many County rights-of-way for county roads are limited in width for road improvements required for future growth. A goal of the County is to preserve these rights-of-way without pathways & utilities entanglements that will restrict future improvements.

E.4.1 Allowable use for easements identified in this section shall be for pedestrian and bicycle pathways, stock driveways, overhead and underground utilities, drainage, irrigation, and similar uses or facilities. Utility and Alternative Travel Easements lying parallel with the centerline of the road shall be located outside the right-of-way.

E.4.2 Maintenance of Utility and Alternative Travel Easements shall be completed by the agency, company, or association creating said easements such as homeowners, utility, irrigation district, or parks and recreation. The County shall not be responsible for said maintenance and upkeep. In the event easements become unsafe or a nuisance to the public, the County or other enforcement agencies of the County will be allowed to require a remedy in accordance to E.3.7.

E.4.3 Widths of utility and alternative travel easements shall be a minimum of 20 feet.

Section F

F.1 Design Standards

Table No. 1, General Design Standards set forth the minimum design and construction requirements for roads based on ownership, traffic volume, and functional classification. Also see Standard Drawings in the Appendix titled "Typical Paved Road Section" and "Typical Unpaved (Gravel) Road Section."

Table No. 1				
General Design Standards				
	Functional Classification			
	County Maintained Roads			Private Maintained Roads
	Arterial / Major Collector	Minor Collector	Local Road	Private Local Road
Lots Served, Max.	No Limit	No Limit	50 per Mile	No Limit
ADT (Vehicle/Day)	Greater than 700	400-700	10-400	No Limit
Right of Way Width, Min (ft) ***	80	60	60**	60**
Finished Surface, Min. (ft) *	28 if ADT < 600 36 if ADT > 600	26 if ADT < 600 34 if ADT > 600	24	24
Access	Restricted	Restricted	No Limit	No Limit
Surface Type	Asphalt	Asphalt	Asphalt/Gravel	Asphalt/Gravel
Design Speed (MPH)	35 - 65	35 - 45	35	25 - 35
Grade, Max.****	8%	8%	8%	8%
Notes:				
* Finished Surface includes shoulder widths				
** Right-of-way for Local Roads and Private Road may be reduced to 50 feet when development potential is limited by terrain or government owned lands				
*** Right-of-way width minimum to be increased to include all of the cut and fill cross slope section				

F.2 Road Names

F.2.1 All names for new roads constructed within the jurisdiction of the County shall be approved by E-911 Coordinator.

F.2.2 All guide signs as identified by MUTCD required by the County shall be installed by the Developer in accordance with Section I such as road name signs.

F.3 Road Cross Section

F.3.1 The Standard Drawing Details included in the Appendix of these Standards show typical cross section characteristics required for road classification.

F.3.2 After reconstruction of roadway, existing irrigation structures and culvert termini should be removed and relocated outside the County right-of-way. Roadside drainage ditches (borrow area) may not be used for conveying irrigation water of any type. New irrigation structures, ditches, and piping shall be constructed outside of the right-of-way.

F.3.3 The road cross section outside the paved area and inside the remaining right-of-way shall conform to Section E and the LHTAC Manual. Conformance thereto will be based on a site-specific review including plans and site walkover.

F.3.4 Existing roads along the frontage of a proposed subdivision or development shall be improved to meet current standards.

F.4 ISPWC Modifications

F.4.1 Roads incorporating aggregate material for finish surfacing as a gravel road shall utilize the following gradation for the aggregate.

Table No. 2	
Crushed Aggregate for Gravel Road Surfacing	
Sieve Size	**Percent Passing**
3/4	95 – 100
No. 4	50 – 78
No. 8	37 – 67
No. 40	13 – 35
No. 200	4 – 15
Plasticity Index	4 – 12

F.5 Materials Requirements

Asphalt oil is not defined in these standards and will depend on the specific project, availability of mix, and volume of traffic. Roads with a high ADT volume a PG 64-28 is recommended while low ADT volume roads and parking areas a PG 58-28 is recommended.

F.5.1 Surface and base crushed aggregates shall be granular materials 3/4-inch (3/4”) or smaller. Materials from specific sources may be approved by LCRB without laboratory testing based on LCRB's prior experience with material from such sources.

F.5.2 Sub-base (or base for gravel roads) course crushed aggregates shall be granular materials 4-inches (4”) or smaller and historical experience of imported aggregate materials from specific sources approved by the County, the pertinent gradation and placement requirements of ISPWC may be applied.

F.5.3 Sub-grade material sampling and testing is required for all new construction. Sub-grade material not required to be tested shall meet all three of the following conditions:

a. Native material shall be identified on the NRCS soils map as being non-clay soil, and

b. Sub-base of typical section shall be increased by 6-inches (6”), and

c. Imported material shall meet the non-testing conditions of F.5.1 and F.5.2.

F.5.4 Native material containing clay shall require sampling and testing in all conditions.

F.6 Cut and Fill Slopes

F.6.1 Cut slopes shall be as follows except where a Soils and Geology Report by a licensed Professional Engineer or Professional Geologist stipulates that materials on a specific site will be stable at steeper slopes.

a. For sections where the cut as measured from the uphill shoulder is less than or equal to 10 ft vertically, cut slope shall not be steeper than 1 H: 1V (1 Horizontal: 1 Vertical).

b. For sections where the cut as measured from the uphill shoulder is greater than 10 ft vertically, cut slope shall not be steeper than 1.5 H: 1 V.

c. Native materials containing clay require a Soils and Geology Report by a licensed Professional Engineer of Professional Geologist regardless of the vertical distance.

F.6.2 Where a Soils and Geology Report by a licensed Professional Engineer or Professional Geologist identifies native materials at road locations, cut slopes shall be as recommended by such report but not steeper than the following:

a. Solid Rock requiring blasting: 0.5 H:1 V

b. Jointed Rock removable by ripping: 0.75 H:1 V

c. Naturally Cemented or Bonded Material, 1 H:1 V

d. Loose Material, 1.5 H:1 V

F.6.3 Fill slopes shall not be steeper than 1.5 H:1 V.

F.6.4 Recognized areas which are susceptible to slides and erosion will require site-specific design solutions to limit or mitigate environmental and structural damage to roadways and waterways. Identified areas susceptible to these conditions have been shown on an overlay map entitled "Areas of Unstable Soils." Special construction and maintenance procedures specific to soil conditions within these areas must be practiced as precautions against potential sliding and erosion. Design and maintenance considerations within these overlay areas may include a combination of slope protection and stabilization practices such as:

- Reshaping borrow areas, revegetating, or regrading slopes,
- Drainage provisions including interceptor drain lines and redirecting flows, and
- Slope stabilization with gabions, slope pinning, or geotechnical fabrics.

The specific design should be completed by a qualified geotechnical engineer.

F.6.5 Construction of cut and fill slopes shall not be permitted without incorporating erosion protection measures recognized by the Idaho DEQ Stormwater Catalog: Best Management Practices.

F.7 Horizontal and Vertical Alignment

F.7.1 Horizontal and vertical alignment shall conform to AASHTO or LHTAC Manual unless noted otherwise.

F.7.2 Grades shall not exceed 8% on public or private roads. Five percent grades are recommended. Lemhi County terrain may require grades to be greater than 8%. In such case the LCRB is authorized to make such determination. Exceeding 8% grades will require an application of variance.

F.7.3 Horizontal Alignment: When road lines deflect from each other by more than ten degrees (10°) in alignment, the centerlines shall be connected by a curve having a minimum radius of 500 ft for collectors, and 150 ft for local or private roads. Between reverse curves on local roads, there shall be a minimum tangent distance of 100 ft, and on collectors, 200 ft.

F.7.4 Vertical Alignment: Minimum sight distance shall be 200 ft for local and private roads and 300 ft for other roads.

F.7.5 Intersections shall conform to the following:

a. Angle of Intersection: Roads shall intersect at ninety degrees (90°) or as closely thereto as possible, and in no case shall roads intersect at less than eighty degrees (80°).

b. Sight Triangles: Minimum clear sight distance at all minor road intersections shall permit vehicles to be visible to the driver of another vehicle in accordance with Standard Drawing 8 and 9 (pp 37-38).

c. Number of Roads: No more than two roads shall cross at any one intersection.

d. Centerline Offsets: Slight jogs at intersections shall be prohibited. Where jogs are unavoidable, road center lines shall be offset by a distance of at least 125 ft.

e. Vertical Alignment of Intersections or junctions shall be no steeper than 3 percent for a minimum of 50 ft every direction from the centerline intersection point.

F.8 Additional Width

F.8.1 Horizontal curves shall be widened to allow for off tracking. Table No. 3 provides minimum lane-widening dimensions. Transition sections shall be in accordance with AASHTO but not greater than 1 ft of width change per 10 ft of longitudinal travel.

Table No. 3
Additional Width of Horizontal Curves

Radius	1-lane widening	2-lane widening
40 ft to 79 ft	5 ft	10 ft
80 ft to 99 ft	3 ft	6 ft
100 ft to 149 ft	2.5 ft	5 ft
150 ft to 249 ft	1.5 ft	3 ft
250 ft to 400 ft	1 ft	2 ft
More than 400 ft	Not Required	Not Required

F.9 Driveway / Emergency / Service Vehicle (DESV) Access

F.9.1 Design of driveways, emergency vehicle access and utility service access shall conform to the following:

a. DESV access driveways shall be provided to every habitable structure here-after built on (or moved onto) property in the County.

b. DESV driveways roads shall be constructed to standard engineering specifications for an "All Weather Surface." Six inches of crushed aggregate with a maximum aggregate size of 2 inches qualifies as an "All Weather Surface."

c. Width of DESV access:

- Roads or driveways serving two or more habitable structures shall have a drivable surface at least 24 ft wide. No obstructions including, but not limited to, power poles, fences, phone boxes, ditches, or irrigation boxes shall reduce this minimum width.

d. Bridges shall be designed and constructed to support (AASHTO HL93 Design Loading)

e. DESV access driveways abutting state highways and collectors shall provide for on-site turn-around movements to enable vehicles to face traffic lanes.

f. Curves shall have an inside radius of at least 26 ft and an outside radius of at least 50 ft providing 24 ft of drivable surface.

g. DESV access location is recommended to be a distance of 150 ft but in no case shall it be less than 50 ft from road intersections measured from intersecting right-of-way, easement or property lines. On occasion when the right-of-way, easement or property lines exist at different locations the line creating the larger distance shall control.

h. DESV access grade shall have a maximum grade of three percent for a minimum distance of 24 ft from edge of traffic lane.

i. DESV access shall include drain swales or borrow ditches to prevent runoff water from entering onto roadways.

j. Driveway culvert requirements shall meet the specifications of Section G of the Standards.

F.10 Dead-ends / Turn-around

Dead-ends of Public and Private roads shall be constructed with a turn-around adequate for truck-and-single-trailer vehicle combinations, and for fire trucks and other emergency vehicles of non-articulated, single-steering-axle type. Turn-arounds shall be designed for the least practicable disturbance of existing terrain; to support this purpose they may be circular-, tee-, or loop-type as illustrated in Standard Drawing Number 5. Disturbances caused in installation shall be repaired or mitigated to prevent erosion, facilitate drainage, and minimize long-term maintenance obligations. See Standard Drawings

a. Turn-Around: Dead-end access roads shall have an approved turn-around at the end of a road.

b. Dead-end access roads in excess of one (1) mile length shall have constructed turn-arounds or areas of sufficient width that emergency vehicles can turn around without leaving the roadway surface at intervals not greater than one mile.

Section G

G.1 Drainage and Structures

G.1.1 All drainage for the development shall be designed by a Registered Professional Engineer and approved by the County in conjunction with the roadway plans. The design shall be based on the State of Idaho, Catalogue of Storm Water Best Management Practices for Idaho Cities and Counties. Any disruption of the normal drainage pattern of the area to be developed must have special consideration to facilitate equivalent future drainage of this area.

G.1.2 Culverts used for drainage purposes shall be in accordance with the LHTAC Manual except as noted in the Standards.

G.1.3 Culverts or bridges shall be installed at intersections and accesses, at driveway entrances, at all points where a natural drainage concentration pathway crosses any road, and at all points where high water table conditions create a requirement for supplemental drainage.

G.1.4 Culverts shall be installed at all driveway approaches that occur in Road sections that are drained by constructed roadside ditches. Driveway entrances at locations where natural topographic relief allows road surface runoff to drain away from the roadside without requiring a ditch may be constructed without culverts.

G.1.5 Disruption of natural drainage ditches or collection of surface runoff and subsequent use of the roadside drainage ditch to convey the natural drainage will not be acceptable.

G.1.6 Professional Engineer in the State of Idaho shall submit hydrologic model and drainage calculations for review and approval by the County for all bridges.

G.2 Culvert Requirements

G.2.1 Design flow for sizing culverts shall be the 50-year maximum flow based on hydrologic analysis performed by or under supervision of a Professional Engineer registered in the State of Idaho, or culverts may be sized based on the watershed area from Table No. 4 in Section G.3.

G.2.2 Culverts across County and Private-Local roads shall be a minimum of eighteen inches (18”) diameter, or sized to handle the design volume of water, or equal to the diameter of the greatest diameter upstream culvert.

G.2.3 Culverts in forested regions, including driveway entrance culverts shall be 18 inches (18”) in diameter or larger where required.

G.2.4 Culverts on driveway approaches in non-forested regions shall be not less than 12 inches in (12”) in diameter.

G.2.5 Culvert length shall be such that the total road (travelway plus shoulders) is not narrowed as the road crosses the culvert. Culverts shall extend a minimum of 3 ft past the toe of the road or driveway fill both upstream and downstream. A shorter culvert may be used provided that the fill is stabilized by headwalls and wingwalls and that the road (travelway plus shoulders) is not narrowed.

G.2.6 Culverts shall be installed for AASHTO HL93 Design Loading (such as 16 tons/axle or 12.5 tons/axle for tandem). Manufacturer of culvert to verify required depth of cover to achieve loading requirements.

G.2.7 Acceptable materials for culverts are reinforced concrete pipe, precast reinforced concrete box sections, galvanized steel pipe and plate, and aluminized steel pipe and plate.

G.3 Culvert Size

Table No. 4, shows minimum acceptable culvert sizes for rural conditions.

Table No. 4

Minimum Culvert Sizing

Watershed Area (acres)	Required Culvert Size (inches)	Culvert Capacity (cubic ft. per sec)
Less than 15	18	2
16 to 72	18	6
73 to 130	24	12
131 to 270	30	20
271 to 460	36	32
461 to 720	42	46
721 to 1,025	48	65
1,026 to 1,450	54	89
1,451 to 1,870	60	112
1,871 to 2,415	66	142
2,416 to 3,355	72	176
3,356 to 5,335	84	260
5,336 to 7,410	96	370
7,411 to 9,565	108	500
9,566 to 11,780	120	675

Strongly consider having culverts larger than 60 inches designed, or consider alternative structures, such as bridges, mitered culverts, arches, etc. Culverts larger than 120 inches must be designed and alternative structures evaluated for service life and maintenance.

G.4 Bridge Requirements

G.4.1 Bridges shall be designed for AASHTO HL93 Design Loading.

G.4.2 Flow design capacity shall pass the 100-year peak flow. The lowest member shall have 2 ft clearance of the 50-year peak flow.

G.4.3 Structural materials allowed are prestressed concrete, reinforced concrete, galvanized steel, weathering steel, painted steel, and pressure-treated wood.

G.4.4 Bridge widths shall be such that the total road (travelway plus shoulders) is not narrowed as the road crosses the bridge.

G.4.5 Bridge design subject to these Standards shall be designed by a Professional Engineer registered in Idaho. The County shall approve all bridge plans for public roads or private roads on dedicated right-of-way prior to construction.

G.4.6 Construction of bridges shall be subject to full-time inspection by the County. The cost for County inspection shall be compensated to the County by the Owner and agreed to by the Board.

G.4.7 **Material** test results provided by the Owner shall be submitted for review to the County before acceptance of the bridge by the Board.

Section H

H.1 Access Management

H.1.1 Standards for safety, access management, and right-of-way preservation are based on functional classification of roadways.

H.1.2 Roadways classified as Arterials (state highways) and Major Collectors shall be preserved for long distance, high volume, high speed traffic. Design shall demonstrate elements that address the following:

- Limit commercial and residential driveway access points.
- Establish agreements between properties for cross- or joint access.
- Require acceleration and deceleration lanes or right-turn lanes.
- Driveway location near intersections shall accommodate queued vehicles entering Arterials or Major Collectors. Queued Vehicles shall be defined as the line of cars on minor road waiting to access major road.
- Shared access points for subdivisions with frontage on state Arterials.
- Individual lots maintain access from minor collectors or lower classification roads.
- Access requiring backing maneuver onto roadways shall be prohibited. Backing maneuvers from access shall be allowed only if the all of the following conditions are met.

  1. Speed limit 25 mile per hour or less.
  2. Road not classified an arterial.
  3. Lot size is less than one acre.

H.1.3 Intersection/Approach separation/spacing shall conform to the following function and access class:

Table No. 5
Access Classification System

Functional Classification		Intersection Spacing (ft/min.)		Approach/Driveway Spacing (1)
		> 45 mph	≤ 45 mph	
Arterial	US 93	5,280 ft	1,320 ft	1,000 ft
	US 28	1,320 ft	660 ft	1,000 ft
Major Collector		660 ft	660 ft	600 ft
Minor Collector		330 ft	330 ft	150 ft
Local Road		330 ft	330 ft	100 ft

1. Driveway spacing may also be limited by adequate stopping sight distance. See following

H.1.4 Changes in land use or in development on existing parcels that will result in projected traffic volume increase and which require access from a state highway will necessitate preparation of a Traffic Impact Study (TIS). The scope and content of the TIS will be determined by Planning and Zoning and ITD from the guidance document, Transportation Impact Analysis for Site Development, by the Institute of Transportation Engineers, 2005.

H.1.5 For Arterials, internal connections between neighboring properties through cross- or joint access agreements shall be provided to promote vehicular and pedestrian circulation without having to re-enter the arterial system.

H.1.6 Flag lots are not encouraged, as per the County Development Code.

H.1.7 Residential corner lots shall obtain access from the road with the lowest functional classification.

H.1.8 Driveways shall be consolidated using internal connectors to avoid multiple lots with individual access connections to Arterials and Major Collectors.

H.1.9 Intersection and driveway access on Arterials or Collectors shall not be located closer to structural or topographic vision obstacles than the stopping distance for the posted speed as follows:

Table No. 6	
Stopping Distances per Speed Limit	
Posted Speed Limit (MPH)	Stopping Sight Distance (ft)
≤ 25	155
35	250
45	360
55	495
> 55	645

Section I

I.1 Permanent Signage

I.1.1 Permanent signs shall be in accordance with the Manual of Uniform Traffic Control Devices (MUTCD), latest edition, as published by the U.S. Department of Transportation, or as approved by the County. Unless otherwise identified in MUTCD, signage shall conform to Appendix A, Detailed Performance Standards for Signs, LCDC.

I.1.2 The Owner (Developer) shall install all signs prior to County acceptance of the project. All signs are defined as Regulatory, Warning, Guide, Motorist Service, Recreational and Cultural Interest, Tourist Orientated Directional, and Civil Defense signage as defined by MUTCD.

I.1.3 Traffic control signs required to properly control traffic in a safe manner shall be installed by the Owner.

I.1.4 Yield or stop traffic control signs shall be required on lesser class roads intersecting with a higher class road. The County shall approve location and type of all traffic control signs prior to installation.

I.1.5 Sign construction shall be in accordance with ISPWC Section 1105 and shall be constructed on an “E-2” steel post or pressure treated wood post. See ISPWC Standard Detail D-1130 and D-1131 respectively.

I.2 Pavement Markings

I.2.1 County will determine where pavement markings will be required. Should they be required, centerline striping or other pavement markings shall be constructed in accordance with the MUTCD Manual.

I.2.2 The spacing, location, and width of markings will be determined on an individual basis by County.

I.2.3 Paint quality shall be the same as that used by the Idaho Transportation Department, Standard Specifications for Highway Construction, 2004 or current Standard Specification.

Section J

J.1 Guardrails

J.1.1 Guardrails may be necessary in certain areas depending on the warrants for protecting the traveling public. Guardrail warrants and design shall be in accordance with AASHTO Roadside Design Guide.

J.1.2 The type of guardrail to be installed shall be determined by the County as the location dictates.

Section K - DEFINITIONS

Definitions and meanings of common terms utilized within the Lemhi County Development Code (LCDC) are incorporated into these Standards for their intended use with the following exceptions or additions:

Average Daily Traffic – (ADT) The average 24-hour volume, being the total volume of vehicles during a stated period divided by the number of days in that period.

Driveway – A private owned and maintained vehicle access serving a single lot, properties under single ownership, a single residence, or agricultural, commercial, or industrial use area.

Functional Classification Map – A map adopted by Lemhi County and the Idaho Transportation Department classifying roads and highways according to the character of service they are intended to provide.

Right-of-Way - A parcel of land dedicated for use as a public way, which normally includes roads, sidewalks, pathways, utilities, or other public service functions.

Road/Roadway - Any road, street, avenue, boulevard, lane, parkway, easement for access, or other way which is an existing state, county, or municipal roadway; or a road or way shown in a plat heretofore approved pursuant to law or approved by official action; or a road or way in a plat duly filed and recorded within the right-of-way boundaries whether improved or unimproved and may be comprised of aggregate surface material, pavement, shoulder, curbs, gutters, sidewalks, parking areas, and lawns. Roads in the county are classified by the following uses as identified on the Functional Classification Map:

a. Arterial - A principle highway corridor including state or county highways connecting cities and having regional continuity for interstate commerce.
b. Major Collector – A public road that provides for regional traffic movement within neighborhoods of the County and between arterial roads and local roads.
c. Minor Collector – A public secondary collector road with fewer ADT but functions as a sub regional corridor to local roads.
d. Local Road - A public road that provides direct access to residential, commercial, industrial, or other abutting land for local traffic movements and connects to collector and/or arterial roads.
e. Private Road (PR) – A privately owned and maintained road constructed on right-of-way or easement dedicated for public use roads.

Travel Way – The portion of the roadway for the movement of vehicles, exclusive of ditches, fore slopes and back slopes. Directional travel ways are also referred to as travel lanes.

Utilities - Installations or facilities, underground or overhead, furnished for use by the public, including but not limited to, electricity, gas, steam, communications, telecommunications, cable television, water, drainage, irrigation, sewage disposal, or flood control, owned and operated by any person, firm, corporation, municipal department, or board duly authorized by state or municipal regulations. Utility or utilities as used herein may also refer to such persons, forms, corporations, departments, or boards, as applicable herein.

County Road – Roads within the County that are maintained by LCRB.

County Road System – All roads within the County as identified in Section D.

LIST of ACRONYMS used in this document:

AASHTO	American Association of State Highway and Transportation Officials
ADT	Average Daily Traffic
CC&R	Community, Covenants, and Restrictions
DESV	Driveway / Emergency / Service Vehicle
ISPWC	Idaho Standards for Public Works Construction
ITD	Idaho Transportation Department
LCDC	Lemhi County Development Code
LCRB	Lemhi County Road & Bridge
LHTAC	Local Highway Technical Assistance Council
MUTCD	Manual on Uniform Traffic Control Devices
NRCS	Natural Resources Conservation Service
PG	Pre Grade
PR	Private Roads

Section L

L.1 References

American Association of State Highway and Transportation Officials (AASHTO) Guides

- Roadside Design Guide
- Policy on Geometric Design of Highways and Streets, 2004
- Standard Specifications for Highways and Bridges

Idaho Standards for Public Works Construction (ISPWC)

Local Highway Technical Assistance Council (LHTAC) Manuals

- Highway and Street Guidelines for Design and Construction
- Right-of-Way Use Manual – Standard Approach Policy
- Right-of-Way Use Manual – Permits for Utilities and Encroachments

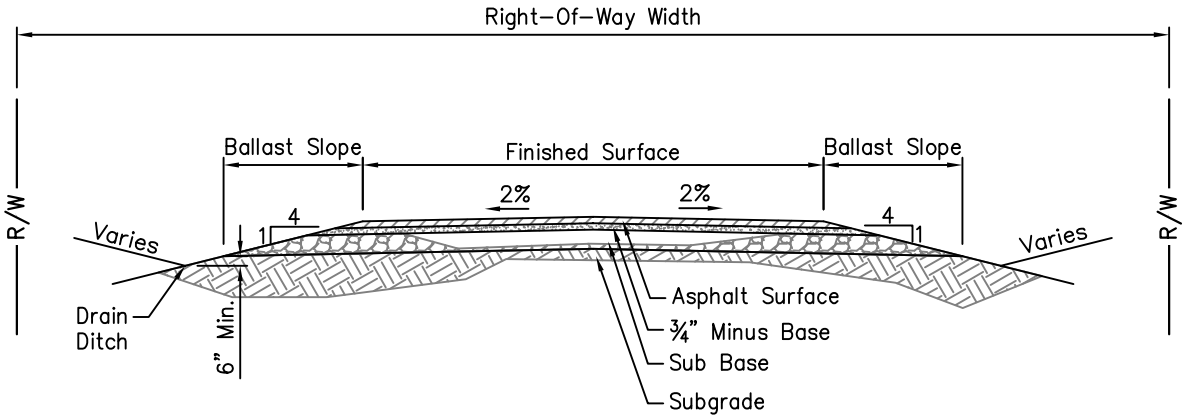
Highway Standards and Developmental Procedures for the Association of Canyon County Highway Districts

Manual of Uniform Traffic Control Devices (MUTCD) - published by the U.S. Department of Transportation, Federal Highway Administration

LEMHI COUNTY STANDARDS

TYPICAL PAVED ROAD SECTION

SD-1



Notes:

1. All Construction Shall Be Per I.S.P.W.C. Specifications.

2. Minimum Asphalt Surface, ¾" Minus Base, And Sub Base Thickness Set By Local Policy And Type Of Use. Material Thickness Shall Be Strictly Adhered To Unless Designed By Engineer Based On Traffic Index And "R" Value.

3. Right Of Way Widths Shall Be Increased To Encompass The Cut And/Or Fill Slopes Associated With The Roadway.

4. Drain Ditches Shall Have A Maximum 3:1 Fore Slope With 4:1 Slope Recommended. The Back Slope Of Drain Ditch Shall Be A Minimum 1:1 Back Slope With 4:1 Back Slope Recommended. The Flow Line Of The Drain Ditch Shall Be A Minimum 6 Inches Below The Lowest Aggregate Base Course. Piping Drain Ditch Under Driveways Required With Approved Length And Type.

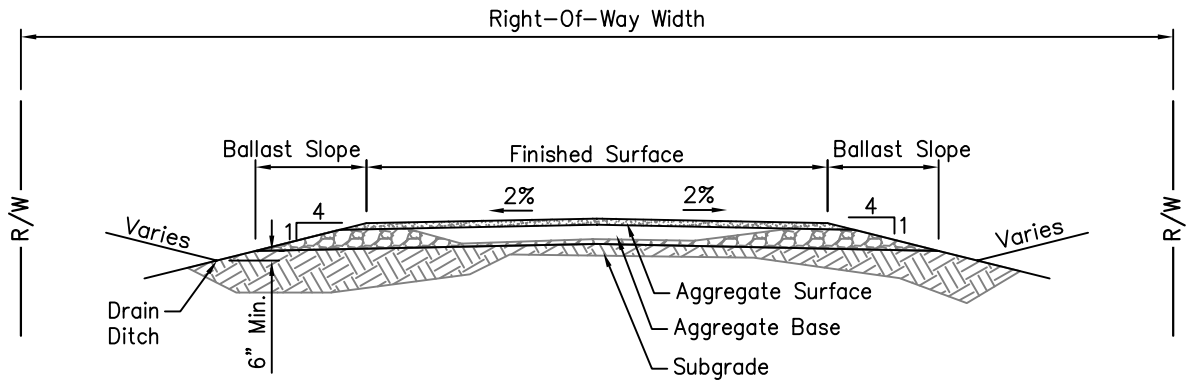
* See Table 1 Of Standards For Additional Conditions, Section F.5 For Materials

CLASS OF ROAD	ASPHALT SURFACE	¾" MINUS BASE OR LEVELING COURSE	GRANULAR SUB BASE	FINISHED SURFACE	RIGHT OF WAY WIDTH	MAXIMUM LENGTH	AVE. DAILY TRAFFIC
MAJOR COLLECTOR	2½ IN.	4 IN.	12 IN.	28 FT. IF ADT < 600 36 FT. IF ADT > 600	80 FT.	NO LIMIT	> 700
MINOR COLLECTOR	2 IN.	4 IN.	12 IN.	26 FT. IF ADT < 600 34 FT. IF ADT > 600	60 FT.	NO LIMIT	400–700
LOCAL ROAD	2 IN. MIN. (OPTIONAL)	4 IN.	12 IN.	24 FT.	60 FT.	NO LIMIT	10–400
PRIVATE ROAD	2 IN. MIN. (OPTIONAL)	4 IN.	12 IN.	24 FT.	60 FT.	NO LIMIT	NO LIMIT

LEMHI COUNTY STANDARDS

TYPICAL UNPAVED (GRAVEL) ROAD SECTION

SD-2

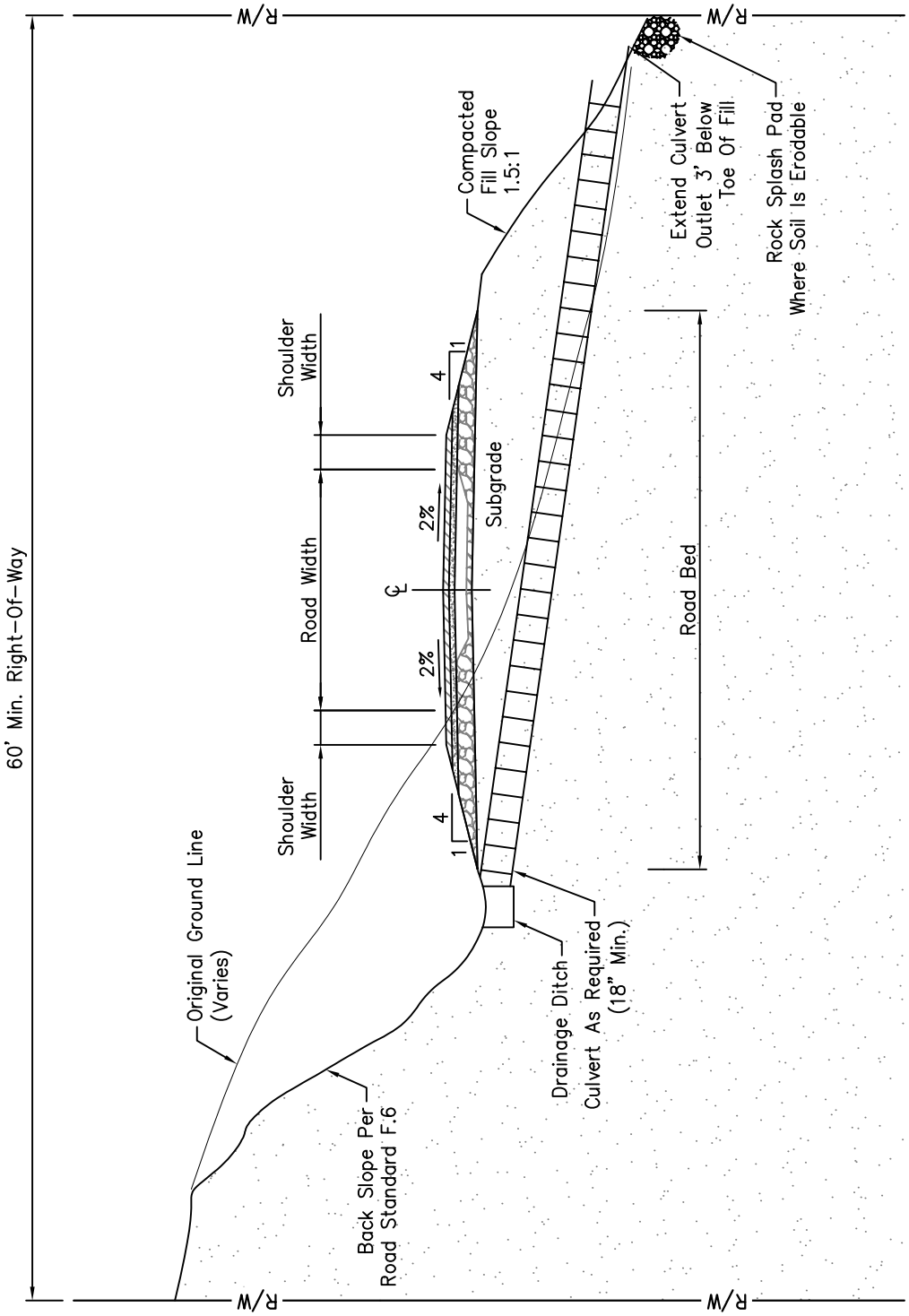


Notes:

1. All Construction Shall Be Per I.S.P.W.C. Specifications.
2. Minimum Aggregate Surface And Aggregate Base Thickness Set By Local Policy And Type Of Use. Material Thickness Shall Be Strictly Adhered To Unless Designed By Engineer Based On Traffic Index And "R" Value.
3. Right Of Way Widths Shall Be Increased To Encompass The Cut And/Or Fill Slopes Associated With The Roadway.
4. Drain Ditches Shall Have A Maximum 3:1 Fore Slope With 4:1 Slope Recommended. The Back Slope Of Drain Ditch Shall Be A Minimum 1:1 Back Slope With 4:1 Back Slope Recommended. The Flow Line Of The Drain Ditch Shall Be A Minimum 6 Inches Below The Lowest Aggregate Base Course. Piping Drain Ditch Under Driveways Required With Approved Length And Type.

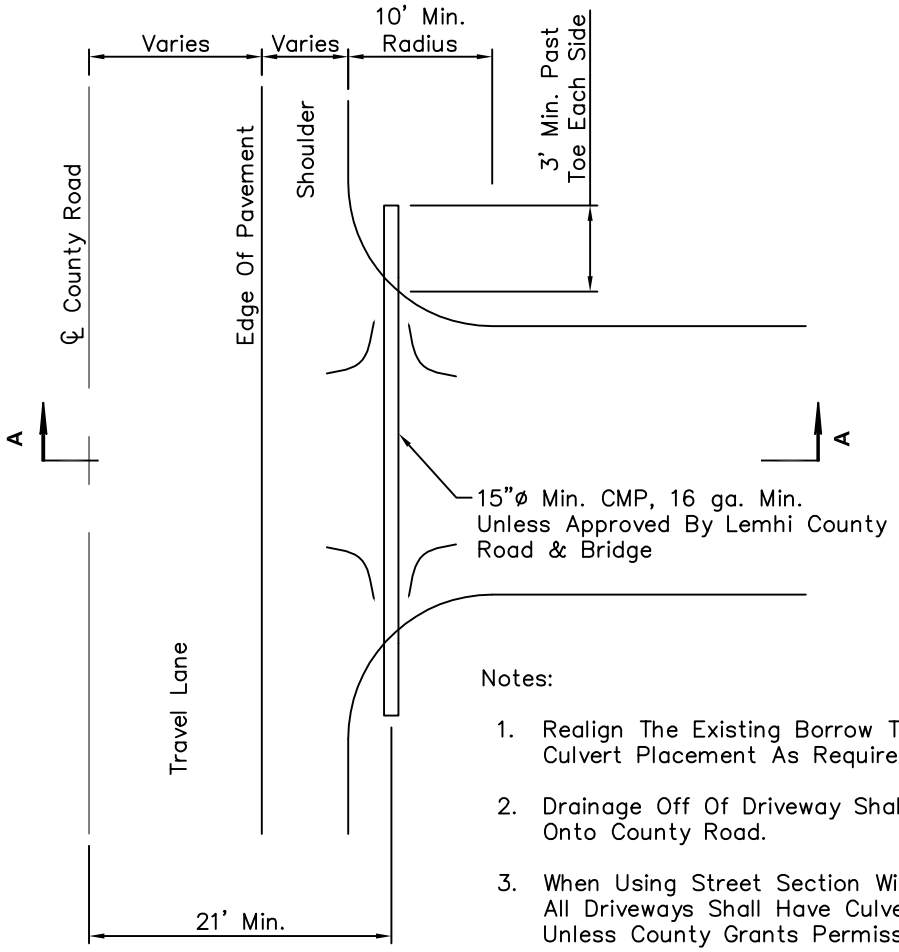
* See Table 1 Of Standards For Additional Conditions, Section F.5 For Materials

CLASS OF ROAD	AGGREGATE BASE	AGGREGATE SURFACE	FINISHED SURFACE	MIN. RIGHT-OF-WAY WIDTH
MINOR COLLECTOR	12 IN.	4 IN. < 5% GRADE 6 IN. > 5% GRADE	24 FT.	60 FT.
LOCAL ROAD	12 IN.	4 IN. < 5% GRADE 6 IN. > 5% GRADE	24 FT.	60 FT.
PRIVATE ROAD	12 IN.	4 IN. < 5% GRADE 6 IN. > 5% GRADE	24 FT.	60 FT.



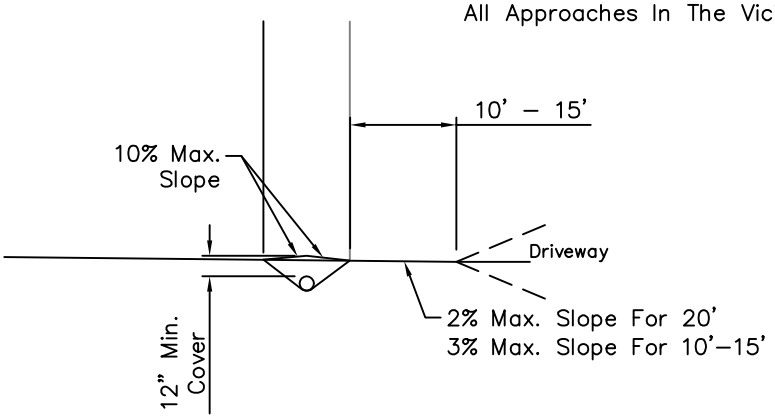
Note:
Shapes And Dimensions Will Vary To Fit Local Conditions.
See Drawings For Typical Sections.

COUNTY OF LEMHI EST. 1869	LEMHI COUNTY STANDARDS	TYPICAL SECTION MOUNTAINOUS DRAINAGE	SD-3



Notes:

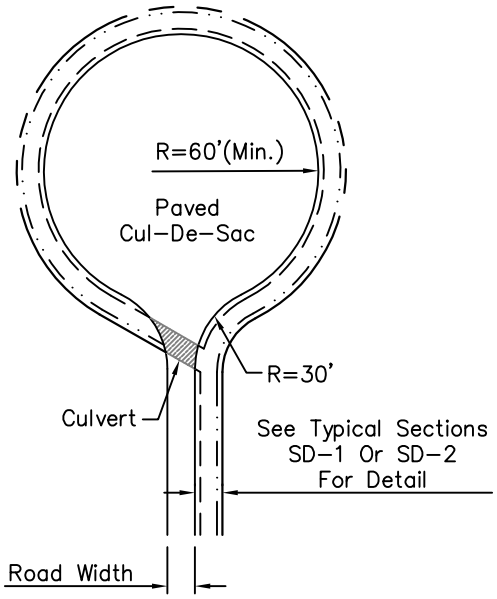
1. Realign The Existing Borrow To Conform To Culvert Placement As Required.
2. Drainage Off Of Driveway Shall Not Enter Onto County Road.
3. When Using Street Section With Borrow Ditch, All Driveways Shall Have Culverts Installed, Unless County Grants Permission Otherwise.
4. Borrow Ditches Shall Be Constructed A Min. Of 18" Deep Below Center Line.
5. Grades In Excess Of 3% Should Be Avoided On All Approaches In The Vicinity Of An Intersection.



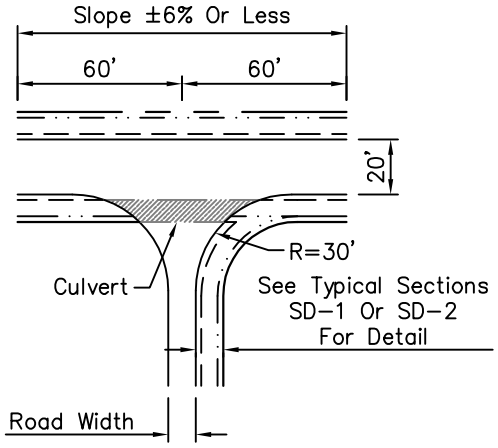
SECTION A-A

(Not To Scale)

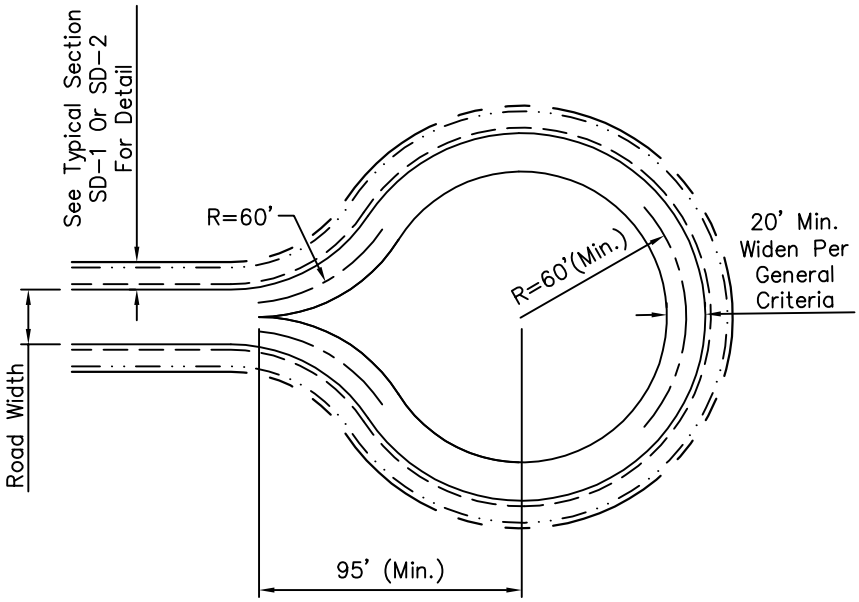
	LEMHI COUNTY STANDARDS	DRIVEWAY CULVERT DETAIL	SD–4



OPTION A
Circular Turn-Around

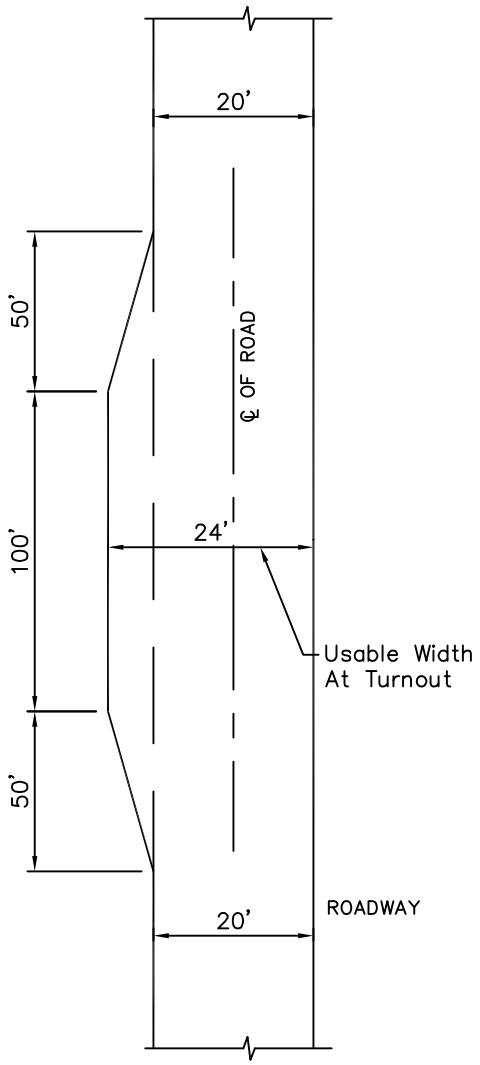


OPTION B
Tee Turn-Around

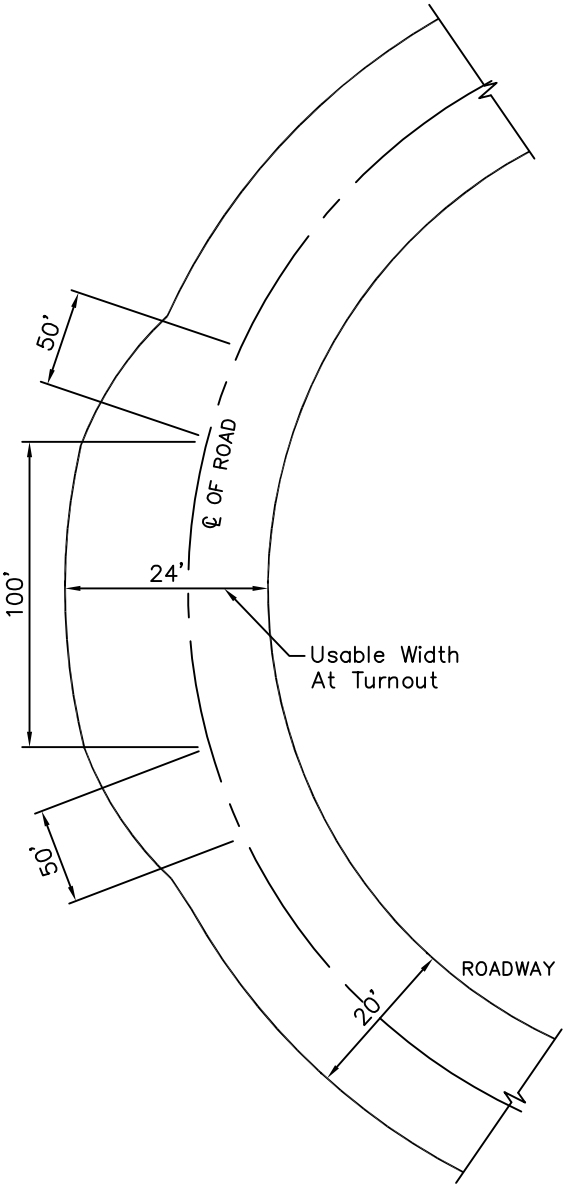


OPTION C
Loop Turn-Around

	LEMHI COUNTY STANDARDS	TURN-AROUND OPTIONS	SD-5

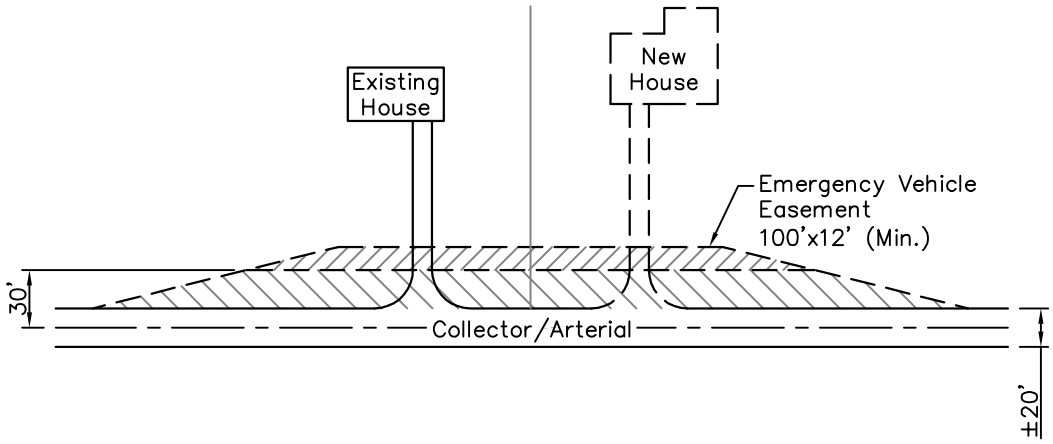


ROAD ON TANGENT

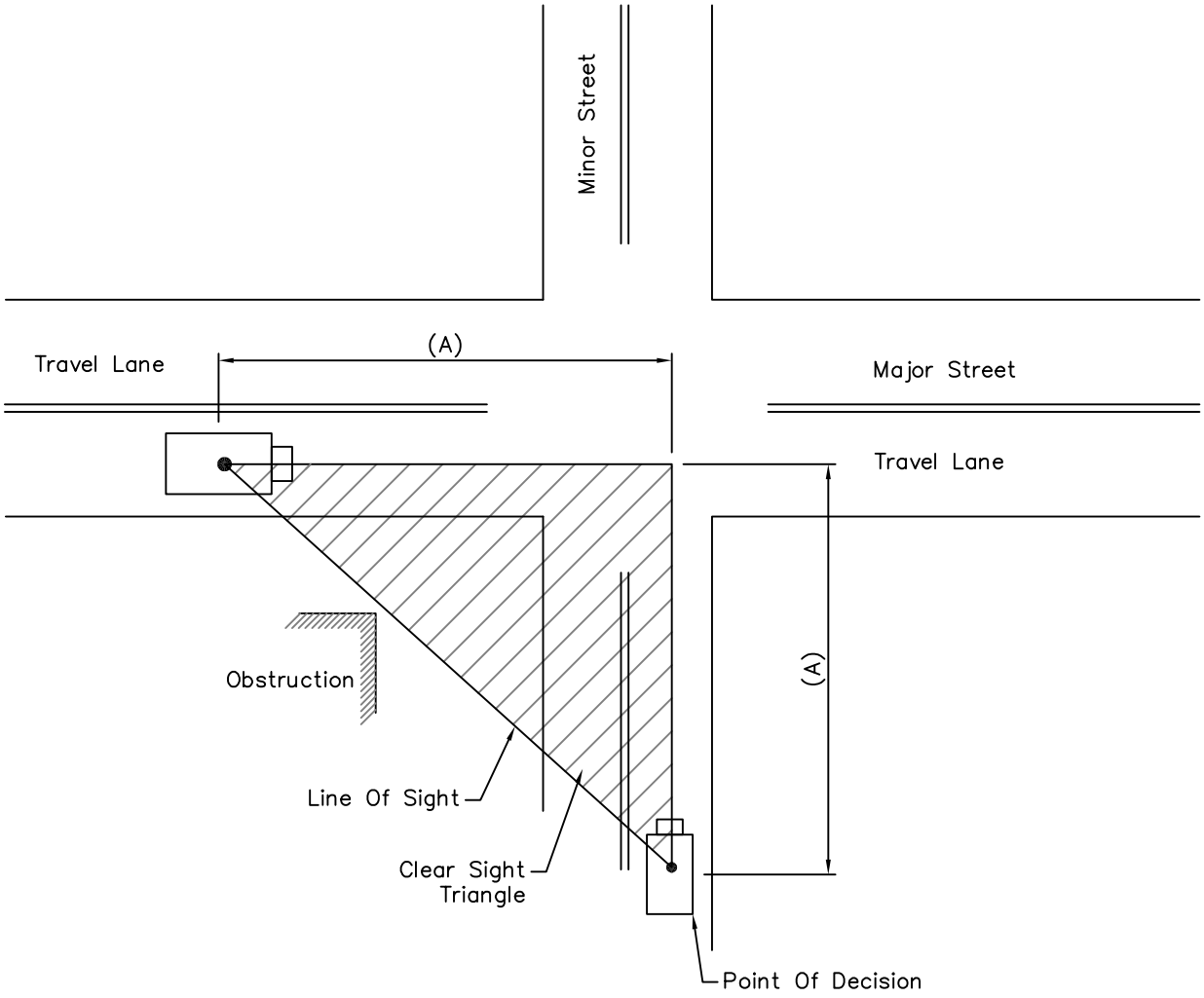


ROAD ON CURVE

	LEMHI COUNTY STANDARDS	MAILBOX TURNOUT DETAIL	SD–6



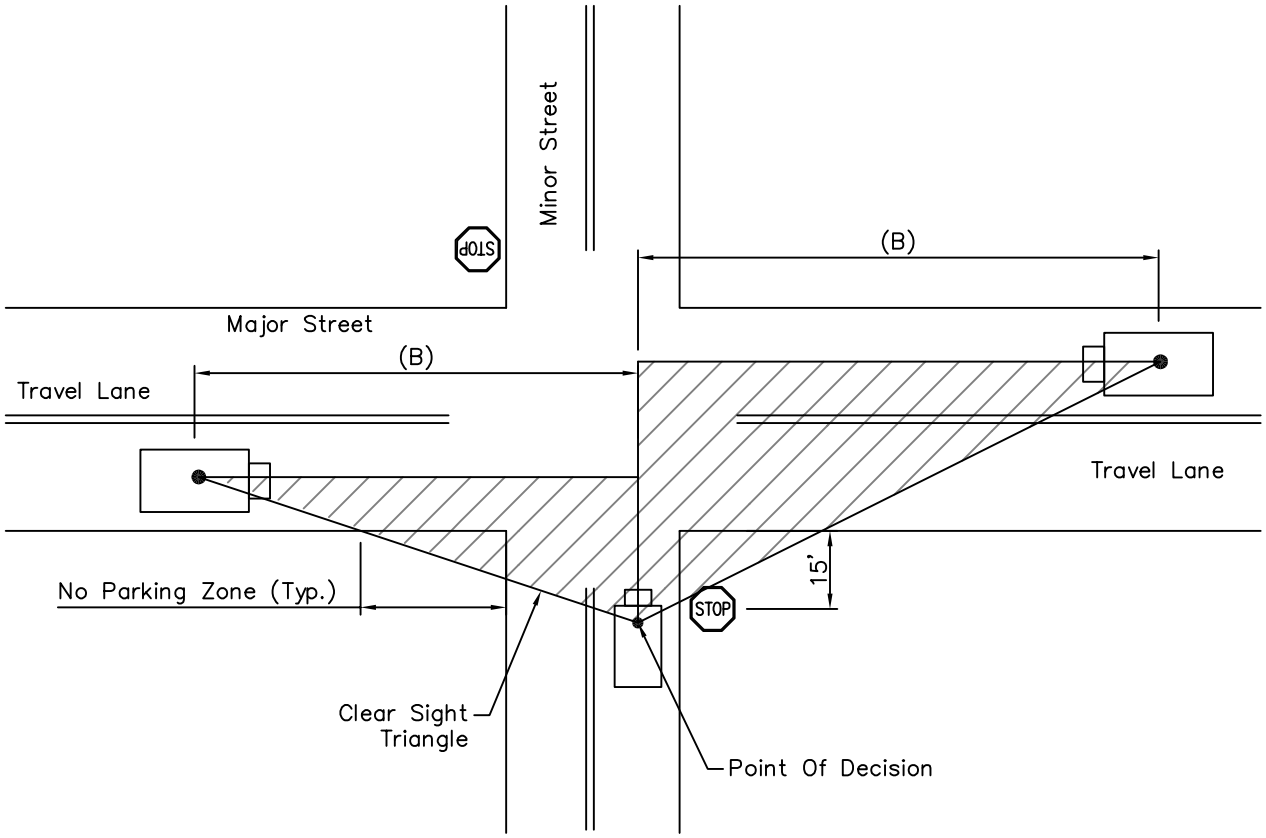
	LEMHI COUNTY STANDARDS	EMERGENCY VEHICLE EASEMENT	SD-7



Stopping Sight Distances

MPH	(A) FT.
25	70
35	165
45	220
55	285

	LEMHI COUNTY STANDARDS	APPROACH SIGHT TRIANGLE UNCONTROLLED INTERSECTION FOR MAJOR AND MINOR ROADS	SD–8

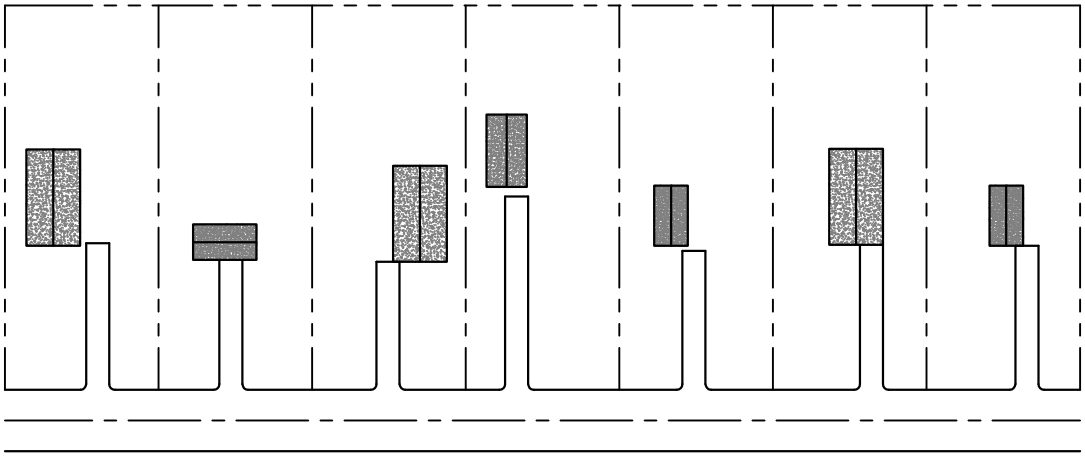


Stopping Sight Distances

MPH	LEFT TURN (B) FT.	RIGHT TURN (B) FT.	THROUGH (B) FT.
25	280	240	240
35	390	335	335
45	500	430	430
55	610	530	530

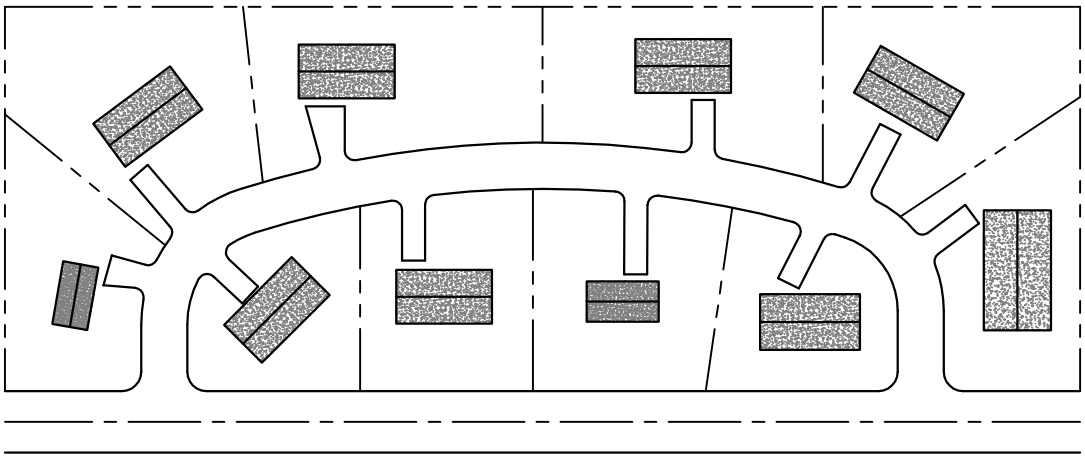
	LEMHI COUNTY STANDARDS	DEPARTURE SIGHT TRIANGLE FOR TWO-WAY STOP CONTROL INTERSECTION: PASSENGER CARS	SD-9

SHARED RESIDENTIAL ACCESS



AVOID:

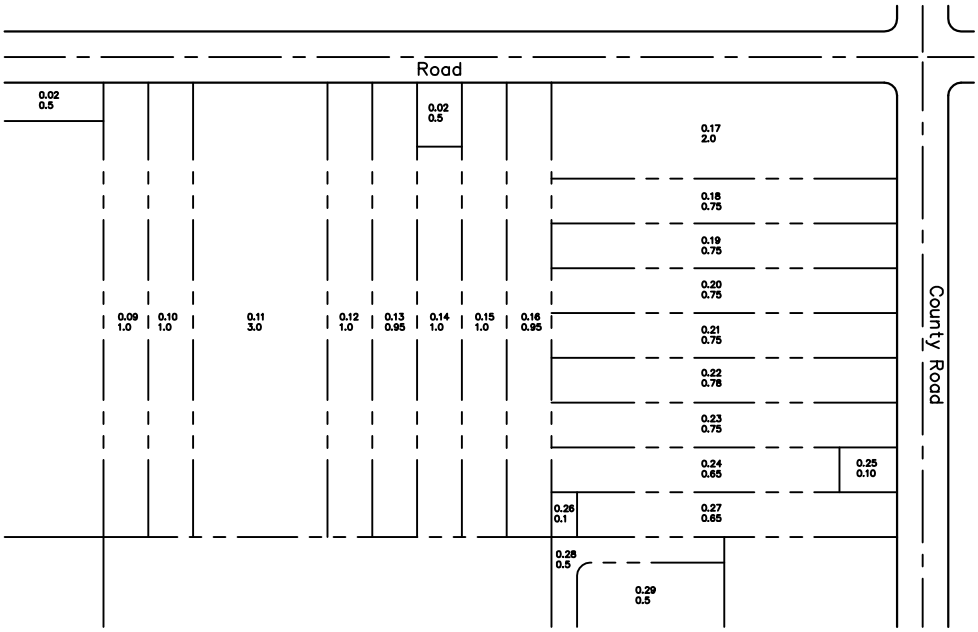
Multiple Lots With Individual Access Connection To The Adjacent Streets.



ENCOURAGE:

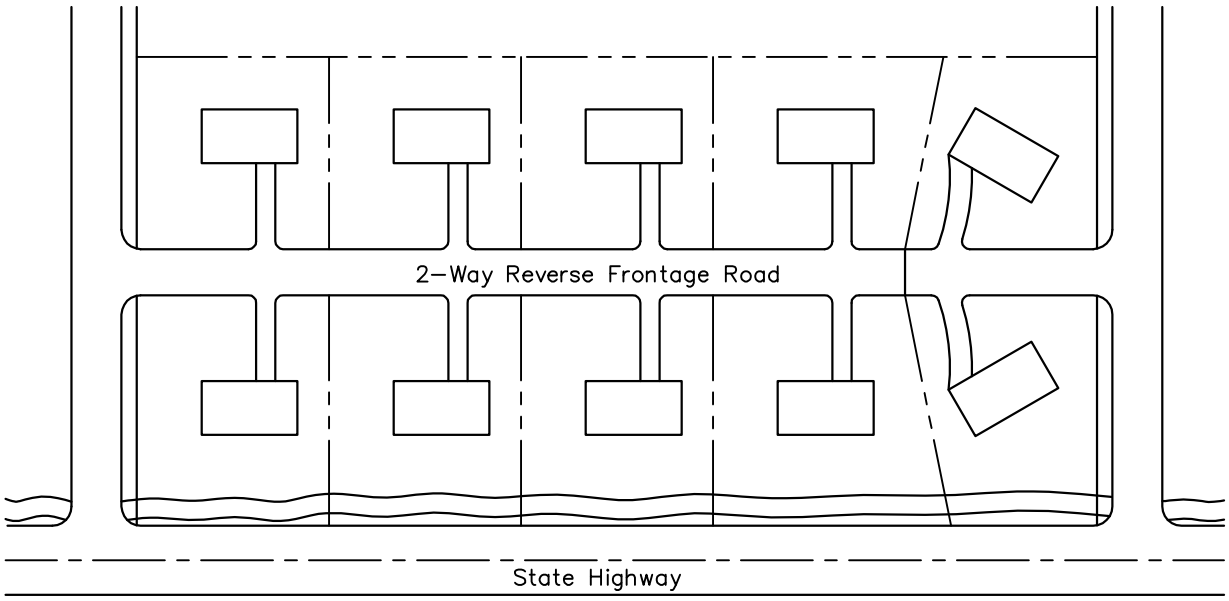
Internal Collector Type Facilities To Reduce Conflicts On Adjacent Streets.

	LEMHI COUNTY STANDARDS	COLSOLIDATE/LIMIT DRIVEWAYS PER PARCEL	SD–10



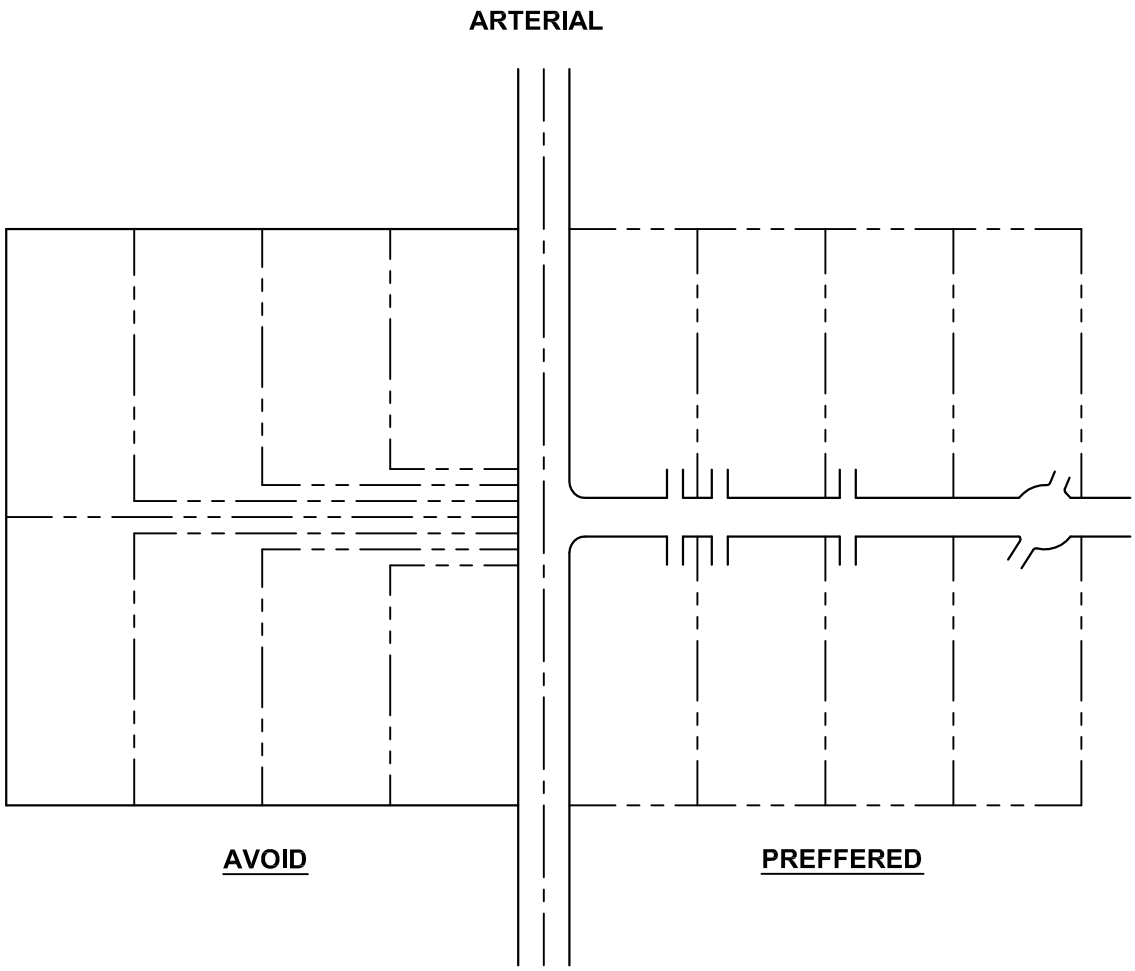
WHAT TO AVOID

	LEMHI COUNTY STANDARDS	LOT WIDTH TO DEPTH RATIOS	SD-11

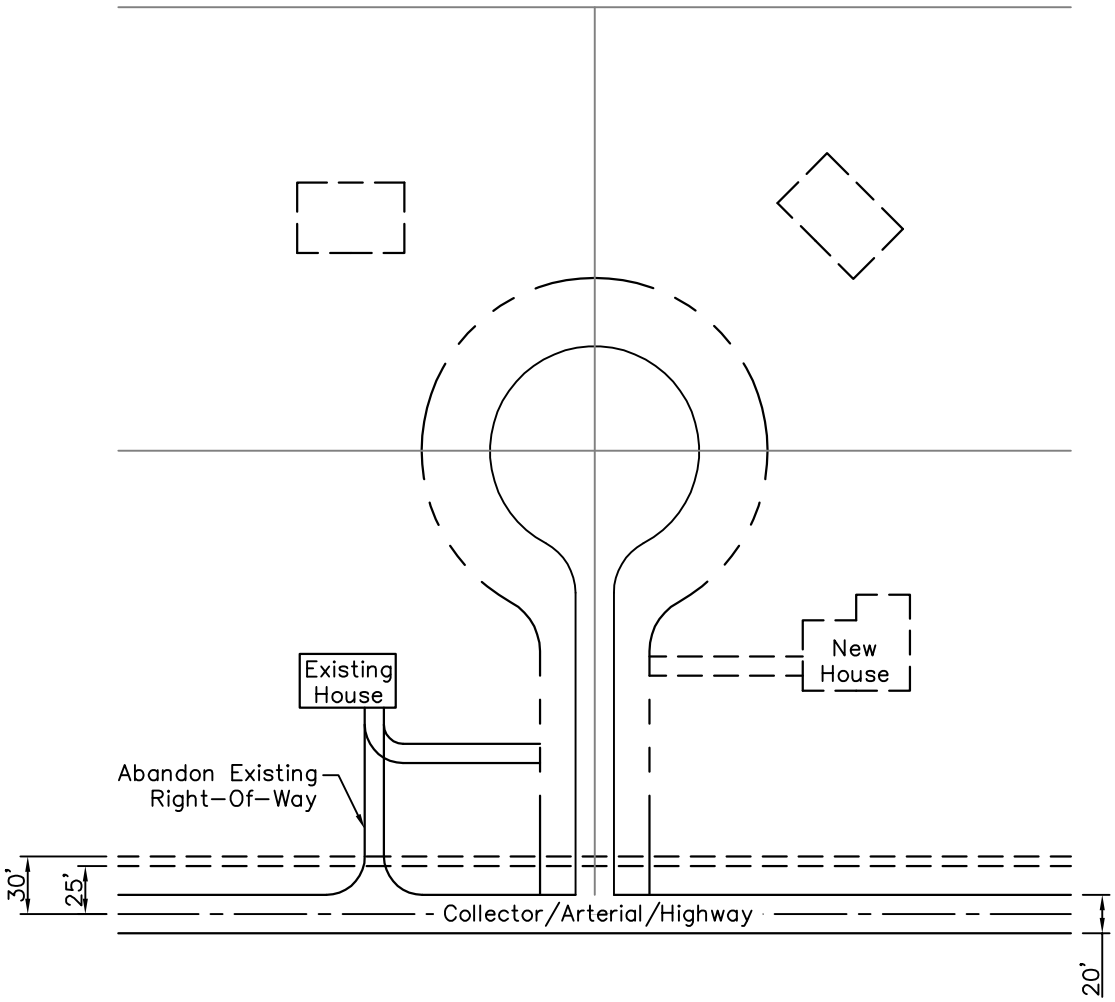


ENCOURAGE

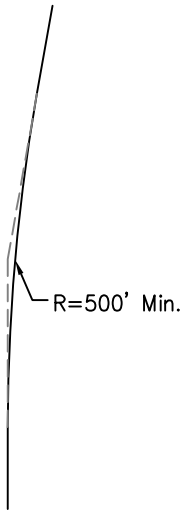
	LEMHI COUNTY STANDARDS	REVERSE FRONTAGE ROAD	SD–12



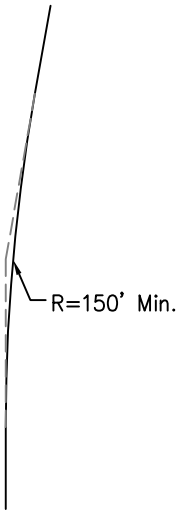
	LEMHI COUNTY STANDARDS	DISCOURAGE FLAG LOTS	SD-13



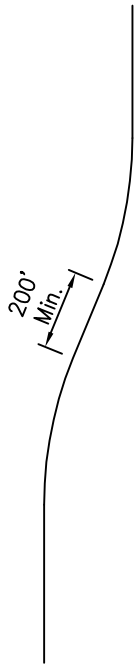
	LEMHI COUNTY STANDARDS	ACCESS STANDARD	SD-14



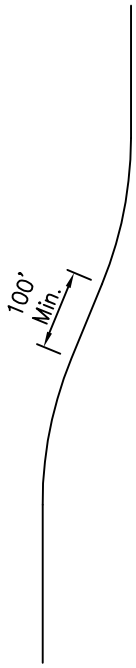
RADIUS FOR COLLECTORS
(Not To Scale)



RADIUS FOR LOCAL / PRIVATE
(Not To Scale)



TANGENT DISTANCE ON COLLECTOR
(Not To Scale)



TANGENT DISTANCE ON LOCAL / PRIVATE
(Not To Scale)

	LEMHI COUNTY STANDARDS	HORIZONTAL ALIGNMENT DETAIL	SD–15

Date:
Project Name:
Project Number:

LEMHI COUNTY

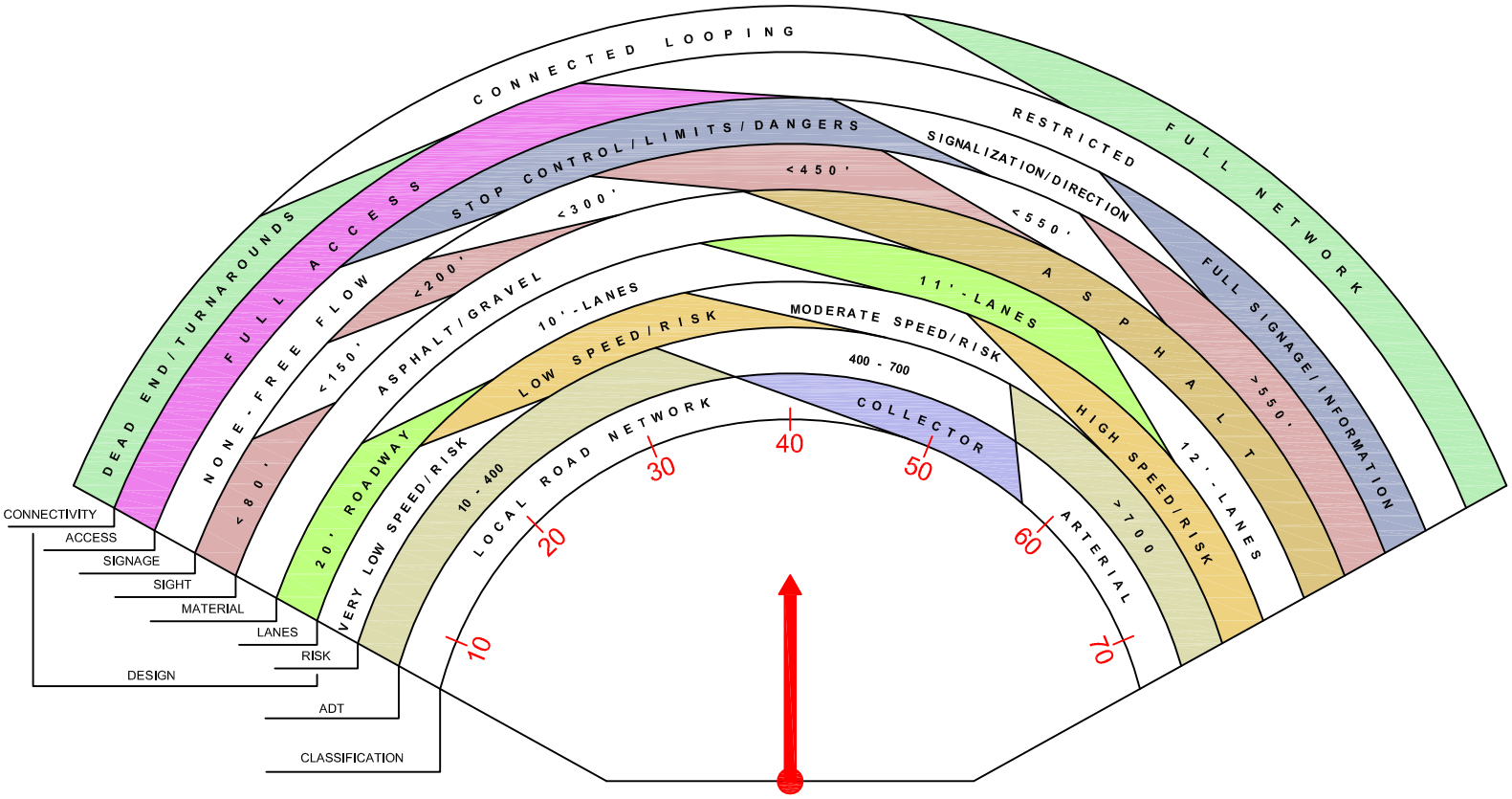
ROAD DESIGN STANDARDS

This document is for the exclusive use of Lemhi County and is NOT intended as a legal binding document of law, but as a tool for internal use in the review process by Lemhi County

✓	DESIGN STANDARDS		COMMENTS
	Section A, Road Classification		
	A.2.1	Each road identified and classified according to use (see Table 1 in Section F)	
	Section B, Road Classification		
	B.1.1	Constructed comply with the minimum design Standards.	
	B.1.3	Plans stamped "Approved for Construction"	
	B.1.6	Walkover Completed	
	B.1.6	Construction acceptable; Warranty Period as noted:	
	Fees for Plan Review and Construction Observation		
	B.2	Fees for Plan Review and Construction Observation have been paid to the County.	
	Street and Road Dedication		
	B.3	Roads shall be accepted for county maintenance only with approval by the Board for County Commissioners. Application Date: Approval Date:	
	Section C, Testing		
	C.1	Construction testing completed, meet minimum specifications, and results submitted to the County □ Embankment □ Trench Backfill □ Pressure Air Testing (pipes) □ Subgrade Density □ Base Course Density □ Leveling Course (road mix) □ Finished Course (Asphalt)	
	Section D, Road Classification		
	D.1	Road classification identified on plans and typical sections meet the specified classification according to the proposed use (see Table 1 in Section F)	

✓	DESIGN STANDARDS		COMMENTS
	Section E, Right of Way		
	E.1.1	Right of way **width** in accordance with Classification	
	E.1.2	Right of Way and Easements dedicated to the public	
	E.2 & 3	Right of way activities comply with accepted use	
	E.4	Utility and alternative travel easements minimum width of 20 feet.	
	Section F, Design Standards (Table 1)		
		Lots served	
		Build out ADT	
		Finished Surface Width	
		Typical section minimum thickness (See SD-1 and SD-2)	
		Access Compliance (See Section H)	
		Speed Compliance based on classification and use	
		Maximum grade of 8%	
	Section F, Road Names		
	F.2.1	Road names approved by Emergency services	
	F.2.2	Road name signs provided per Section I	
	Section F, Road Cross Section		
	F.3	Road typical section meets minimum cross section requirements. (See SD-1 & SD-2)	
	F.3.4	Existing road along the frontage of Development improvement as required to meet minimum standards	
	Section F, Material Gradation		
	F.4	Approved gravel source	
	F.5	Approved Asphalt Mix	
	F.5.1	R-Value or pre-approved ¾ crushed aggregate source	
	F.5.2	R-Value or pre-approved sub-base aggregate	
	F.5.3	Sub-grade material/NRCS soils map/	
	F.5.4	Native clay requires testing	
	Section F, Cut and Fill Slopes		
	F.6	Cut and fill slopes	
	Section F, Alignment		
	F.7.2	Vertical alignment	
	F.7.3	Horizontal alignment	
	F.7.5	Intersection alignment	
	Section F, Curves		
	F.8	Additional width at curves	
	Section F, Driveways		
	F.9.1.b	Driveways with all weather surface	
	F.9.1.c	Driveway width	
	F.9.1.d	Driveway bridge or culvert load rating	
	F.0.1.e	Driveway abutting state highways and collectors require an on-site turn-around	
	F.9.1.f	Driveway minimum curve radius	
	F.9.1.g	Driveway distance from intersection	
	F.9.1.h	Maximum grade of 3% at access point for a distance of 24 feet	

✓	DESIGN STANDARDS		COMMENTS
	F.9.1.i	Drainage swales along driveways	
	F.9.1.j	Driveway culverts	
	Section F, Dead End Roads		
	F.10	Dead ends and turnarounds	
	Section G, Drainage and Structures		
	G.1.1	Development Drainage Plan	
	G.1.2	Culverts installation (see G.2)	
	G.1.3	Culverts located at intersections	
	G.1.4	Culverts located at driveways	
	G.1.3	Preserve existing natural or man-made drainage swales	
	G.1.4	Hydraulic model for bridges	
	Section G, Culvert Requirements		
	G.2.1	Culvert size for 50 year peak flow or Table 4	
	G.2.2, 3, & 4	Culvert minimum size 18-inches under roads and driveways in forest regions, 12-inches under driveways in not forest regions	
	G.2.5	Culvert length	
	G.2.6	Minimum cover for HL-93 loading	
	G.2.7	Approved culvert material	
	Section G, Bridge Reqirements		
	G.4.1	Load rating	
	G.4.2	Hydraulic model, shall pass 100 year peak flow	
	G.4.3	Approved bridge material for superstructure	
	G.4.4	Bridge width (travel lane plus shoulders)	
	G.4.6	Plan approval by County	
	G.4.7	Material testing during construction	
	Section H, Access Management		
	H.1	Access meets applicable location and design elements discussed in Section H and Section F	
	Section I, Permanent Signage and Pavement Markings		
	I.1.2	Permanent signage provided as approved by County	
	I.1.3	Traffic control plan approved, implemented and maintaned	
	I.1.4	Intersection control	
	I.1.5	Post type and installation	
	1.2	Pavement markings provided as required	
	Section J, Guardrails		
	J.1	Guardrails provided per AASHTO Roadside Design	



SIMPLIFIED
ROAD CLASSIFICATION
FIGURE

APPENDIX G

LEVEL OF SERVICE

Level of Service Description
Turning Movement Count Form
Traffic Control Device Figure
ITD Design Guide

Level of Service

The level of service (LOS) characterizes the operating conditions on a facility in terms of traffic performance measures related to speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. Level of Service is a description of different operating conditions, which occur on a roadway or at an intersection when accommodating various traffic volumes. The levels of service range from 'A' (least congested) to 'F' (most congested). The following table shows the general definitions of levels of service applicable to two lane rural highways.

Level of Service Criteria for Two-Lane Highways

Level of Service	General Operating Conditions
A	Describes completely free-flow conditions. The operation of vehicles is virtually unaffected by the presence of other vehicles, and operations are constrained only by the geometric features of the highway and by driver preferences. Maneuverability within the traffic stream is good. Minor disruptions to flow are easily absorbed without a change in travel speed.
B	Describes free-flow conditions, although the presence of other vehicles becomes noticeable. Average travel speeds are the same as in LOS 'A', but drivers have slightly less freedom to maneuver. In simple words, it can be defined as "reasonably free flow traffic".
C	The influence of traffic density on operations becomes marked. The ability to maneuver within the traffic stream is clearly affected by other vehicles. Minor disruptions in traffic stream can cause serious local deterioration in service, and queues will form behind any significant traffic disruption. LOS 'C' can be defined as a "stable flow condition".
D	The ability to maneuver is severely restricted due to traffic congestion. Average travel speed reduces by the increasing volume. Only minor disruptions can be absorbed without extensive queues forming and the service deteriorating. LOS 'D" can be defined as "approaching unstable flow conditions".
E	The traffic operation is at or near capacity, an unstable flow condition, in this LOS. Vehicles will operate with the minimum spacing for maintaining uniform flow. Disruptions cannot be dissipated readily, often causing queues to form and service to deteriorate further. The traffic flow in this LOS can be defined as "unstable flow condition".
F	This LOS represent forced or breakdown flow conditions. This type of traffic occurs when the forecast demand exceeds the computed capacity of a planned facility.

(Source: Highway Capacity Manual 2000)

Unsignalized Intersections

Two-way Stop Controlled (TWSC) and All Way Stop Controlled (AWSC) intersections are two types of unsignalized intersections. The 2000 Highway Capacity Manual and HCS provide methodologies and models to estimate control delays at unsignalized intersections. A qualitative description of different service levels related to an unsignalized intersection is presented in the following table below.

Level of Service	Average Delay per Vehicle on Minor Street
A	• Almost all drives find freedom of operation through intersection. • Gaps are available on major streets for minor streets vehicles. • More than 1 vehicle in queue on minor streets found very rarely.
B	• Some drivers may feel inconvenience because of slight delay • More than 1 vehicle in queue on minor streets maybe found occasionally
C	• Most drivers may feel restricted in traffic, but may not have severe inconvenience. • More than 1 vehicle in queue on minor streets maybe found frequently. • Gaps in major street traffic may not be available frequently.
D	• Drives on minor streets feel restricted and may experience inconvenience. • Mostly more than 1 vehicle in queue on minor streets maybe found.
E	• Drivers find delays inconvenient and intolerable. • Queue lengths maybe longer than 3 vehicles most of the time. • The demand will be close to or equal to the capacity of a movement at an intersection.
F	• Gaps in major street traffic are not available for minor street drivers and result in aggressive driving with forced traffic flow. • The demand in this case will be more than the capacity of a movement and represents failure of an intersection.

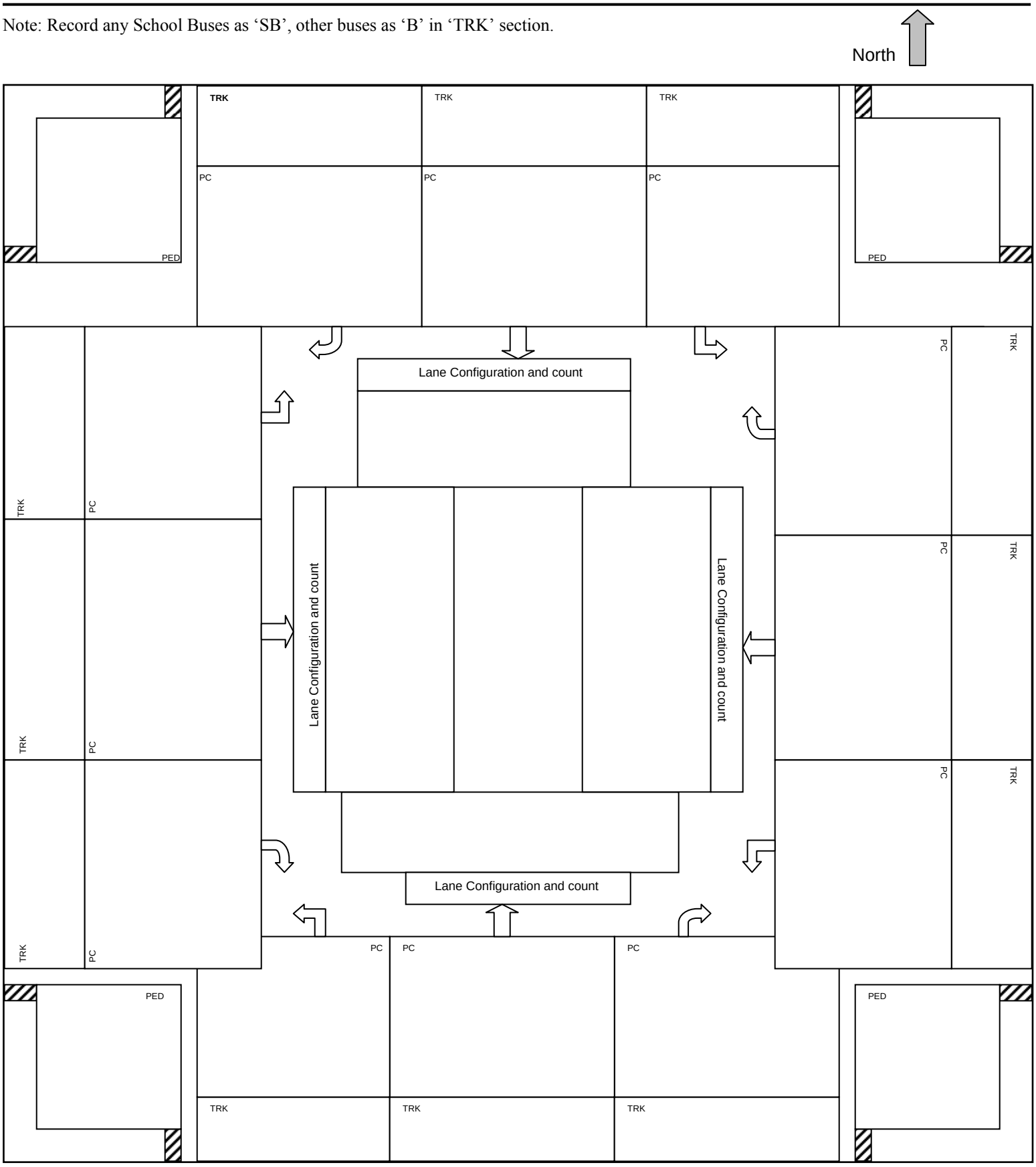
Based on the qualitative and quantitative measures, LOS ‘E’ is generally considered as a minimum design LOS for unsignalized intersections.

Turning Movement Count Form

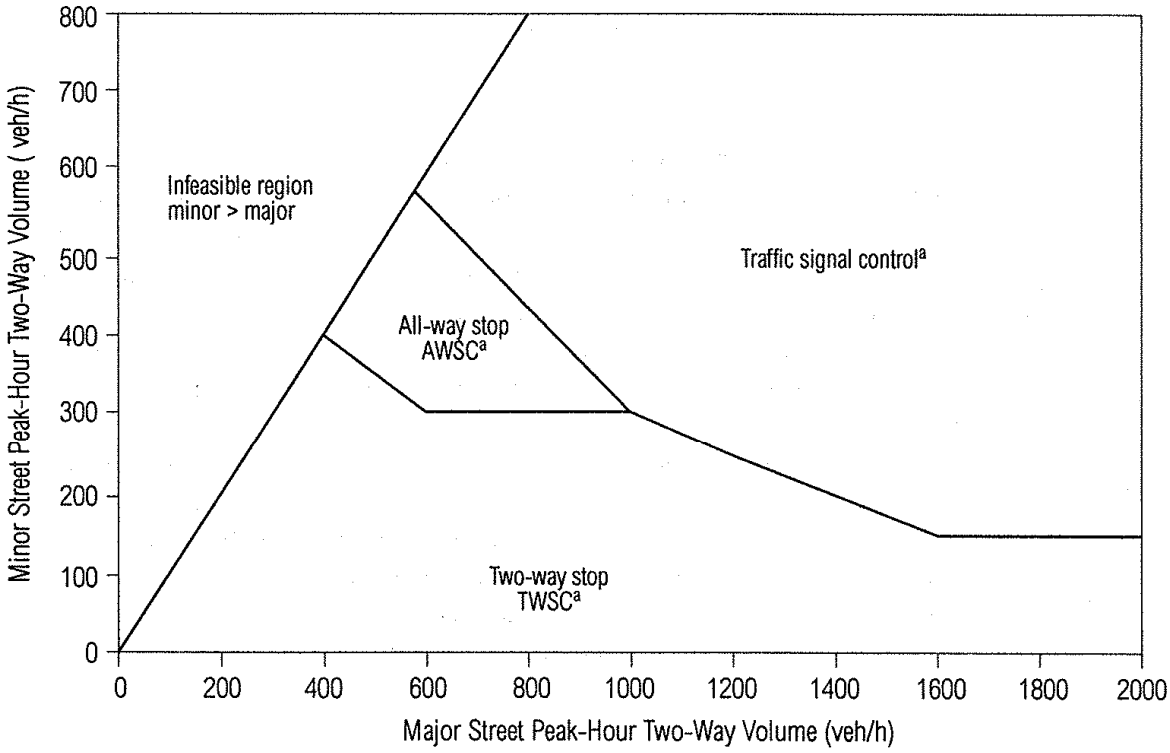
Name: _____
Company: _____
Date: _____
Location: _____
Control: _____

Northeast-Southwest: _____
East-West: _____
Weather: _____
Time: _____ TO _____

Note: Record any School Buses as 'SB', other buses as 'B' in 'TRK' section.



TRAFFIC CONTROL DEVICE FIGURE



Notes

a. Roundabouts may be appropriate within portion of these ranges.

Source: Adapted from ***Traffic Control Devices Handbook*** (***8,*** pp. 4–18) - peak-direction, 8-h warrants converted to two-way peak-hour volumes assuming ADT equals twice the 8-h volume and peak hour is 10 percent of daily. Two-way volumes assumed to be 150 percent of peak-direction volume.

SECTION 450.00 – HIGHWAY APPROACHES

Each District will monitor right-of-way use on state highways within their respective Districts in conformance with the provisions of Department policy and applicable state and federal regulations. Access control on other transportation systems is the responsibility of the public highway agency having jurisdiction of that roadway.

Uncontrolled encroachments can nullify carefully planned safety and maintenance features; therefore, modifications of existing encroachments or any new encroachments must be covered by a permit. It is essential that those in the field (maintenance foreman, maintenance technician, etc.) control these encroachments. A permit to use the right-of-way must be completed and approved before installation of any encroachment begins.

Field personnel that have contact with those owning property adjoining the highway should be knowledgeable of the policies and procedures regarding encroachment permits and be willing to explain and assist those that plan changes or improvements.

The state policy controlling right-of-way encroachments is covered in Rule 39.03.42, "Rules Governing Use of Right-of-Way Encroachments on State Highway Rights-of-Way", Administrative Policy A-12-01 and the ITD documents "Access Management: Standards and Procedures for Highway Right of Way Encroachments" and "A Policy for the Accommodation of Utilities within the Right of Way of the State Highway System in the State of Idaho."

SECTION 451.00 – TURN LANES FOR NEW APPROACHES

451.01 Determining Needs. The need for turn lanes on State Highways shall be addressed during the Concept Review of any proposed new construction. All public-use approaches to the State Highway System, including private approaches to subdivisions and/or adjacent businesses, shall be reviewed for the need to provide turn lanes on the State highway.

Justification for each turn lane shall be supported by an engineering study approved by the Highway Operations and Safety Engineer that considers at least the following factors:

- Operating speed of the highway,
- Traffic volumes,
- Number of anticipated turning moves,
- Availability of passing opportunities,
- Sight distance, and
- Past collision history and/or potential for collisions.

Turn lanes shall not be constructed to enhance an existing roadside business, unless the applicant is willing to participate in the cost. However, when the safety of the traveling public is a significant factor, the participation requirement may be waived. If the engineering study does not support justification for a turn lane, the turn lane may not be approved even when requested by the applicant.

When the need for a turn lane is the result of a planned commercial development(s), and the requirements for a turn lane are met, the turn lane shall be paid for by the developer(s).

451.02 Left-Turn Lanes. The chart below provides warrants for a left-turn lane based on the portion of the current year design hourly volume (DHV) on the highway carried in a single lane, the peak-hour volume of vehicles turning left, and the posted speed. A left-turn lane is warranted when the single-lane portion of the DHV of the highway and the DHV of left turns intersect at a point on or above the curve for the posted speed. In most cases, left-turn lanes should be provided where there are more than 12 left turns per peak hour.

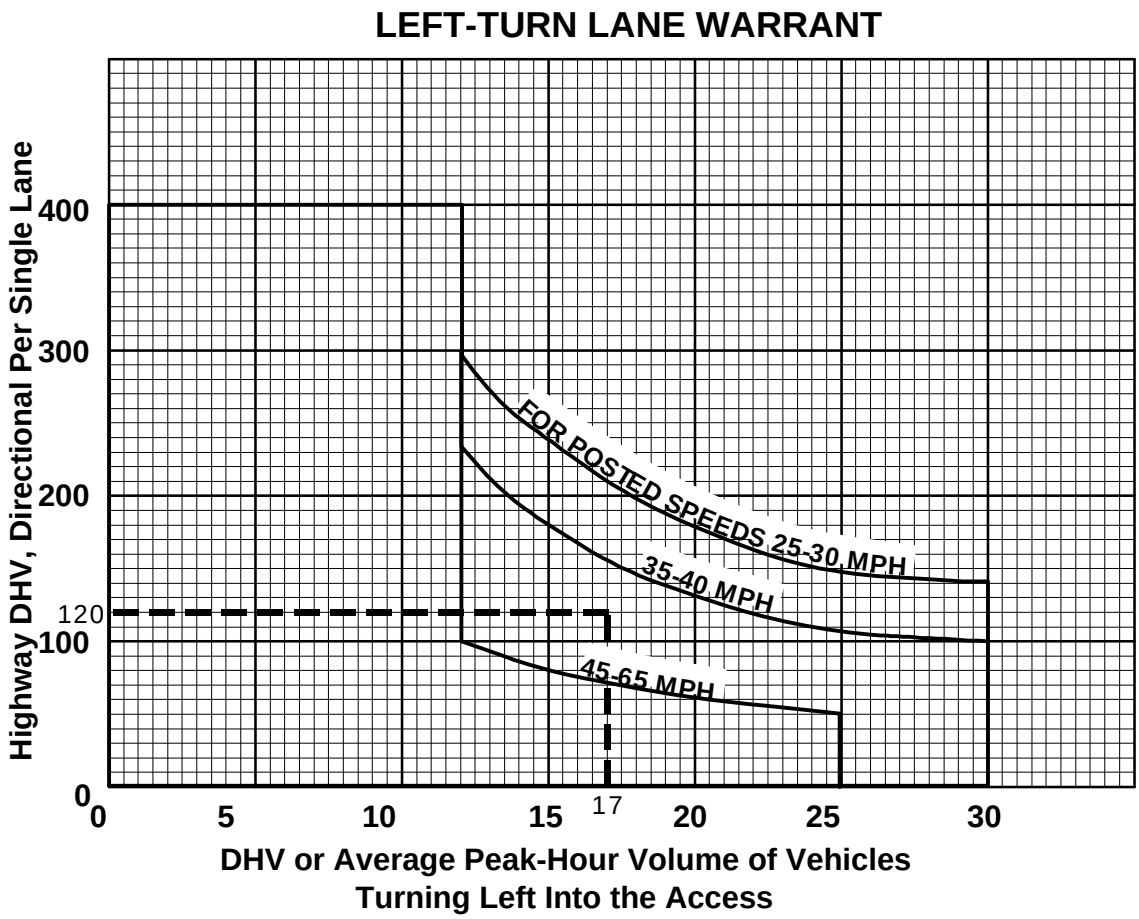
Where the DHV of the left turn into the access is more than 12 vph and the highway's inside lane volume exceeds 250 vph on 45 to 65 mph highways or 400 vph on 25 to 40 mph highways, a left-turn lane may be required due to the high traffic volumes or other unique site-specific safety considerations.

Left-turn lanes should also be considered if there have been four accidents per year at an existing approach, or if that number of accidents could be expected to occur as a result of a new approach without turn lanes.

The effect that a left-turn lane will have on restricting passing opportunities must be weighed against the safety benefit the left-turn lane may provide. On a highway section where passing opportunities are critical, the adverse effect that construction of a left-turn lane would have on the capacity of that roadway section may be more significant than the safety benefit from the left-turn lane. At T-intersections, a possible alternative to constructing a left-turn lane is to widen the right shoulder for an adequate distance on both sides of the intersection to permit through traffic to pass a left-turning vehicle on the right, thus making a no-passing zone unnecessary.

Example:

A highway with a posted speed of 55 mph has a current year DHV of 200 vehicles per hour and a directional distribution of 60/40. At an intersection the left-turning DHV is 17 vehicles per hour.



The highest single-lane DHV is 0.6 x 200 = 120 vph. Entering the left-turn warrant chart with 17 vph on the horizontal axis and 120 vph on the vertical axis gives a point of intersection above the 45-65 mph curve. A left-turn lane should be considered at this intersection after evaluation of all the above factors.

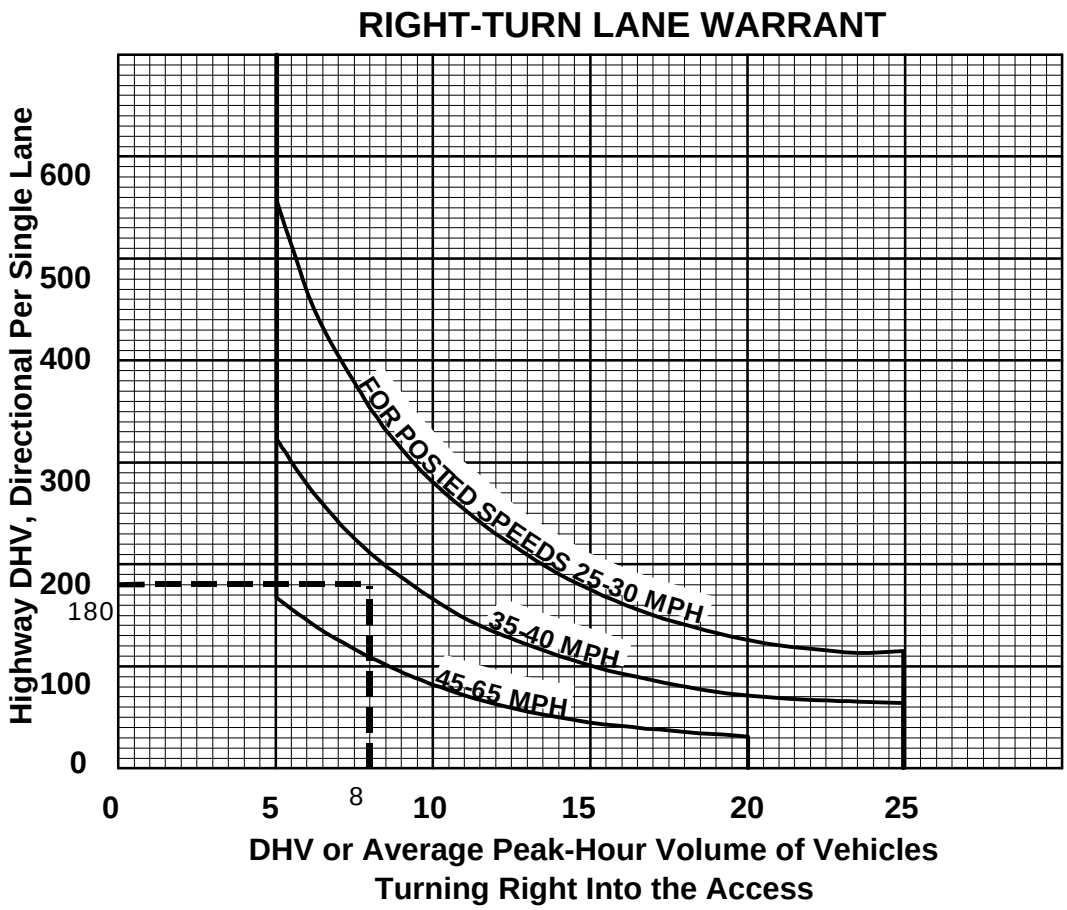
451.03 Right-Turn Lanes. The chart below provides warrants for a right- turn lane based on the current year design hourly volume on the highway, the peak-hour volume of vehicles turning right, and the posted speed. A right-turn lane is warranted when the single-lane portion of the DHV of the highway and the DHV of right turns intersect at a point on or above the curve for the posted speed.

Where the DHV of the right turn into the access is less than 5 vph and the highway's outside lane volume exceeds 250 vph on 45 to 65 mph highways or 450 vph on a 35 to 40 mph highway, or 600 vph on a 25 to 30 mph highway, a right-turn lane may be required due to the high traffic volumes or other unique site-specific safety considerations.

Where the existing shoulder is of adequate width, it may be possible to adjust the pavement markings to provide a sufficient right-turn lane without widening the road.

Example:

A highway with a posted speed of 40 mph has a current year DHV of 360 vehicles per hour and a directional distribution of 50/50. At an intersection the right-turning DHV is 8 vehicles per hour.



The single-lane DHV is 0.5 x 360 = 180 vph. Entering the right-turn warrant chart with 8 vph on the horizontal axis and 180 vph on the vertical axis gives a point of intersection below the 35-40 mph curve. A right-turn lane should not be considered at the intersection.

APPENDIX H

PUBLIC INVOLVEMENT

Public Notice for First Stakeholders' Workshop (11-19-2009)
Proposed Bridge Alternate Routes (Display)
Proposed Connectivity Routes (Display)
Stakeholder Meeting Notification (3-22-2012)
Stakeholder Meeting - Comments + Letter from IDFG
Final Public Meeting Notification(5-22-2012)

ADVERTISING FOR PUBLIC INFORMATION MEETING:

Lemhi County Transportation Plan

Stake Holders Meeting

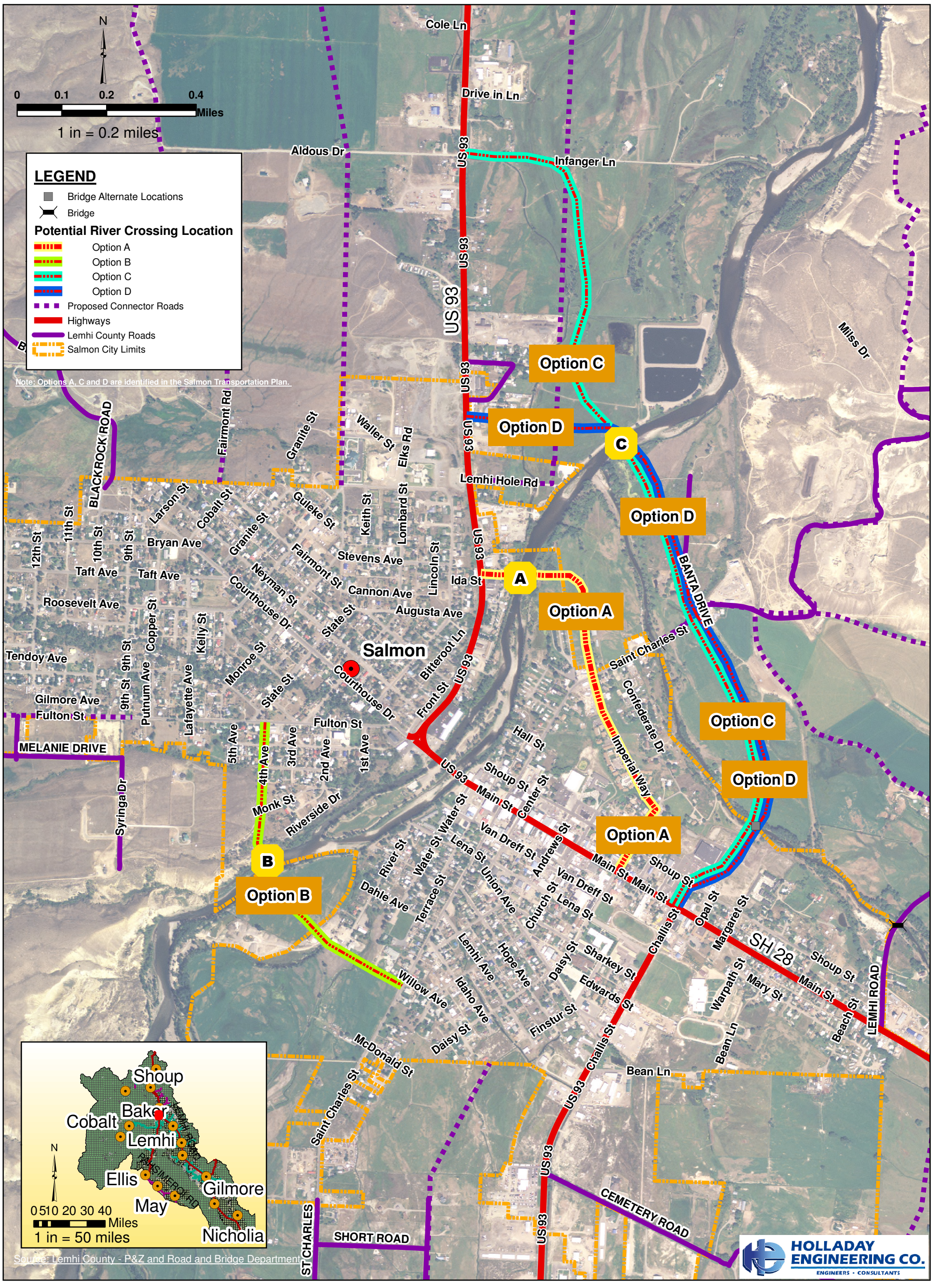
At

Lemhi County Courthouse, Salmon, ID
on Thursday, November 19, 2009
from 3 p.m. to 7 p.m.

An open house stake holders meeting will be held regarding the Lemhi County Master Transportation Plan from 3 p.m. to 7 p.m. on the 19th day of November, 2009 at the Lemhi County Courthouse, Salmon, Idaho, to present the currently available information, identify problem areas and to gather ideas regarding transportation needs from the County, local agencies, public and public agencies from the proposed trans- tation plan study. Public input will be taken concern- osed Lemhi County Master Transportation

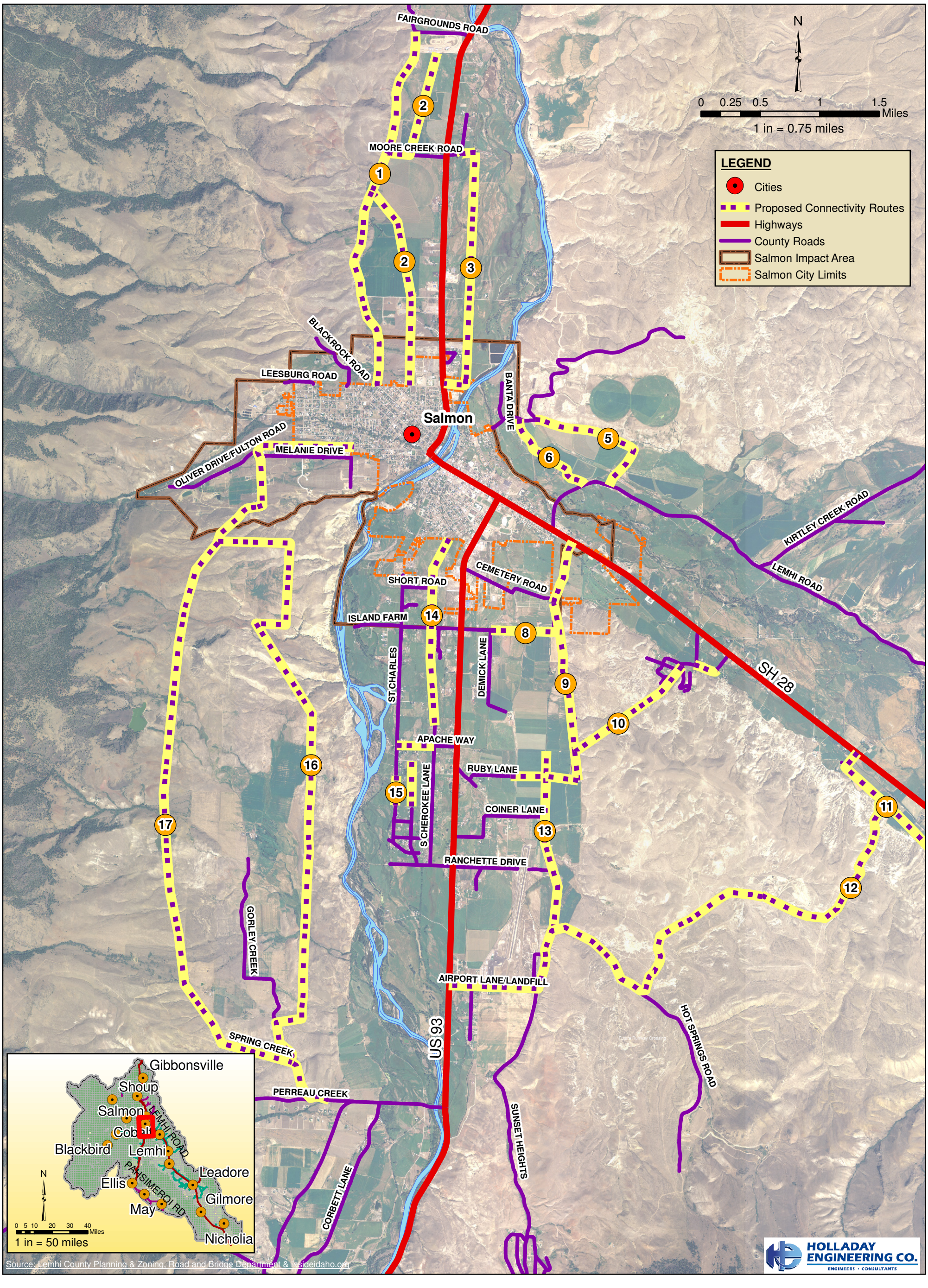
LEMHI COUNTY TRANSPORTATION PLAN

Potential River Crossing Locations & Emergency Routes



LEMHI COUNTY TRANSPORTATION PLAN

Proposed Connectivity Routes



POSTCARD NOTIFICATION TO SHAREHOLDERS FOR MARCH 22, 2012 MEETING

Holladay Engineering Company
P.O. Box 235
32 N. Main
Payette, ID 83661

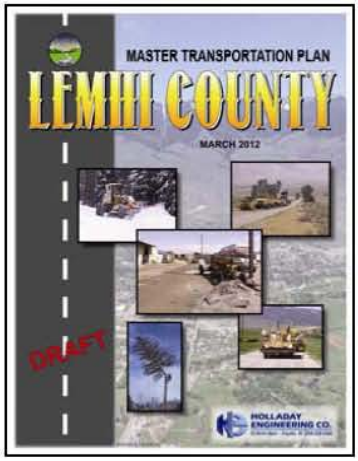
STAKEHOLDERS MEETING
LEMHI COUNTY TRANSPORTATION PLAN

PHYSICAL ADDRESS CORRECTION

When:
Thursday,
March 22, 2012
9:30 a.m.—11:30 a.m.

Where:
Brooklyn Annex
200 Fulton Street
Salmon, ID

We invite you to attend!



As a Lemhi County Stakeholder, you are invited to attend an overview of the final draft of the Lemhi County Master Transportations Plan (LCMTP). The overview will include:

- A brief summary of the LCMTP.
- A draft copy of the report.
- Connectivity Map displays.

For more information, please contact:
Elwin Butler, P.E., or
Mary Jo Kee, Public Information Specialist
Holladay Engineering Co.
(208) 642-3304 or
elwin@holladayengineering.com or
maryjo@holladayengineering.com

Primary purpose of this meeting is to:

- Gather comments from stakeholders prior to presenting LCMTP to the public.

Mary Jo Kee

From: Mary Jo Kee

Sent: Thursday, March 15, 2012 5:01 PM

To: Adrienne Trapani; 'Anita Andrus'; 'Becky Rose'; 'Bill Shaw'; 'Blake Rindlisbacher'; 'Bob Rubel'; 'Bret Stansberry'; 'Buildingdept.lemhicounty@centurytel.net'; 'Chad Fealko'; 'Chief K.V. Felker'; 'Corey Beyerlin'; 'Courtney Howell'; 'Dan Maiyo'; 'Daniel Bertram'; 'Dennis Dunn'; 'Derk Williams'; Elwin Butler; elwin@vzw.blackberry.net; 'Fred McDonald'; 'George Ambrose'; 'Gloria Jakovac'; 'Greg Eager'; 'Greg Painter'; 'Hans Koenig'; 'Hope Benedict'; 'James Joyner'; 'Janet Nelson'; 'Jay Davis'; 'Jenny Rosin'; 'Joann Wolters'; 'Joey Foote'; John Jakovac ; 'June McKinney'; 'Karin Drnjevic'; 'Kerrie Cheney'; 'Kimberly Nelson'; 'Lance Holmstrom'; 'Liz Townley'; 'Lynn Bowerman'; 'Mark Olson'; 'Mary Ann Heiser'; 'Mayor Leo Marshall'; 'Mike Davis'; 'MJ Kee'; 'Ramona Stauffer'; 'Richard Snyder'; 'Robert Cope'; 'Sai Sarepalli'; Salmon Valley Stewardship; 'Scott Feldhansen'; 'Shannon Williams'; 'Steve Adams'; 'Steve Schmidt'; 'Teresa Morton'; 'Terri Morton'; 'Vern Brewer'

Subject: Lemhi County Master Transportation Plan- Stakeholders Meeting - March 22, 2012

Attachments: image003.jpg; image001.jpg

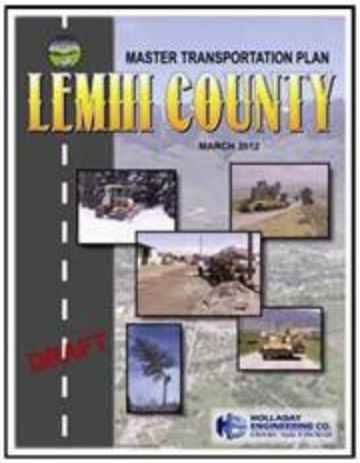
Tracking:

Recipient	Delivery
Adrienne Trapani	
'Anita Andrus'	
'Becky Rose'	Delivered: 3/15/2012 5:02 PM
'Bill Shaw'	
'Blake Rindlisbacher'	
'Bob Rubel'	
'Bret Stansberry'	
'Buildingdept.lemhicounty@centurytel.net'	
'Chad Fealko'	
'Chief K.V. Felker'	
'Corey Beyerlin'	
'Courtney Howell'	
'Dan Maiyo'	
'Daniel Bertram'	
'Dennis Dunn'	
'Derk Williams'	
Elwin Butler	Delivered: 3/15/2012 5:02 PM
elwin@vzw.blackberry.net	
'Fred McDonald'	
'George Ambrose'	
'Gloria Jakovac'	
'Greg Eager'	
'Greg Painter'	
'Hans Koenig'	
'Hope Benedict'	
'James Joyner'	
'Janet Nelson'	
'Jay Davis'	
'Jenny Rosin'	
'Joann Wolters'	

'Joey Foote'	
John Jakovac	
'June McKinney'	
'Karin Drnjevic'	
'Kerrie Cheney'	
'Kimberly Nelson'	
'Lance Holmstrom'	
'Liz Townley'	
'Lynn Bowerman'	
'Mark Olson'	
'Mary Ann Heiser'	
'Mayor Leo Marshall'	
'Mike Davis'	Failed: 3/15/2012 5:01 PM
'MJ Kee'	Delivered: 3/15/2012 5:02 PM
'Ramona Stauffer'	
'Richard Snyder'	
'Robert Cope'	
'Sai Sarepalli'	Delivered: 3/15/2012 5:02 PM
Salmon Valley Stewardship	
'Scott Feldhansen'	
'Shannon Williams'	
'Steve Adams'	
'Steve Schmidt'	
'Teresa Morton'	
'Terri Morton'	
'Vern Brewer'	Delivered: 3/15/2012 5:02 PM

Lemhi County Master Transportation Plan <u>STAKEHOLDERS MEETING</u>
Thursday, March 22, 2012
9:30 a.m. – 11:30 a.m.
Lemhi County Courthouse (Brooklyn Annex Building)
206 Courthouse Drive
Salmon, ID

We invite you to attend!



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- A draft copy of the report.
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For more information, please contact:
Elwin Butler, P.E., or
Mary Jo Kee, Public Information Specialist
Holladay Engineering Co.
(208) 642-3304 or
elwin@holladayengineering.com or
maryjo@holladayengineering.com

Primary purpose of this meeting is to:

- Gather comments from stakeholders prior to presenting LCMTP to the public.

Mary Jo Kee

From: Mary Jo Kee

Sent: Friday, March 16, 2012 10:20 AM

To: Adrienne Trapani; 'Anita Andrus'; 'Becky Rose'; 'Bill Shaw'; 'Blake Rindlisbacher'; 'Bob Rubel'; 'Bret Stansberry'; 'Buildingdept.lemhicounty@centurytel.net'; 'Chad Fealko'; 'Chief K.V. Felker'; 'Corey Beyerlin'; 'Courtney Howell'; 'Dan Maiyo'; 'Daniel Bertram'; 'Dennis Dunn'; 'Derk Williams'; Elwin Butler; elwin@vzw.blackberry.net; 'Fred McDonald'; 'George Ambrose'; 'Gloria Jakovac'; 'Greg Eager'; 'Greg Painter'; 'Hans Koenig'; 'Hope Benedict'; 'James Joyner'; 'Janet Nelson'; 'Jay Davis'; 'Jenny Rosin'; 'Joann Wolters'; 'Joey Foote'; John Jakovac ; 'June McKinney'; 'Karin Drnjevic'; 'Kerrie Cheney'; 'Kimberly Nelson'; 'Lance Holmstrom'; 'Liz Townley'; 'Lynn Bowerman'; 'Mark Olson'; 'Mary Ann Heiser'; 'Mayor Leo Marshall'; 'Mike Davis'; 'MJ Kee'; 'Ramona Stauffer'; 'Richard Snyder'; 'Robert Cope'; 'Sai Sarepalli'; Salmon Valley Stewardship; 'Scott Feldhausen'; 'Shannon Williams'; 'Steve Adams'; 'Steve Schmidt'; 'Teresa Morton'; 'Terri Morton'; 'Vern Brewer'

Subject: Meeting Address Correction: Lemhi County Master Transportation Plan - Stakeholders Meeting - March 22, 2012

The correct physical address for the Stakeholders Meeting is:

200 Fulton Street (Brooklyn Annex)

IDAHO DEPARTMENT OF FISH AND GAME
SALMON REGION
99 Highway 93 North
P.O. Box 1336
Salmon, Idaho 83467

C.L. "Butch" Otter / Governor
Virgil Moore / Director

April 4, 2012

Ms. Mary Jo Kee
Holladay Engineering Company
P O Box 235
Payette, ID 83661

Dear Mary:

Thank you for the opportunity to comment on the *Draft Lemhi County Master Transportation Plan* (Draft Plan). Idaho Department of Fish and Game (Department) commends the efforts of Lemhi County officials, the City of Salmon, and Holladay Engineering Company for identifying impacts and future needs to the existing transportation system in Lemhi County. The Department fully recognizes the transportation system is vital for all residents, businesses, and visitors to Lemhi County.

Fish and wildlife are property of all Idaho citizens. The Department and the Idaho Fish and Game Commission are expressly charged with statutory responsibility to preserve, protect, perpetuate, and manage all fish and wildlife in Idaho (Idaho Code 36-103 (a)). In fulfillment of our statutory charge and direction as provided by the Idaho Legislature, we offer the following comments and recommendations. The purpose of these comments are to assist Lemhi County officials, the City of Salmon, and Holladay Engineering Company by providing technical information addressing potential effects on fish and wildlife resources and encourage incorporation of language into the Draft plan that acknowledges these valuable resources. It is not the intention of Idaho Department of Fish and Game to support or oppose this proposal.

As currently written, the Draft Plan makes little mention of fish and wildlife resources. As noted in the Draft Plan, one of the Policy Statements of the Lemhi County Comprehensive Plan is *"To continue to systematically plan for future transportation needs within the context of minimizing impacts to fish and wildlife resources."* Of particular concern, the Draft Plan appears to overlook vehicle-wildlife collisions with respect to human safety concerns or ways to help avoid or minimize this hazardous situation. The Department recommends you include a subsection, perhaps in Chapter 2, to discuss the importance of fish and wildlife resources and identify ways potential effects can be minimized.

Potential effects of expanding the existing transportation system on fish and wildlife resources fall into three broad categories:

1. Direct habitat loss and impacts:
    a. Loss of seven to twelve acres per mile of road.
    b. Wildlife mortality associated with vehicle collisions.
2. Reduced habitat suitability:
    a. Degradation of surrounding habitat (e.g., pollution, siltation of waterways).
    b. Providing pathways for noxious weed infestations.
    c. Placement of fences adjacent to roads, which can increase animal energy expenditures and increase risk of predation.
    d. Increased habitat fragmentation.
    e. Increased opportunities for poaching, wildfire ignition, and unregulated off-highway travel.
3. Displacement of wildlife:
    a. Changes to or elimination of travel/migration corridors.
    b. Alteration of wildlife behavior or disturbance (e.g., abandonment of nests).
    c. Avoidance of areas near roads by wildlife.
    d. Reducing wildlife access to resources (e.g., restricting movement to water sources).

As Lemhi County officials, the City of Salmon and Holladay Engineering Company moves forward with further development and implementation of the Draft Plan, the Department staff can be available to provide consultation and technical assistance. The Department recommends the Draft Plan identify potential effects to fish and wildlife resources as outlined above, and help identify ways to minimize impacts as identified in the Policy Statements of the Lemhi County Comprehensive Plan. Currently, Idaho Transportation Department maintains a database with assistance from the Department that archives vehicle-wildlife collisions and recommends this information should be included in the Draft Plan.

The Department appreciates the opportunity to review and provide comments of the *Draft Lemhi County Master Transportation Plan*. The Department recognizes this endeavor is extremely important and commends your efforts thus far. If you have questions or require further assistance, please contact our Regional Wildlife Manager, Tom Keegan, at 208.756.2271.

Sincerely,

Steve Schmidt
Regional Supervisor

SLS:TK:jms

cc: Lemhi County Commissioners, 206 Courthouse Drive, Salmon, ID 83467
Sharon Kiefer (IDFG-HQ)

From: ITDNews@itd.idaho.gov
Sent: Friday, April 20, 2012 1:57 PM
To: Mary Jo Kee; Elwin T. Butler; lholmstrom@lhtac.org; gary@lemhicountyidaho.org
Subject: Review: Lemhi County officials seek comment on draft master transportationplan

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Our Mission. Your Safety. Your Mobility. Your Economic Opportunity.

Idaho Transportation Department

News Release

BOISE - Lemhi County officials are taking public comment on the county's draft master transportation plan.

The plan is a comprehensive document that includes information on the future needs of the county's transportation system, the development of road standards, funding strategies, alternative river crossings and an overview of public transportation and pathways.

An open house is being held on Tuesday, May 22, from 3 p.m. to 8 p.m. at the Brooklyn Annex, 200 Fulton Street, Salmon.

An overview of the transportation plan will be presented at 3:30 p.m. and 6:30 p.m. Project staff also will be available to answer questions, and displays at the open house will illustrate information.

Comments can be left at the open house, and comment sheets will be available for those wanting to mail them in. Comments also can be submitted via e-mail by visiting: www.holladayengineering.com/lemhi.html.

Comments are being accepted until June 6, 2012.

The draft plan can be viewed online at: www.holladayengineering.com/lemhi.html.

Copies of the draft plan are available on compact disc or paper by visiting the Lemhi County Planning and Zoning Department at 200 Fulton Street, Suite 204. There is a charge to have CD copies and paper copies made.

After the open house, the county will consider written comments and present a final master transportation plan for acceptance at a future public hearing.

Those needing special accommodations or an interpreter are asked to contact the Idaho Transportation Department's public involvement coordinator at (208) 334-8119, via e-mail at adam.rush@itd.idaho.gov or TDD/TDY (208) 334-4458.

Mary Jo Kee

From: Adam Rush [Adam.Rush@itd.idaho.gov]
Sent: Monday, April 16, 2012 11:09 AM
To: Mary Jo Kee
Subject: Hello Hello Mary Jo (from Adam R. in ITD Communications)

Hello M-J,
I hope you had a good weekend.
Below is the list of media outlets that I would send press releases/announcements to. The newspapers in that region, the Post Register and Idaho State Journal, are sometimes distributed to the smaller communities in that region.
Myself and other staff members here would send a press release about a meeting in Salmon to a distribution list that includes the media below.
Sincerely,
Adam R.
ITD Office of Communications
Direct Line: 1-208-334-8119
E-mail Address: adam.rush@itd.idaho.gov

Recorder Herald (Salmon)
http://lmshumate.com/article.php

Rexburg Standard Journal
http://www.rexburgstandardjournal.com/

Post Register (Idaho Falls)
http://www.postregister.com/functions/Auth/login.php

Island Park News
http://www.islandparknews.com/

KIFI TV (ABC) (Idaho Falls, Pocatello)
http://www.localnews8.com/

Teton Valley News
http://tetonvalleynews.net/

KIDK TV (CBS) (Idaho Falls, Pocatello)
http://www.kidk.com/

Arco Advertiser
http://www.arcoadvertiser.com/

KPVI TV (NBC) (Idaho Falls, Pocatello)
http://www.kpvi.com/

Challis Messenger
http://www.challismessenger.com <http://www.challismessenger.com/>

Valley Citizen (Driggs)
http://www.valleycitizen.com <http://www.valleycitizen.com/>

PUBLIC WORKSHOP

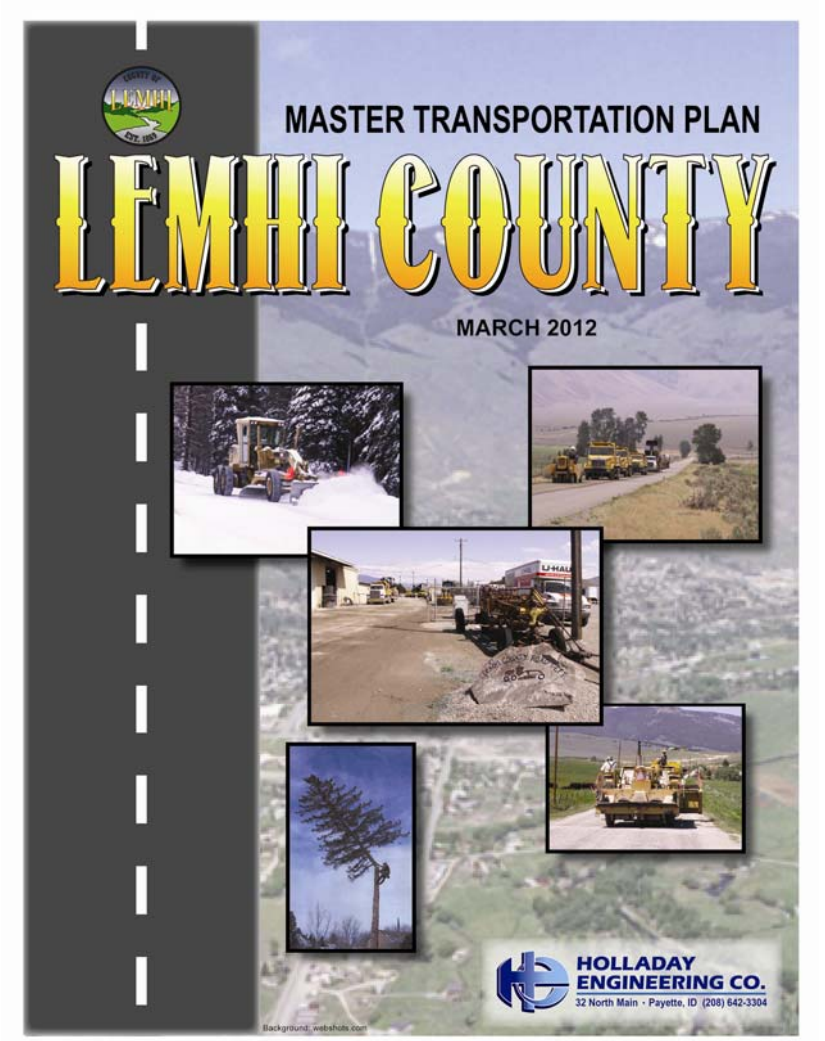
for the

Lemhi County Master Transportation Plan

WHEN: Tuesday, May 22, 2012, 3 p.m. - 8 p.m.

WHERE: Brooklyn Annex, 200 Fulton Street, Salmon, Idaho

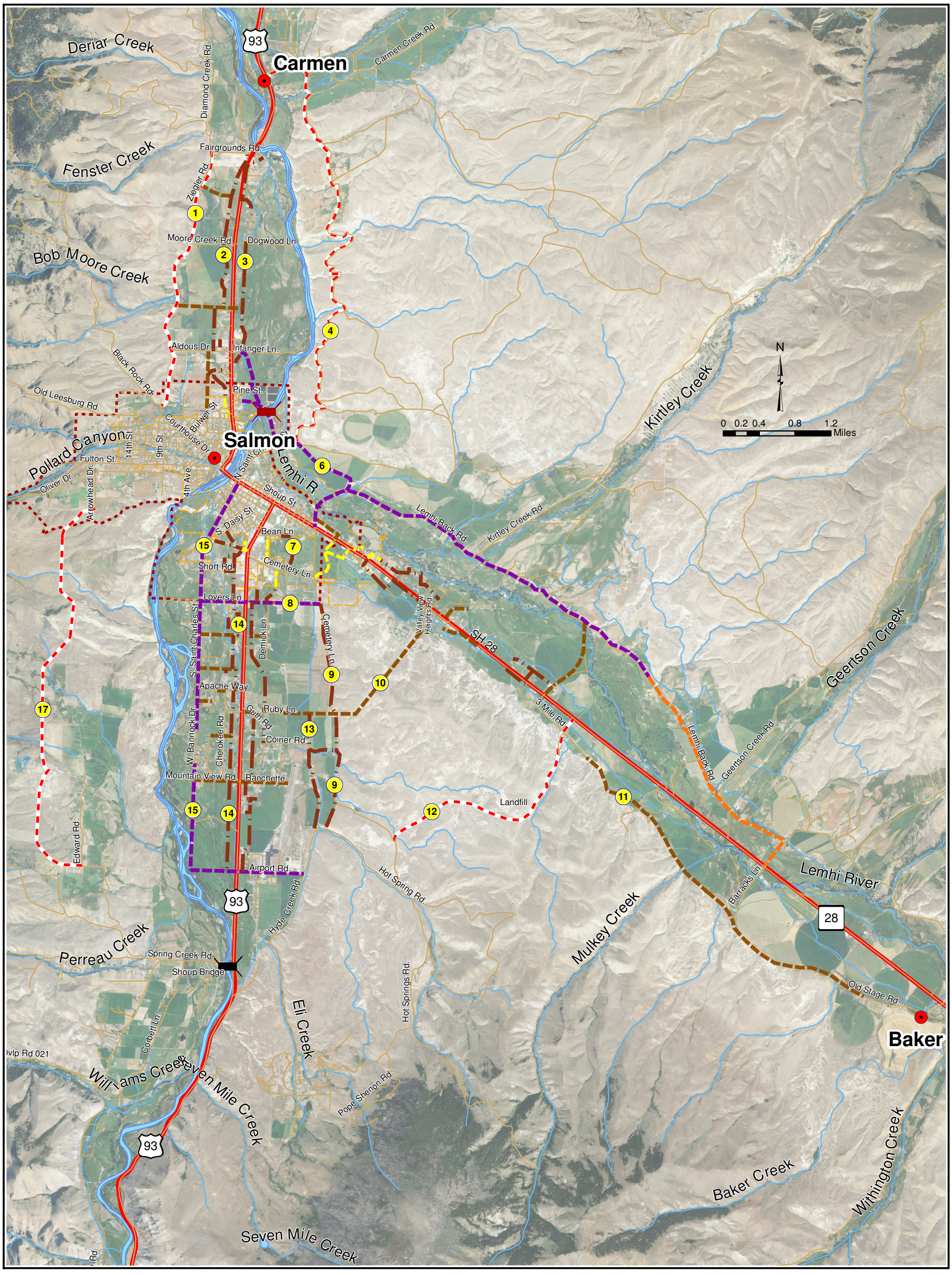
WHAT: An overview of the Lemhi County Master Transportation Plan will be presented at 3:30 p.m. and at 6:30 p.m. The workshop will be an open-house format and project staff will be available to answer questions. Displays will be shown illustrating information and written comments will be accepted until June 6, 2012. Comments also can be submitted via e-mail by visiting: www.holladayengineering.com/lemhi.html<http://www.holladayengineering.com/lemhi.html>.



Those needing special accommodations or an interpreter are asked to contact the Idaho Transportation Department's public involvement coordinator at (208) 334-8119, via e-mail at adam.rush@itd.idaho.gov<mailto:adam.rush@itd.idaho.gov> or TDD/TDY (208) 334-4458.

APPENDIX I

CONNECTIVITY MAPS



This map represents a compilation of public information from diverse records gathered by the County of Lemhi and Holladay Engineering Company. The purpose for which this map is prepared is an overall general representation of positional relationships, and not a definitive description of location of any class of objects or conditions. Hence, no responsibility for errors can be or is assumed.
The County of Lemhi and Holladay Engineering Company CANNOT AND DO NOT GUANTEE the absence of errors or the corrections of all information furnished to them for the preparartion of this map.

Revised June 2012

HOLLADAY ENGINEERING CO.
ENGINEERS • CONSULTANTS
32 N Main • PO Box 235 • Payette, ID 83661
(208) 642-3304 • hec@holladayengineering.com

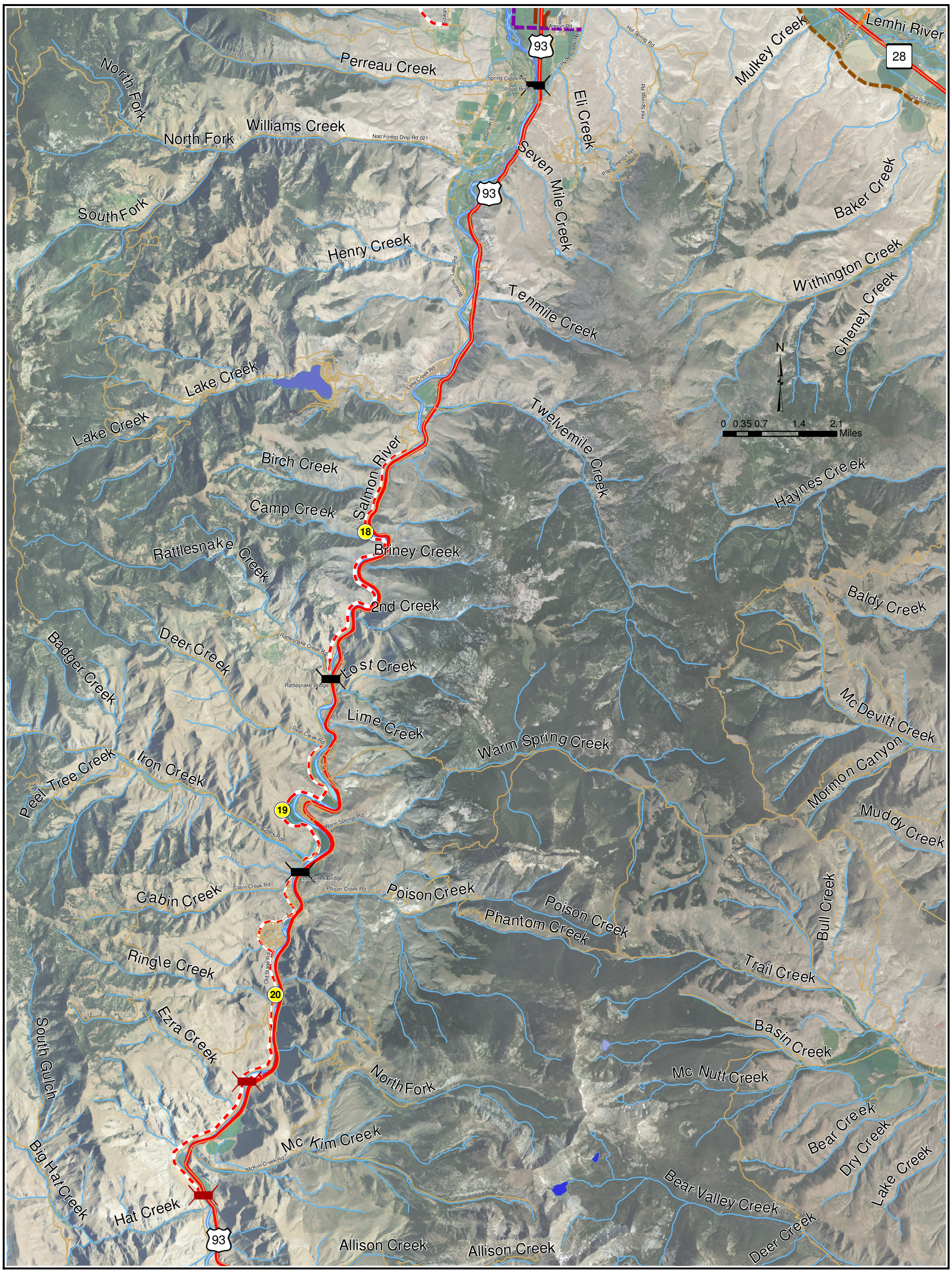
Legend

- Salmon City Limits
- Salmon Impact Area
- State Hwy
- Existing Road
- Existing Bridge
- Cities
- Route #
- Proposed Bridge
- Proposed Major Collector
- Proposed Minor Collector
- Proposed Emergency Route
- Proposed Local Road
- Proposed Backage Road
- Proposed City Road

Lemhi County

COUNTY OF LEMHI EST. 1869

Connectivity Routes



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