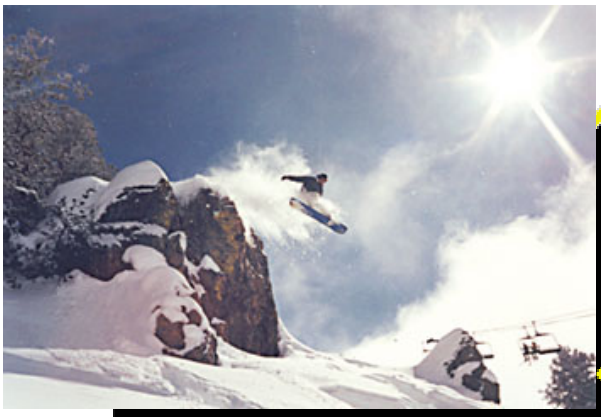
Ogden Valley

Transportation Master Plan



DRAFT REPORT
2004

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Ogden Valley

Transportation Master Plan

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Huntsville Planning & Zoning Commission	Brad Layton Ronald Gault John A. Cox Jr. Jim May
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* If available for this study

1. Introduction

1.1. Background

Huntsville is one of three small communities comprising what is known as "**Ogden Valley**," and is the only incorporated town of the three; the other two communities are Eden and Liberty. Huntsville is located twelve miles east of Ogden City up Ogden Canyon. Its elevation is just under 5,000 feet; the 1990 census showed a population of 561 in the town itself.

In 1825 Peter Skene Ogden came from the Bear Lake region and camped and trapped in the area. The distinction of being the first white man to set foot in the valley after Utah was settled belongs to Thomas Abbott of Farmington, Utah. He came in 1848 with several companions by way of Weber Canyon and passed on up South Fork and over to the Bear Lake country on a trip of exploration ordered by Brigham Young. The men returned the same way.

In 1854, under the leadership of David Moore and Charles F. Middleton of Ogden, others were sent into the valley by Brigham Young to search for a route to Fort Bridger. They traversed North Ogden Pass with pack animals and one supply wagon, which had to be lowered down by ropes. After exploring the valley, they continued up the South Fork of the Ogden River and returned by the divide into Weber Valley.

In August 1849 Captain Howard Stansbury of the Army Corps of Topographical Engineers passed through Ogden Valley, coming by way of South Fork Canyon. He was impressed with the beauty of the area. In September 1856, cattle were brought into Ogden Valley. Also after three years of hacking away at the brush and timber, Isaac Goodall completed a narrow toll road through Ogden Canyon in November 1860.

In the fall of 1860 seven families went into the valley to cut hay with the view of making a permanent settlement. The settlers consisted of Jefferson Hunt (for whom the town is named), two of his sons, Joseph and Hyrum, Joseph Wood, Charles Wood and his mother, Nathan Coffin and his mother Abigail, Edward Rishton, James Earl, and their families. Others soon followed; however, they found the upper part of the valley occupied by Little Soldier and other Shoshone Indians who soon began to steal stock and otherwise harass the whites. In order to avoid trouble, the settlers followed the advice of Brigham Young to "feed rather than fight the Indians." In order to maintain peace, the whites paid the Indians an annual tax of beeves, flour, and vegetables.

The first settlement was established in 1860 by a hillside spring and by a grove of cottonwood trees near the South Fork River, afterward known as "Hawkin's Grove." There were seven crude log houses with dirt roofs, all facing an inner courtyard. The first crops of oats, barley, and hay were planted in the spring of 1861, and a fine harvest followed. The women cultivated vegetable gardens near the cabins.

During the summer, many new settlers moved into the valley. The land was surveyed and a new town, called "Huntsville," was located on the bench. It was laid out in nine blocks, six acres to a block, each block divided into eight lots. An irrigation company was organized and tapped the South Fork River, bringing water to the bench land. Soren L. Peterson and Peter C. Geertsen, immigrants from Denmark in 1864, also served as missionaries there and encouraged many Danish converts to settle in Huntsville.

Huntsville was incorporated in 1903. The first mayor was L.M. Nelson. A city hall was built, as was an electric lighting system, extending from the dam in Ogden Canyon to the city. Nelson's home is still standing and is on the Utah Historical Register. (At one time it was a restaurant known as the "Valley House.") Some six years later, however, on 18 December 1909, the city was disincorporated.

In 1923 Huntsville presented a petition to the county commissioners requesting the privilege of again incorporating, and it was granted on 10 March 1924. The main purpose in again incorporating was to secure an up-to-date water system through a bond issue. On 3 December 1924 the water system was officially completed with a celebration in honor of the event. Huntsville was the second community in Weber County to incorporate, Ogden being the first.

The predominant religion in Huntsville is LDS, but many people of different faiths are moving into the valley. South of Huntsville there is a new Catholic church, St. Florence; east of town there is a Catholic Trappist monastery, Abbey of Our Lady of the Trinity.

In the early 1990s Huntsville had a U.S. post office, a convenience store, a sandwich store, a dentist, a psychiatrist, a factory, a beauty parlor, a gift store, and the oldest tavern in the state of Utah--the "Shooting Star." Huntsville also has a history department, which was begun in 1965 and is funded mainly by donations and entirely manned by volunteers. It focuses on information on the valley communities and Ogden Canyon.

While farming and dairying were the main occupations in years past, today the majority of the populace works outside of town in Ogden or in nearby federal installations. Ogden Valley is in the heart of a recreational area with nearby Pineview Dam used for fishing, boating, and water skiing; three ski areas also are located close by--Snow Basin, Nordic Valley, and Powder Mountain.

Huntsville had the first free public school in the state of Utah, and the first schoolteacher in the state--Mary Jane Dilworth Hammond--(who taught first in Salt Lake City) is buried in the local cemetery. During World War II, the area had more men enlist in the services per capita than any other place in the United States. President David O. McKay of the LDS Church was raised here and his family home is a tourist attraction. Tours are conducted during the summer months, and the home is on the Utah Historical Register.

In the wintertime, an area in the town square is flooded for ice skating. There are bobsleighs for hire in the winter. In the summertime, a horse and buggy can be hired at the town park. Delicious vegetables and fruit are raised in the summer despite the short growing season.

Huntsville is the location of the elementary school located here for Ogden Valley; a new junior high is located in the Eden. High school students are bused down Ogden Canyon to Pleasant View.

Huntsville won the "Tidy Town" award in 1992 in the state of Utah. Plans were being finalized in 1993 for a Weber County branch library to be built in Huntsville. That same year, final restoration was done on the first log cabin built in Huntsville, in 1861. The cabin was donated by former congressman Gunn McKay and his wife, Donna, and was built by Robert Frederick Aldous. Also in 1993, work was begun to convert Huntsville's old fire station into a small museum.

This information was provided from www.onlineutah.com, in an article written by Erma H. Wilson and Stanley F. Wangsgaard.

Eden is on the North Fork of the Ogden River, north of Pineview Reservoir. The first home was a log cabin built in 1857 for summer herdsmen Erastus Bingham and Joseph Hardy. A community was established in 1859 when fifteen families moved in via North Ogden Canyon and Pass. The settlers hired a government surveyor, Washington Jenkins, to plat the town. Jenkins said he thought the area was one of the most beautiful sites he had every surveyed and suggested the biblical name Eden. An earlier temporary name was North Fork Town.

This information was provided from www.onlineutah.com, in an article written by John W. Van Cott.

Liberty is on U-162 east of North Ogden and north of Eden. The settlement was laid out in 1892 as an outgrowth of Eden. There are several reasons presented for the name source. One version states that shortly after the Civil War the name "liberty" was very popular throughout the country. Another source claims that after John Freeman had been having trouble with range cattle, he told his neighbors, Fisher and Morris of North Ogden, that since people seemed to be taking a lot of liberties with property, he thought Liberty was an appropriate name for the settlement. Another reference states that the community was named after the Liberty Prison at Liberty, Clay County, Missouri. The Prophet Joseph Smith of the Mormon Church was held in this jail at one time.

This information was provided from www.onlineutah.com, in an article written by John W. Van Cott.

1.2. Study Need

Weber County has seen a 24.13 % population increase within the last decade and just over 9.48 % population increase the decade before. From 1960 to 2000, the population has increased 62.16 %. A well-established transportation plan is needed to provide direction for continual maintenance and improvements to Weber County as well as to Ogden Valley's transportation system.

With the aging infrastructure of Ogden Valley's transportation system and the need for system improvements, a more extensive transportation plan is necessary for Ogden Valley and the surrounding area.

Some of the major transportation issues around the State are as follows:

- Safety
- Railroad crossings
- Trails (bicycle, pedestrian, & OHV)
- Signals
- City interchange aesthetics
- Connectivity of roadways
- Property access
- Truck traffic
- Alternate routes
- Speed limits

Ogden Valley recognizes the importance of building and maintaining safe roadways, not only for the auto traffic but also for pedestrians and bicyclists.

1.3. Study Purpose

The purpose of this study is to assist in the development of a transportation master plan for Ogden Valley. This plan could be adopted by the Town of Huntsville as well as by Weber County as a companion document to their General Plan. With the transportation master plan in place the city can qualify for grants from the State Quality Growth Commission.

The primary objective of the study is to establish a solid transportation master plan to guide future developments and roadway expenditures. The plan includes two major components:

- Short-range action plan
- Long-range transportation plan

Short-range improvements focus on specific projects to improve deficiencies in the existing transportation system. The long-range plan will identify those projects that require significant advance planning and funding to implement and are needed to accommodate future traffic demand within the study area.

1.4. Study Area

The study area includes Ogden Valley, and land adjacent to it that is in Weber & Morgan Counties. A general location map is shown in Figure 1. A more detailed map of the study area and city limits is shown in Figure 2-1. The study area was developed by the communities of the Ogden Valley and approved by the Ogden Valley Transportation Master Plan Technical Advisory Committee.

The roadway network within the study area connects the Ogden Valley to Weber County and other points in the state include state routes; SR-39, SR-158 & SR-167. Each of these roadways provides a vital function to Ogden Valley, to the rest of Weber County and to the

State of Utah. SR-39 connects all points East and West including Ogden City and the Utah/Wyoming State Line. SR-39 also connects to I-15 to the West. I-15 is the regions main commuter and commercial trucking route. SR-39 is the main highway through the Town of Huntsville and serves local business and community circulation needs**.** SR-158 serves the community to the north. These roadways along with the local road network are shown in Figure 1-2.

1.5. Study Process

The study, which began in November 2004, is proceeding as a cooperative effort between Ogden Valley communities, UDOT, and local community members. It is being conducted under the guidance of Ogden Valley Officials. The following individuals participated in the initial meetings to provide input used to create this document. This group listed below will be referred to as the Technical Advisory Committee or "TAC" for this document.

James C McKay	**Mayor, Huntsville**
Jim Truett	**Huntsville Town Council**
John A Cox	**Huntsville Planning Commission**
Ronald Gault	**Huntsville Planning Commission**
Gail Ahlstrom	**Huntsville City Clerk**
Glen Burton	**Weber County Commissioner**
Jim Gentry	**Weber County Planning**
Kevin Hamilton	**Weber County Planning**
Kirk Langford	**Eden Planning**
Steve Clarke	**Eden Planning**
John Cleone	**CEO Valley Lodging**
Jerry Allred	**Citizen**
CD Taylor	**Citizen**
Kim Wheatley	**Citizen**
Paul DeLong	**Citizen**
Debra Weatley	**Citizen**
Ben Toone	**Citizen**
Steve Roberts	**Citizen**
Kris Woodring	**Citizen**
Marion Horna	**PEMJH Power**
Tommy Lee	**Principal at Valley Elementary**
Lowell Peterson	**Wolf Creek Resort**
Steve Clarke	**Citizen**
Aleta Colsabe	**Powder Mountain**

Marc Paulsen	**Powder Mountain**
Volma Reeder	**Radford Hill**
C Thompson	**Wasatch Paving**
John Klisch	**Weber Pathways**
Shanna Francis	**Ogden Valley News**
Rex Harris	**UDOT Region One**

Figure 1-1: Ogden Valley Study Area Location

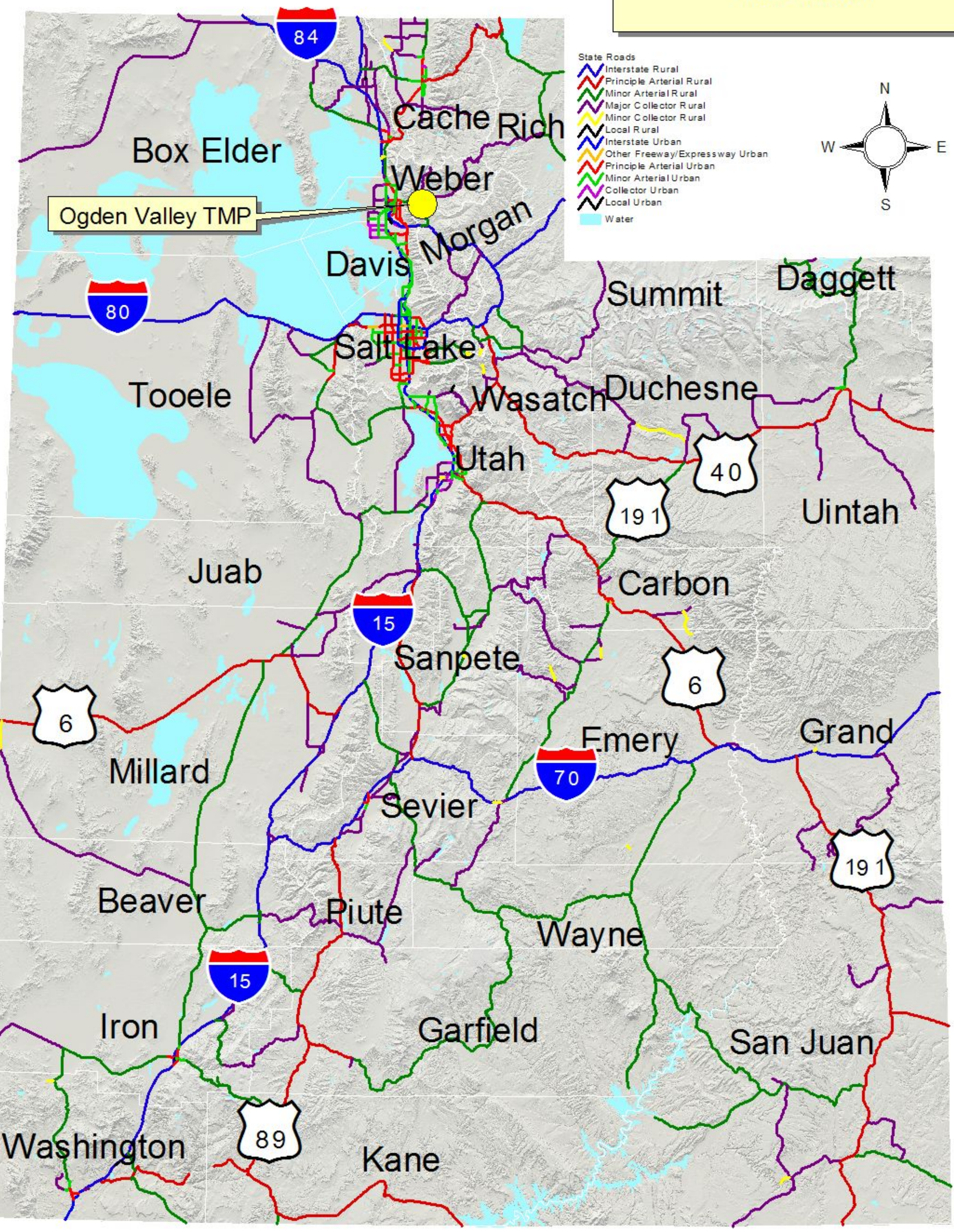
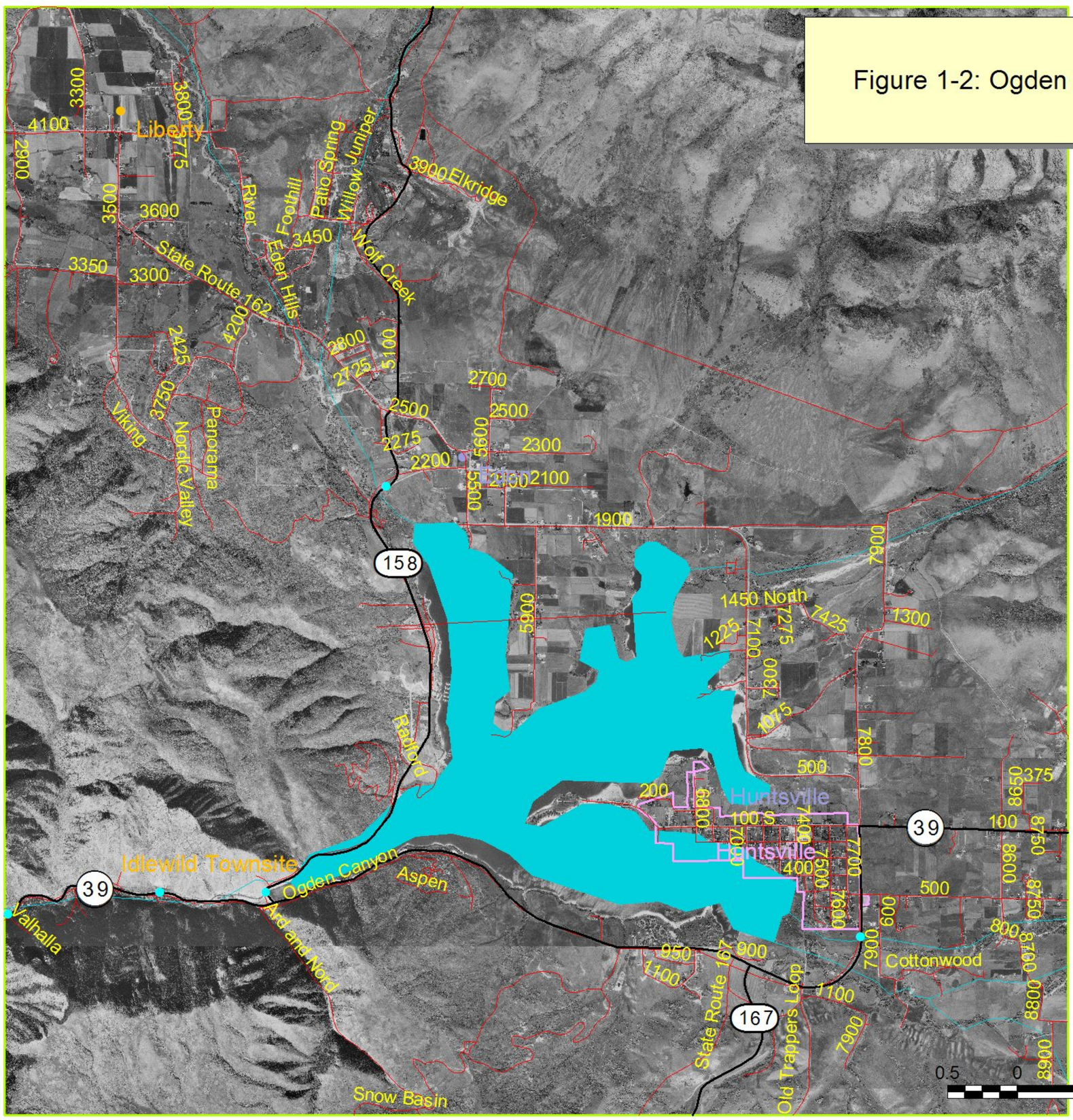


Figure 1-2: Ogden Valley Study Area Vicinity



The study process for the Ogden Valley Transportation Master Plan consist of three basic parts: (1) inventory and analyze existing conditions, (2) project future conditions, and (3) development of a transportation master plan (TMP). This process involves the participation of the TAC for guidance, review, evaluation and recommendations in developing the TMP to include development of future projects for the identified study area.

The TAC will evaluate each part of the study process. Their comments will be incorporated into the study's draft final report. The remainder of the draft final report will focus on the recommendation and implementation portion of the transportation plan program. Transportation projects that will be recommended for the short-term and long-range needs will be developed based on the TAC's recommendations and concurrence.

The study process allows for the solicitation of input from the public at two TAC workshops. This public participation element is included in the study process to ensure that any decisions made regarding this study are acceptable to the community.

The first TAC workshop will provide an inventory and analysis of existing conditions and identify needed transportation improvements. The second TAC workshop will focus on prioritizing projects, estimating costs, and discussion of the funding processes.

The TAC is expected to recommend those comments that are to be incorporated into the report and applicable to the goals of this study. The draft final report and the final report will be submitted to the City for review and comments.

Upon local review of the draft report, UDOT will prepare appropriate changes and submit the final report to the Town of Huntsville and Weber County for approval. The final report will describe the study process, findings and conclusions, and will document the analysis of the recommended transportation system projects and improvements.

2. Existing Conditions

An inventory and evaluation of existing conditions within the study area was conducted to identify existing transportation problems or issues. The results of the investigation follow.

2.1. Land Use

In order to analyze and forecast traffic volumes, it is essential to understand the land use patterns within the study area. By analyzing the patterns or changes in land use, we can better predict the ever-changing transportation needs.

The Ogden Valley Zoning map follows on the next page.

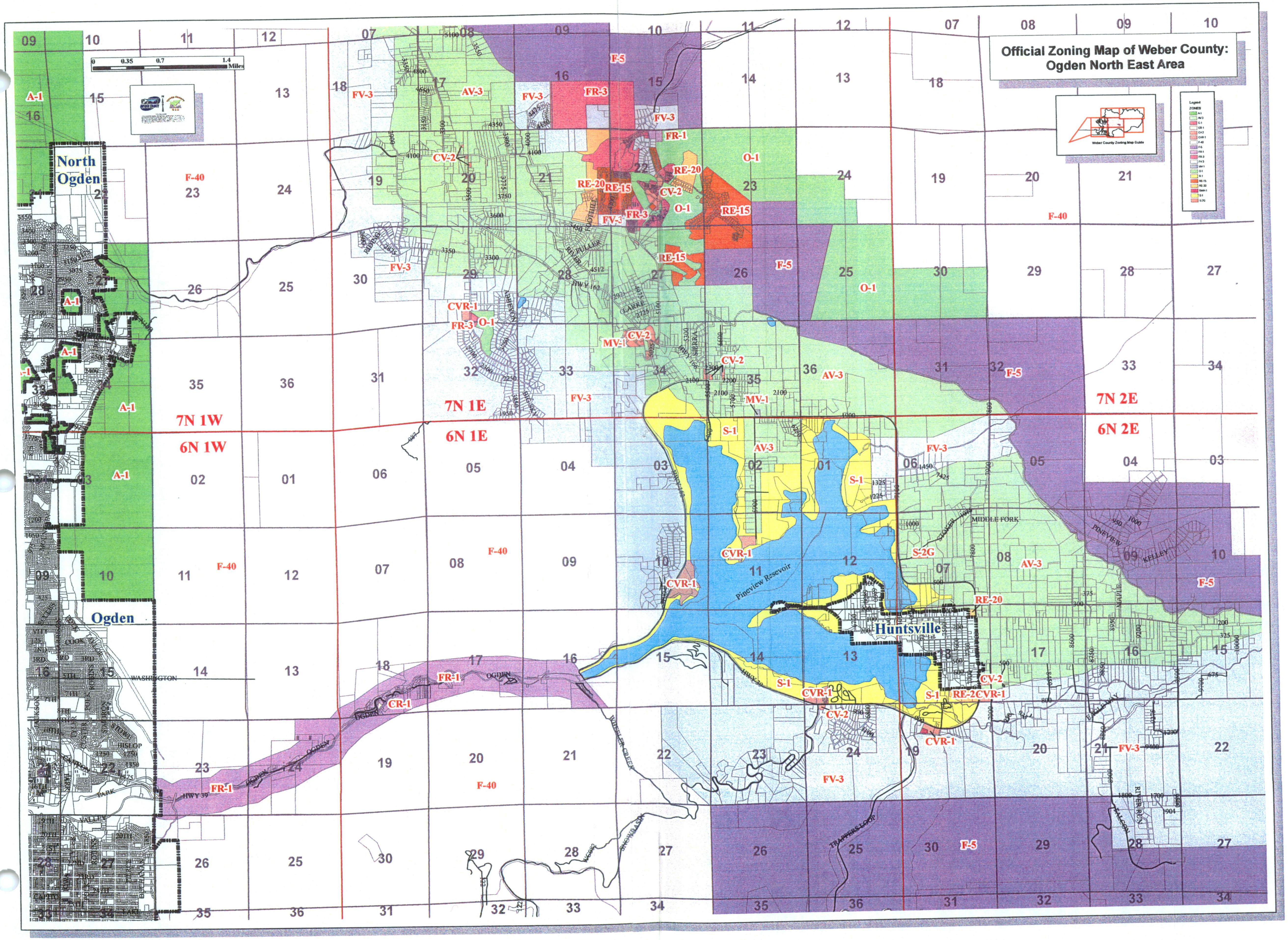
2.2. Environmental

In Utah there are a variety of local environmental issues. Each of the cities and counties need to look at what are the environmental issues in their areas on a case-by-case basis. There are many resources that can help local entities to determine what issues need to be addressed and how any problems that may exist can be resolved.

Some of the environmental concerns around the State are wetlands, endangered species, archeological sites, and geological sites among other issues. Environmental concerns should be addressed when looking at an area for any type of improvement to the transportation system. Protecting the environment is a critical part of the transportation planning process.

2.3. Socio-Economic (Census Brief: Cities and Counties of Utah, May 2001)

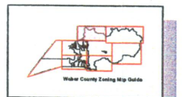
The town of Huntsville ranks 158th for population in the State of Utah, out of 235 incorporated cities and towns, and this is the largest town in the Ogden Valley. Historical growth rates have been identified for this study, because past growth is usually a good indicator of what might occur in the future. Chart 2-1 identifies the population growth over the past 50 years for the State of Utah, Weber County and for the town of Huntsville. Chart 2-2 identifies that population change in Huntsville has ranged from –2.77% between 1980 and 1990 to gaining 15.69% between 1990 and 2000, while growth in the State has gained between 18 and 38 percent during the past 50 years.

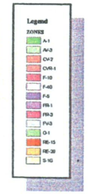


Official Zoning Map of Weber County:
Ogden North East Area
North Ogden
Ogden
Huntsville
Pineview Resevoir
7N 1W
6N 1W
7N 1E
6N 1E
7N 2E
6N 2E
A-1
AV-3
CV-2
CVR-1
CR-1
F-5
F-40
FR-1
FR-3
FV-3
MV-1
O-1
RE-15
RE-20
S-1
S-2G

Official Zoning Map of Weber County: Northern Weber County

0 0.5 1 2 Miles





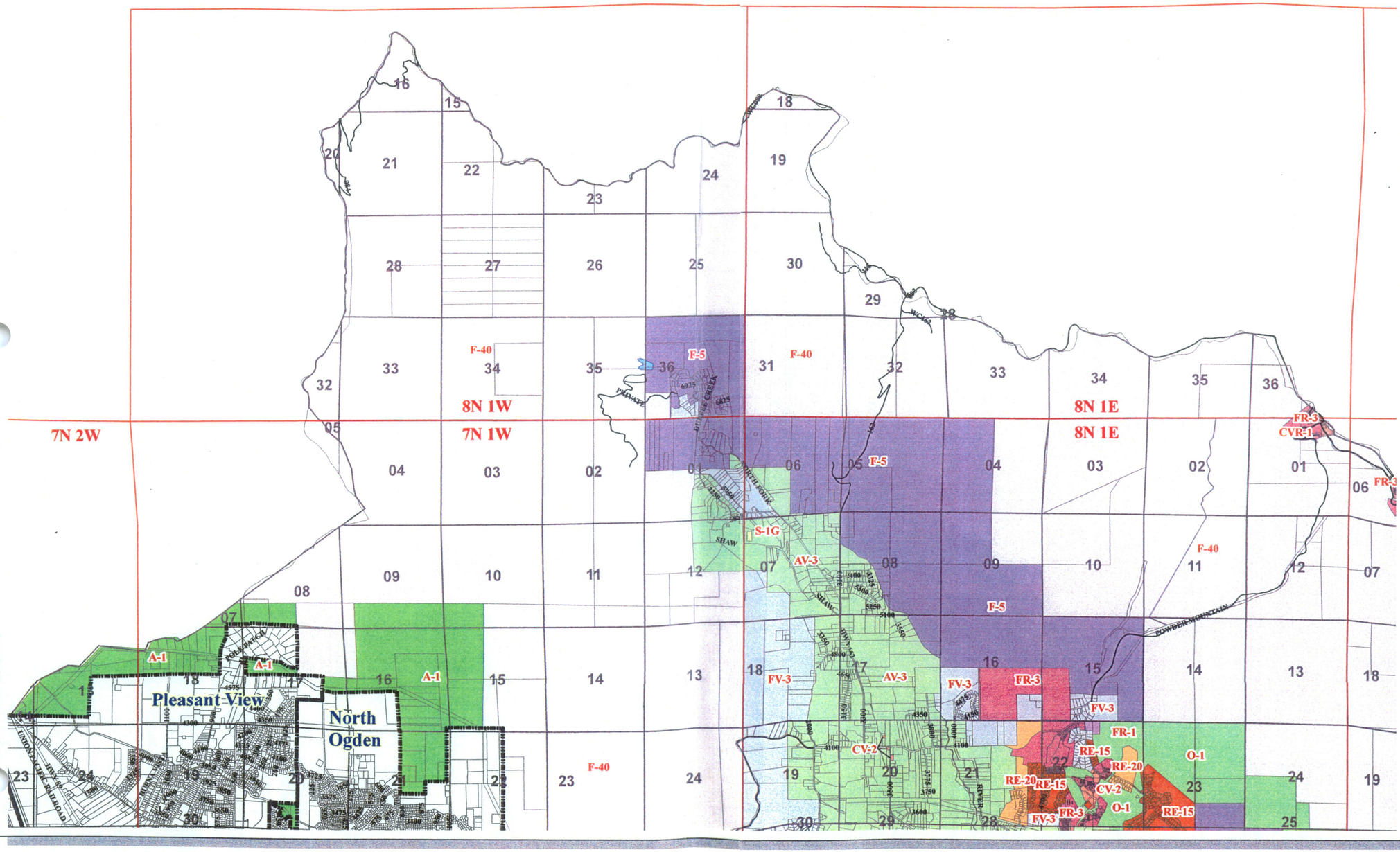
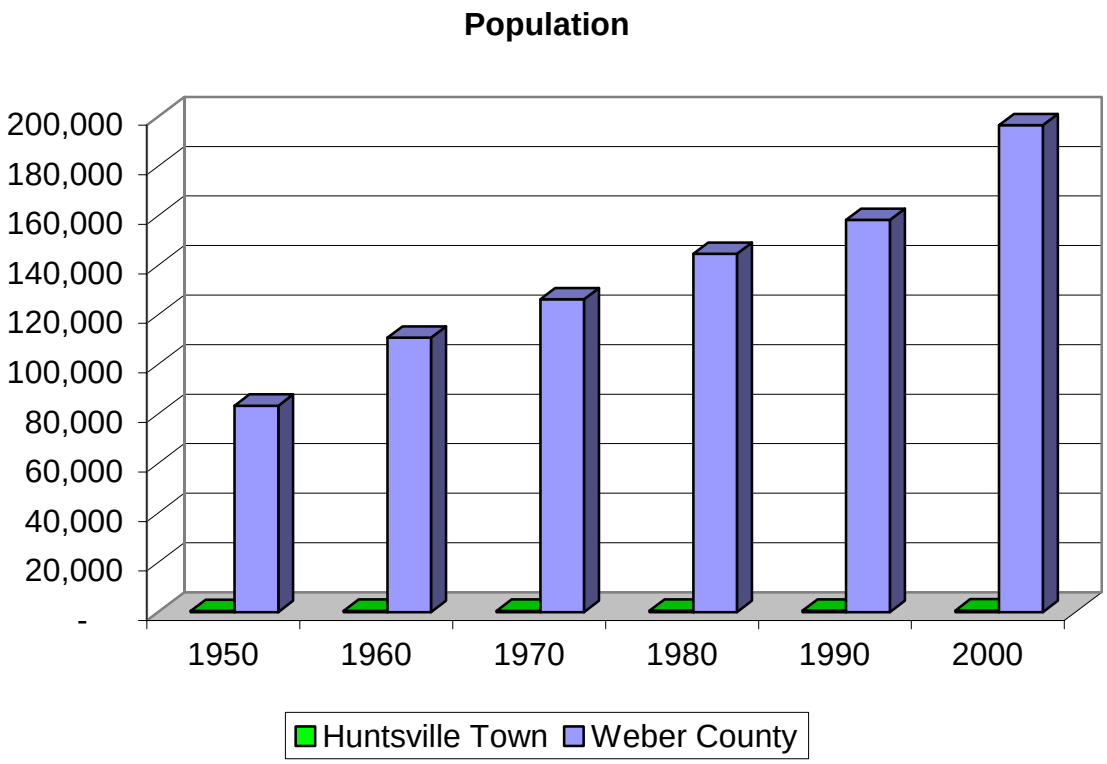


Chart 2-1. Population Data

Population			
Year	Utah	Weber County	Huntsville Town
1950	688,862	83,319	494
1960	890,627	110,744	552
1970	1,059,273	126,278	553
1980	1,461,037	144,616	577
1990	1,722,850	158,330	561
2000	2,233,169	196,533	649



Source: U.S. Bureau of the Census
http://www.govenor.utah.gov/dea/OtherPublications.html

Chart 2-3 identifies yearly population growth rates for the State of Utah and Weber County.

Though the State population has grown every decade from 1950 until 2000, Weber County has also showed a slower, yet consistent, rate of growth in population over the same period.

The town of Huntsville has some unique demographic characteristics when compared with the State, particularly with age demographics. In the 25 to 54-age category, the State is at 38.6% the County is at 39.2% and the City is at 35.7%. For the 65+-age category, the State is at 8.5%, the County is at 10.3% and the town is at 11.9%. The State's median age is 27.1 years and the County's median age is 29.3 years, town's median age is 34.5 years. Another interesting statistic is that of Veteran status with State at 10.7%, County at 13.8%, and Huntsville is at 14.7%.

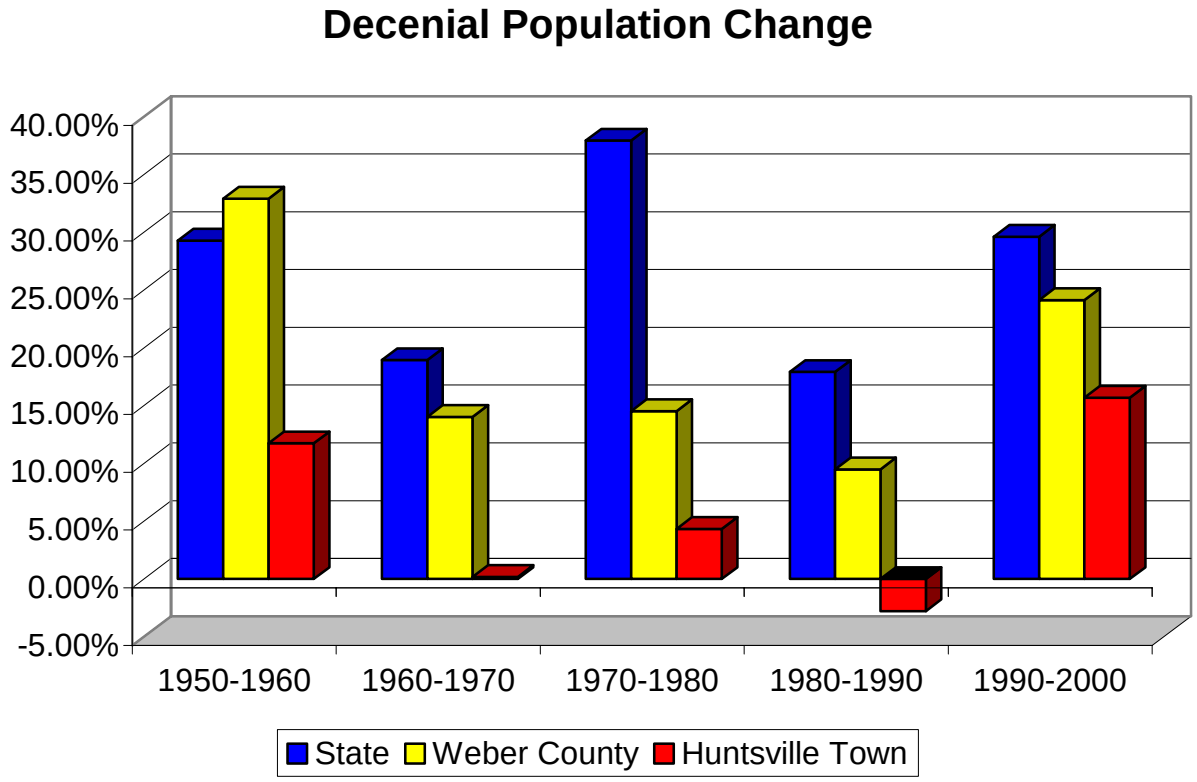
The 2000 median household income in Huntsville is $50,625, compared to the State median household income of $45,726.

The unemployment rate in the town of Huntsville was 4.4 percent in 2000. According to the Utah Department of Employment Security (UDES), in 2000 there were approximately 279 employed people in Huntsville or 61.5% of the population. The city has 20 unemployed people, which is 4.4% of the population. There are 91,938 employed people in Weber County or 64.3% percent of the population. The county has 5,878 people unemployed, which is 4.1% of the population. Chart 2-4 shows the historical employment growth rates for Weber County the Wasatch Front MCD as well as the State of Utah.

The majority of employees in Weber County work in three primary employment sectors: Services, Trade and Government as shown in Chart 2-5. In the county, these sectors make up 58.61% of the labor force. Another interesting note was that housing built from 1990-2000 were 9.1% of total for Huntsville compared to 25% for the state. Also homes built before 1939 were 45.5% of the total for Huntsville with 10% for the state.

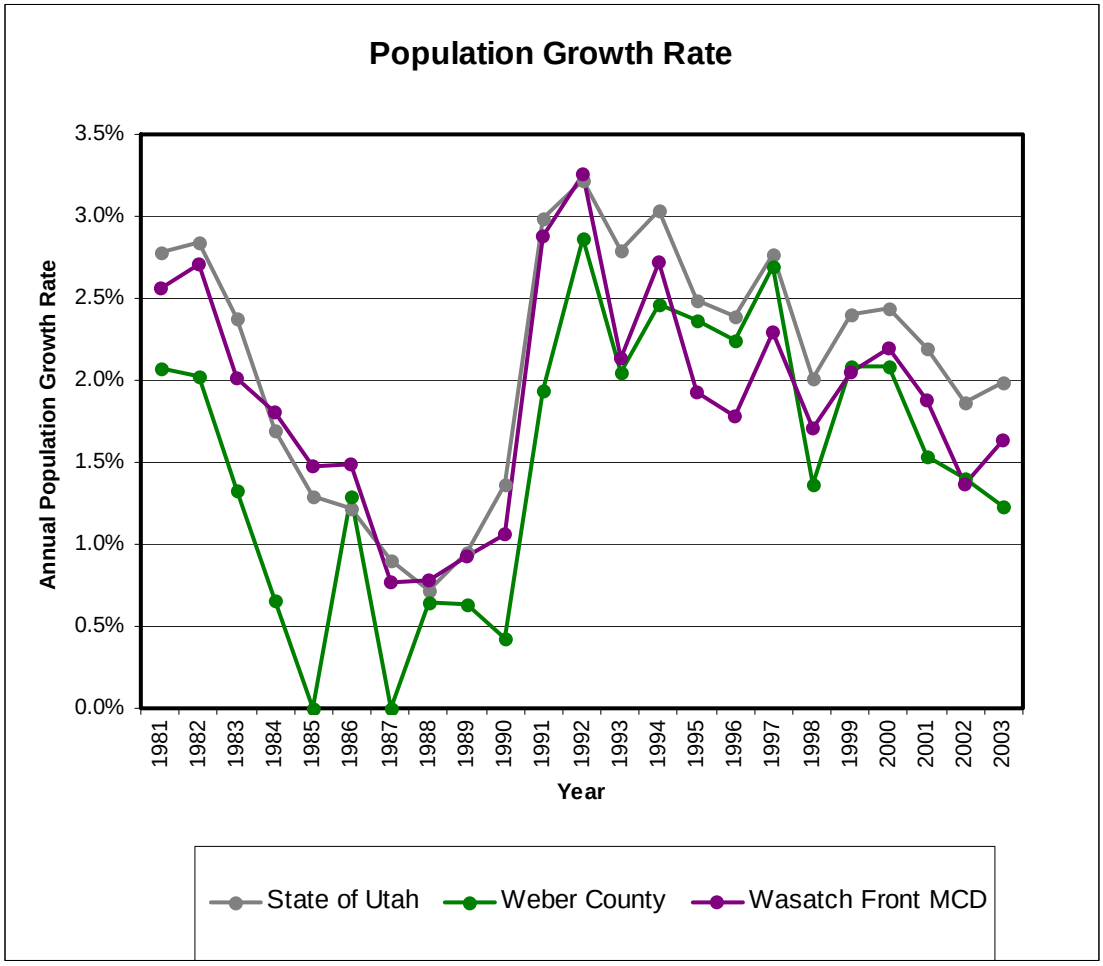
Chart 2-2. Population Change Data

Decade	State of Utah	Weber County	Huntsville Town
1950-1960	29.29%	32.92%	11.74%
1960-1970	18.94%	14.03%	0.18%
1970-1980	37.93%	14.52%	4.34%
1980-1990	17.92%	9.48%	-2.77%
1990-2000	29.62%	24.13%	15.69%



Source Data: U.S. Bureau of the Census
http://www.govenor.utah./dea/OtherPublications.html

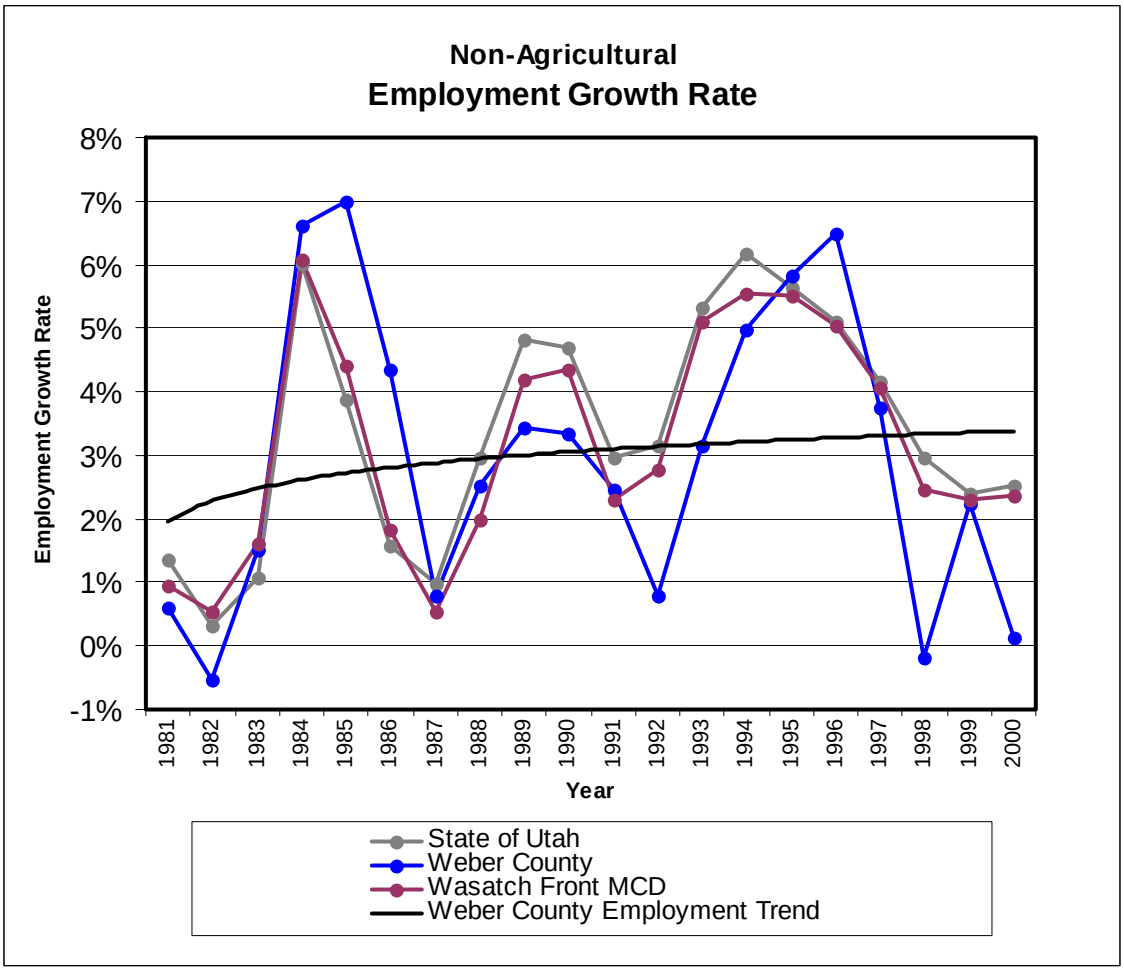
Chart 2-3. Population Growth Rate (1980-2000)



MCD = Multi-County Districts, Wasatch Front MCD = Davis, Morgan, Salt Lake, Tooele & Weber Counties

Source: Governors Office of Planning and Budget
http://www.governor.utah.gov/dea

Chart 2-4. Employment Growth Rate (1980-2000)



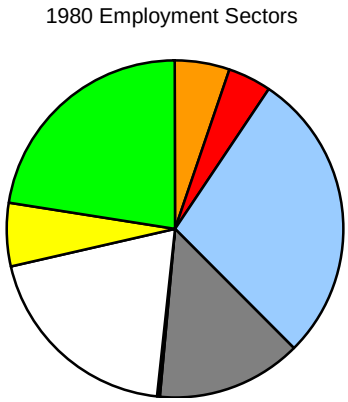
MCD = Multi-County Districts, Wasatch Front MCD = Davis, Morgan, Salt Lake, Tooele & Davis Counties

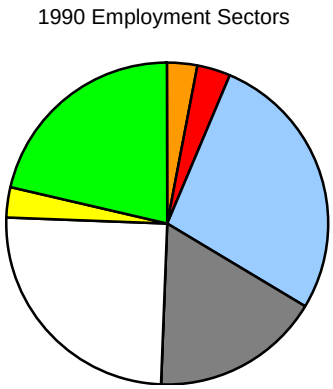
Source: Governors Office of Planning and Budget
http://www.governor.utah.gov/dea

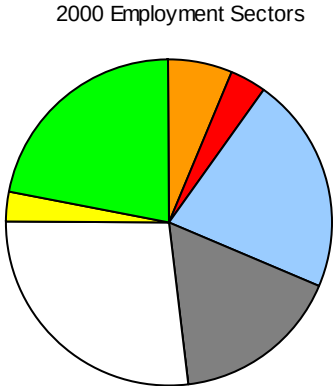
Chart 2-5. Weber County Employment Sectors (1980-2000)

Sector	1980	1990	2000	Δ% 1980-2000
Construction	4.40%	2.64%	5.27%	117.69%
FIRE	3.67%	2.73%	3.04%	50.41%
Government	23.80%	22.77%	17.55%	33.92%
Manufacturing	11.65%	14.05%	13.88%	116.45%
Mining	0.20%	0.01%	0.01%	-94.17%
Services	16.96%	20.81%	22.27%	138.43%
TCPU	5.02%	2.63%	2.45%	-11.42%
Trade	19.14%	17.77%	18.10%	71.81%

FIRE = Finance, Insurance & Real Estate
TCPU = Transportation, Communications & Public Utilities







Source: Governors Office of Planning and Budget
http://www.governor.utah.gov/dea/HistoricalData.html

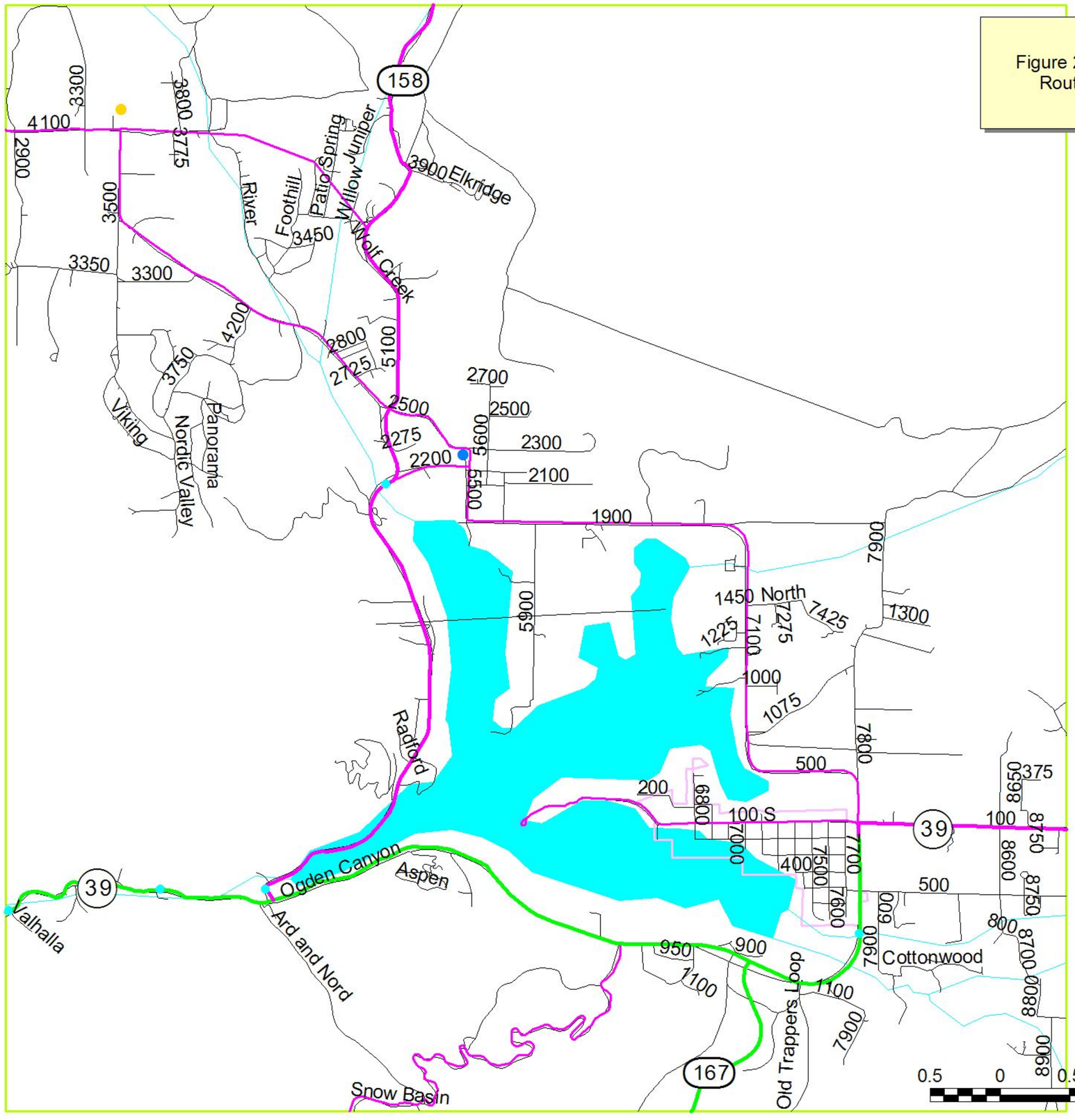
2.4. Functional Street Classification

Figure 2-2 identifies the current function and operational characteristics of the selected roadway network of Ogden Valley. Functional street classification is a subjective means to identify how a roadway functions and operates when a combination of the roadway's characteristics are evaluated. These characteristics include; roadway configuration, right-of-way, traffic volume, carrying capacity, property access, speed limit, roadway spacing, and length of trips using the roadway.

The primary classifications used in classifying selected roadways of Ogden Valley are: Minor Arterial, Major Collector, Minor Collector and Local. An Arterial's function is to provide traffic mobility at higher speeds with limited property access. Traffic from the local roads is gathered by the Collector system, which provides a balance between mobility and property access trips. Local streets and roads serve property access based trips and these trips are generally shorter in length.

The Ogden Valley area is accessed by SR-39 from the east and from the west. SR-158 connects the region from the north and SR-167 from the south. SR-39 bisects the town of Huntsville north to south then travels east out of the town to the Utah/Wyoming state line. The functionally classified system is currently being revised statewide. The current functionally classified system generally defines the higher traffic roads, so only minor additions or changes will be required.

Figure 2-2: Existing State and Federal Routes Functional Classification



2.5 Bridges

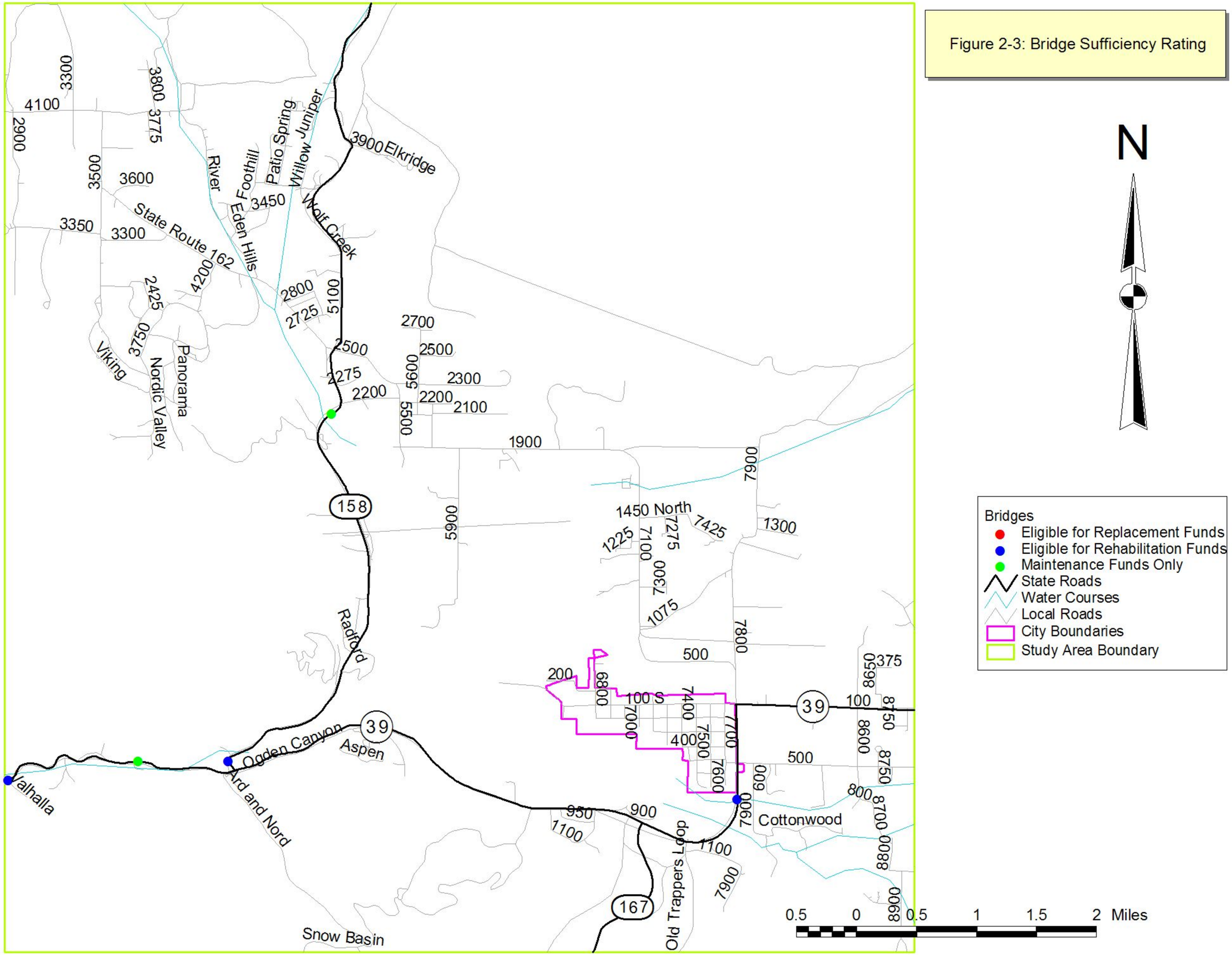
There are ten bridges on the state system located in the study area that could be eligible for federal bridge maintenance, rehabilitation, or replacement funds. Bridges are maintained and minor repairs made with maintenance funds. A bridge is rehabilitated or replaced as it deteriorates over time and as traffic volumes increase. (Figure 2-3 Bridge Sufficiency Rating)

Table 2-1 compares the bridges in the study area and identifies their sufficiency rating and location. Sufficiency rating indicates current condition of the structure with a rating of 100 showing a structure that is in excellent shape. A rating nearing 50 will reveal a structure that is in need of attention and is eligible for federal funding.

Table 2-1. Bridges

Number	Location	Maximum Span	No. Lanes & Road Width	Sidewalk	Sufficiency Rating
F-381	SR-39, at Mouth of Ogden Canyon	15.2 m	2 lanes, 11.6 m	No	83.0
F-598	SR-39, 5 miles West of Pineview Dam	21.1 m	2 lanes, 14.3 m	No	84.0
D-643	SR-39, 3 miles West of Pineview Dam	35.4 m	2 lanes, 12.9 m	Yes	68.4
E-1099	SR-39, 3.5 miles East of Pineview Dam	11.9 m	2 lanes, 8.5 m	No	88.8
E-1100	SR-39, 3.8 miles East of Pineview Dam	11.9 m	2 lanes, 8.2 m	No	70.8
D-388	SR-39, 9.5 miles East of Huntsville	6.7 m	2 lanes, 8.2 m	No	54.8
D-389	SR-39, 10 miles East of Huntsville	9.8 m	2 lanes, 8.2 m	No	67.5

Figure 2-3: Bridge Sufficiency Rating



D-395	SR-39, 14.5 miles East of Huntsville	7.9 m	2 lanes, 8.2 m	No	47.8
D-737	SR-158, Pineview Dam Spillway	9.67 m	2 lanes, 9.15 m	No	72.6
E-1105	SR-158, 3 miles North of SR-39 Junction	13.1 m	2 lanes, 8.5 m	No	87.8

Bridge Sufficiency Rating – Figure 10
Source: Utah Department of Transportation/Structures Division

2.6 Traffic Counts

Recent average daily traffic count data were obtained from UDOT. Table 2-2 shows the traffic count data on the key roadways of the study area. The number of vehicles in both directions that pass over a given segment of roadway in a 24-hour period is referred to as the average annual daily traffic (AADT) for that segment.

Table 2-2. Average Annual Daily Traffic

Road	Segment	Year	AADT
SR-39	Junction SR-158 at Pineview	2002	7,350
SR-39	Junction SR-226	2002	7,580
SR-39	Junction Local Road to Eden	2002	3,970
SR-39	Road to Monastery	2002	2,000
SR-158	Junction Local Road West of Eden	2002	4,800
SR-158	Junction Local Road Northwest of Eden	2002	3,835
SR-158	Patio Springs-Powder Mountain Ski Resort	2002	1,850
SR-167	Morgan/Weber County Line-SR-39 near Huntsville	2002	3,740

Source: Utah Department of Transportation

**INCL=Incorporated City Limits*

These are averages for the entire year. Ogden Valley experiences a significant increase in traffic during the summer months. UDOT maintains 86 continuously operated automatic traffic recorders (ATR) throughout the state highway system. ATRs collect data continuously throughout the year in order to determine monthly, weekly, daily, and hourly traffic patterns. One ATR is located in the study area on SR-39 one-half mile west of SR-158 in Ogden Canyon. The following points summarize the 2003 data from the ATR at this location.

Traffic on SR-39 one-half mile west of SR-158, Ogden Canyon @ MP 8.73

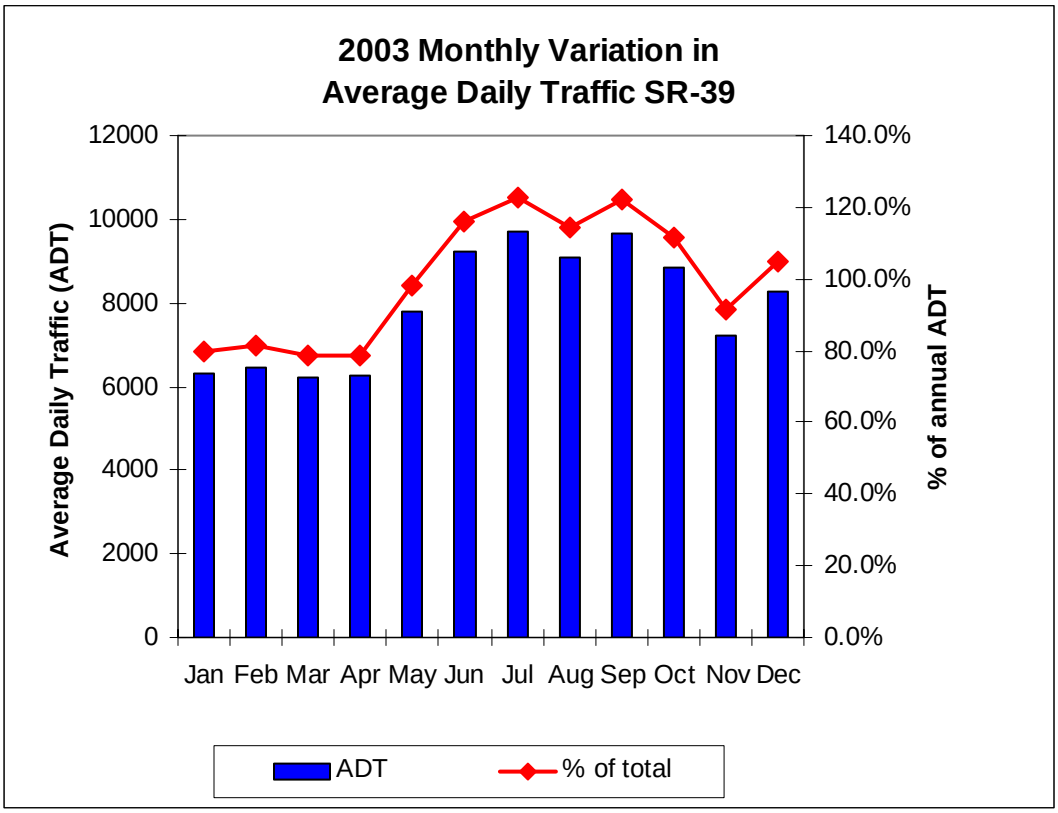
- July & September was the highest volume months.
- March & April was the lowest volume months.
- The highest daily volumes occurred on Saturday.
- The lowest daily volumes occurred on Sunday & Tuesday.

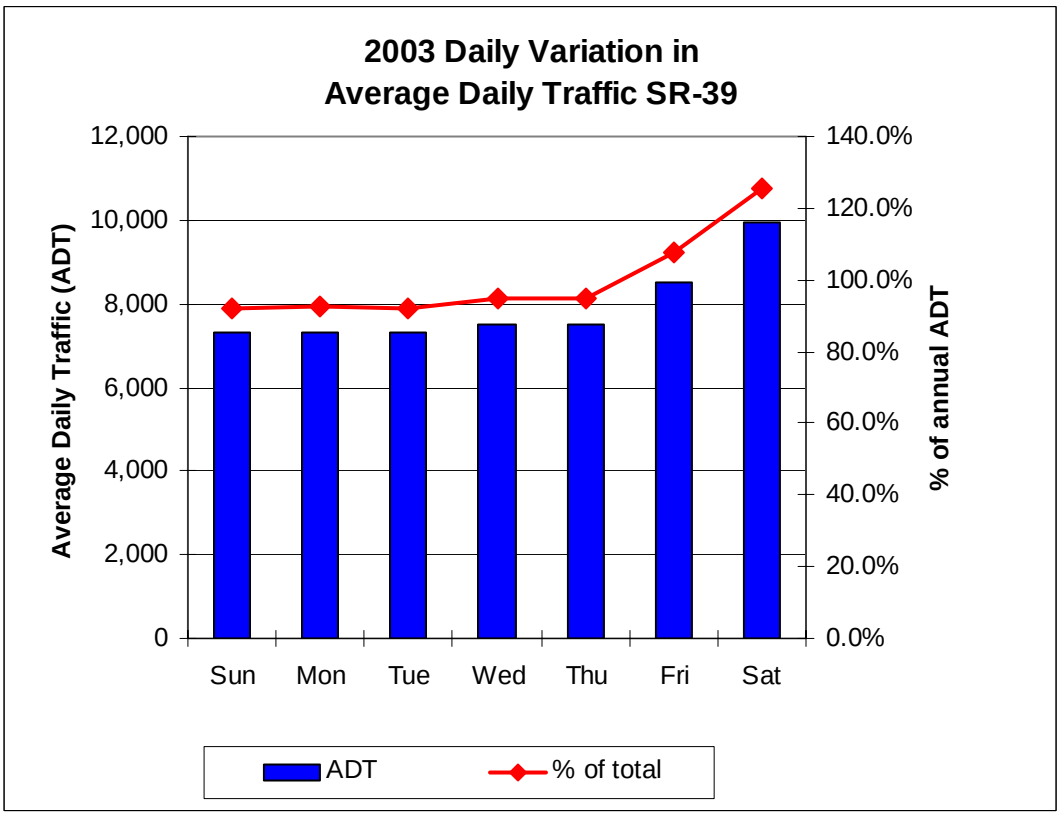
The peak months of July and September are consistent with a recreational usage.

The hourly traffic shows an average peak period from 3:00 to 5:00 pm. This is consistent with an afternoon commuter peak.

A map illustrating existing and future traffic, peak season traffic, and roadway capacities is presented in the Traffic Forecast section 3.2.

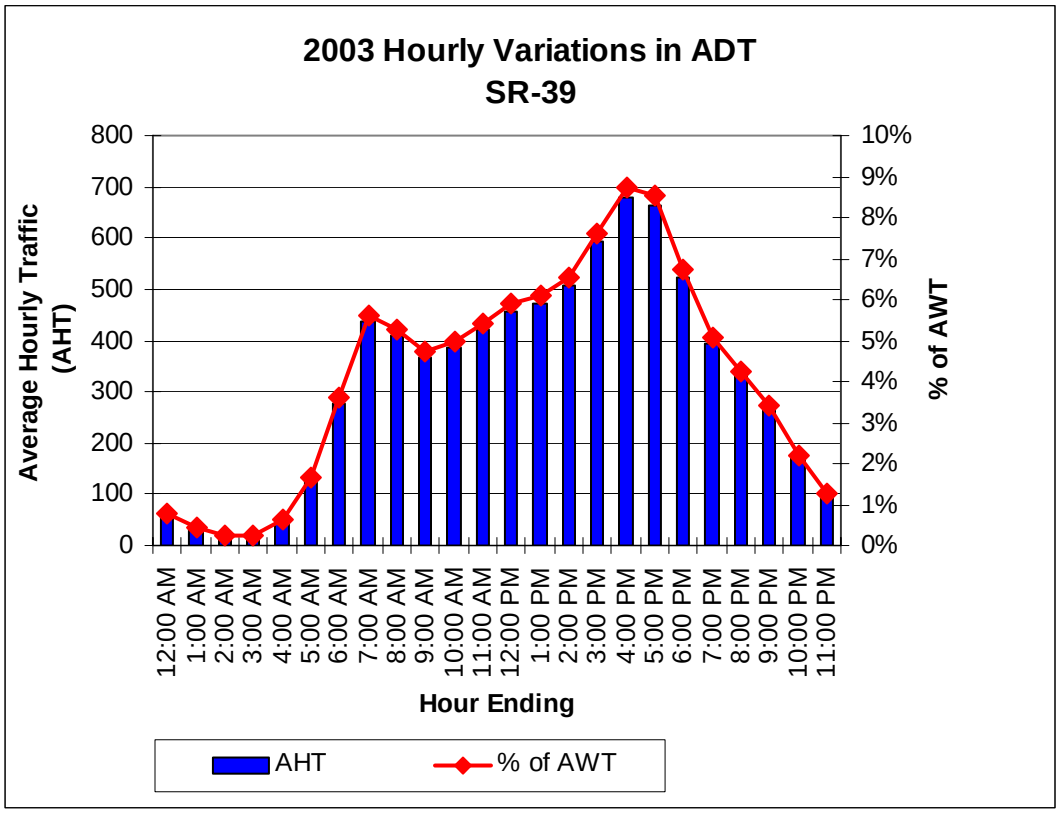
Chart 2-6. Monthly and Daily ADT on SR-39





Source: Utah Department of Transportation

Chart 2-9. Hourly Variations on SR-39



Source: Utah Department of Transportation

2.7 Traffic Accidents

Traffic accident data was obtained from UDOT's database of reported accidents from 2002.—Table 3 summarizes the accident statistics for those segments for the year 2002. Additional information includes the average daily traffic, the number of reported accidents, and the accident rates. The roadway segment accident rates were determined in terms of accidents per million vehicle miles traveled. The crash rates for each roadway segment are compared to the expected crash rate for similar facilities across the state.

Upon review of the accident data for the state system, there appears to be a higher than expected accident rates at the following locations:

- **On SR-39 From the MP 8.73 to MP 16.58**
- **On SR-167 From MP 1.54 to MP 11.07**

The remainder of the state system shows a lower than expected accident rate. Table 2-3 shows accident data taken from 1999-2001, which shows various segments of the state highway system and associated accident data.

Ogden Valley may wish to review the accident history for the local street system to identify any specific accident hot spot locations.

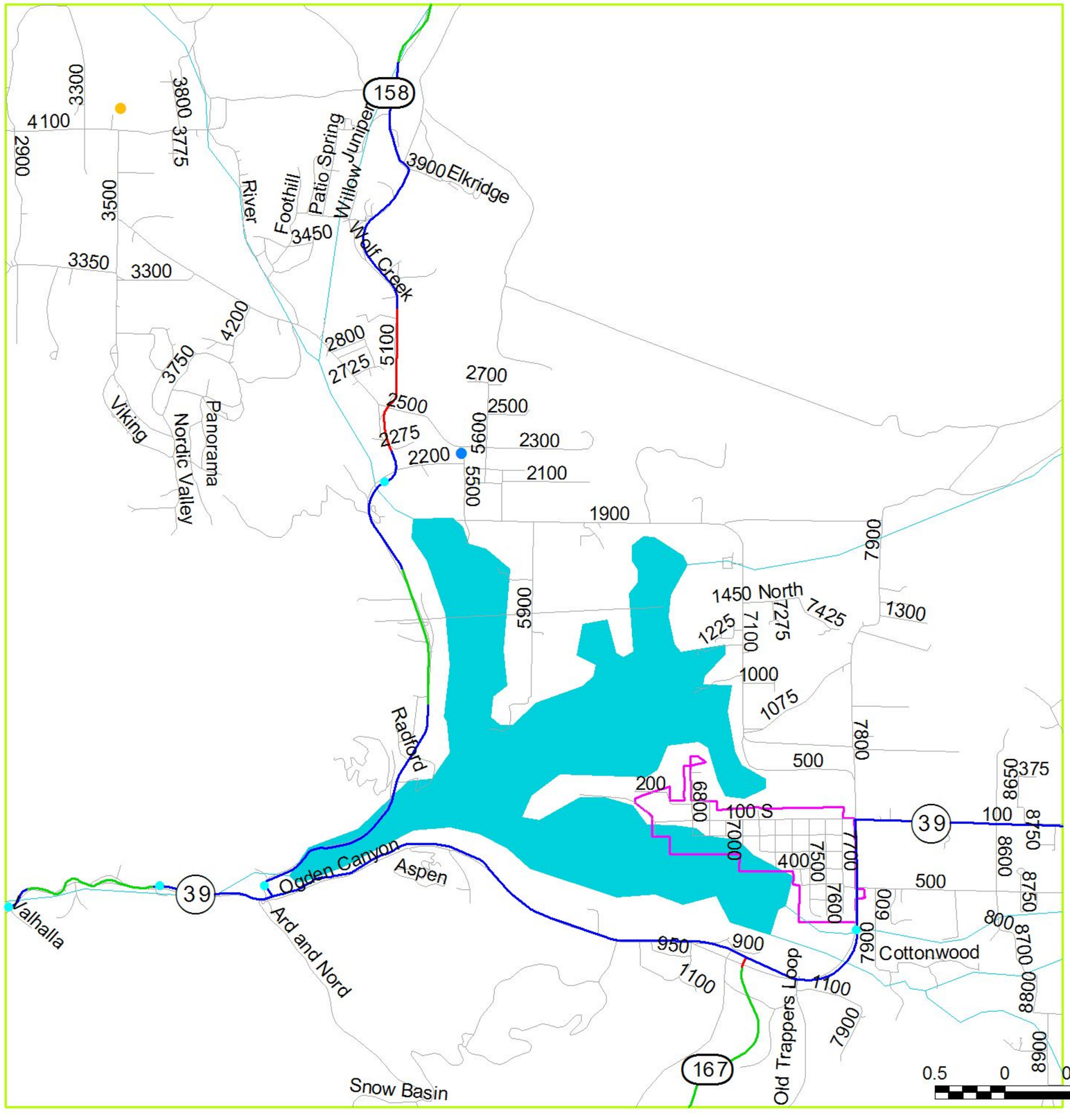
Table 2-3. Crash Data 2002

Road	From Milepost	End Milepost	ADT (2002)	# Crashes (2002)	Crash Rate	
					Actual	Expected*
39	8.73	13.8	8728	50	3.25	2.45
39	13.81	16.58	7350	17	3.06	1.98
39	16.59	19.35	7580	8	1.77	2.45
39	19.36	21	3970	2	1.15	1.88
158	0	3.77	4730	9	1.49	2.28
158	3.78	4.33	4800	2	2.20	2.28
158	4.34	4.98	3835	0	0.00	2.28
158	4.99	11.67	1850	7	1.65	2.53
167	1.54	11.07	3740	20	3.55	2.28

* Statewide average accident rates for functional class and volume group.

Red indicates higher than expected rates of accidents

Figure 2-4: State Road Crash Rates



2.8 Bicycle and Pedestrian

The Federal Highway Administration recognizes the increasingly important role of bicycling and walking in creating a balanced, intermodal transportation system, and encourages state and local governments to incorporate all necessary provisions to accommodate bicycle and pedestrian traffic. As Weber County representatives are currently updating their recreation plan, consideration should be given to these alternative transportation modes through adoption of a "complete streets" philosophy. This type of all-inclusive planning process will help to create a more bicycle-friendly and walkable community.

2.8.1 Biking/Trails

Ogden Valley is a unique locale with its greatest asset being its geographic location. With the Wasatch Mountain range providing the east side boundary and the numerous mountain trails, the area is becoming a destination of choice for mountain biking enthusiasts. Through the partnering efforts of various organizations, many trails have already been constructed and additional trails have been proposed. A Trails Master Plan has recently been adopted by Ogden Valley that identifies placement of both mountainous trails and those that follow the road alignment. The Weber Pathways organization has helped to facilitate many of these trails accomplishments. Their mission is to promote, plan, and preserve non-motorized public pathways and related open spaces throughout Weber County.

The trails system in the Ogden Valley is based on the north/south Bonneville Shoreline Trail that, when completed, will connect several Wasatch Front communities from Brigham City in the north to Provo City in the south. The trails that are available clearly state the type of trail and the degree of difficulty. This feature helps potential users make decisions based on their individual need and level of experience. The openness of the land in Ogden Valley also invites off-highway vehicle (OHV) use.

Included among the trails identified in the Trails Master Plan are a few that are in close proximity to the popular Pineview Reservoir. Tourist and resident use of this reservoir has made it one of the busiest recreational destinations in the state. This recreational facility makes the practicality of placing trails in the vicinity a logical determination. Comments received from the community during development of UDOT's Long Range

Plan included a suggestion for a trail that would encircle the reservoir. A trail such as this would add to the overall Pineview Reservoir attraction and increase tourism in the area.

Relative to the rural nature of the valley, there currently are not any dedicated bike lanes on local or state roads. Many of the roads throughout the area lack adequate shoulder and do not accommodate those bicyclists who choose not to use the travel lane. These conditions increase the safety concern of bicyclists and the entire community. The Ogden Valley representatives recognize the need to provide for both residents and tourists who have demonstrated a desire for easily accessible bicycle facilities. This is evidenced by the recent ordinance adoption requiring developers to include trails in all development plans. Through enforcement of this ordinance, the quality of life will be enhanced for those in the community.

2.8.2 Pedestrian

The area consisting of the Ogden Valley is vast in nature and therefore does not lend itself to an entire connectivity of one sidewalk system. Developments in the area typically have not included sidewalk installation; however, there are sidewalks in place at all area schools. With the anticipated future growth in the valley, increased interest in placing sidewalk and reviewing its connectivity would be prudent in order to provide for the safe transport of pedestrians.

2.9 Public Transportation

There is no public transportation in the Ogden Valley. Transit bus service is operated by Utah Transit Authority in Ogden. This service links various points in Ogden proper with Salt Lake City to the south. Long distance intercity bus service is provided by Greyhound with stops in Ogden and Salt Lake City. Intercity rail passenger service is provided by Amtrak's "California Zephyr," operating between Chicago and the San Francisco Bay Area with a stop in Salt Lake City. Airline service is available at the Salt Lake City International Airport.

2.10 Freight

The transportation of freight is not a major factor in the Ogden Valley. There are no primary or secondary highway or rail freight routes operating through Ogden Valley. Aside from local deliveries made by trucks to stores and other businesses in the valley, along with trucks serving local construction projects, intercity and regional freight does not usually move through the Ogden Valley.

The nearest highway freight route to Ogden Valley is Interstate Highway 84 to the south and Interstate Highway 15 to the west. Railroad freight operations are focused in Ogden to the west, while Union Pacific's busy "Overland Route" mainline passes just south of Ogden Valley through Strawberry and Mountain Green.

2.11 Aviation Facilities & Operations

There are no airports in the Ogden Valley. The nearest full-service general aviation airport is Ogden's Hinckley Field, while the nearest major airport with airline service is the Salt Lake City International Airport.

2.12 Revenue

Maintenance of existing transportation facilities and construction of new facilities in the Transportation Master Plan study area come primarily from revenue sources that include the Weber County and Huntsville Town general funds, federal funds and State Class B & C and state transportation funds.

Financing for local transportation projects consists of a combination of federal, state, and local revenues.

2.12.1 State Class B and C Program

The distribution of Class B and C Program monies is established by state legislation and is administered by the State Department of Transportation. Revenues for the program are derived from State fuel taxes, registration fees, driver license fees, inspection fees, and transportation permits. Twenty-five percent of the statewide funds derived from the taxes and fees are distributed to cities and counties for construction and maintenance programs.

Class B and C funds are allocated to each city and county by the following formula: 50% based on the population ratio of the local jurisdiction with the population of the State, 50% based on the ratio that the Class B roads weighted mileage within each county and the class C roads weighted mileage within each municipality bear to the total class B and Class C roads weighted mileage within the state. Weighted means the sum of the following: (i) paved roads multiplied by five; (ii) graveled road miles multiplied by two; and (iii) all other road types multiplied by one. (Utah Code 72-2-108)

For more information please visit UDOT's internet homepage @ www.udot.utah.gov, and select the tab entitled (1) "Doing Business" then select the tab titled (2) "Local Government Assistance", and finally the tab titled (3) "Class B&C Road Funds."

The table below identifies the ratio used to determine the amount of B and C funds allocated.

Apportionment Method of Class B and C Funds

Based on	Of
50%	Roadway Mileage *Based on Surface Type Classification (Weighted Measure) Pave Road (X 5) Graveled Road (X 2) Other Road (X 1)
50%	Total Population

Class B and C funds can be used for maintenance and construction of highways, however thirty percent of the funds must be used for construction or maintenance projects that exceed $40,000. Class B and C funds can also be used for matching federal funds or to pay the principal, interest, premiums, and reserves for issued bonds.

Weber County received $1,237,084.40 and Huntsville received $41,474.96 in 2003 for its Class C fund allocation.

2.12.2 Federal Funds

There are federal monies that are available to cities and counties through federal-aid program. The funds are administered by the Utah Department of Transportation. In order to be eligible, a project must be listed on the five-year Statewide Transportation Improvement Program (STIP).

The Surface Transportation Program (STP) provides funding for any road that is functionally classified as a collector street or higher. STP funds can be used for a range of projects including rehabilitation and new construction. The Joint Highway Committee programs a portion of the STP funds for projects around the State for non-urbanized areas. A portion of the STP funds can be used in any area of the State, at the discretion of the State Transportation Commission.

Transportation Enhancement funds are allocated based on a competitive application process. The Transportation Enhancement Advisory Committee reviews the applications and then a portion of those are recommended to the State Transportation Commission for

funding. Transportation enhancements include 12 categories ranging from historic preservation, bicycle and pedestrian facilities to water runoff mitigation. Other funds that are available are State Trails Funds, administered by the Division of Wildlife Resources.

The amount of money available for projects specifically in the study area varies each year depending on the planned projects in UDOT's Region One. As a result, federal aid program monies are not listed as part of the study area's transportation revenue.

2.12.3 Local Funds

The towns and cities in the Ogden Valley area have utilized general fund revenues in its transportation program. Other options available to improve the City's transportation facilities could involve some type of bonding arrangement, either through the creation of a redevelopment district or a special improvement district. These districts are organized for the purpose of funding a single, specific project that benefits and identifiable group of properties. Another source is through general obligation bonding arrangements for projects felt to be beneficial to the entire entity issuing the bonds.

2.12.4 Private Sources

Private interests often provide alternative funding for transportation improvements. Developers construct the local streets within the subdivisions and often dedicate right-of-way and participate in the construction of collector or arterial streets adjacent to their developments. Developers can be considered as an alternative source of funds for projects because of the impacts of the development, such as the need for traffic signals or street widening. Developers should be expected to mitigate certain impacts resulting from their developments. The need for improvements, such as traffic signals or street widening can be mitigated through direct construction or impact fees.

3. Future Conditions

3.1. Land Use and Growth

Ogden Valley's Transportation Master Plan must be responsive to current and future needs of the area. The area's growth must be estimated and incorporated into the evaluation and analysis of future transportation needs. This is done by:

- Forecasting future population, employment, and land use;
- Projecting traffic demand;
- Forecasting roadway travel volumes;
- Evaluating transportation system impacts;
- Documenting transportation system needs; and
- Identifying improvements to meet those needs.

This chapter summarizes the population, employment, and land use projections developed for the project study area. Future traffic volumes for the major roadway segments are based on projections utilizing 20 years of traffic count history. The forecasted traffic data is then used to identify future deficiencies in the transportation system. This data was also corroborated with the data that Bio-West is currently using for their Recreation study.

3.1.1 Population and Employment Forecasts

The Governor's Office of Planning and Budget develop population and employment projections. The current population and employment levels, as well as the future projections for each are shown for Huntsville and Weber County in the following table.

Population and Employment

Year	City	County	
	Population	Population	Employment
2000	649	186,987	107,568
2030	1,062	307,350	183,790

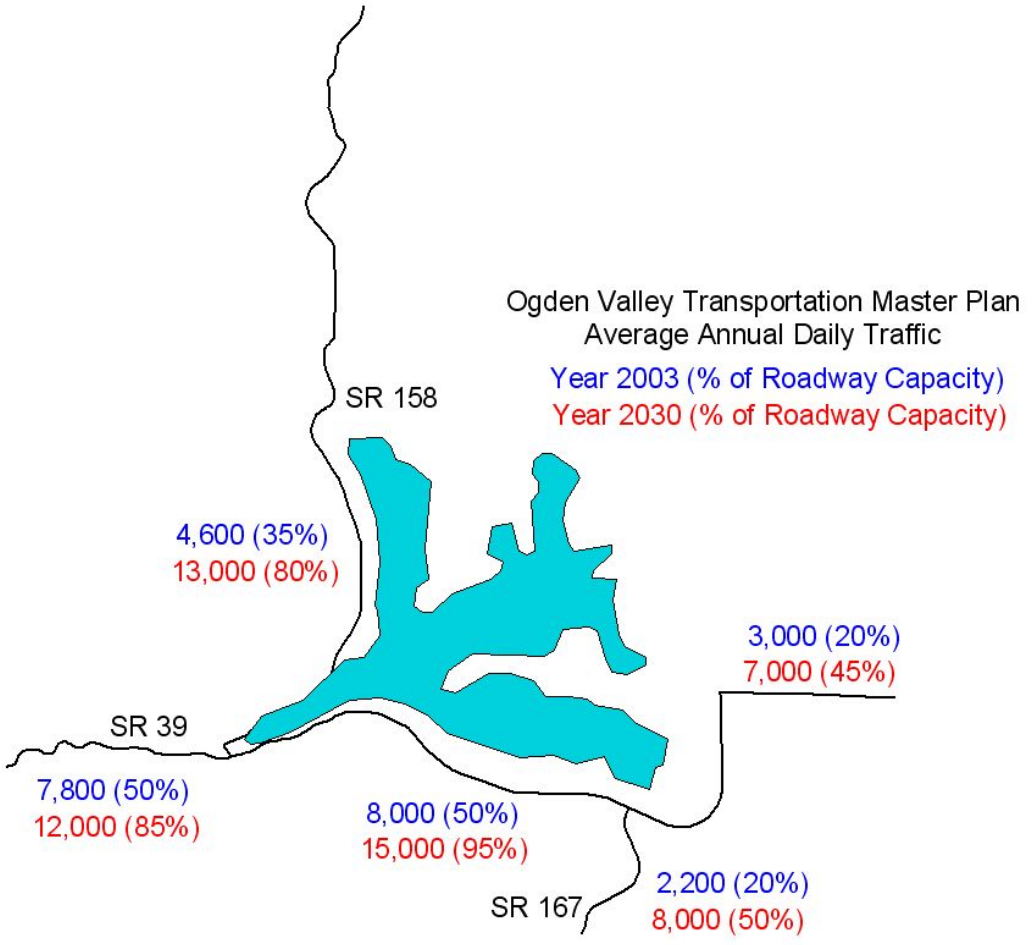
3.1.2 Future Land Use

The towns and cities of the Ogden Valley should have annexation plans that describe where they plan to grow. Some areas for developments were discussed during the course of the Transportation Master Plan.

While specific development plans change with time, it is important to note possible areas of development within the Ogden Valley area. Commercial and industrial growth is also important in understanding transportation needs.

3.2 Traffic Forecast

Traffic in the Ogden Valley area is growing and will continue to grow. Although the population projections from the Governors Office of Planning and Budget show a 1.6% annual growth, traffic has historically grown at about 2% to 4% on average in the Ogden Valley. The map on the following page shows average annual daily traffic for years 2003 and 2030. Also shown is the percentage of the roadway capacity the traffic will reach. The map illustrates that a few corridors could have capacity issues by the year 2030 if historical trends continue.



4. Planning Issues and Guidelines

Provided below is a discussion of various issues with a focus on elements that promote a safe and efficient transportation system in the future.

4.1 Guidelines and Policies

These guidelines address certain areas of concern that are applicable to Ogden Valley's Transportation Master Plan.

4.1.1 Access Management

This section will define and describe some of the aspects of Access Management for roadways and why it is so important. Access Management can make many of the roads in a system work better and operate more safely if properly implemented. There are many benefits to properly implemented access management. Some of the benefits follow:

- Reduction in traffic conflicts and accidents
- Reduced traffic congestion
- Preservation of traffic capacity and level of service
- Improved economic benefits businesses and service agencies
- Potential reductions in air pollution from vehicle exhausts

4.1.1.1 Definition

Access management is the process of comprehensive application of traffic engineering techniques in a manner that seeks to optimize highway system performance in terms of safety, capacity, and speed. Access Management is one tool of many that makes a traffic system work better with what is available.

4.1.1.2 Access Management Techniques

There are many techniques that can be used in access management. The most common techniques are signal spacing, street spacing, access spacing, and interchange to crossroad access spacing. There are various distances for each spacing, dependant upon the roadway type being accessed and the accessing roadway. UDOT has developed an access management program and more information can be gathered from the UDOT website and from the Access Management Program Coordinator.

4.1.1.3 Where to Use Access Management

Access Management can be used on any roadway. In some cases, such as State Highways, access management is a requirement. Access management can be used as an inexpensive way to improve performance on a major roadway that is increasing in

volume. Access management should be used on new roadways and roadways that are to be improved so as to prolong the usefulness of the roadway.

4.2 Context Sensitive Solutions

Context Sensitive Solutions (CSS) addresses the need, purpose, safety and service of a transportation project, as well as the protection of scenic, aesthetic, historic, environmental and other community values. CSS is an approach to transportation solutions that find, recognize and incorporate issues/factors that are part of the larger context such as the physical, social, economic, political and cultural impacts. When this approach is used in a project the project become better for all of the entities involved.

4.2.1 Recommended Roadway Cross Sections

Cross sections are the combination of the individual design elements that constitute the design of the roadway. Cross section elements include the pavement surface for driving and parking lanes, curb and gutter, sidewalks and additional buffer/landscape areas. Right-of-way is the total land area needed to provide for the cross section elements. Suggested types of cross-sections can be found in figure 4-1.

The design of the individual roadway elements depends on the intended use of the facility. Roads with higher design volumes and speeds need more travel lanes and wider right-of-way than low volume, low speed roads. The high use roadway type should include wider shoulders and medians, separate turn lanes, dedicated bicycle lanes, elimination of on street parking, and control of driveway access. For most roadways, an additional buffer area is provided beyond the curb line. This buffer area accommodates the sidewalk area, landscaping, and local utilities. Locating the utilities outside the traveled way minimizes traffic disruption when utility repairs or changes in service are needed.

Federal Highway standard widths apply on the all roads that are part of the state highway system. Also, all federally funded roadways in the Ogden Valley area and Weber County must adhere to the same standards for widths and design.

4.3 Bicycles and Pedestrians

4.3.1 Bicycles/Trails

Bicycles are allowed on all roadways, except where legally prohibited, and as such should be a consideration on all roads that are being designed and constructed, and as roadway improvements are taking place. To increase the level of interest in bicycling in Ogden Valley, area representatives should require developers to include separate bicycle/pedestrian pathways in all new developments. This

recommendation is in line with Ogden Valley's recently adopted ordinance referenced in Chapter 2 of this Plan. Opportunities to include bike lanes and increased shoulder-width in conjunction with a roadway project should be taken whenever technically, environmentally, and financially feasible.

Development of the proposed trails system identified in the Trails Master Plan is encouraged. As all new trails systems are planned, designed, and constructed, it is important to note that connectivity of the trails should be a consideration. With input from the community, a review of the connectivity of the trails should play an integral role in the decision making process for potential projects. In order to enhance the quality of life for those in the community, the trails should be accessible to all users and incorporate ADA requirements.

The trails, when constructed, may have slight variances in application type due to possible differences in the terrain at a specific trail location or differing user needs. However, regardless of the design type, the applicable design standards found in the latest version of the AASHTO Guide for the Development of Bicycle Facilities should be followed, as well as the Manual on Uniform Traffic Control Devices (MUTCD) guidelines for appropriate signage of the trails system.

4.3.2 Pedestrians

Every effort should be made to accommodate pedestrians throughout Ogden Valley. An opportunity to include accessible sidewalks, while adhering to ADA requirements, during construction of other projects is encouraged. For the safety and convenience of pedestrian traffic, sidewalk placement should be free from debris and obstructions or impediments such as utility poles, trees, bushes, etc. Although sidewalk placement in the valley is sporadic, where sidewalks are in place area representatives should conduct a sidewalk inventory to document locations where there are gaps or safety concerns. Effort should then be made to construct and complete the sidewalks where gaps or problems occur. Ogden Valley should require developers to include sidewalk placement or improvements in their respective project plans. The interconnectedness of the sidewalk system should be considered as development takes place. To more accurately address pedestrian issues, Ogden Valley representatives are encouraged to follow the 2004 AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities.

Sidewalks in residential areas should be at least 5-feet wide whenever adequate right-of-way can be secured. This will provide sufficient room and a level of comfort to persons walking in pairs or passing and will specifically allow for persons with strollers or in wheelchairs to pass. On major roadways, sidewalks at least 6-feet wide and with a 6 to 10-foot park strip are desirable. In pedestrian-focused areas, such as schools, parks, sports venues or theaters, and in hotel and market districts, even wider sidewalks are recommended to accommodate and encourage a higher level of pedestrian activity, especially where tourist use would be expected. To ensure consistency of sidewalks throughout the area, UDOT's approved standard for sidewalks should be followed.

There may be opportunity for Ogden Valley to make improvements to their sidewalk system through the Utah Department of Transportation's Safe Sidewalk Program,

available through the Traffic and Safety Division. Area representatives should contact the UDOT Region 1 office for application requirements.

The Ogden Valley should be aware of, and coordinate with, the area schools that are tasked with developing a routing plan to provide a safe route to school. The routing plan is to be reviewed and updated annually. Information regarding the Safe Routes to School program is available by contacting the Utah Department of Transportation's Traffic and Safety Division.

4.4. Enhancements Program

In 1991, the Intermodal Surface Transportation Efficiency Act (ISTEA) created the Transportation Enhancement program. The program has since been reauthorized in subsequent bills (i.e. TEA-21). The Transportation Enhancement program provides opportunities to use federal dollars to enhance the cultural and environmental value of the transportation system. These transportation enhancements are defined as follows by TEA-21:

> The term 'transportation enhancement activities' means, with respect to any project or the area to be served by the project, any of the following activities if such activity relates to surface transportation: provision of facilities for pedestrians and bicycles, provision of safety and educational activities for pedestrians and bicyclists, acquisition of scenic easements and scenic or historic sites, scenic of historic highway programs (including the provision of tourist and welcome center facilities), landscaping and other scenic beautification, historic preservation, rehabilitation and operation of historic transportation buildings, structures, or facilities (including historic railroad facilities and canals), preservation of abandoned railway corridors (including the conservation and use thereof for pedestrian or bicycle trails), control and removal of outdoor advertising, archeological planning and research, environmental mitigation to address water pollution due to highway runoff or reduce vehicle caused wildlife mortality while maintaining habitat connectivity, and establishment of transportation museums.

The Utah Transportation Commission, with the help of an advisory committee, decides which projects will be programmed and placed on the Statewide Transportation Improvement Program (STIP). Applications are accepted in an annual cycle for the limited funds available to UDOT for such projects. Information and Applications for the current cycle can be found on UDOT's homepage @ www.udot.utah.gov, tab on "Doing Business" select "Planning and Programming", here you will find a sub-topic entitled "Transportation Enhancement Program". Applications must be received by the UDOT Program Development Office, on or before the specified date to be considered. Projects will compete on a statewide basis.

4.4 Transportation Corridor Preservation

Transportation Corridor Preservation will be introduced as a method of helping Ogden Valley's Transportation Master Plan. This section will define what Corridor Preservation is and ways to use it to help the Transportation Master Plan succeed for the community.

4.4.1 Definition

Transportation Corridor Preservation is the reserving of land for use in building roadways that will function now and can be expanded at a later date. It is a planning tool that will reduce future hardships on the public and the city. The land along the corridor is protected for building the roadway and maintaining the right-of-way for future expansion by a variety of methods, some of which will be discussed here.

4.4.2 Corridor Preservation Techniques

There are three main ways that a transportation corridor can be preserved. The three ways are acquisition, police powers, and voluntary agreements and government inducements. Under each of these are many sub-categories. The main methods will be discussed here, with a listing of some of the sub-categories.

5.4.2.1 Acquisition

One way to preserve a transportation corridor is to acquire the property outright. The property acquired can be developed or undeveloped. When the city is able to acquire undeveloped property, the city has the ability to build without greatly impacting the public. On the other hand, acquiring developed land can be very expensive and can create a negative image for the City. Acquisition of land should be the last resort in any of the cases for Transportation Corridor Preservation. The following is a list of some ways that land can be acquired.

- Development Easements
- Public Land Exchanges
- Private Land Trusts
- Advance Purchase and Eminent Domain
- Hardship Acquisition
- Purchase Options

4.4.2.1 Exercise of Police Powers

Police powers are those ordinances that are enacted by a municipality in order to control some of the aspects of the community. There are ordinances that can be helpful in preserving corridors for the Transportation Master Plan. Many of the ordinances that can be used for corridor preservation are for future developments in the community. These can be controversial, but can be initially less intrusive.

- Impact Fees and Exactions
- Setback Ordinances
- Official Maps or Maps of Reservation
- Adequate Public Facilities and Concurrency Requirements

4.4.2.2 Voluntary Agreements and Governmental Inducements

Voluntary agreements and governmental inducements rely on the good will of both the developers and the municipality. Many times it is a give and take situation where

both parties could benefit in the end. The developer will likely have a better-developed area and the municipality will be able to preserve the corridor for transportation in and around the development. Listed below are some of the voluntary agreements and governmental inducements that can be used in order to preserve transportation corridors in the city limits.

- Voluntary Platting
- Transfer of Development Rights
- Tax Abatement
- Agricultural Zoning

Each of these methods has its place, but there is an order that any government should try to use. Voluntary agreements and government inducements should be used, if possible, before any police powers are used. Police powers should be tried before acquisition is sought. UDOT has developed a toolkit to aid in corridor preservation techniques. This toolkit contains references to Utah code and examples of how the techniques have been used in the past.

5 Transportation Improvement Projects

5.1 Current Statewide Transportation Improvement Program (2004-2008 STIP)

At the present time there are several projects under consideration and investigation in the Ogden Valley area. Currently in the STIP is the following Project:

- SR-39; at 500 South, Huntsville, Spot Improvement – Turning Lanes

Also, these projects are currently listed on the State of Utah's Long Range Plan, Utah Transportation 2030:

- On SR-39, the Pineview Dam Bridge Structure
- On SR-158, from SR-39 at Pineview Dam to near Eden, highway reconstruction/Bridge Project
- On SR-226, from SR-39 near Pineview to Snow Basin, highway reconstruction/ Safety

5.2 Recommended Projects

The following list identifies the eight projects that have been identified as having the highest priority to the Ogden Valley Transportation Advisory Committee. These needs were identified through a series of meetings where the TAC identified the needs and set priorities for projects.

- Dedicated Bike path through Ogden Canyon on existing rail bed.
- Roundabout at the junction of SR-158 and old route 162, by Valley Market.
- Bike path around Pinview reservoir with preservation of rural characteristics.
- Bike path from Wolf Creek resort to Valley Market.
- Improved roadway across Avon Divide into Cache Valley.
- Intersection Improvement at SR-39 and SR-158 to improve sight distance.
- Crosswalk study at SR-39 and 500 South in Huntsville.
- New interchange at I-84 and Trappers Loop.

Additionally, many concerns and issues were identified which are found on the attached list.

Transportation Needs and Cost Estimates

County	Route	Project Description / Concept Highway Projects	Start Point	End Point	Length or Quantity	2004 Estimated Cost
Weber	SR-158	SR-158 improvement across Pineview Reservoir at the Narrows	vailable funding =	$6,000,000		$15,000,000
Morgan	I-84	Trappers Loop Interchange with I-84 at Mountain Green				$50,000,000
Weber	SR-39	"Slow Traffic Use Pull-Outs" signing in Ogden Canyon				$2,500
Weber	SR-158	Add shoulder along SR-158 near reservoir			1.5 Miles	$325,000
Weber	SR-39	Add shoulder along SR-39 near reservoir			2 Miles	$425,000
Weber		Add shoulder along old route 162			4 Miles	$850,000
Weber	SR-39	Widening near Peery Bridge in Ogden Canyon				$4,000,000
Weber	SR-158	Wolf Creek Drive widen to three lanes			2 Miles	$450,000
Weber		Tunnel thru Ogden Divide into North Ogden				$40,000,000
Weber		Improved roadway across Avon divide into Cache Valley		County Line	2.5 Miles	$8,000,000
Weber		Build an alternative route into Powder Mountain from Avon Divide Road			2.5 Miles	$6,000,000
Weber	SR-158	Turn lanes near Wolf Creek club house and recreation center				$150,000
Weber		Avon Road to Powder Mountain	River Road	Wolf Creek Drive		$10,000,000
Weber		Bridge widening over North Fork for pedestrians				$40,000
Weber	SR-39	Build at least two Pullouts or Passing lanes in Ogden Canyon				$1,000,000
Weber	SR-39	8600 East loop road improvements (east Huntsville)			3 Miles	$1,450,000
		Pedestrian/ Bicycle Projects				
Weber		Bridge widening over Middle Fork on old Route 162				$40,000
Weber		Dedicated bike path through Ogden Canyon on existing rail bed			5.5 Miles	$552,000
Weber		Bike path around reservoir with preservation of rural characteristics			20 Miles	$1,500,000
Weber		Crosswalks for bicycle triangle in Eden			7 locations	$12,500
Weber		Wolf Creek bike path store to clubhouse	4-way stop	Club House	2 Miles	$150,000
		Intersection Improvements				
Weber	SR-39	SR-39 / 8600 East add turning bays				$150,000
Weber	SR-158	SR-158 roundabout at old route 162 (Valley Market)				$200,000
Weber		Old route 162 / River Road site distance improvement				$75,000
Weber	SR-158	SR-158 / 5150 East acceleration / deceleration lanes near bike shop				$150,000
Weber	SR-158	SR-158 / Boat ramp entrance acceleration / deceleration lanes				$150,000
Weber	SR-158	Access improvement near Maverick into commercial development				$75,000
Weber		North Fork Road / 3100 North decel / acceleration / turning lanes				$150,000
Weber		North Fork Road / 3300 North decel / acceleration / turning lanes				$150,000
Weber	SR-39	SR-39 / SR-167 traffic signal				$150,000
Weber	SR-39	SR-39 / 500 South (in STIP)				$360,000
Weber		500 South / 9600 East				$75,000
Weber	SR-39	SR-39 / 9000 East				$75,000
Weber	SR-39	SR-39 / SR-158 to improve site distance near Pineview Dam				$75,000
Weber	SR-39	Intersection lighting SR-39 / SR-158 near Pineview Dam				$25,000
Weber	SR-39	Intersection lighting SR-39 / Old Snowbasin Road				$25,000
		Freight				
Weber	SR-39	Truck routing study through Ogden Canyon				$100,000
		Safety				
Weber	SR-39/158	Guardrail around Pineview Dam			3.5 Miles	$555,000
Weber	SR-39	Signing for Ogden Canyon (slow traffic use pull outs)				$2,500
Weber	SR-158	Enforce winter tires on SR-158			Day	$1,000
Weber	SR-158	Create chain up area on SR-158 at gravel pit				$125,000
Weber	SR-158	Do not tailgate signs on SR-158				$2,500
Weber	SR-158	Radar speed enforces signs on SR-158				$2,500
Weber	SR-158	Signing on SR-158 at the top Powder Mountain to use "Lowest Gear"				$1,000
Weber	SR-39/158	Install rumble strips in center line on SR-39 & SR-158			13.5 Miles	$25,000
		Alternative Travel Modes				
Weber		Carpooling into Salt Lake / Davis / Weber counties (Create a Program)				$25,000
Weber	SR-158	Build Carpool Lot at intersection of SR-158 and old route 162				$400,000
Weber	SR-39/167	Build Carpool Lot at intersection of SR-39 and SR-167 (Trappers Loop)				$400,000
Weber		Local shuttle system (Van / Driver)			Year	$65,000
		Studies				
Weber		North Ogden divide tunnel feasibility Study				$250,000
Weber	SR-39	Safety Study at SR-39 / 100 South				$5,000
Weber	SR-39	Speed Study on SR-39 from Trappers Loop intersection thru Huntsville				$5,000
Weber	SR-158	Safety Study at SR-158 / 2200 North (Yield sign)				$5,000
Weber	SR-158	Speed Study on SR-158 from the "Y" to 4- Way Stop				$1,000
Weber		Old route 162 turn lane study at multiple locations				$10,000
Weber		School Crossing Study, Crosswalk Study				$2,500
Weber	SR-39	Crosswalk Study SR-39 / 500 South				$2,500
Weber		Safety Study 5500 East/2200 North at General Store in Eden				$5,000
Weber		Study to Build a connection road from Cache County to Weber County				$250,000
Weber	SR-39	Study taking down "Bicycles Not Recommended" signs in Ogden Canyon				$500
Weber	SR-158	Speed Study from 4-way stop to dam				$2,500
						$144,075,500

5.3 Revenue Summary

5.3.1 Federal and State Participation

Federal and State participation is important for the success of implementing these projects. UDOT needs to see the Transportation Master Plan so that they understand what the City wants to do with its transportation system. UDOT can then weigh the priorities of the city against the rest of the state. It is important for Ogden Valley to promote projects that can be placed on UDOT's five-year Statewide Transportation Improvement Program (STIP) as soon as possible. The process for placing projects into the STIP and funding of these projects can be found at UDOT's homepage @ www.udot.utah.gov, tab on "Doing Business" select the tab for " Planning and Programming" here there is a subtopic entitled "Statewide Transportation Improvement Program (STIP)" that describes this program in detail. Additionally coordination with UDOT's Region Director and Planning Engineer will be practical.

5.3.2 City Participation

The Community of Ogden Valley will fund the local projects. The local match component and partnering opportunities vary by the funding source.

5.4 Other Potential Funding

Previous sections of this chapter show significant shortfalls projected for the short-range and long-range programs. The following options may be available to help offset all or part of the anticipated shortfalls:

- Increased transportation impact fees.
- Increased general fund allocation to transportation projects.
- General obligation bonds repaid with property tax levies.
- Increased participation by developers, including cooperative programs and incentives.
- Special improvement districts (SIDs), whereby adjacent property owners are assessed portions of the project cost.
- Sales or other tax increase.
- State funding for improvements on the county roadway system.
- Increased gas tax, which would have to be approved by the State Legislature.
- Federal-aid available under one of the programs provided in the federal transportation bill (TEA-21 is the current bill; SAFETEA will likely be passed in late 2004).

Increased general fund allocation means that General Funds must be diverted from other governmental services and/or programs. General obligation bonds provide initial capital for transportation improvement projects but add to the debt service of the governmental agency. One way to avoid increased taxes needed to retire the debt is to sell bonds repaid with a portion of the municipalities' State Class monies for a certain number of years.

Participation by private developers provides a promising funding mechanism for new projects. Developers can contribute to transportation projects by constructing on-site

improvements along their site frontage and by paying development fees. Municipalities commonly require developers to dedicate right-of-way and widen streets along the site frontage. A negative side of the on-site improvements is that the streets are improved in pieces. If there are not several developers adjacent to one another at the same time, a continuous improved road is not provided. One way to overcome this problem is for the jurisdiction to construct the street and charge the developers their share when they develop their property.

Another way developers can participate is through development fees. The fees would be based on the additional improvements required to accommodate the new development and would be proportioned among each development. The expenditure of additional funds provided by the fees would be subject to the City's spending limit. However, development fees are often a controversial issue and may or may not be an appropriate method of funding projects.