TWIN FALLS MASTER TRANSPORTATION PLAN

Prepared for the City of Twin Falls, Idaho

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AMERICAN GEO TECHNICS

KMP

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Executive Summary

In 2007 the City of Twin Falls hired Civil Science to provide an update to their 1993 transportation plan. This update addresses the growth in the community since 1993 as well as looking forward to a planning horizon of 2030. In recent decades the City has seen significant growth and is at a critical point as the population nears 50,000. This population is a threshold for metropolitan planning organization (MPO) status and the timing of this study provides the City a basis for this future designation as well as a tool for effective design, operation and maintenance of the transportation system. Additionally, this study was timed to coincide with and be structured to be a part of the update of the Twin Falls City Comprehensive plan.

In an effort to incorporate the public in the development of this plan, many public involvement elements were included. During these events the transportation goals and objectives were formed. These goals were advanced and have guided the plan through its development. Primary goals which were identified by Technical and Community Advisory Committees are:

PRIMARY GOALS

1. **Clear and Efficient connectivity of transportation facilities**
2. **Develop and Implement appropriate design and operation standards**
3. **Provide sufficient roadway capacity to meet current and future needs**

To address these goals and others a comprehensive planning process was performed which initially identified existing conditions, concerns and opportunities. The integration of public input and staff experience was then applied in development of maps, plans and analysis leading to recommendations for future improvements.

Connectivity was addressed through implementation of a grid network of roads with arterial roadways at one mile intervals and collector roadways at quarter mile spacing. This approach maintains consistency with past City practice. This approach required some flexibility due to topography challenges presented principally by the Rock Creek drainage. Provisions for bike way connectivity was addressed through cooperative planning with the Comprehensive Plan update which mapped off-street pathway facilities. An efficient system of bike ways was recommended that focused on connectivity to important off road recreation features such as Rock Creek and the Snake River Canyon. Additionally, the planned bikeways provide connectivity to these features from the downtown and Townsite areas where limited connectivity has traditionally been provided. To enhance safety, the bikeways are proposed on collector class roadways where traffic volumes and speeds are traditionally lower than that seen on arterial roadways.

Goals related to operation and design standards are substantiated in the form of updated roadway cross sections that provide for increased lane and shoulder widths, defined bike lanes, and increased utility setback areas. Additionally, intersection and access control standards are provided that provide for increased operational safety and enhanced level of service conditions.

This study also analyzed and provides recommendations for various transportation facilities including roads, on street bicycle areas, transit and pedestrian accommodations. To address future roadway conditions and needs a travel demand model was developed which resulted in a graphical depiction of the state of the current and future system. Study results show that the existing roadway network is functioning at level of service C or better, except in the case of Blue Lakes Boulevard which currently functions at a level of service D. To address the stated capacity goals, the City determined that this level of service standard should be maintained into the future and this goal guided the modeling and study recommendations.

Future roadway conditions were modeled and no-build scenarios were evaluated which demonstrated the need for improvements to address future north-south and east-west level of service conditions. Various alternatives were then examined to address these level of service challenges. An iterative approach was then applied to alternative evaluations which resulted in a proposed capital improvement plan (CIP) as shown below. The CIP received extensive scrutiny to ensure compatibility with potential funding capacity and opportunities that are available to the City.

Table 1: Capital Improvement Plan

Twin Falls City
Master Transportation Plan
CIP List
(Including R/W for Median Lanes on Arterials)

Project ID #	Street	From	To	Improvement	Preliminary Cost	Phase	Cost at Phase with Inflation
1	Falls	Washington	Grandview	Widen to 4 lanes	$3,418,119	2015	$4,809,637
2	Falls	Locust	Eastland	Widen to 4 lanes	$2,361,062	2030	$5,565,929
3	Falls	Blue Lakes	Locust	Widen to 5 lanes	$377,111	2015	$530,632
4	Blue Lakes	Kimberly	Addison	Widen to 3 lanes	$2,917,834	2030	$6,878,456
5	Washington	Pole Line	Addison	Widen to 5 lanes	In Process		
6	Grandview	Filer	Falls	Widen to 3 lanes	$1,446,066	2030	$3,408,933
7	Filer	Grandview	Blue Lakes	Widen to 3 lanes	$3,891,866	2030	$9,174,623
8	Filer	Locust	Madrona	Widen to 4 lanes	$587,502	2030	$1,384,967
9	Hankins	Addison	4th Ave.	Widen to 3 lanes	$3,000,106	2030	$7,072,403
10	Cheney	Parkview	North College	New road/ 3 lanes	$6,622,357	2015	$9,318,321
11	Eastland	Candleridge	Addison	Widen to 4 lanes	$16,334,009	2015	$22,983,591
	Eastland	Addison	Orchard	Widen to 3 lanes			
12	Addison	Morningside	Juniper	Widen to 5 lanes	$1,206,921	2015	$1,698,259
TOTAL: Costs include additional R/W for median lane to meet Master Plan Width					**$42,162,953** (current day dollars)		Inflation 5% until 2015 then 3.5% thereafter

This study also focused on the state of the existing transportation system including areas that do not meet proposed standards (roadway deficiencies), intersection deficiencies, lighting deficiencies and pavement conditions. Roadway deficiencies were determined based upon field surveys which were integrated into the City's GIS network. Associated costs for improvements were estimated and are discussed in Chapter 5. Intersection deficiencies were determined based upon public and staff input and recommendations for improvements, along with associated costs are also shown within the Capital Improvement Plan in Chapter 5. A lighting field study was performed which resulted in recommendations for improvements to existing lighting facilities and costs as described in Chapter 5. A pavement management programming effort was also undertaken to assist the City in assessing future operation and maintenance needs. These efforts included inventories on many of the major roads and data integration into a pavement management software system. This program will allow for continued development by City staff toward ultimate implementation directly within the City planning, programming and budgeting processes.

1. Introduction

This introductory chapter sets forth the purpose of the Twin Falls Master Transportation Plan, the public involvement process and goals of the plan.

Purpose of the Plan

The purpose of the Twin Falls Master Transportation Plan is to create a transportation plan that will help meet the transportation goals of the City and allow future development to enhance the positive aspects of Twin Falls. Twin Falls' previous transportation plan was a section of the 1993/1994 Comprehensive Plan. The transportation element was subsequently reviewed in 2000. The City intends to incorporate this Master Transportation Plan into the adoption of a new Comprehensive Plan. The current transportation system has been studied to address the needs and concerns of Twin Falls. Road cross sections and bicycle routes have been updated to reflect the needs of future traffic volumes while still maintaining the quality of life that the citizens of Twin Falls have come to know.
In the last few decades, Twin Falls has seen significant population growth in its 16 square miles. In 1990, the population was 27,591. The 2007 Twin Falls population is estimated to be approximately 43,000 people; however, the City serves the much broader Magic Valley regional area by providing goods and services to a much larger regional area that extends as far away as Elko, Nevada and Sun Valley, Idaho. Consequently the growth of Twin Falls City and region has put increased pressure on the City's transportation system.

Twin Falls is at a critical growth point. As the City reaches a population of 50,000 Twin Falls will be eligible for Metropolitan Planning Organization (MPO) status. The Transportation Master Plan takes MPO status into account to ensure that funding for transportation projects and programs are based on this planning process. Federal funding for transportation projects are channeled through the MPO process.

This plan responds to the increased travel demand while retaining the character and feel of the City. As part of the City's Comprehensive Plan, the Master Transportation Plan guides City government, staff, and residents as future growth and needs are encountered. The Master Transportation Plan should be viewed as a component of the Comprehensive General Plan.

There are many causes that have lead to the development of this Master Transportation Plan including:

- Recently completed and planned developments are having and will have significant traffic impacts
- To identify and respond to known "problem" transportation areas
- To remain current with regional issues
- To save taxpayers' money by constructing and repairing roads more efficiently via careful planning

This plan has been organized into five chapters which cover the components of the transportation plan. Chapter 1 is the introduction which covers the City's goals and includes a high level view of transportation issues. Chapter 2 reviews existing conditions in Twin Falls. Chapter 3 looks at the transportation conditions that Twin Falls will likely encounter in the future. Chapter 4 presents transportation implementation recommendations. Chapter 5 proposes funding and a Capital Improvement Plan. Related figures which are referenced in the aforementioned chapters are provided in Appendix A. Other appendices have also been provided to include supporting technical details of the plan.

This document serves as a resource and guide to be used by City officials for transportation-related standards. This Master Transportation Plan also offers a basis for understanding the future goals and standards identified by the public and City officials. Of course, the discretion of City officials and staff is always encouraged and decisions should be made within the relative context of each transportation issue.

Twin Falls City Vision

Twin Falls is located in the high desert of Southern Idaho. Initially the City of Twin Falls grew to serve the needs of the homesteaders and farmers that irrigated the lands of the Snake River plain. In the last few decades the City has emerged into an urban center that serves the needs of the surrounding Magic Valley region.

Twin Falls is a City that has a small town feel which is rich in rural heritage and yet has the convenience of urban opportunities. The citizens of Twin Falls want to manage the continuing growth within the City to maintain the high quality of life that these citizens have come to know. An efficient transportation system is an important component to this vision. This Master Transportation Plan looks to satisfy the goal of providing a well structured transportation system.

Public Involvement

Public involvement was an important element of the Twin Falls Master Transportation Plan. The intent behind the various groups and meetings described below was to expand opportunities for public involvement to several levels and to appropriately integrate the public into the planning process. In addition to utilizing the knowledge and opinions of the City Council, local groups were established to provide regular opportunities for direction and information. Transportation input from the City's Comprehensive Plan processes was also integrated into the Transportation Master Plan. Public open houses were held so that any resident or interested individual could ask questions and see the focus of the transportation plan. These open houses were intended to provide participants with a broad understanding of the transportation planning process and results as well as to gain insight from those most affected by the plan, the residents and business owners. The public was involved so as to develop support for the most effective final plan recommendations that would meet various community needs while planning a transportation system that was both desirable and achievable.

Public Involvement Elements

The public involvement activities to support the development of the Twin Falls Transportation Master Plan were designed to appropriately integrate the public into the planning process. The activities involved specific stakeholders, affected groups, key organizations and the general public at key decision points and in ways appropriate for each group. The goal was to develop support for final plan recommendations that were the most effective in meeting the various community needs for a transportation system that is both desirable and achievable.

The elements of the public involvement plan included the activities listed below and are shown in order of occurrence. The schedule is shown in Table 2.

- Stakeholder Interviews- Twelve interviews were conducted at the initiation of the planning process in order to promote conversation and comprehension about the most important issues regarding the City's current and future transportation needs with key community and organization representatives. Interviewees included representatives from the College of Southern Idaho, Twin Falls School District, Twin Falls Chamber of Commerce, Twin Falls Parks and Recreation, Trans IV Transit, Twin Falls Economic Development, Twin Falls Police Department, Magic Valley builders and several private businesses. The key issues cited by interviewees are organized into primary categories below.
    - Safety - Crossings, school zones, high residential speeds, lack of sidewalks, intersection design, and downtown 2nd Aves were listed as concerns.
    - Congestion - Intersection delays, the need for more capacity, relief of Blue Lakes congestion, and reconstruction of Washington Street.
    - Bike/Pedestrian - Concerns included improved connectivity, lack of sidewalks, missing bike connections, and the desire for continued canyon trails.
    - Trucking - Trucking issues centered on providing clear to and through-routes, construction to support loads, intersections that meet truck turning needs, and a South East truck route.
    - Regional Access - An improved alternative to Perrine Bridge/Blue Lakes Boulevard /Pole Line Road and a US-30 re-route were discussed.
    - Planning Coordination - Conversations involved integrated project planning and scheduling, coordination with Twin Falls county and state, R.O.W. preservation, cross-community connectivity, and definition and maintenance of roadway hierarchy.
- Stakeholder Roundtables – Two presentations and discussions were held with the Greater Twin Falls Area Transportation Committee. The first session was held at plan initiation to introduce the project and gather input regarding the key issues that should be addressed as part of the plan. The second session was held to present the draft transportation improvements and Capital Improvement Plan and gather comments.
- Transportation Advisory Committee (TAC) – The TAC included representation from key community organizations and agencies that have a technical understanding of the transportation

system and the City of Twin Falls. A list of the TAC members is included in the plan appendix. The main objective of the TAC was to provide technical guidance to the plan development and to ensure that the most appropriate projects and recommendations were developed. The TAC met six times throughout the planning process. The specific results from the TAC meetings are also included in the appendix.

- Community Advisory Committee (CAC) – The purpose of the CAC was to provide balance to the technical input from the TAC. The CAC included non-technical representation from across the community providing input on behalf of community transportation system users. The CAC met four times at key decision points in the development of the plan. A complete list of CAC members and conclusions from CAC meetings are included in the plan appendix.

- City Council Work Sessions – The City council was engaged in the planning process at three distinct times; project initiation, confirmation of future land use and transportation system goals, and a review of the draft list of system improvements and Capital Improvement Plan.

- General Public Events – The general public was invited to participate in two open house events. The first open house occurred at project initiation in order to introduce the project and identify public concerns regarding the City's current and future transportation system needs. The second open house presented and discussed the draft transportation system improvement projects and the Capital Improvement Plan. The results of these sessions are included in the plan appendix.

- Additional Public Outreach – At the request of the City, due to the low attendance at the two public open house events, the consultant team added public outreach activities designed to generate increased awareness to the plan and gather input on the revised CIP. Additional activities to gather public input for the revised CIP included a display booth at the Twin Falls Western Days and notification on the City's utility bills of the revised CIP availability for review and comment on the City's web site. Finally, in coordination with the Times News, an additional article was developed that outlined the revised CIP and invited public comment via the City's web site or direct contact with the public involvement coordinator. Results of these additional outreach activities are available in the plan appendix.

- Supporting Public Involvement Tools – a series of supporting tools were implemented, including media releases in advance of each public meeting, a project webpage, a mailing/contact list for public meeting attendees, comment forms to gather specific public input and an open opportunity to contact any member of the planning team for questions or comments.

Table 2: Public Involvement

PUBLIC INVOLVEMENT OUTLINE		
PHASE I – PROJECT KICK OFF AND ISSUE IDENTIFICATION		
Comprehensive Plan Coordination ♦ Conference call with Landmark Design to discuss common issues		**August 2007**
Stakeholder Interviews (10-12) • Identify outstanding transportation issues		**August / September 2007**
Kick off Meeting ♦ City / Consultant team; Scope, schedule, deliverables and data needs		**September 10th, 2007**
TAC Meeting #1 / CAC Meeting #1 ♦ Introduce the project, present scope, schedule and identify issues		**September 10th, 2007**
Greater Twin Falls Area Transportation Committee Presentation #1 ♦ Introduce the project, identify issues		**September 11th, 2007**
City Council Workshop #1 ♦ Kick off, present project scope, schedule and identify issues		**October 15th, 2007**
Public Workshop #1 ♦ Kick off, present project scope, schedule and identify issues		**October 15th, 2007**
PHASE II – IDENTIFICATION OF EXISTING AND FUTURE CONDITIONS		
TAC Meeting #2 ♦ Existing conditions, priority issues and goals discussion		**October 16th, 2007**
TAC Meeting #3 / CAC Meeting #2 ♦ Future land use, traffic demand and traffic analysis zones		**December 10th, 2007**
City Council Workshop #2 ♦ Future land use, traffic demand and traffic analysis zones		**December 10th, 2007**
PHASE III – ALTERNATIVES EVALUATION / PRESENTATIONS		
TAC Meeting #4 / 4A / CAC Meeting #3 ♦ TAC #4 / CAC #3 – Draft improvement alternatives – initial discussion ♦ TAC #4-A – Pavement management plan discussion		**February 11th, 2008**
Greater Twin Falls Area Transportation Committee Presentation #2 ♦ Present / discuss draft improvement alternatives		**February 12th, 2008**
City Council Workshop #3 ♦ Present / discuss improvement options, policies and funding options		**April 7th, 2008**
PHASE IV – CIP, POLICIES AND FUNDING DISCUSSIONS		
Public Workshop #2 ♦ Present / discuss draft improvement options		**April 14th, 2008**
TAC Meeting #5 ♦ Present / discuss draft CIP, policies and funding options		**April 14th, 2008**
PHASE V – DRAFT PLAN RECOMMENDATIONS		
TAC Meeting #6 / CAC Meeting #4 ♦ Present / discuss draft plan recommendations		**July 9, 2008**
Public Involvement Tools		
• Media coverage (Newspaper, Radio and TV)	As needed to support public involvement plan	
• Stakeholder interview surveys and comment forms	Coordinate with public events and project needs	
• Web page	Integrated with City of Twin Falls web page	
• Mailing / E mail list	Ongoing use and upcoming event notification	
• Contact list of project team	For miscellaneous stakeholder / public contacts	
• Utility Mailing	Western Days Presentation	
Public Involvement Plan Management		
Mike Pepper, KMP Planning (208) 734-6208 kmpplanning@cableone.net	Kyle Comer, Civil Science, Inc.; Project Mgr. (801) 768-7200 Kcomer@civilscience.com	Jackie Fields, City of Twin Falls, Project Mgr. (208) 7357273 jfields@tfid.org

Goals and Objectives

The goals and objectives for this transportation plan were developed as a culmination of ideas from the City Council, open houses, the Technical Advisory Committee and the Community Advisory Committee. These goals were advanced and became the principles which guided the Twin Falls Master Transportation Plan development. Using results from a survey of the TAC and CAC, it was determined that the **top three goals were numbers 1, 6 and 7**; Connectivity, Design/Operation and Capacity Congestion.

Goal Number 1. Connectivity

- Maintain clear and efficient connectivity for vehicle, pedestrian and bicycle travel across the community.
- Maintain a clear and appropriate roadway hierarchy.

Goal Number 2. Trucking

- Provide efficient and safe truck access into, around, through and out of the community.
- Locate / relocate truck routes in appropriate locations that improve safety and support desired community design and function.
- Design and construct streets and transportation improvements that accommodate large trucks in desired areas, while minimizing negative impacts.

Goal Number 3. Coordination / Planning

- Maintain effective coordination with the state and county when planning and developing a transportation system and related infrastructure improvements.
- Identify and preserve right of way to meet future needs.
- Maintain consideration for actions that are achievable and fundable.
- Appropriately consider cost of potential improvements when developing plan recommendations.

Goal Number 4. Public Transportation

- Affirmatively address the development of public transportation system facilities and services as needed to meet demand.
- Identify potential public transportation pick up and drop off locations as needed and appropriate to meet user demand.
- Seek funding to support planning and development of public transportation systems to meet demand.

Goal Number 5. Pedestrians / Bicycles

- Provide facilities and programs that support the safe "walk-ability" of the community.

- Provide facilities and programs that support the safe "bike-ability" of the community.

Goal Number 6. Design / Operation

- Develop, adopt and enforce appropriate street, bicycle and pedestrian facility standards to meet City needs.
- Maintain community / neighborhood identity when planning and developing transportation improvements.
- Incorporate beautification and aesthetic enhancements into transportation system improvement projects where feasible and appropriate and that reflect Twin Falls climate restrictions.
- Avoid or minimize impacts to the environment when designing and implementing transportation system improvements.
- Incorporate traffic calming measures where appropriate and feasible.

Goal Number 7. Capacity / Congestion

- Provide sufficient roadway capacity to meet current and future needs.
- Minimize congestion where and when feasible.
- Maintain an appropriate level of service on key collector and arterial streets and intersections.

Goal Number 8. Maintenance

- Maintain or enhance the quality and function of the City's existing streets, pathways and support facilities.
- Incorporate future system maintenance requirements into the planning and designing of system improvements.
- Identify and secure sufficient and consistent funding to support desired system maintenance

Master Transportation Plan Development Process

The development Twin Falls Master Transportation Plan implemented a process that included public involvement, coordination with the City Council, CAC/TAC group interaction and private consultants to identify transportation needs and solutions. The following points summarize the process of the development of the Master Transportation Plan.

- Coordination with the General Comprehensive Plan. Various communications were held with the City's planning staff and with their consultants to coordinate efforts between the General Comprehensive Plan and the Master Transportation Plan.

- Stakeholder interviews. Early in the plan process interviews were held with key stakeholders to identify the transportation system goals and concerns.

- City Council meetings. Throughout the planning process the City Council was kept informed on the progress, issues and status of the plan. Information gathered at the City Council meetings was also a significant source of input for the plan.

- Data collection. Early and throughout the process data in and around the City was collected. Examples of data collection include: traffic counts, lighting studies, curb/ gutter and sidewalk inventories, pavement condition studies, intersection configuration evaluations, and crosswalk accommodations.

- TAC and CAC meetings. The CAC was made up of non-technical representative advisors to add input to the planning process. The TAC was a group of technical advisors to add input to the plan. These groups were purposefully chosen to add balance to the plan.

- Development of a Travel Demand Model. A travel demand model for the City of Twin Falls was specifically designed and built for this transportation plan. The model became an integral part of testing roadway scenarios. Many iterations of the model were run to evaluate alternatives and possible project improvements.

- Public Workshops. Workshops held at the College of Southern Idaho were designed to gather public input for the transportation plan. This input was used as main source of information for the development of the transportation plan.

- Prepare and write the Master Transportation Plan. The writing of this transportation plan was an effort between the private consultants Civil Science, InterPlan and KMP Planning, and incorporated review and input from City Staff as well as the members of the TAC and CAC.

- Develop a Capital Improvement Program that incorporated the results of the alternative evaluations and associated cost estimating.

Travel Demand Model

As part of the Twin Falls Master Transportation Plan a travel demand model was developed. A Travel Demand Model (TDM) is a computer modeling tool which forecasts trips using socio economic data based on small regions known as Traffic Analysis Zones (TAZs). Using this model, the consultant team was able to analyze future congestion on the existing roadways. TDMs are also often used for forecasting the impacts of roadway projects and for forecasting travel patterns within urban areas.

The Travel Demand Model utilizes two main inputs to forecast traffic; socio-economic data and the roadway network. Socio-economic data in the model consists of dwelling units, service employment, retail employment and non-retail employment. The roadway network uses links and nodes to represent the actual roadway network.

The existing conditions base year model was derived after extensive data collection. This data was compiled and studied for accuracy before integration into the model. Data collection measures included:

- Field investigations
- Traffic counts
- GIS aerials and data collection used for lane configurations and roadway widths

While the model is an effective tool for forecasting traffic and a tool to be used when deciding on the future infrastructure, it is not the only tool that should be used. For example the model should not be used in place of local expert engineering judgment.

The Master Transportation Planning process is designed to address transportation issues over the long term. Travel modeling considers long term (year 2030) growth trends to evaluate future capacity needs. Safety analysis considers the conditions that generate higher crash rates above the specifics of any individual high crash location. A pavement management system began the development of a baseline to evaluate the effects of various funding options on pavement condition. Ultimately, the intersection improvements, maintenance improvements, new traffic signals and related smaller scale improvements can only be implemented after an understanding of the types of growth related challenges that face the City and the available funding sources to meet these challenges. This allows the Twin Falls City Council to balance limited resources and put the most money toward the most pressing needs, while understanding future plans. The Master Transportation Plan allows for a "look ahead" to understand the transportation conditions in the future by setting a policy direction on the incremental improvements that will be built this year and on into the future.

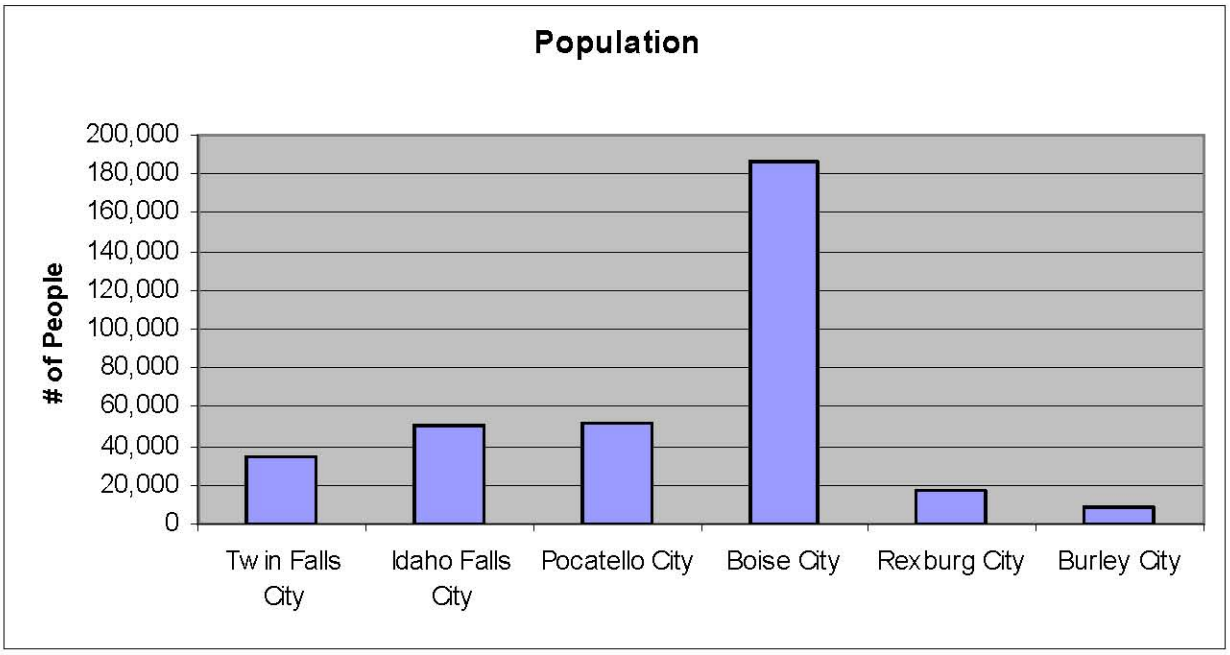
Peer City Comparison

For transportation plan analysis it is useful to compare the Twin Falls region to similar cities in Idaho. (Twin Falls' future demographics are described in the Future Conditions portion of this document). Several cities were selected as "peer cities" due to similar characteristics of geographic location, strong residential growth, and on-going employment growth. Reviewing transportation data from peer cities is a useful way of presenting available data in the context of other areas so that discussion and presentation is simplified. The following list of peer cities share similar characteristics to Twin Falls. It should be noted that use of Year 2000 Census data limits the summary of Twin Falls to the incorporated limits of the City, but actual planning occurred for a larger area, consistent with the Comprehensive Plan, which accounts for growth in the overall Twin Falls region.

Idaho Falls City	Bonneville County
Pocatello City	Bannock County
Boise City	Ada County
Rexburg City	Madison County
Burley City	Minidoka and Cassia Counties

For comparison, the 2000 Census population of these cities is shown in the graphic below.

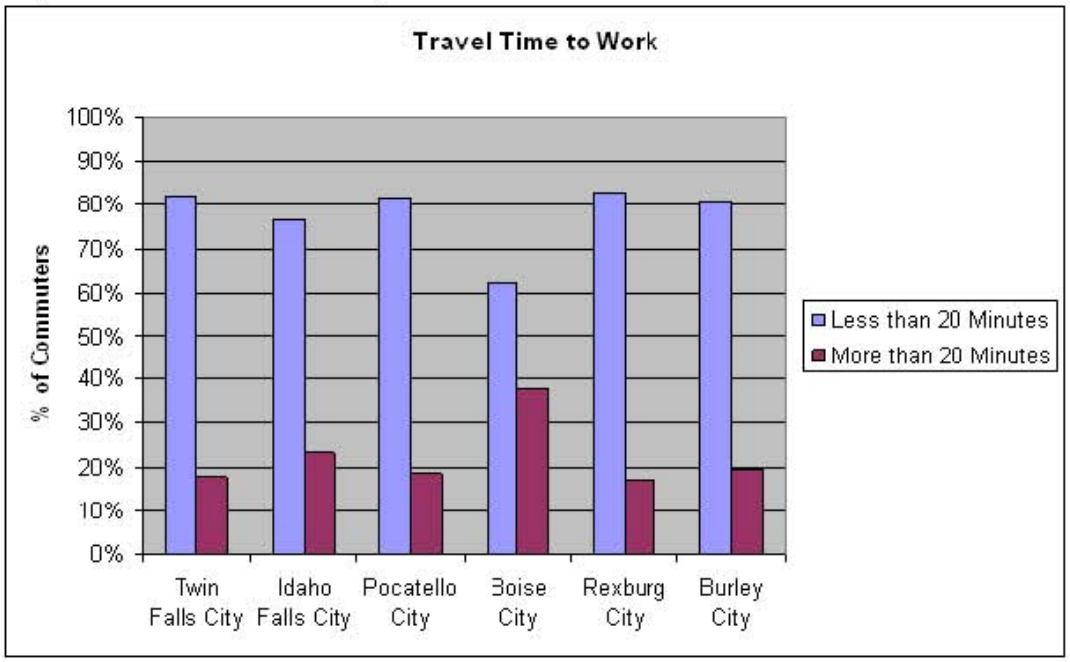
Graph 1: Twin Falls Peer City 2000 Population



The population in many of these cities, including Twin Falls, has grown substantially over the seven years since the 2000 Census. However the transportation related aspects can be expected to change more slowly and provide a useful way to compare the status of Twin Falls City transportation system to other peer cities.

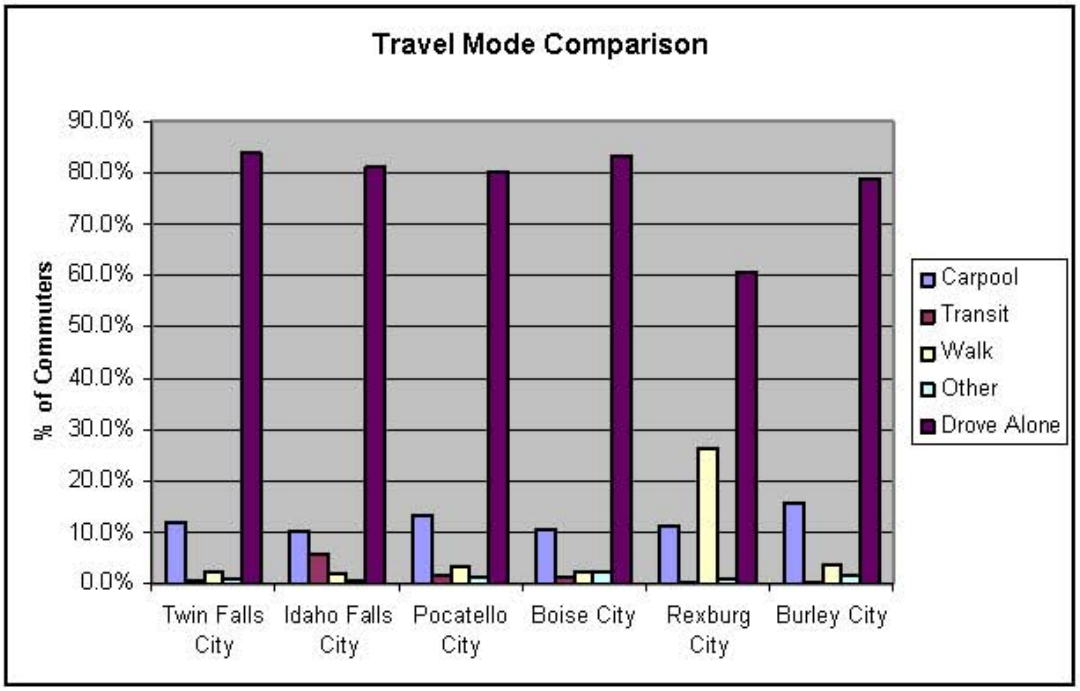
Having employment opportunities nearby, with a reasonable commute, adds to the quality of life of a City. Although some people commute longer distances by choice, there is a trade-off between the value of time spent traveling and other values such as land costs and leisure time. 2000 Census data shows that a high percentage of commuters in Twin Falls travel less than 20 minutes to get to work which is very similar to commuters in the other peer cities which tend to travel less than 20 minutes to work.

Graph 2: Twin Falls Peer City 2000 Travel Time to Work



Mode choice is an important transportation indicator. Many people value a balanced transportation system where there are choices between a variety of travel modes such as automobile, transit, walking or bicycling. In Idaho and across the United States, there is a trend for increasing percentages of workers driving in a single occupant vehicle. Twin Falls and the Idaho cities in this comparison are no different This has created an inefficient use of the roadway network and traffic congestion is a growing problem.

Graph 3: Twin Falls Peer City 2000 Travel Mode



2. Existing Conditions

This Existing Conditions chapter of the Master Transportation Plan analyzes the current transportation system in Twin Falls. Recent development has offered substantial growth with a mix of residential and commercial land uses.

Existing City Comprehensive General Plan

The existing Twin Falls City Comprehensive General Plan was adopted almost fifteen years ago. Since then the City has experienced significant population and employment growth and the needs of the City have changed. Accordingly an update to the Comprehensive General Plan is being developed concurrent with this Transportation Plan.

The Comprehensive General Plan update uses the water and sewer service area as the limitations for future growth. Infrastructure will not be provided from the City of Twin Falls beyond this limit line. These limits will encourage in-fill of the existing system. The Comprehensive Plan also promotes redevelopment of the downtown area to include high density residential units in conjunction with the commercial development in this area. An increase in commercial and industrial properties is anticipated to accompany the population growth. The updated Comprehensive Plan addresses the anticipated growth and the areas that will be impacted by this increase. The Transportation Master Plan is based upon the information provided from the updated Comprehensive Plan including proposed land use changes. The coordination of these two plans allows both documents to support each other and provide a more accurate vision of the future growth and development of Twin Falls and the associated transportation impacts.

Existing land use in Twin Falls is consistent with many of the similar sized cities in Idaho. Land uses tend to separate and follow the rules of typical Euclidean zoning. Residential land accounts for a significant amount of total land use in Twin Falls. Generally commercial development has been located along major arterial roads such as Blue Lakes, Pole Line, Addison and Kimberly. The areas zoned industrial tend to be located near the railroad lines and in the South portion of the City. Agriculture and open space tends to be in the outlying areas of the community. The southernmost area of the City has been zoned for an airport and associated uses. As the community has grown, agricultural land has either been developed or taken out of production to be used for other land uses such as residential or commercial development. The existing land use map can be seen in Figure 1. Located in Appendix A of this document.

Existing Roadway Classification

The existing street network in Twin Falls has been classified based on a gridded network consistent with previous area planning. Twin Falls City has traditionally distinguished arterial and collector roadways by spacing, arterial roadways are based upon mile spacing, and collectors are half-mile and quarter-mile spacing. Local roadways fill in the spacing between the collector roadways. The makeup of the existing roadway system is shown on the Existing Roadway Classification map on Figure 2. This Master

Transportation Plan focuses on the arterial and collector grade roadways and the final recommendations will be identified for roadway improvements at that level.

- Arterial - Streets that carry the greatest volume of through or long distance travel of the road network. Arterials often connect other high volume traffic generators and high volume travel corridors. Arterials are roads where vehicles are expected to move at higher speeds. Depending on the type of arterial area, the speed threshold is generally greater than 40 miles per hour. In Twin Falls City arterial roadways are spaced every mile. Arterial roadway connectivity is not affected by homes or parks. Arterials provide good east-west and north-south connectivity, except in the case of Grandview Dr, which does not cross Rock Creek. The roadway width of these existing arterial roadways varies from 30 foot sections up to 120 feet on Poleline Road. The width of these roadways can have an effect on the level of service as larger widths generally allow for increased traffic flow and greater capacity.

- Collector - Collector roads are intended to carry traffic from local streets to arterial streets. They are designed to carry less traffic at lower speeds than arterials and to serve trips that are shorter in length. Collector streets often provide access to residential areas, churches, parks and schools. Twin Falls City collectors are spaced every quarter mile. But, in some portions of the City, this spacing does not hold true due to geographic limitations, such as parks, school, or other obstructions. Currently the widths of these roadways vary from 20 feet to 48 feet.

- State Highways - A broad highway designed for high volumes and high speed traffic. Generally speeds are 50 miles per hour or greater. Often state highways are designed to carry through traffic over long distances with few stops.

- Residential Streets / Local Roads - Local roadways provide connectivity between residential neighborhoods, churches, parks etc., and the collector level roadway network. Local roadways are traditionally narrow, with slower speeds; these and other design elements contribute to the discouragement of through-traffic.

Existing Standards and Policies

The standards and policies associated with the Twin Falls transportation system are located in a variety of documents. These documents include the 1993 Twin Falls Master Street Plan, the City of Twin Falls Engineering Department Standard Drawings, and the Title 10 Zoning and Subdivision Regulations. These standards and policies address items such as right-of-way width, pavement structure, access control, intersection separation, and alignment control.

Roadway Width and Structure

The required roadway width and structure are based on the road classification. Currently there are three roadway classifications, Residential, Collector, and Arterial. Standard Drawings S-3 to S-5 identify the various street sections that are allowed within Twin Falls. The 1993 Street Plan indicates roadway widths for the various street classifications that are different than what is indicated in the Standard Drawings. In recent years the required right-of-way widths have expanded to 88 feet for Arterial Roads, 72 feet for Collector Roads, and 50 feet for Residential Roads. The roadway structure is consistent with the directions indicated in the current standard drawings.

Alignment

The roadway alignment is controlled by the minimum amount of centerline radius and tangent length allowed based on roadway classification. Section 10-12-3-13 of the Zoning and Subdivision Regulations indicate the minimum requirements for the alignment. Section 10-12-3-4 also addresses the grade limitations and vertical alignment controls. There are no set design speeds for the various road classifications to assist in the roadway design process.

Intersections

Intersection constraints are located in the Section 10-12-3-6 of the Zoning and Subdivision Regulations. This includes angle limitation of no less than 70 degrees, clear sight distance triangles of 100 feet, limitation on number of roads crossing at an intersection, intersection off-set limitations, and grade limitation for approaches into the intersection. Curb radius is also addressed for intersections with the standard being 20 feet. Recently Twin Falls has requested curb radii to be a minimum of 30 feet on arterial roads to accommodate truck turning actions. A standard radii for arterial routes should be established for enforcement purposes.

Access Control

Controlling access onto the transportation system has a great impact on traffic flow and assists in reducing congestion. Currently the guidelines for access control are located in the 1993 Street Plan which indicates the minimum access guidelines for arterial streets. In new developments the City controls the accesses on arterial roads by not allowing accesses onto the arterial except for street intersections. There are occasions where a development cannot achieve this and the City works together with the developer in minimizing the accesses onto the arterial. For collector streets the City requests combined or shared approaches and direction that cars are not allowed to back into the collector road thus requiring a turnaround on the individual lot. For residential roads the access is not controlled other than proximity to an intersection or property line

Topography and Regional Considerations

The geography of Twin Falls City provides challenges for planning an overall roadway network that provides connectivity to all areas of the City. Rock Creek cuts diagonally across the City and limits roadway connectivity due to the depth of this feature. In some areas the creek has been crossed and provides the necessary connectivity for the transportation system. In other areas such as between Grandview Drive, and Sun Way the creek has not been crossed. In the areas where bridges have not been constructed over Rock Creek north-south connectivity is limited. This situation exists for approximately one quarter of the City, resulting in an increased demand on East-West collector and arterial roadways that do provide crossings of Rock Creek.

The area known as the 'Townsite' which is the area of Twin Falls that extends from Addison to Kimberly Road, and from Blue Lakes Boulevard to Washington Street, presents various roadway geometric issues. The angled roadways present unique problems when trying to incorporate this geometry into the grid roadway system that is found throughout most of Twin Falls City. The resulting intersections can create difficult and challenging driving conditions. Examples of resulting intersections are the 5 points intersections at Blue Lakes / Addison Avenue, Blue Lakes / Kimberly Road, and Washington Street / Addison Avenue.

The Twin Falls area supports several state highways that represent major traffic travel routes. These include Blue Lakes Blvd (US 93), Kimberly Road (US 30), 2nd Avenue East & 2nd Avenue West, and SH 74. These roadways fall under the jurisdiction of the Idaho Transportation Department (ITD), but because of the affect they have on the overall traffic flow in the Twin Falls area they are an integral part of this study. The study team incorporated the Idaho Transportation Department and surrounding highway interests into the Technical Advisory Committee to ensure the consideration of compatibility and connectivity to these regional transportation facilities.

An additional topographic element unique to Twin Falls City is that of the Snake River Canyon. This canyon presents limited access to Twin Falls City, because of its size and location, between Twin Falls City and I-84. Currently there are two crossings of this canyon, with a third crossing north of Twin Falls being currently under study by the Idaho Transportation Department. This third crossing may have some relevance to Twin Falls City in the future, but currently the timing and funding viability is unknown.

At grade railroad crossings also can pose a traffic flow and congestion dilemma. Currently there are several at grade railroad crossings in Twin Falls. An example is on Washington Street just north of Rock Creek, where train traffic on some days brings traffic flow to a halt. This has a larger effect on traffic flow then just the time it takes for the train to pass. The effects can be felt for a period of time after the train has passed, if the train happens to pass during peak traffic flow times. Eastland Drive has an underpass that allows free traffic flow, but the remaining crossings, at Blue Lakes Boulevard, Locust Street and Hankins Road all have at grade crossings which should be evaluated as traffic loads increase.

With the City of Twin Falls being a major regional center for the Magic Valley it is imperative that the City transportation system provides functionality with the surrounding transportation systems. Connectivity between the City, county, and state roadway system is essential to providing an efficient transportation operation. Currently the City is connected to the Interstate System through US-93 and SH-50 in conjunction with US-30. These connections are limited in functionality and capacity by the ability to cross the Snake River Canyon on the Perrine Bridge on US-93 and the Hansen Bridge on SH-50. ITD recently completed a feasibility study for a third Snake River Crossing to provide additional access from Twin Falls to I-84. Currently ITD is in the environmental evaluation process for the proposed third crossing. Continued involvement by the City of Twin Falls is encouraged as this project develops.

The state routes within the City study area include US-93 (Blue Lakes Boulevard), US-30 (Kimberly Road, Addison Avenue West, and the Second Avenues), and SH-74 (Shoshone Street and Washington Street South). These state highways are integrated into the City transportation system. A majority of the Arterial Streets in Twin Falls connect to Twin Falls County Roads. The City currently works together with the County to coordinate the development of these roadways so that they are compatible and provide connectivity benefiting both entities. Continuing the coordination between the City and County is essential to ensure connectivity and compatibility of the two transportation systems.

Existing Traffic Signals

Traffic signals provide traffic control and are an indication of roadways that carry high volumes of traffic. In Twin Falls, there are currently 35 operating signals which are located at the intersections that handle the majority of the daily traffic flow. Blue Lakes Boulevard has nine signals located at intersections with both collectors and arterials, two of which are at north five points and east five points. Addison Avenue has six signalized intersections; one of these intersections is west five points. Addison Avenue also shares north five points with Blue Lakes Boulevard. The rest of the signalized intersections are found along Kimberly

Road, Pole Line Road, Shoshone Street, Eastland Drive, Locust Street and Washington Street. (See Existing Traffic Signals - Figure 3 in Appendix A).

Currently Twin Falls also has numerous 4-way, 3-way, and 2- way stop sign controlled intersections. These sign controlled intersections are in areas with much lower daily traffic demands, and areas where collector grade roads allow access onto local or residential streets. Roundabout controlled intersections, which have increased in popularity in recent years, are not currently found in Twin Falls City.

Twin Falls Travel Demand Model

The Travel Demand Model created for this study was calibrated utilizing the latest version of General Network Editor (GNE) and the latest version of Quick Response System II (QRS II). This software is often used for forecasting the impacts of roadway projects and for forecasting travel patterns within urban areas. GNE allows a user to enter the roadway network and then to enter data about each link and node to describe the network. QRS II acts as the motor behind GNE and is a program designed to forecast the impacts of development on roadway traffic and projects travel patterns.

The Travel Demand Model follows a "four step process" to assist urban areas estimate travel demand while building the interstate system. This process is an econometric process of estimating individual choice decisions such that the aggregate estimate is reasonably accurate even if the individual estimates do not represent actual travel demand choices of individuals. The four steps of the travel demand model are:

- Trip Generation
- Trip Distribution
- Mode Choice
- Trip Assignment

To calibrate the model traffic data was compiled from a number of sources including Twin Falls City, the Idaho Transportation Department (ITD), and the Twin Falls County Highway District. Additionally traffic counts were performed at 12 strategic locations around the community. Using this data iterative model runs were performed and cross checked against the existing data to calibrate the model.

Existing Roadway Level of Service

Regional forecasts and plans assist with the development of the Twin Falls Master Transportation Plan. The travel demand model was developed to analyze the number of vehicles which utilizes current roadways within Twin Falls City. The travel demand model is also used to predict how well the roadway network will perform in the future.

Level of Service is used to evaluate how well a roadway or intersection operates and is expressed as a letter grade from "A" to "F". Level of Service (LOS) A represents traffic volumes that permit free vehicle movement with little or no congestion while Level of Service F represents traffic where conditions are very congested and vehicles may experience significant delay. Some congestion occurs at a level of Service D, but the transportation system is assumed to be adequate at this level. The graphic below is a visual to help understand the Level of Service grading system.

Graphic 1: Level of Service Examples / Tables

Level of Service A

Level of Service B

Level of Service C

Level of Service D

Level of Service E

Level of Service F

The following tables illustrate the LOS definitions for the suburban arterial and the signalized intersection as defined by the Transportation Research Board in the *Highway Capacity Manual (HCM)*.

Undivided Multilane Suburban Highway/Arterial Level of Service

Level of Service (LOS)	Traffic Conditions
A	Free-flow operations at average travel speeds, vehicles are unimpeded in maneuvering within traffic stream
B	Relatively unimpeded at average travel speeds, only slightly restricted maneuvering within traffic stream
C	Relatively stable traffic operations, more restricted maneuvering at mid-block locations than LOS B, individual cycle failures at traffic signals may begin to appear
D	Small increases in traffic flow may cause substantial delay and decrease in travel speed, congestion and individual cycle failures at traffic signals are more noticeable as vehicles stop
E	Poor travel speeds with slow progression and high delay, individual cycle failures at traffic signals occur frequently
F	Extremely slow travel speeds with queues forming behind breakdowns, brief periods of movement are followed by stoppages, considered unacceptable by most drivers.

Source: ***Highway Capacity Manual (HCM) 2000***, Transportation Research Board National Research Council, Washington D.C., 2000.

Signalized Intersection Level of Service

Level of Service(LOS)	*Control Delay (seconds/vehicle)*
A	*0 – 10*
B	*> 10 – 20*
C	*> 20 – 35*
D	*> 35 - 55*
E	*> 55 - 80*
F	*> 80*

Source: ***Highway Capacity Manual (HCM) 2000***, Transportation Research Board National Research Council, Washington D.C., 2000.

Travel Demand Model Yields LOS Values

The travel demand model was developed to quantify current traffic conditions and to predict future traffic and level of service. The comparison between current and future traffic is used in this study because congestion is not just dependent on the number of vehicles using a road. The number of lanes, the capacity, the speed and the number of intersections also help to determine the LOS experienced by motorists. The level of service maps contained within this document depict average daily traffic conditions. A motorist in Twin Falls can expect to experience varied roadway level of service conditions depending on the time of day, such as the PM peak period.

In the current conditions travel demand model, traffic congestion is relatively low as can be seen on Graphic 1 above. One of the most congested modeled roads, Blue Lakes Blvd., has an existing modeled

volume of 25,000-30,000 vehicles per day. By comparison the modeled volume of Addison Avenue was in the 12,000 to 16,000 vehicles per day range.

Figure 4 is a map showing the existing daily Level of Service and road volume for the City of Twin Falls and surrounding areas. Green roads have little or no traffic congestion and correspond to LOS A or B. Yellow roads have a stable flow and correspond to LOS C. Orange roads have some congestion and correspond to LOS D. Although no roads are shown in red in the map below, red roads would have significant traffic congestion and correspond to LOS E or F and may occur during peak travel periods. The width of the roadway shown on this figure indicates the approximate modeled daily volume of these roads.

Note that the volume of vehicles experienced on a particular roadway does not necessarily determine the road's LOS. For example, Falls Avenue carries 5,000 to 15,000 vehicles daily, but the portion from Washington Street to Blue Lakes Blvd has LOS A and B whereas Falls Avenue from Blue Lakes Blvd to Hankins Road has LOS C and D. The decline in LOS for that portion of Falls Avenue, while not due to differing volume, may be due to lesser capacity, i.e. fewer lanes; poor signalization or cross street interruption; frequent access points such as driveways or other factors.

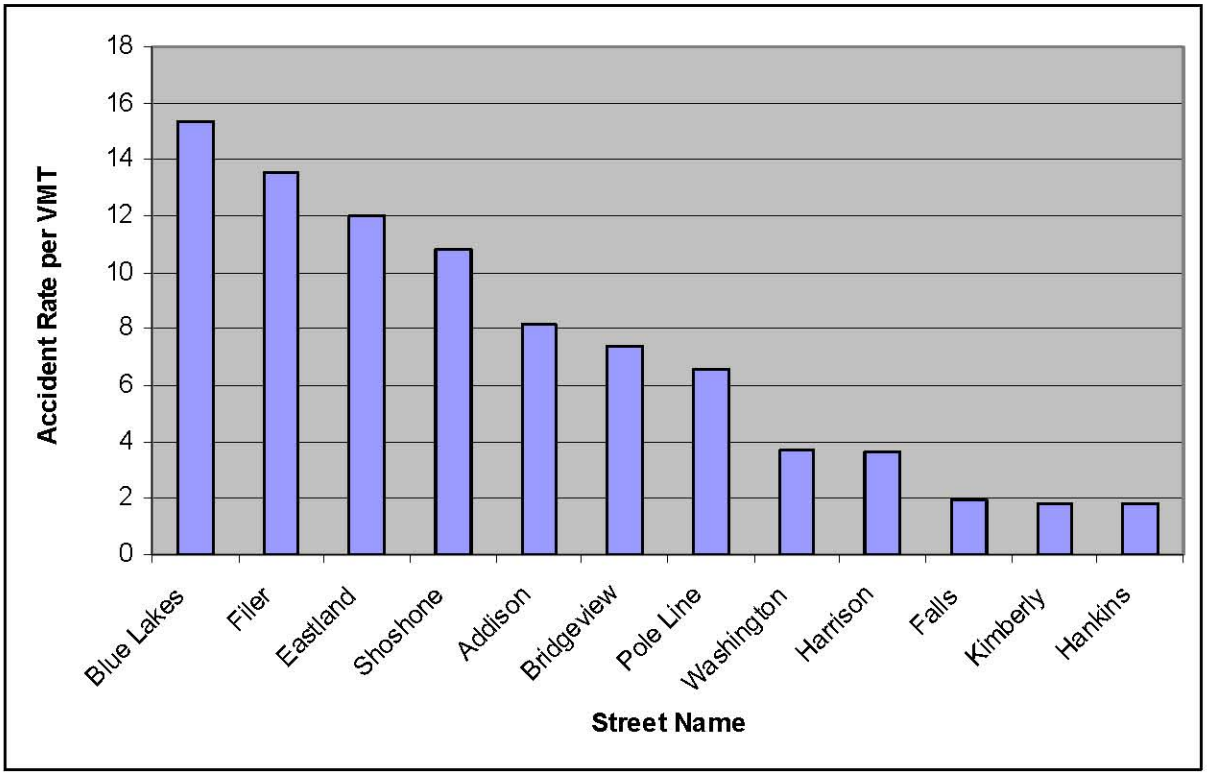
Traffic Generators

The City of Twin Falls is a regional service center for southern Idaho generating trips from as far as Sun Valley and Elko Nevada. A major draw for this additional traffic is the retail centers along Blue Lakes Boulevard. The College of Southern Idaho also generates additional traffic with students commuting from throughout the Magic Valley. Other major traffic generators include the St. Luke's Magic Valley Regional Hospital, Jayco Inc., Dell USA, Amalgamated Sugar Company, and ConAgra Foods. Significant changes to these traffic generators or the introduction of others that are outside the context of plans stemming from the City's Comprehensive Plan can be expected to impact the functionality of the transportation system. Adjustments to the transportation plan may be necessary to identify and address the impacts generated from the changes to the traffic generators.

Accident Rates

The Police Department in Twin Falls has collected and recorded accident data for all of the accidents that have occurred within the Twin Falls City limits over the past seven years. Since the data from the year 2006 was the latest available it was analyzed in further detail. The graphic below shows the rate of accidents per vehicle million miles traveled on the busier roads in Twin Falls. A review of the data revealed that Police Department accident rates provide a good indication of the relative number of accidents on any given roadway. However, detailed accident analysis has found that rates produced at this aggregate level may reflect higher than actual accident rates to the recording of the Police Department of driveways and internal parking areas, cross streets, and related geographic details that distort the summary of total accidents by roadway. Figure 5 shows the areas with the most accidents.

Graph 4: 7 Year Accident Rate



As expected the roads with the highest traffic volumes in Twin Falls had the higher accident rates. Generally high volumes and numerous access points lead to higher accident rates. Access points include driveways and cross streets and can be signalized or unsignalized. Numerous access points introduce multiple decision points for drivers. More decision points lead to more accidents.

The following table shows the intersections in Twin Falls that had the highest average accident rate over the last seven years. The intersection of Blue Lakes and Falls Avenue had the highest accident rate with an average of 61 accidents a year.

Table 3: 7 Year Highest Accident Rate Intersections

2003-2006 Intersection Accident Data			
Intersection Location	Average Accidents	Average Vehicles	Average Injuries
Blue Lakes and Falls	61	125	17
Addison and Washington	35	70	4
Blue Lakes and Addison	35	71	8
Blue Lakes and Filer	32	67	8
Blue Lakes and Cheney	29	48	5
Blue Lakes and Pole Line	28	54	5
Addison and Eastland	28	57	9
Blue Lakes and North College	24	56	7
Pole Line and Fillmore	14	29	6
Pole Line and Bridge View	11	24	3

The 2006 accident data was geocoded and mapped to show the location of the more severe accidents that had an injury or a fatality. This injury/fatality map is shown in Figure 5. In addition to roads which have a pattern of high accident rates, such as Blue Lakes Boulevard, areas of more severe accidents tend to follow a pattern of higher traffic volumes in the core of the City as opposed to higher speeds on the fringe. An ongoing diligent review of accident patterns is suggested as part of this Master Transportation Plan, and later sections address hot spot intersection locations which emerged through analysis of this data and public comment.

Roadway Deficiencies

Roadway deficiencies such as lighting, curb, gutter and sidewalk may be improved by Twin Falls as deemed necessary for the safety and health of residents. Situations where roadways lack connection or width may be remedied as development occurs in these areas or as the City sees a critical need.

Roadway Width Requirements

As part of the TMP Civil Science identified the widths of the existing roadways. The collector and arterial roadways were analyzed in the field to determine any asphalt width deficiencies in relation to the proposed roadway cross sections (See Typical Cross Sections Figure 14). The purpose of the analysis was to identify the sections of arterial and collector roadways that do not meet the proposed standards (See Roadway Deficiencies Figure 6). Using a handheld GPS receiver edge of asphalt shots were taken throughout the City on all existing collector and arterial roadways and the data was imported into a GIS database. This database was used to identify the existing sections of roadway that are deficient according to the proposed roadway cross sections. Within the City limits of Twin Falls there are roughly 40 miles of arterial roadways. The study shows 14.5 arterial miles do not meet the proposed width requirement. There are roughly 50 miles of collector roadways within Twin Falls City limits. Thirty-seven (37) miles of collectors will need additional widening to meet the proposed master plan cross section requirements.

Roadside Improvements

Sidewalks with curb and gutter provide pedestrian safety and drainage during heavy rainfall. Many streets in Twin Falls have curb, gutter, and sidewalks. However, some streets in Twin Falls are lacking these amenities and there are areas that have breaks in curb, gutter, and sidewalk along main roads. In conjunction with areas that lack curb and gutter, there are locations that lack adequate ADA compliant pedestrian ramps. Additionally, there are various locations with existing pedestrian ramps that do not meet current ADA standards.

Planter strips are generally utilized in the establishment of roadway cross sections in Twin Falls City. Landscaping between the roadway and the sidewalk offers a visual amenity and enhances the safety of adequately planned and constructed sidewalks. Figure 6 shows the existing roadside deficiencies of sidewalks, curb and gutter and associated planter strips in Twin Falls City.

In addition to the GPS data for asphalt width, survey shots were taken to identify locations of existing sidewalk and curb and gutter. This data was also imported into the GIS database and line work was created that defines locations of existing roadside features. With the existing roadside features located and drawn on the mapping, areas where these roadside features were deficient was then created in the GIS. (See Roadside Deficiencies, Figure 6) These deficient features include, curb & gutter, sidewalk, and landscaping/hardscape. Landscaping/hardscape is defined as grass planter strip or instead of grass, decorative rock or some other hard surface feature. The landscaping/hardscape are not quantified using the GPS, but it generally exists in the same locations as the existing sidewalk. Using this understanding, wherever sidewalk does not exist, landscaping/hardscape was also considered to be lacking.

Pavement Inventory

One of the most important capital investments for any City is the streets and roads within that City. The condition of the roadways is often viewed as a reflection of the City. As part of the Twin Falls Master Transportation Plan the development of a Pavement Asset Management Plan has been established.

A roadway condition inventory provided information forming the basis of a program that will more accurately identify pavement constraints and allow a better understanding of financing needs and future prioritization. This program will assist the City of Twin Falls in determining whether pavement sections

are in need of maintenance or replacement through a technical evaluation of the current conditions. The map on Figure 8 represents the condition of the pavement in Twin Falls.

Data in the form of pavement condition surveys were collected along selected Twin Falls City arterial, collector, and local roadways in order to obtain a pavement condition index (PCI). The PCI is a numerical indicator which rates pavement surface condition and gives a measure of the present condition of the pavement. When the PCI is monitored over time it provides feedback on pavement performance for validation or improvement of the current pavement design and maintenance procedures. The PCI also aids in pavement life cycle predictions, planning and budgeting for roadway maintenance, and addressing broader roadway system goals.

Organization of the pavement condition survey began by dividing the pavement network into branches, sections, and sample units according to the ASTM D 6433 Standard Practice for Roads and Parking Lots Pavement Condition Index Surveys. Pavement condition surveys were performed on key roadways selected by the Twin Falls City Streets Department staff and exclude roadways maintained by the Idaho Transportation Department. After a branch, section, and sample unit was determined, the inspection of distresses on the pavement surface began. Each distress within the sample unit was recorded by its type, severity, and quantity according to the MicroPAVER 6.0 User Manual.

Roadway Branch, Section, and Sample Unit selection

To organize the pavement condition surveys, an overview page was created for each section and data sheet filled out for each sample unit. The section overview page documents the branch name, section letter, section dimensions, and sample unit dimensions and location. The data sheets contain a sketch of the sample unit, location information, and the distresses present within that sample unit.

The City of Twin Falls identified the branches of roadway to be surveyed.

Table 4: Branches of Roadway to be Surveyed

Falls Ave.	Addison Ave.	Eastland Dr.
Filer Ave.	Elizabeth Ave.	Grandview Dr.
Locust St.	Heyburn Ave.	Shoup Ave.
Washington St.	Idaho St.	Fairfield St.
Main Ave.	Park Ave.	South Park Ave.

The survey direction of each branch was either North to South or East to West. Branches were divided into sections usually ranging from 0.5 to 1.0 mile in length. Sections were assigned an alphabetical letter to aid in delineating a section's boundaries. Sample units measuring 2500 square feet in area were identified in each section. To obtain the number of sample units within a section, the total area of the section was divided by 2500 square feet to obtain the total number of sample units. The total number of sample units was then compared to the Network Level Sampling Table to obtain the number of units to be sampled within the section. A random beginning sample unit was chosen and the remaining sample units were spaced out equidistantly within the section.

Pavement Inspection Procedure

The procedure for recording distresses is covered in the ASTM D 6433 Standard Practice for Roads and Parking Lots Pavement Condition Index Surveys. Each distress was recorded by its type, severity, and quantity on the survey data sheet. There are nineteen different distresses for flexible pavements.

Table 5: Distresses for Flexible Pavements

Alligator Cracking	Bleeding
Block Cracking	Bumps and Sags
Corrugation	Depression
Edge Cracking	Joint Reflection Cracking
Lane/Shoulder Drop-off	Longitudinal and Transverse Cracking
Patching and Utility Cut Patching	Polished Aggregate
Potholes	Railroad Crossing
Rutting	Shoving
Slippage Cracking	Swell
Weathering / Raveling	

The severity of each distress was recorded as either low, medium, or high based on descriptions and pictures in the MicroPAVER 6.0 User Manual. For example, a rut which is .25" – 0.5" deep is defined as low severity. A rut which is 0.5" – 1" deep is defined as medium severity, and a rut greater than 1" deep is defined as high severity.

Data Results

The field data collection gathered thus far in Twin Falls includes pavement distress and PCI information on 15 branches, 50 Sections, and 200 sample units (see Pavement Condition Ratings Figure 8). The section with the lowest PCI of 36 was Eastland Avenue between Hillcrest Drive and Addison Avenue. This pavement section contains large areas of high severity block cracking, longitudinal and transverse cracking, and edge cracking. Other distresses present in this pavement section are edge cracking, potholes, bumps, rutting, and patching. The sections with the highest PCI values of 100 were Eastland Avenue between Pole Line Road and Candleridge Road and Filer Avenue between Washington Street and Grandview Street. These pavement sections were recently overlayed, chip sealed, or reconstructed.

Existing Bicycle Facilities

Twin Falls has an existing network of bikeways that contributes to its multi-modal transportation network and provides a travel choice for residents. Currently, the existing bikeways network in Twin Falls provides for limited connectivity. Existing bikeways in Twin Falls are predominately Class III bike lanes or bike routes which mean that there is not a continuous stripe on the pavement indicating a bike lane, but rather it is signed for shared use with motorists. Existing bike lane locations can be seen

on Figure 18.

Existing Intersection Hotspots

The Community Advisory Committee, Technical Advisory Committee and City officials identified several intersection "hot spot" areas within Twin Falls. These "hotspot" areas in the City are areas where transportation issues are of a particular concern and are shown on Figure 16. These areas have diverse transportation problems such as insufficient transportation infrastructure to meet the growing transportation demand. As part of this transportation plan, each location was studied in further detail and recommendations for each "hotspot" are presented in Chapter 4 of this document.

- **Location Number 1**. The intersection of Washington Street and Orchard Drive. Recent development in this section of town generates increased traffic volumes on both Orchard Drive and Washington Street. The increased volumes make it difficult for traffic on Orchard Drive to cross or turn on to Washington Street. There is also an increase in truck traffic using Orchard Drive adding to the difficulty in accessing Washington Street at this location. The approaches to Washington Street from Orchard Drive are at an incline adding to the difficulty for vehicles (especially larger vehicles such as trucks and trailers) to accelerate across the intersection from a stopped condition. Control in this intersection includes stop signs and single through lanes on Orchard Drive. Washington Street controls include a right turn lane, through lane, and left turn lane in each direction

- **Location Number 2.** The intersection of Blue Lakes Boulevard and Cheney Drive. With commercial development increasing on Fillmore Street and Cheney Drive more traffic is using Cheney Drive to access the area resulting in traffic congestion on the west leg of Cheney Drive. There are two through lanes and a left turn lane in each direction of Blue Lakes Boulevard at this location. There is also a right turn lane from Blue Lakes Boulevard onto the west leg of Cheney Drive. Cheney drive is controlled with stop signs and has a through lane in each direction and a right turn lane from the west leg onto Blue Lakes Boulevard.

- **Location Number 2a.** The intersection of Blue Lakes and Addison, also called the "North Five Points Intersection". Due to the configuration of a five leg intersection there is difficulty in addressing the associated traffic movements and timing resulting in congestion at this crucial intersection. Blue Lakes Boulevard, Addison Avenue, and Shoshone Street carry a major load of the Twin Falls transportation system resulting in the traffic congestion encountered at the junction of these major routes. One concern expressed with this intersection is the left turn restriction from the south leg of Blue Lakes to the east leg of Addison. This restriction creates confusion for individuals not familiar with the intersection. Currently south bound traffic on Blue Lakes Boulevard is limited to one lane and the associated signal time for this action is minimal to accommodate the remaining traffic movements. The intersection is controlled by a traffic signal with timed phasing for each leg. The existing configuration for the intersection includes two through lanes and one left turn lane on each leg of Addison Avenue and two through lanes on Shoshone Street with a right turn lane from Shoshone to east bound Addison Avenue. Blue Lakes Boulevard south bound consists of one through lane for Blue Lakes and two through lanes for Shoshone Street. The northbound leg of Blue Lakes contains two through lanes. Current restrictions at this intersection include no left turn from Blue Lakes onto Addison and no left turn from Shoshone Street onto Addison Avenue.

- **Location Number 3**. The intersection of Blue Lakes Boulevard and Falls Avenue. This signalized intersection of these two major routes in Twin Falls experiences congestion due to the large amount of traffic using this intersection on a regular basis. There are also some business approaches near this intersection that impact the operation of this intersection. Each leg of this intersection includes two through lanes, a left turn lane, and a right turn lane. Public comments indicated that the lack of a left turn lane is leading to turn movement deficiencies.

- **Location Number 3a.** The intersection of Blue Lakes Boulevard and Filer Avenue. Comments indicated a need for right turn lanes on Filer Avenue to Blue Lakes to address the deficiencies at this intersection. Currently Filer Avenue has 2 through lanes and a left turn lane while Blue Lakes Boulevard has two through lanes, a left turn lane and a right turn lane.

- **Location Number 4.** The intersection of Washington Street and Addison Avenue. This major signalized intersection is in close proximity to another signalized intersection at 2nd Avenue and Addison Avenue. Due to the proximity of these two signals traffic tends to back from Washington Street into the 2nd Avenue signal. Comments also indicated that the intersection is lacking a right turn lane on Washington going northbound. Addison Avenue consists of two through lanes, a left turn lane, and a right turn lane. Washington Street includes two through lanes and a left turn lane with a right turn lane for south bound traffic.

- **Location Number 5.** The intersection of Falls Avenue and Locust Street. Traffic along Locust Street is increasing as more people use this road as an alternative to Blue Lakes Boulevard. Traffic on Falls Avenue is increasing with commercial growth adjacent to this intersection. The traffic growth through this signalized intersection results in traffic delay and congestion. Locust Street consists of one through lane and a left turn lane with a right turn lane for south bound traffic. Falls Avenue consists of one through lane east bound and two through lanes west bound with a left turn lane each direction. Identified deficiencies include lack of right turn lanes on certain legs and lack of through lanes on Falls Avenue east bound.

- **Location Number 6.** The intersection of Addison Avenue and Carriage Lane. Recent residential growth and development in this area increases the traffic through this intersection. The increased traffic volumes make it difficult to cross or turn on to Addison Avenue. The intersection is controlled with stop signs on Carriage Lane. Carriage Lane consists of one through lane while Addison Avenue consists of one through lane and a left turn lane.

- **Location Number 7.** The intersection of Blue Lakes Boulevard and Orchard Drive. The residential development in the south portion of Twin Falls increases the traffic volumes at this intersection. Truck traffic is increasing on Orchard Drive due to industrial growth in this section of Twin Falls. The intersection is controlled with stop signs on Orchard Drive. Each leg of this intersection consists of a through lane and a left turn lane. Concerns with this intersection include turn movement deficiencies resulting from increased truck traffic and limited turn radius.

- **Location Number 8.** The intersection of Addison Avenue and Hankins Road. This intersection experiences traffic volume growth as residential growth occurs to the north and south. With the traffic increase on Addison Avenue it is difficult for traffic to cross or turn on to Addison Avenue from Hankins Road. This leads to delays and congestion along Hankins Road. The intersection is controlled by stop signs on Hankins Road. Hankins road consists of one through lane while Addison Avenue has one through lane and a left turn lane.

- **Location Number 9.** The intersection of Eastland Drive and Falls Avenue. Traffic volumes for both of these roads have increased due to development in this area. The additional traffic generates congestion at the signalized intersection of these two corridors. Eastland Drive consists of a through lane, a left turn lane and a right turn lane while Falls Avenue contains a through lane and a left turn lane with a right turn lane for east bound traffic.

- **Location Number 10.** The intersection of Blue Lakes Boulevard and Kimberly Road is also known as "East Five Points". This intersection in conjunction with the intersection of Blue Lakes with 2nd Avenue and the adjacent railroad generate a complex intersection that is complicated by the increased traffic volumes associated with the growth in the south section of Twin Falls. Kimberly Road enters this signalized intersection with one through lanes, one left turn bay, and one right turn bay. Blue Lakes contains one through lane, one left turn lane and one right turn lane. Main Street is a one way road heading away from the intersection. Minidoka Avenue consists of two through lanes and one left turn bay. The congestion in this area can be attributed to the lack of through lanes on Blue Lakes Boulevard and the conditions at the Blue Lakes and 2nd Avenue Intersection.

- **Location Number 11.** The intersection of Falls Avenue and Hankins Road. This intersection is a daily route for individuals traveling from the southeast side of Twin Falls to the north portions of the City. Recent developments along Hankins Road and the north east section of Twin Falls have increased the traffic volumes and congestion at this intersection. Hankins Road is controlled with stop signs and has one through lane in each direction. Falls Avenue consists of one through lane and one left turn lane each direction. There is a right turn lane for eastbound traffic on Falls Avenue to southbound Hankins Road.

In looking at the transportation system as a whole, the role of intersections in determining traffic congestion, and overall LOS cannot be underestimated. Input from City staff and the public was gathered for collector and arterial grade roadways which were reported to have existing deficiencies or congestion concerns. Figure 16 details the proposed intersection improvements to various intersections throughout Twin Falls City. The improvements outlined generally include dedicated right turn lanes, dedicated left turn lanes and traffic signals.

Historic Downtown

The transportation system in Twin Falls faces specific challenges and opportunities associated with the historic sections of the City. The section bordered by Blue Lakes Boulevard on the east, Kimberly Road on the west, Addison Avenue on the north and Washington Street on the south consists of smaller blocks which generally offset the prevailing street grid at a 45 degree angle. These angled intersections caused by the offset grid present geometric challenges at individual intersections, including the large signalized five leg intersection at Blue Lakes Boulevard and Addison Avenue, as well as many smaller stop controlled intersections. The nature of movement in the downtown area can offer pedestrian opportunities due to the smaller block lengths and more dense development. Yet, the use of 2nd Avenues one-way couplets as a State/US highway through the downtown presents an important consideration towards pedestrian flow and the nature of downtown travel.

Many of the land use considerations of the downtown area are addressed in the Comprehensive Plan. The continuing use and promotion of on-street parking in the downtown creates an on-going coordination element of the transportation and comprehensive planning process. By creating a walk-able downtown environment, internal traffic problems can be minimized. Traffic must still get to and from

the downtown core, but a focus should be on the concept of "park once and walk" as opposed to multiple short trips. Boundary issues of the offset grid must also be addressed by City staff as an evolving issue.

Other Existing Conditions

Many elements contribute to the existing travel conditions in Twin Falls. Pedestrian crosswalks, transit, truck routes and lighting conditions were both identified as needed study areas by the public involvement process. These areas are addressed in further detail in the following sections.

Pedestrian Crosswalks

Pedestrians make up a key transportation component within Twin Falls City. To understand safety conditions related to pedestrian travel existing controlled crosswalks were identified and documented. Controlled crosswalks that were identified consisted of those that have more control than simply a pedestrian sign designation. Crosswalks such as those at major intersections that are controlled by a traffic signal were not quantified as part of this study as these are recognized as standard with signal installation. Thirty-Two (32) intersections or crossings were identified as those that meet the aforementioned standards. Each of these crossings has one or more of the following controlling elements:

1. Pavement Striping
2. Crossing Flags
3. Protective Medians
4. Speed Reduction Signs
5. Flashing Light, with or without a Speed Reduction Sign
6. Crossing Guard
7. Cones or Barrels.

Figure 9 - Controlled Crosswalks (Existing) shows the location of these intersections, with a picture of each crossing. Each pedestrian crossing has the standard white street markings indicating a pedestrian crossing. The majority of the pedestrian crossings in the study are located on collector roads, making up 20 out of the 32 roads, 12 of the 32 are located on arterial roads. The following table represents six different pedestrian accommodations and the amount they appeared at the 32 locations studied. Of the 32 crosswalks studied 29 of them are located around various schools. These schools include: Stuart Jr. High, Harrison Elementary, Twin Falls High School, Bickel Elementary, and College of Southern Idaho.

Table 6: Existing Controlled Crosswalks

Pedestrian Accommodations	Arterial Road	Collector Road
1- Crossing Flags	58%	0%
2- Protective Island	29%	25%
3- Speed Reduction Sign	75%	95%
4- Flashing Light	50%	0%
5- Crossing Guard	25%	15%
6- Cones, Barrels, etc.	25%	25%

The majority of the pedestrian crossings have a speed reduction sign. The majority of the arterial based roads have an additional pedestrian accommodation besides signing due to the higher volume of traffic serviced by this roadway classification.

Existing Public Transit

Existing public transit in the City of Twin Falls is limited. The following options exist to serve Twin Falls:

- As part of the College of Southern Idaho Trans IV shuttle buses have been providing public transportation to the people of Twin Falls and the Magic Valley. A variety of services, including dial a ride, are offered to meet the needs of commuters, students, the elderly, and the disabled.
- Magic Valley Ride Share organizes a rideshare program. The program helps individuals to find a carpool partner for commuting purposes. The goal of the program is to lower the number of single occupant vehicles on the roadways.
- Several senior transportation services exist.
- Rocky Mountain Trailways provides service to Salt Lake City.
- Greyhound Bus service travels from Twin Falls to Boise, Salt Lake City, and Pocatello.

Existing Airport Facilities

The City of Twin Falls currently maintains a regional airport facility in the south portion of the City. This facility serves as a hub for magic valley residents and provides regional service to areas throughout the Western United States. Expansion of the airport and related facilities has been underway in the past several years and is anticipated to continue into the future to meet expected demands.

Existing Truck Routes

For the Twin Falls Master Transportation Plan truck traffic data was collected from three different sources:

- The Snake River Crossing Plan
- Southeast Twin Falls Regional Corridor Study, and
- The Twin Falls County Transportation Plan

Increasing safety, reducing noise levels and reducing pavement impact are all reasons cities restrict truck or heavy vehicle traffic to certain routes. Restrictions may include weigh limits, minimal height clearance design standards or prohibitions on streets that primarily serve recreational or residential land uses. If such restrictions are implemented, the City must make provisions for alternate routes to accommodate all types of vehicle traffic.

Twin Falls is a hub for interstate truck traffic; most of this traffic utilizes US-93 as a north/south corridor. All three of these documents identified both US-93 and US-30 as the main truck routes in the City of Twin Falls. The average percent of trucks on the busiest truck route, US-93, is approximately 11%. The average varies by season with harvest season in the fall being the busiest and winter being the slowest.

Currently truck routes are limited to the existing State Routes. Extensive examination of these conditions and other possible routes were analyzed within the study.

Lighting Conditions

As part of the transportation plan an inventory was taken of the street lighting within the City limits of Twin Falls. The lighting study included key areas within Twin Falls on arterial, collector or state highways as shown on Figure 10. The red diamonds on the figure represent the locations where street lighting studies took place.

Using a light meter a study was conducted on 27 intersections to determine the light level for all travel legs of the intersection. The readings were read at the stop bar with the light meter facing the direction of traffic. This study was conducted between 11:30 pm and 4:00 am and was completed in one night. According to the ANSI / IESNA RP-8-00 as shown in Table 7 the average maintained illuminance for a medium pedestrian intersection (11-100 pedestrian per hour) is 18 lux for an arterial and 16 lux for a collector. For a low pedestrian intersection (0-10 pedestrians per hour) the average maintained illuminance for an arterial is 12 lux and 10 lux for a collector. Table 7 details the results of the study. Based upon the study results it is clear that the vast majority of intersections studied are not adequately lit, and require additional street lighting to provide a safer night environment for pedestrians.

The lighting study associated with the Transportation Master Plan identified areas within the City of Twin Falls that are deficient in nighttime illumination (see Table 7 Lighting Study Results). The lighting conditions of the deficient intersections need improvements to meet the requirements of the City's light policy and the guidelines established in ANSI / IESNA RP-8-00 Table 7 . The results of these improvements will provide a safer nighttime environment for motorists and pedestrians.

Table 7: Lighting Study Results

		Intersection Quadrant			
Intersection	Number of illuminares & location	North (lux)	East (lux)	West (lux)	South (lux)
Falls/Grandview	1 NE corner	1	8.5	1.4	0.5
Grandview/North College	0	0.1	0.1	0.1	0.1
Grandview/Cheney Dr. W.	1SE corner	0.4	8.9	NA	23.1
Grandview/Pole Line	5 Total: two on NW corner, 1 NE, SE, SW	39.5	3.4	7.8	12
Falls/Wendell	1 SW corner	0.2	0	3.2	0
North College/Fillmore	1 NE corner	2	7.7	0.1	0.2
Pole Line/Locust	2 Total: one in N median 1 SE corner	2.9	0.6	0.2	0.9
Pole Line/Madrona	2 Total: NW, NE corner	6.6	0.7	0.9	6.1
Falls/Hankins	0	0.1	0	0	0
Addison/Hankins	1 SW corner	0.4	0.5	11.9	7.5
Orchard/Eastland	1 NW corner	1.2	0.1	0.7	0.1
Orchard/Blue Lakes S.	0	0	0	0	0
Orchard/Harrison	0	0	0	0	0
Park Ave./Harrison	1 SE corner	0.7	2.6	4.1	5
Park Ave./Blue Lakes	0	0	NA	0	0
Locust/4th Ave.	1 W of intersection	6.8	0.9	NA	1.9
Elizabeth/Eastland	2 Total: NW,SE corners NW not on during study	0.6	3.5	0.8	1.4
Eastland/Filer	2 Total: NW not on during study, SW corner on for only the south reading	0.4	0.8	0.3	4.8
Filer/Locust	3 Total: NW,NE, SW corner	11.7	5.2	7.6	7.6
Addison/Locust	3 Total: NW,NE, SE corner	6.2	7.8	5.6	6
Addison/Eastland	4 Total: NE,SE,SW,NW corner	8.3	9.7	36.8	8.2
Addison/Carriage	1 SW corner	0.1	0.1	1	0.1
Falls/Eastland	2 Total: NW, SE corner	1.1	2.9	1	1.8
Falls/Madrona	1 SE corner	0.5	4.6	1.8	5.1
Falls/Locust	2 Total: SW, NE corner	2.6	1.4	2	4.6
Fillmore/Falls	1 SE corner	NA	0.8	0.2	0.3
Harrison/Falls	1 SE corner	NA	1	4.1	17.1
Denotes the values that fall within the acceptable range					

Currently the City of Twin Falls has a street lighting code for new subdivisions, which requires street lights to be installed at intersections throughout new subdivisions (see section 10-12-4-2.N). The City of Twin Falls City's standard street lighting policy also requires street lights at intersections, the end of long cul-de-sacs, and in the middle of long blocks that exceed 920 feet in length.

The recommended illuminance guidelines established by ANSI / IESNA RP-8-00 Table 7 are defined by pavement classification, roadway classification, and pedestrian traffic.

- Pavement classification is divided into concrete and asphalt surfaces.
- Roadway classification is dependent upon the classification of the intersecting roadways.
- Pedestrian use is defined by Low (0-10 pedestrians/hour), Medium (11-100 pedestrians/hour), and High (more than 100 pedestrians/hour). It is estimated that the majority of the intersections in the study meet the Low (0-10 pedestrians/hour) classification during the nighttime hours. However, the amount of pedestrian traffic at the study intersections may require further analysis and was not part of this study.

Roadway Signs, lighting, traffic signal data collection

As part of the initial field data collection of the Transportation Master Plan; roadway signs, street lighting, traffic signals, asphalt width, existing sidewalk and existing curb and gutter were to be collected by Civil Science using GPS survey equipment. This data was collected in conjunction with and integrated into the Twin Falls City wide GIS database. This information was combined with data that Twin Falls City had already collected involving traffic signals, street lighting and street signs.

3. Future Conditions

Having clearly defined goals, strong analysis tools, and identification of known travel deficiencies gives elected officials, City staff and residents the ability to better prepare for the coming transportation challenges and opportunities.

Coordination with the Comprehensive General Plan

The Twin Falls Comprehensive General Plan is the City's principal tool for defining the goals and the vision for the City of Twin Falls. The Comprehensive General Plan also provides the City policy guidance as growth and the corresponding development decisions take place.

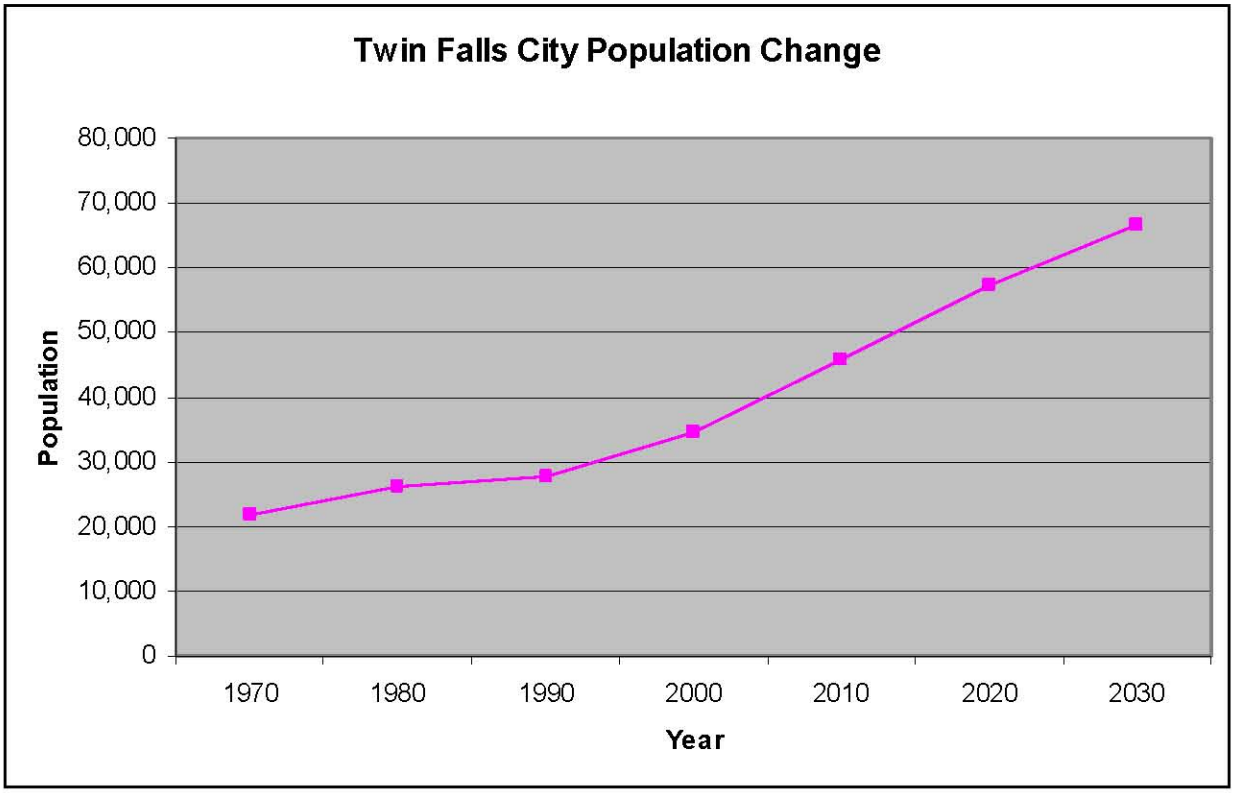
In 2008, the existing Comprehensive General Plan was being updated by the City of Twin Falls in conjunction with LandMark Design Group. Since land use is a cornerstone of the transportation plan, it is imperative that the two efforts are coordinated.

Figure 11 shows the planned land use stemming from the updated Comprehensive Plan effort. This information was then used as the basis to develop future population and employment data that formed the foundation for the travel demand modeling.

Growth and Development

In 2000, Twin Falls' population was 34,469 individuals, up from 27,591 individuals in 1990 representing an increase of 6,878 people according to the U.S. Census. In 2006, Twin Falls population had grown to about 40,000 individuals. The rate of growth is forecasted to continue to increase in the next decade.

Graph 5: Twin Falls Population Change



Source: Idaho Dept of Commerce, US Census Bureau

The state of Idaho, in general, has seen much population growth in the last decade. Idaho was the fifth fastest growing state in the nation from 2000 to 2005; during those years the state's growth was about eight percent. Twin Falls' growth during that time period was approximately 12 percent. By 2010 the City's population is expected to reach approximately 46,000 persons. Based upon the Twin Falls Comprehensive Plan by Landmark, long term forecasts have projected the population of Twin Falls to be 66,500 by 2030. The table below shows the 2000, 2005 and expected future Twin Falls population.

Table 8: Percent Change in Population

Year	Population	5 Year increase
2000	34,469	
2005	38,600	12%
2010	46,000	18%
2015	52,565	15%
2020	57,259	9%
2025	62,031	8%
2030	66,500	7%

Source: Intermountain Demographic

The most current count of Twin Falls dwelling units can be found in the Census 2000. According to Census 2000 data the City contained approximately 15,000 dwelling units. The number of dwelling units needed for the forecasted population is expected to nearly double over the 30 year period. By the year 2030 the City of Twin Falls is expected to contain 28,000 dwelling units. About 83 percent of the total dwelling stock will be single family dwelling units, while the remaining 17 percent will be multi-family units.

Table 9: Dwelling Unit Change over Time

Year	Single Family Units	Multi-Family Units	**Total Units**	5 year increase
2000	11,638	2,519	**14,519**	
2005	13,350	2,867	**16,217**	12%
2010	15,648	3,338	**18,986**	17%
2015	18,151	3,850	**22,001**	16%
2020	19,878	4,204	**24,082**	10%
2025	21,715	4,580	**26,295**	9%
2030	23,505	4,947	**28,452**	8%

Source: Intermountain Demographic

Employment data is generally available at the county level. Infrequently, data is available for individual cities within a county. Therefore, the data in this section is for all of Twin Falls County. Twin Falls City is the major employment center in the county, so many of the conclusions drawn at the county level are relevant to the City of Twin Falls. The table below shows the 2005 total employment and the forecasted employment prediction through year 2030.

Table 10: Employment Change over Time

Year	Total Employment	5 Year increase
2005	36,530	
2010	40,363	11%
2015	43,523	8%
2020	46,880	8%
2025	50,238	7%
2030	53,695	7%

Source: Intermountain Demographic

Table 11: Twin Falls 2006 Major Employers

Employer	Business Type	2006 Number of Employees
Magic Valley Medical Center	Health Care Services	847
Lamb Weston	Food Processing	825
College of Southern Idaho	Education	804
Amalgamated Sugar Co.	Food Processing	373
Twin Falls Clinic Physicians	Health Care Services	300
Glanbia Foods Inc.	Food Processing	200
Longview Fiber	Corrugated Containers	148
Times News Newspaper	Publishing	130

Source: http://community.idaho.gov/Portals/15/Profiles/Community/TwinFallsCity.pdf

Future Forecasts

Travel demand for the roadway network in Twin Falls was modeled for the future years 2015 and 2030. These future year models were based upon the most current Twin Falls City Comprehensive General Plan and socio-economic data, which were gathered by Intermountain demographic.

The stated goal of the City of Twin Falls is to achieve level of service (LOS) C on all roads with the exception of Blue Lakes, which has a future goal of LOS D. The recommended CIP was formulated to achieve these goals in the most cost effective manner.

External Trips

The focus of this section is communicate what percent of trips come from outside of the Twin Falls study area and utilize the street network within Twin Falls. This section provides information on what percent of the total trips are external in nature.

External Stations are used to represent vehicle trips coming to and leaving the Twin Falls study area. Generally speaking external trips represent a smaller portion of the trips as compared to the internal trips. As such the Twin Falls Model has been more intensively focused on internal travel, however the travel demand model can provide external to external and external to internal trips when creating a vehicle trip table.

The travel demand model creates four different types of trips:

- Internal to Internal - The entire vehicle trip stays within the modeled study area of Twin Falls.
- Internal to External - The trip has its origination in Twin Falls and goes to a destination outside of Twin Falls.
- External to External - The vehicle passes through the Twin Falls Study area without stopping.
- External to Internal - The trip has its origins outside of Twin Falls and has a destination within the Twin Falls study area.

The following tables represent the external trips for the Existing Conditions Twin Falls model and the 2030 Capital improvement Plan Twin Falls model.

Existing Model	
External Trips	14%

2030 CIP Model	
External Trips	15%

Two examples of national external station trip data are given as reference for comparison to Twin Falls:

- In *The Calibration and Adjustment of System Planning Models*, the U.S. Department of Transportation, Federal Highway Administration gives several examples of external trips for cities of various sizes. The table is show below.

Urban Area Population	% External Trips
50,000-100,000	21
100,000-250,000	15
250,000-750,000	10
750,000-2,000,000	4

- In *The National Cooperative Highway Research Program (NCHRP) Report 365*, also gives examples of external trip rates for cities of various sizes. The table is shown below.

Location	Population	% External Trips
Chicago	6,070,000	5
Twin Cities	2,464,000	7
San Diego	2,498,000	12
Phoenix	2,122,000	14
Reno	255,000	13
Wausau	37,000	20

Metropolitan Planning Considerations

Federal transportation funding requirements designate that contiguous areas of urban densities exceeding 50,000 people, as determined by the US Census, be designated as Urbanized Areas subject to the Metropolitan Planning Regulations. It is expected within the planning horizon that a Twin Falls Urbanized Area will be designated by the Census Bureau and a Twin Falls Metropolitan Planning Organization (MPO) will be formed to address the federal requirements. Among these transportation requirements is the development of a Continuous, Comprehensive, and Cooperative ("3-C") Planning Process. This planning process will address multi-modal transportation considerations as well as air quality

issues as they relate to transportation. Although it is premature to describe what future planning regulations may entail, it is useful to identify the development of an MPO early in the process to allow the existing planning process to consider metropolitan issues and to begin to explore federally mandated metropolitan planning regulations.

This TMP provides Twin Falls City with the basis to integrate with an MPO and receive federal funds. A MPO generally requires a long range plan be in place, modeling of transportation conditions existing and future, traffic counts and statistics, and estimated costs to construct the projects. This TMP provides each of these items and will be the basis for any further study needed to qualify for federal funds thru an MPO. The actual application process with an MPO for federal funding may require more detailed site specific studies to address issues not covered as part of this TMP. Some of those issues may include, how construction will affect travel conditions, Right-Of-Way acquisition, and other similar requirements.

Inherent in the Metropolitan Planning Process is the need for Twin Falls City, Twin Falls County, and the Idaho Transportation Department to work together to solve mutual planning needs. The Transportation Master Plan (Chapter 4, Recommendations Section) identifies the long term role of various roadways (see Figure 15, Long Term Functional Classification). This classification is developed to assume a general pattern of urban densities spreading from Twin Falls City to suggest future needs for a one-mile grid of arterial streets and a one-quarter mile grid of collector streets, which vary based on topography and known specific demand considerations. By establishing a long term vision of how the street system will function, each entity can work together to define the best way to achieve that function in a manner that does not push funding needs for one agency to another.

Unfortunately, the urgent needs of today often compete with the vision of tomorrow. It is difficult to forecast future traffic safety needs beyond a high level identification of today's safety challenges. Similarly, it is difficult to forecast the individual solutions to intersection challenges, access issues, and related details. These details must continue to be addressed while looking ahead toward long term challenges to ensure that what is built today can last for the longer term. The following section provides a glimpse at the future capacity challenges facing the Twin Falls region. Chapter 4 then addresses the specific programs necessary to meet these long term challenges.

2015 and 2030 No Build Level of Service

2015 and 2030 models were developed to determine the future travel demand for the City of Twin Falls. Figure 12 depicts the 2015 condition and Figure 13 shows the 2030 condition. These figures illustrate the roadway level of service conditions if none of the existing roads are widened and no new roads are built. This data illustrates where traffic congestion is likely to occur under a no-build scenario. This data is valuable to help determine the phasing of travel improvement projects. Certain roadway improvement assumptions were added and coded into the 2015 and the 2030 models. These included:

- Improvements are already programmed to Washington Street from Pole Line to Addison.
- Improvements on Pole Line Road that were recently completed as part of the Twin Falls Alternate Project.

2015 No Build

Figure 12 shows 2015 Level of Service for the City of Twin Falls. Green roads have little or no traffic congestion and correspond to LOS A or B. Yellow roads have a stable flow and correspond to LOS C. Orange roads have some congestion and correspond to LOS D. Although no roads are shown in red in the 2015 map on Figure 12, roads designated with red would have significant traffic congestion and correspond to LOS E or F and may occur during peak travel periods. The width of the roadway indicates the approximate modeled daily volume of these roads. Note that the LOS shown is daily; peak periods may exhibit worse traffic in the morning or afternoon.

In Twin Falls' travel demand model, 2015 forecasts exhibit growing modeled traffic congestion. Limited sections of roadway, such as North College Road and Falls Avenue, are showing congestion problem areas and are shown as LOS E/F on the Figure 12.

2030 No Build

The Twin Falls' 2030 No Build travel demand model forecasts significant modeled traffic congestion as shown on Figure 13. The areas shown as E/F will have significant traffic congestion in the year 2030 if no roads are widened or built. The following roads show congestion in the 2030 no-build scenario:

- Blue Lakes Blvd. The congestion on Blue Lakes Blvd is a result of north/south traffic utilizing US-93 through Twin Falls. The many traffic generators located along Blue Lakes are also adding to the congestion.

- North College. The College of Southern Idaho is a major traffic generator in Twin Falls. The college produces and attracts many vehicle trips to both North College and Falls Ave.

- Filer and Falls. The two roads are acting as main routes connecting the east and west portions of the City and are showing congestion in 2030.

- Grandview. Grandview acts as a relief valve for travelers trying to avoid the congestion on Blue Lakes. Grandview is the first significant road for vehicles coming from the west on Pole Line Road to go south into Twin Falls.

4. Recommendations

This chapter discusses the recommended short and long term transportation network improvements. The recommendations in this chapter will be used for road building and transportation reconstruction projects into the future. Other mobility and safety aspects such as traffic calming, transit and bicycle movement are also discussed in this chapter.

Recommended Functional Class

Many inputs were taken in account when the recommended street classification was developed. The recommended street classification is based upon:

- Goals developed by the City Council, Citizens Advisory Committee, Technical Advisory Committee and public open house comment.
- Existing street network
- Future land use and
- Future traffic movement and congestion

This Transportation Master Plan has focused its analysis on the arterials and collectors within the City of Twin Falls, as these roadways provide for the backbone of the transportation system within the City. The recommended street classifications are shown on Figure 15. Roads not noted as Arterial or Collector are defined to be of Local classification.

Future Street Classification

Revision of Street Standards

These street standards reflect the goals of the City and are consistent with the transportation goals set up by the City Council, public open houses and advisory committees. Street standards have been developed in this Plan for each specific functional classification of street.

Using design speeds as a guideline in designing the street horizontal and vertical alignment is recommended. An established design speed will dictate the horizontal and vertical controls as dictated in the latest revision of the AASHTO Policy on Geometric Design. Arterial Streets are designed to pass traffic at a higher rate of speed. To meet this it is recommended that Arterial Streets have a minimum

design speed of 45 mph. For Collector roads the design speed should be 35 mph while Local roads should be designed at 25 mph.

The City should strive to have all roadways meet the standard cross sections identified in this Twin Falls Master Transportation Plan as shown on Figure 14. The suggestions are provided as recommended widths and configurations, but some situations may need either lane or dimension changes. The modification of these standards may be recommended on a case-by-case basis by the City Engineer. This change should be based on a review of the existing and proposed function of the road, proximity to major intersections, access points, accident history and related technical criteria. The City Engineer may require higher standards, based on best engineering judgment related to the safe operation of traffic flow. Intersections of minor collector streets and higher road classification shall be reviewed for the need for turn lanes and other geometric improvements and are excellent examples of locations where different cross section standards may be required. The City Engineer may also approve alternative standards when those standards can be demonstrated to provide a superior solution to the safe operation of traffic flow. The City Engineer serves as a technical reference for the City. Final decisions and appeals rest with the City Council based on appropriate input and the best interests of the City.

Proposed Arterial Street Cross Sections

Arterial streets are the primary regional transportation routes within Twin Falls. These roads have limited access, higher speeds, and traffic signals only at major cross streets.

92-Foot Arterial

The 92-foot ROW arterial street cross includes four travel lanes and a center turn lane for a total of 62 feet of road surface. Figure 14 shows the proposed arterial cross sections.

Proposed Collector Street Cross Sections

Collector streets serve local trips and provide local access.

78-Foot Collector- 4 Lanes

The 4 lane collector streets have two 12 foot travel lanes in each direction on 48 feet of road surface. Planter strips, curb/gutter and sidewalks make up the remainder of the 78 foot right-of-way.

78-Foot Collector- 3 Lanes

The 3 lane collector streets have the same road surfaces as the 4 lane collectors, however it is configured differently. This street standard has one 12 foot travel lane in each direction, a 12 foot center turn bay, planter strip, curb/gutter and sidewalks within a 78 foot right-of-way. A six feet wide shoulder bike lane corridor is offered in each direction. Figure 14 shows the proposed collector cross sections.

Proposed Local Street Cross Sections

Local streets are designed to offer access from residences to the roadway network. Local streets serve many driveways and provide a collection point to collector or arterial roadways. Local streets should be designed to minimize speed and cut-through traffic while meeting the requirements of emergency vehicles. Local streets are typically placed with driveways on both sides and have a statutory limit of 25 miles per hour. Generally, no striping is proposed on local streets. However, the City Engineer may provide roadway striping consisting of a center yellow line and outside white lines to allow travel lanes no smaller than nine feet as a traffic calming measure. Parking may be restricted on local streets near intersections, in high density or commercial areas, where snow removal or storage issues arise, or at other locations deemed by the City.

50-Foot Local

The 50 foot ROW Local streets include one eleven foot travel lane in each direction, curb/gutter and sidewalks. This cross section includes a seven foot shoulder. The road surface is 36 feet in width.

Truck Routes

Truck restrictions on certain roads may include weight limits, speed limits, minimum height clearance design standards or prohibitions on streets that primarily serve recreational or residential land uses. If such restrictions are implemented, the City must make provisions for alternate routes to accommodate all types of vehicle traffic, as trucks need access to numerous points within the City of Twin Falls.

Recommended truck routes are intended for truck traffic that passes through the City of Twin Falls. If a route is a designated truck route, the truck route is both structurally and geometrically able to handle truck traffic.

This study examined possible alternative route for commercial trucks. Proposed truck routes off the existing State Highways were extensively analyzed and considered. Substantial costs and impacts to provide these routes was anticipated. After significant discussion within the study, the City determined that the continued utilization of the state road facilities for truck routes would best meet the goals of the study when considering anticipated funding limitations.

Accident Rates

By analyzing the specific locations (Figure 5) that are experiencing a high level of accidents steps can be taken to reduce crashes. The list below suggests some methods of lowering the accident rates within the City of Twin Falls.

- Improved signal timing and coordination
- Addition of raised medians, either short or full length
- Closure of unnecessary driveways
- Additional enforcement of the existing laws and restrictions
- Speed reduction
- Improved roadway striping

One or a combination of these methods could be used to lower the accident rate in a high accident area. Engineering studies to determine which measure is appropriate for a given area should be taken before construction begins. Also, additional engineering studies should be done before and after to test the validity of the measures to determine effectiveness. The Recommendations section of this document incorporates some of these techniques into the Master Transportation Plan.

Proposed Roadway Improvements

A Capital Improvement Plan list of projects was assembled to address the LOS and connectivity goals of the Study. This plan as detailed in Chapter 5 provides LOS C conditions on all roadways except Blue Lakes Boulevard, which in the future functions at LOC D, and is consistent with present day conditions.

Roadside Improvements

Based upon the recommended Long Term roadway classification map, additional widening will need to be constructed to bring many of the existing roadways up the proposed master plan width. This proposed width has been outlined in Figure 14 Proposed Typical Cross Sections. These roadside improvements include the following, curb & gutter, sidewalk, and landscaping. Landscaping can also be termed as hardscape which is using decorative rock or some other water friendly landscaping technique. It is recommended that at time of widening of each of the existing roadways that the appropriate roadside features be constructed to bring the particular roadway segment up to the desired width, and include all of the necessary roadside features. It is also recommended that all new roadway construction be required to build the road at desired width, with all necessary roadside features. By requiring the initial roadway construction to be done at proposed master plan width, it prevents the City of Twin Falls from having to come back later and fund both the additional widening of an inadequately constructed roadway, and the roadside features which should be built with the initial construction.

Hotspot Intersections

Many locations throughout the City have been identified as "hotspot" areas. These "hotspot" areas are areas where transportation issues are of a particular concern. These areas have diverse transportation problems including insufficient transportation infrastructure to meet the growing transportation demand. As part of this transportation plan each location was studied in further detail and recommendations for each "hotspot" are presented in this section of the report.

- **Location Number 1**. The intersection of Washington Street and Orchard Drive. Recent evaluation of this intersection warrants a traffic signal at this location. Adding right turn lanes on Orchard Drive will also decrease the congestion experienced at this location.

- **Location Number 2.** The intersection of Blue Lakes Boulevard and Cheney Drive. Signalization of this intersection will address the congestion encountered.

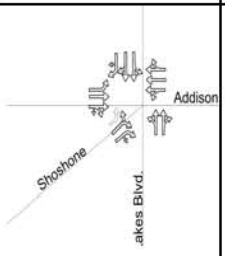
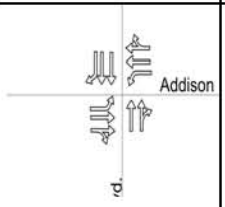
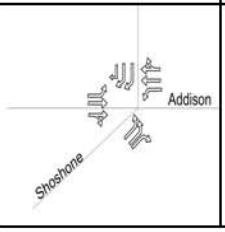
- **Location Number 2a.** Due to the configuration of the intersection of Blue Lakes and Addison, also called the "Five Points Intersection", signal phasing improvements are vital to allow the five leg intersection to accommodate existing and future traffic volumes at an acceptable level of service.

Potential short-term improvements at the intersection may include lane marking changes that facilitate southbound traffic flow. These lane marking changes would allow one of the through lanes from Blue Lakes to Shoshone Street to also act as a southbound through lane for Blue Lakes Boulevard. These lane marking changes may also allow the Blue Lakes southbound through lane to act as a left/thru lane and one of the northbound through lanes on Blue Lakes could also act as a left/thru lane. To accomplish this, the traffic signal phasing would be adjusted so that each leg of Blue Lakes would have its own phase as well as Shoshone Street having a single phase and Addison having two phases to accommodate protected left turns. The south leg of Blue Lakes is wide enough to accept the additional through lane for the distance needed to allow the two through lanes to merge into a single lane. Further evaluation, traffic modeling and study is needed to address the signal phasing and impacts.

Longer-term solutions include additional turn lanes and/or the closure of either Shoshone Street or the southern leg of Blue Lakes Boulevard. New turn lanes at the intersection would provide additional

capacity for future traffic growth while closure of one leg of the intersection would improve intersection safety and performance. However, all of these potential alternatives would require either additional right-of-way or reduce access to either Blue Lake Boulevard or Shoshone Street possibly impacting existing businesses and residents.

The table below shows the level of service of each alternative and the benefits and issues with the implementation of each alternative. Each alternative presented below will require further detailed study.

Alternative	Concept	LOS	Benefits	Issues
No Action		F	• No property impacts • Access to Townsite area via Shoshone and Blue Lake Boulevard • No property impacts	• Poor LOS • No spare capacity for future traffic growth • No left turns from Blue Lakes
Lane Marking Changes		F	• Increased southbound capacity on Blue Lake Boulevard • Access to Townsite area via Shoshone and Blue Lake Boulevard • No property impacts • Left-turns allowed from Blue Lakes	• Lower LOS • No spare capacity for future traffic growth • More conflicting traffic movements
Additional Turn Lanes		D	• Improved LOS • Additional capacity for future traffic growth • Retains full access to Townsite area via Shoshone and Blue Lake Boulevard	• Multiple property impacts • Does not improve conflicting traffic movements
Close Shoshone		C	• Improved LOS • Improves intersection safety • Fewer property impacts than widening • Permits left-turns from Blue Lakes Boulevard	• Eliminates direct access to Townsite area • Potential traffic diversion on residential streets
Close Blue Lake		C	• Improved LOS • Improved intersection safety • Fewer property impacts than widening • Permits left-turns from Blue Lakes Boulevard/Shoshone	• Eliminates access to south Blue Lakes Boulevard • Potential traffic diversion on residential streets

- **Location Number 3**. The intersection of Blue Lakes Boulevard and Falls Avenue. To address the left turn deficiencies an additional turn lane is needed on both legs of Falls Avenue. Additional widening of the existing road would be required to accommodate the proposed turn bays. Relocating the private approaches away from the intersection would also be beneficial if feasible.

- **Location Number 3a.** The intersection of Blue Lakes Boulevard and Filer Avenue. Provide right turn bays on Filer Avenue by widening the existing roadway. This will address the congestion generated by the lack of right turn bays in this area. Relocating the private approaches away from the intersection would be beneficial if feasible.

- **Location Number 4.** The intersection of Washington Street and Addison Avenue. Due to the close approximation of this intersection to another signalized intersection at 2nd Avenue and Addison Avenue it is imperative that these signals are interconnected to function as a cohesive unit. Coordinating the signals will reduce traffic blocking the intersections. Relocating the private approaches away from the intersection would be beneficial

- **Location Number 5.** The intersection of Falls Avenue and Locust Street. Adding right turn lanes to each leg of this intersection in conjunction with extending the turn bays for stacking purposes will address the congestion related to the turning movements. Increasing the through lanes to two lanes extended outside of the intersection would also be beneficial in the operation of this intersection.

- **Location Number 6.** The intersection of Addison Avenue and Carriage Lane. Signalizing the intersection will allow traffic to safely cross and access Addison Avenue. Accommodation of left turn bays on each leg will also improve the traffic flow at this intersection.

- **Location Number 7.** The intersection of Blue Lakes Boulevard and Orchard Drive. To address the turning movement deficiencies additional right turn lanes should be added.

- **Location Number 8.** The intersection of Addison Avenue and Hankins Road. Adding left turn lanes on Hankins Road will reduce the congestion in this intersection. Widening Addison Avenue for right turn lanes will also improve traffic flow.

- **Location Number 9.** The intersection of Eastland Drive and Falls Avenue. Expanding the intersection to accommodate an additional right turn lane from westbound to northbound would allow traffic to pass through this intersection efficiently. These lanes would need to extend beyond the intersection to allow for merging opportunities.

- **Location Number 10.** The intersection of Blue Lakes Boulevard and Kimberly Road also known as East Five Points. To accommodate the north and south bound increase in traffic the intersection should be widened to allow for two extended through lanes in both directions on Blue Lakes Boulevard.

- **Location Number 11.** The intersection of Falls Avenue and Hankins Road. Adding right turn lanes on Hankins Road will address turning constraints at this intersection.

The specific areas and issues are summarized on Figure 16. The possible intersection improvements are highlighted in either red or blue on this figure. A red line denotes the addition of a right turn lane, while a blue line shows the addition of a left turn lane.

Future Signals

As Twin Falls continues to grow and traffic increases, the need for traffic signals at intersections will increase. Twin Falls should continue to watch the intersections with the highest volume and most accidents in anticipation of future need for traffic signals based on the warrants described in Chapter Two Existing Conditions. Figure 17 depicts possible future locations for traffic signals and major intersection improvements.

The *Manual of Uniform Traffic Control Devices* (MUTCD) is the national standard for all traffic control devices on public roads open to travel in accordance with 23 U.S.C. 109(d) and 402(a). The MUTCD states that the need for a traffic control signal shall include an analysis of the applicability of any of eight standard warrants based on a study of the existing operation and safety. The MUTCD further states that the satisfaction of a traffic signal warrant, or multiple warrants, shall not in itself require the installation of a traffic control signal. The investigation of the need for a traffic control signal shall include an analysis of the applicable factors contained in the following traffic signal warrants and other factors related to existing operation and safety at the study location:

- Warrant 1, Eight hour vehicular volume
- Warrant 2, Four hour vehicular volume
- Warrant 3, Peak Hour
- Warrant 4, Pedestrian Volume
- Warrant 5, School Crossing
- Warrant 6, Coordinated Signal System
- Warrant 7, Crash Experience
- Warrant 8, Roadway Network

A traffic control signal should not be installed unless one or more of the factors are met; unless an engineering study indicates that installing a traffic control signal will improve the overall safety and operation of the intersection. A traffic control signal should be not installed if it will significantly disrupt the flow of traffic.

Despite the need for ongoing traffic signal warrant studies, it is important to allow for planning of traffic signals to ensure that signals are not spaced to close to inhibit progression. A review of future traffic volumes in the City has identified locations where traffic signals may be warranted. The City may apply Warrant Number 8, Roadway Network Warrant, to install traffic signals in advance of traffic count or traffic accident support on locations where a future signal is planned and, in the opinion of the City Engineer, will result in an improvement to traffic flow and/or traffic safety.

While traffic modeling does not take the place of detailed traffic signal warrant analysis, certain conditions are used to estimate future traffic signal warrants. The travel modeling was used to generally estimate intersections which serve over 10,000 vehicles per day on the main route and over 5,000 vehicles per day on a cross street as potential signalized locations. However, left turn volumes are often a stronger trigger towards traffic signal warrants. There exists a balance between inconveniencing the major flow of traffic and providing gaps to allow for the safe passage of the minor traffic movement. Regional modeling and the proposed future traffic signal plan should be used as a general guide for the placement of traffic signals, but diligent on-going traffic engineering analysis remains necessary.

Access Management

Access management is the practice of limiting access to land development to preserve the flow of traffic on the surrounding roadways. The preservation of street safety, capacity, and speed are the primary goals of access management. Access management can involve the control of the location, design, and operation of driveways, median openings, and street connections to a roadway. Access management typically involves greater access restrictions on the higher functioning roadways, such as arterial roads, with little or no control on the access to lower functioning roadways, such as local streets.
Access spacing standards allow drivers to process one decision at a time. Through proper spacing, drivers may monitor upcoming conflict points and react accordingly to each conflict. Studies show that the speed of traffic is decreased by 0.25 mph with each additional driveway (1994 Highway Capacity Manual) and that accident rates on a road increase by upwards of three percent with each new access point (TRB Access Management Manual, 2003).

The proper design of driveways and roadway drainage systems are an important component of access management. Design of driveways is generally addressed by the Twin Falls City engineering standards, which define specific details for the construction of the approach

The operations of driveways are generally approved on a case-by-case basis by the City Engineer. Driveways may restrict certain movements, such as left turns, or be constructed with acceleration and deceleration lanes to minimize their impact on the main street. Circuitous access to individual developments may be provided through operational restrictions of access points. Operational analysis of driveways during development approval or as part of subsequent engineering studies of a roadway shall consider the following four main principles of access management:

- Conflict elimination,
- Conflict separation,
- Removing speed differentials from travel or turn lanes, and
- Providing for on-site circulation and storage.

The location of driveways will have a considerable effect on the function of the roadway regardless of the design and operation of each driveway. The location of cross streets and driveways shall be a primary factor in the review of traffic impact studies presented to the City Engineer for approval of access points along with the operational factors addressed above.

Access spacing may be increased by the City Engineer based on localized conditions outlined by the four main access management principles presented above. Requests to decrease access spacing standards may

be granted by the City Engineer provided that a traffic impact study is provided by the developer which documents the preservation of safety, capacity, and speed with reduced access spacing.

Access spacing or driveway spacing is measured from the closest edge (perpendicular tangent section) of the nearest driveway to the center of the proposed driveway. Application of access spacing standards shall consider driveways on the same side of the proposed driveway as well as driveways on the opposing side of the street. Opposing upstream driveways (vehicles approaching from the right of drivers in the proposed driveway) shall be carefully considered due to the conflicts presented with left turns into the proposed driveway.

Table 12: Recommended Intersection Standards

Roadway Classification	Right-of-Way	Curb Radius at TBC	Distance Before First Driveway
Arterial	92 ft	40 ft	300 Foot Minimum (Recommend access onto local and collector roads)
Collector	78 ft	30 ft	75 ft

Public street spacing standards govern the spacing between unsignalized public intersections, which typically accommodate higher traffic volumes than private driveways and access points. High volume private driveways may be held to the standards of public street spacing at the discretion of the City Engineer. Issues associated with public street spacing are similar to those discussed with access spacing, although the minimum spacing standards are greater due to the expected higher traffic volumes. Table 13 shows existing Idaho Department of Transportation standards for intersection spacing on State Highways. This information may be helpful as a guide for some larger City facilities such as Washington Street and Pole Line Road.

This study recommends that the City of Twin Falls continue to restrict access onto Arterial Streets except for Local and Collector Roads at the length restrictions as indicated for a Type III Urban roadway described in Table 13. For Collector Roads all accesses should be shared or adjacent to each other along the property line with no more than one access per lot. For both Arterial and Collector Roads the City should continue to enforce that backing out onto these roads is not allowed.

Table 13: Idaho Administrative Policy A-12-01: 11-27-02

APPROACH/INTERSECTION/SIGNAL SPACING PER ACCESS TYPE

ACCESS TYPE	RURAL/ URBAN	TYPE	APPROACHES		SIGNALS	FRONTAGE ROADS
			INTERSECTION SPACING	APPROACH SPACING	SIGNAL SPACING	
I	R	At-grade	0.25 miles (0.4 km)	300 feet (91.4 m)	0.5 miles (0.8 km)	0.25 miles (0.4 km)
	U	Urban sections shall be upgraded to Type II or greater				
II	R	At-grade	0.25 mile (0.4 km)	500 feet (0.15 km)	0.5 mile (0.8 km)	0.25 mile (0.4 km)
	U	At-grade	660 feet (201.2 m)	150 feet (45.7 m)	0.25 mile (0.4 km)	0.25 mile (0.4 km)
III	R	At-grade/ Interchange	0.5 mile (0.8 km)	1,000 feet (0.3 km)	0.5 mile (0.8 km)	0.25 mile (0.4 km)
	U	At-grade/ Interchange	0.25 mile (0.4 km)	300 feet (91.4 m)	0.5 mile (0.8 km)	0.25 mile (0.4 km)
IV	R	At-grade/ Interchange	1 mile (1.6 km)	NA	1 mile (1.6 km)	0.25 mile (0.4 km)
	U	At-grade/ Interchange	0.5 mile (0.8 km)	NA	0.5 mile (0.8 km)	0.25 mile (0.4 km))
V	R	Interchange	3 miles (4.8 km)	NA	None	NA
	U	Interchange	1 mile (1.6 km)	NA	None	NA

Type I — Is applicable to segments of the State Highway System functionally classified as major collectors. All major collectors shall be upgraded to a minor arterial or higher class once located within an urban area.

Type II — Is applicable to segments of the State Highway System functionally classified as minor arterials and some selected segments classified as major collectors that exhibit characteristics of minor arterials.

Type III — Is applicable to segments of the State Highway System functionally classified as principal arterials. Type III can also be applied to selected segments classified as minor arterials but exhibiting characteristics of principal arterials.

Type IV — Is applicable to segments of the State Highway System functionally classified as principal arterials and have two or more through lanes in the same direction of travel. The highway may or may not be divided.

Type V — Is applicable to State Highways accessible only by interchanges (ramps). All at-grade intersections, including those with railroads are prohibited. These highways typically include the Interstate System and require FHWA approval for any change in access.

Table 14: Twin Falls Minimum Access Spacing Standards

Roadway	From	To	Signal Spacing (feet)	Intersection Spacing (feet)	State Hwy
Falls	Grandview	Hankins	1320	300	No
Washington	Pole Line	Addison	1320	300	No
Grandview	Pole Line	Orchard	2640	300	No
Filer	Grandview	Hankins	1320	NA	No
Hankins	Falls	Orchard	2640	300	No
Eastland	Cheney	Orchard	2640	300	No
Arterials such as Blue Lakes, 2nd Avenue north and west, Addison, Kimberly and Washington Street south			2640	1320 (as feasible)	Yes

Pedestrian Accommodation

Our recommendations are similar to the current crosswalk application within Twin Falls City. For Arterial streets we recommend placement of additional pedestrian accommodation in the form of crosswalks where determined as appropriate by a pedestrian traffic study. Collector roads may not need an additional accommodation besides a speed reduction sign but locations should be considered on a case by case basis by Twin Falls City Engineering staff. Crossing Flags have been found to be somewhat effective and are a low cost accommodation, particularly when used on arterial streets.

The City may also consider protective islands as an effective pedestrian accommodation. According to a study by the FHWA, protective islands on multi-lane minor and major arterials are essential. Protective islands allow pedestrians to determine a safe crossing gap for one direction of traffic at a time. Older and younger pedestrians have reduced gap acceptance skills and it's more difficult for them to cross multi-lane arterial streets without a protective island. Protective islands can be kept simple with a low cost and a low maintenance. Protective islands may be considered on collector roads that have higher traffic volumes and higher speeds. Flashing lights and crossing guards are of high importance near elementary schools and should be applied in appropriate areas as determined by a pedestrian traffic study.

Recommended Bike Lanes

Currently in the City of Twin Falls bike routes share travel lanes with motor vehicles. This pattern reflects the current state of the development of the Twin Falls bicycle route system. In the future, the travel network should reflect a balance of multiple uses which share the roadway, including a preferred bike lane which is exclusively designated and signed for cyclists. After consultation with the City staff and advisory committee members, a recommended Bike Facilities Map was prepared as shown in Figure 18. This map was coordinated with the multi-use pathways being proposed by the Comprehensive Plan to provide an interconnected network of facilities geared to non-motorized use.

Section 217 of Title 23 of the U.S. Code provides the enabling legislation for the integration of bicycling and walking into the transportation mainstream. The Federal Highway Administration's Office of Human and Natural Environment is responsible to carry forth the mandate to promote bicycle and pedestrian transportation accessibility, use, and safety through its Bicycle and Pedestrian Program. The Idaho Transportation Department [ITD] is responsible for the design and construction of non-motorized

facilities on state roads under their jurisdiction. On local roads, the City of Twin Falls is responsible for taking ownership to develop integrated local transportation network.

Specific goals and objectives should be considered when establishing multi-use corridor segments as follows:

- Improve and maintain the current areas as part of an overall ongoing roadway maintenance program.
- Include planning for multi-use corridors as part of road projects including rehabilitation, capacity improvements, pavement maintenance and re-striping efforts.
- Seek federal, state and local funding opportunities to enhance facilities
- Promote multi-use transportation facilities.
- Establish an Advisory Committee to the Planning and Zoning Department. This will assist City officials and City staff to work with various users to design a multi-use travel network that provides adequate connectivity.

Bike Lanes and Roadway Design

The skill and ability level of multiple uses should be taken into consideration when determining the type of facilities to select. As bike lane corridors are implemented, consideration should be given to providing a balance of facilities that reflect local use. As well, consideration should be given to providing connectivity to other modes of transportation. Opportunities for re-striping can include creating multi-use areas to provide lanes of safety. Additionally, as new roads are being designed, constructed or reconstructed, consideration should be given to developing these corridors at safe widths and in acceptable locations.

Figure 18 is a map of the recommended bike lanes and bike routes in Twin Falls. This map has been coordinated with planned "off street" multi-use trails to ensure connectivity and compatibility of use throughout the City.

Future Public Transit

As the City of Twin Falls continues to grow and reaches a population of 50,000, investing in public transit should become a goal that the City is striving for. Public transportation will add to the quality of life for the citizens of Twin Falls. A public transportation system for Twin Falls should include the following goals:

- To provide transportation options that will assist in reducing auto dependency in Twin Falls
- To provide high-quality transportation options that meet the needs of Twin Falls Commuters

- To promote economic development by providing additional transportation linkages to and from the commercial areas of the City
- To coordinate and assist in providing transportation service to the elderly, disabled, or transportation disabled populations of Twin Falls including youth.

Twin Falls faces many challenges when trying to meet the mobility needs of its residents. The City should work towards conducting a feasibility study that would identify the capital and human resources needed to provide increased mobility for those in the local area who do not use, or do not wish to use, an automobile for transportation. The feasibility study could be conducted in conjunction with the Idaho Transportation Department. Further, coordination with the Idaho Transportation Department is necessary to determine an appropriate timeline and guidance on securing funding from the Federal Transit Administration for a local fixed route or an on demand response public transportation.

Lighting

It is recommended that the lighting study results be examined by City staff to fully identify the determine the cause of the reported deficiencies. For example, existing equipment could be malfunctioning, poorly positioned, not present at the intersection, or have objects impeding the street lights. A visual inspection of existing equipment may determine whether or not the luminaire is functioning, whether or not the clarity of the glass/plastic cover is impeding the light, and/or the need to remove any trees, bushes, or signs that may be casting shadows into the intersection. The positioning of the luminaire could also affect the effectiveness of existing equipment. The height, rotation, and length of the luminaire arm should be considered.

As the City of Twin Falls continues to experience growth it is possible that development plans are in progress that may help to improve the deficient intersections. For example, the intersection of Grandview Drive/Pole Line Road will likely receive upgrades with the construction of the hospital. Plans to improve the intersection of Falls Avenue/Hankins Road are also in process. The remainder of the deficient intersections that are not likely to receive development-based upgrades should be addressed based on pedestrian use. For example, the intersection of Falls Avenue/Eastland Avenue is prone to have more pedestrian traffic than the intersection of Orchard Avenue/Blue Lakes South. Additional light fixtures should be considered to attain the recommended illuminance.

The lighting study examined existing intersection to determine if additional street lighting is needed to increase pedestrian safety. Locations that were studied are shown on Figure 10. Also additional street lighting or relocation of street lighting is part of the overall widening process. During the Transportation Master Plan study, 27 intersections were studied to determine if the existing lighting adequately met the IESNA RP-8-00 criteria. The study results can be seen on Table 7. The intersections studied, were chosen based on public comments stating that these were high pedestrian traffic intersections.

5. Capital Improvement Plan

Chapter 5 defines a capital improvement plan. Implementing the improvements recommended in this document requires the coordination with the proper agencies, developer contributions to the transportation system as new development occurs and a local commitment to pay for and implement needed improvements. This section identifies the capital improvement plan for the City of Twin Falls.

Capital Improvement Plan by Phase

The improvement transportation priorities identified in this Transportation Master Plan reflect the goals that were identified by the City. The stated goal of the City of Twin Falls is to achieve level of service (LOS) C on all roads with the exception of Blue Lakes, which has a future goal of LOS D. These goals were used to guide the development of the Capital Improvement Plan (CIP). This chapter identifies the main components of projects that are anticipated to be needed by a particular time, and a planning level cost estimate for each improvement. The recommended improvements are separated into two phases: 2015 and 2030. These improvements are for collector streets and above. Local street improvements may be required, but are not included in the CIP. Trails and related pedestrian improvements are also not included in the CIP.

The CIP has three main objectives:

- To identify an estimated cost for each needed transportation improvement
- To identify the implementation time frame for each transportation improvement
- To identify the location of the needed transportation improvement

Figure 19 represents the Capital Improvement Plan. The location, improvement, goals met and estimated cost are all included in this figure.

The costs included in the figure are road base, asphalt, curb/gutter and sidewalk. Engineering costs, utilities and contingencies were also included in the cost estimates. Cost estimates were developed assuming full reconstruction of the existing pavement section where widening was needed. The costs are inflated based upon the phased construction schedule. Details of the cost estimates are included in Appendix. B.

When budgeting for transportation improvements, it is important that a review of the Twin Falls City Capital Improvement Plan (CIP) be referenced. The CIP provides a short-term (2015) priority list of transportation improvements that are generally taken from the long-term (20 plus years) list of the

Transportation Master Plan. This will help to ensure that elected officials, staff, and residents understand the financial need for current and future budgets.

As part of the Transportation Master Plan an associated list of roadway improvement projects was initially created by Twin Falls City Personnel. This list comprised the Capital Improvement Plan or CIP list. The initial CIP was based upon City personnel's experience, understanding of the overall transportation system, and knowledge of funding criteria, and challenges. As the TMP was being developed and the transportation model was calibrated the 2030 LOS was developed and the CIP was adjusted to address the future LOS at a level E/F which puts the roadway in a state of failure, (see Figure 13 2030 No Build Level of Service). As shown in the map, Blue Lakes Blvd will have a LOS of E/F, portions of Falls, Filer, and Grandview will also be LOS E/F. North College is shown as E/F, but instead of making improvements to the roadway itself, Twin Falls City has proposed a new roadway that would extend Cheney to the east and tie into North College, (see Figure 19 - Capital Improvement Plan). This new roadway would move traffic along a different route that corresponds with future plans of Twin Falls City.

The CIP not only addresses those roadways that fall into LOS E/F, but it looks at improving the overall transportation system. Without CIP suggested improvements, and based on the travel demand model, Eastland Drive would function at a LOS of A/B & C through most of the corridor, with only a mile section falling into the D category. The CIP looks to improve this corridor as a means for through traffic to bypass Blue Lakes. As part of this project a grade separated Railroad crossing is proposed, and incorporated into the CIP. This will be either an overpass or underpass, with the selected type being determined at a later date. Additionally, without implementing the suggested CIP improvements Hankins Road would have a three-quarter of a mile section that falls into the LOS D category.

Cost Estimate Worksheet

CIP Cost Estimate Development

Calculating cost estimates for CIP projects was a process that involved determining item unit costs, identifying those sections of necessary roadway construction and recommending how best to phase the construction costs over time.

Items that were considered in the cost estimation of these roadways included: Asphalt, Leveling & Base Course, Sidewalk, Curb & Gutter, Right of Way, Utility Easements, Landscaping and other relevant items. Each of these items was quantified using GIS to determine the estimated amount of each item necessary to widen the existing roadway to the desired width. Once roadway and roadside items were quantified unit costs were assigned to each to establish an estimated cost per item. Unit costs were derived from current ITD project information, municipal government projects in the area, and area contractors. The costs reflected in this study are present day dollars. Table 15 shows the present day cost for each project, and also an inflationary cost associated with the phasing year. This inflationary cost uses 5% inflation until the year 2015 then 3.5% inflation is used thereafter.

The CIP list is a list of projects that will help to eliminate those areas where in the future the LOS will fall below the stated LOS goals established for this study. Most of the projects on the CIP are along arterial roadways, which are recommended to be 5 lanes based on the recommended TMP cross section shown in Figure 14. Because of the cost to construct all of these to the recommended width of 5 lanes, the CIP recommends 4 lane sections be constructed to address capacity and that the right-of-way for the additional 5th lane also be acquired. This will allow for future widening to accommodate the 5th lane as

necessary. See Table 15 for this information. The CIP table shown on Figure 19 is slightly different than Table 15 as it shows the estimated costs to construct the CIP projects excluding the additional ROW.

Table 15: CIP List

Twin Falls City
Master Transportation Plan
CIP List
(Including R/W for Median Lanes on Arterials)

Project ID #	Street	From	To	Improvement	Preliminary Cost	Phase	Cost at Phase with Inflation
1	Falls	Washington	Grandview	Widen to 4 lanes	$3,418,119	2015	$4,809,637
2	Falls	Locust	Eastland	Widen to 4 lanes	$2,361,062	2030	$5,565,929
3	Falls	Blue Lakes	Locust	Widen to 5 lanes	$377,111	2015	$530,632
4	Blue Lakes	Kimberly	Addison	Widen to 3 lanes	$2,917,834	2030	$6,878,456
5	Washington	Pole Line	Addison	Widen to 5 lanes	In Process		
6	Grandview	Filer	Falls	Widen to 3 lanes	$1,446,066	2030	$3,408,933
7	Filer	Grandview	Blue Lakes	Widen to 3 lanes	$3,891,866	2030	$9,174,623
8	Filer	Locust	Madrona	Widen to 4 lanes	$587,502	2030	$1,384,967
9	Hankins	Addison	4th Ave.	Widen to 3 lanes	$3,000,106	2030	$7,072,403
10	Cheney	Parkview	North College	New road/ 3 lanes	$6,622,357	2015	$9,318,321
11	Eastland	Candleridge	Addison	Widen to 4 lanes	$16,334,009	2015	$22,983,591
	Eastland	Addison	Orchard	Widen to 3 lanes			
12	Addison	Morningside	Juniper	Widen to 5 lanes	$1,206,921	2015	$1,698,259
TOTAL: Costs include additional R/W for median lane to meet Master Plan Width					$42,162,953 (current day dollars)		Inflation 5% until 2015 then 3.5% thereafter

Intersection Improvements to be completed as part of CIP Corridor Improvements

As part of the development of the CIP projects, several intersection areas will require improvement. In order to understand the proportionate share of these intersections, the following table is provided. It should be noted that intersection costs are included with the total CIP costs shown in Table 15.

Table 16 CIP Intersection Costs

Twin Falls City
Master Transportation Plan
CIP Intersection List

ID #	Street	From	To	Improvement	# of Intersection Improvements	Cost	Phase
1	Falls	Washington	Grandview	Widen to 4 lanes	2	$600,000	
2	Falls	Locust	Eastland	Widen to 4 lanes	0	$0	
3	Falls	Blue Lakes	Locust	Widen to 5 lanes	0	$0	
4	Blue Lakes	Kimberly	Addison	Widen to 3 lanes	0	$0	
5	Washington	Pole Line	Addison	Widen to 5 lanes	0	$0	
6	Grandview	Filer	Falls	Widen to 3 lanes	0	$0	
7	Filer	Grandview	Blue Lakes	Widen to 4 lanes	3	$900,000	
8	Filer	Locust	Madrona	Widen to 4 lanes	1	$300,000	
9	Hankins	Addison	4th Ave.	Widen to 3 lanes	1	$300,000	
10	Cheney	Parkview	North College	New road/ 3 lanes	3	$900,000	
11	Eastland	Candleridge	Addison	Widen to 4 lanes		$300,000	
	Eastland	Addison	Orchard	Widen to 3 lanes	1		
TOTAL:						$3,300,000	

In assigning a cost of Intersection Hot Spot improvements, recent projects of a similar nature were used as well as professional experience to determine an estimated cost. The table shown below outlines the preliminary costs of each of these intersections. It should be noted that these costs are separate from the intersections that are incorporated as part of planned CIP projects. Additionally the intersection of Washington South and Orchard Blvd is scheduled to be completed in 2010. The intersection improvements outlined, as well as the associated CIP projects incorporate Americans with Disabilities Act (ADA) requirements in planning and cost estimating.

Table 17 Intersection Hot Spots

Intersection ID	LOCATION	CONDITION	PRELIMINARY COST
1	Washington & Orchard	Congestion, Poor Turning Conditions	$400,000
2	Blue Lakes & Cheney	Heavy Congestion	$250,000
2	Blue Lakes & Addison "Five Points Intersection"	Congestion, Confusion, Lack of Some Turning Lanes	$250,000
3	Blue Lakes & Falls	Heavy Congestion, Turn Lane Deficiencies	$400,000
3	Blue Lakes & Filer	Heavy Congestion, Turn Lane Deficiencies	$250,000
4	Washington & Addison "West Five Points Intersection"	Congestion, Operational Conflicts with North 2nd Ave	$100,000
5	Falls & Locust	Congestion, Turn Lane Deficiencies	$250,000
6	Addison & Carriage	Congestion	$300,000
7	Blue Lakes & Orchard	Truck Traffic, Turning Deficiencies	$400,000
8	Addison & Hankins	Congestion, Turning Conflicts	$400,000
9	Eastland & Falls	Turn Lane Deficiencies. Free Right Turn Island	$100,000
10	Blue Lakes & Kimberly "East Five Points Intersection"	Congestion, Confusion	$500,000
11	Falls & Hankins	Congestion, Turn Lane Deficiencies	$200,000
TOTAL			**$3,800,000** (current day dollars)

Roadside Deficiencies – Improvement Costs

Using GIS database tools it was determined that there are approximately 15 linear miles of missing curb & gutter and 43 linear miles of missing sidewalk and landscaping/ hardscape. The estimated cost for deficient curb and gutter is $1.7 million, sidewalk $5.1 million and landscaping/hardscaping is $ 3.7 million.

Lighting Improvements

Based on the results of the lighting study, it is recommended that additional lighting be placed at all intersections in the study and that remaining intersections be evaluated to determine compliance with IESNA RP-8-00. It is recommended that four (4) lights be placed on all non signalized intersections to provide for pedestrian safety. An intersection requiring 4 lights will cost an estimated $16,000 for poles and luminaires.

Capital Improvement Projects

Falls Avenue

Washington Street to Grandview Drive

Currently Falls Avenue from Washington Street and Grandview Drive provides access to many residences, and functions as a connector to Washington Street and Grandview Drive. To meet the transportation master plan cross section of 78 feet of right-of-way, 4 lanes, and 48 feet of road surface several roadway and roadside improvements are needed. A pavement width of 48 feet requires up to 28 feet of additional pavement width in the area of Blake Street to Bracken Street. Additional right-of-way acquisition between 8-28 feet is needed throughout this road section. Extensive sidewalk, curb and gutter improvements are also needed throughout this entire section of roadway.

Falls Avenue
Locust Street to Eastland Drive

Falls Avenue from Locust Street to Eastland Drive provides access to many residences and mobility as an east west arterial off of Blue Lakes Boulevard. This section of Falls Avenue currently has 2 travel lanes throughout. To meet the transportation master plan cross section of 78 feet of right-of-way, 4 lanes, and 48 feet of road surface several roadway and roadside improvements are needed. A pavement width of 48 feet requires up to 10 additional feet of pavement in some sections. Right-of-way acquisition requires up to 18 feet in the area near Madrona St. Sidewalk, curb and gutter improvements will be needed throughout the entire roadway section due to the widening of the roadway to one or both sides.

Falls Avenue
Blue Lakes Boulevard to Locust Street

Falls Avenue from Blue Lakes Boulevard to Locust Street is a short section arterial roadway which connects a commercial area of Twin Falls to a residential area. This current roadway transitions from 5 lanes and 60 feet wide at the Blue Lakes intersection to 4 lanes and 50 feet wide until Locust Street. To meet the transportation masterplan cross section of 92 feet of right-of-way, 5 lanes, and 62 feet or road surface some roadside and roadway improvements are needed. A pavement width of 12 additional feet is needed throughout. Twenty-seven feet of additional right-of-way is needed throughout this road section. Sidewalk is needed on the south side due to the widening of this roadway section.

Blue Lakes Boulevard
Addison Avenue to Kimberly Road

Blue Lakes Boulevard from Addison Avenue to Kimberly Road is a one mile section of developed roadway through Twin Falls City. Currently, this roadway varies in width from 26 feet to 50 feet wide with 70 feet of right-of-way and 2 lanes. To meet the transportation master plan cross section of 78 feet of right-of-way, 3 lanes with striped bikeways, and 48 feet of road surface several roadway and roadside improvements are needed. A pavement width of up to 22 additional feet is needed throughout this roadway section. Right-of-way width acquisition is minimal at 8 feet. Extensive sidewalk, curb and gutter, and lighting improvements are needed due to the roadway being widened to one or both sides throughout.

Grandview Drive
Falls Avenue to Filer Avenue

Grandview Drive from Falls Avenue to Filer Avenue is an arterial roadway running through an agricultural and residential area of Twin Falls City. Currently this half-mile section of roadway varies between 30 and 40 feet in pavement width with nearly 80 feet of right-of-way and 2 travel lanes. To meet the transportation master plan cross section of 78 feet of right-of-way, 3 lanes with striped bikeways, and 48 feet of road surface some roadway and several roadside improvements are needed. A pavement width between 8 and 18 feet is needed. Minimal right-of-way acquisition is needed from Sage Mesa Court to Filer Avenue. Extensive sidewalk and curb and gutter, pedestrian ramps, and street lights are needed throughout due to current deficiencies in these areas.

Filer Avenue
Grandview Drive to Blue Lakes Boulevard

Filer Avenue from Grandview Drive to Blue Lakes Boulevard is a collector roadway running through a residential and agricultural area of Twin Falls City. Currently this nearly 2 mile section of roadway is 2 lanes with a pavement width between 30 and 42 feet and a right-of-way width of 50 feet in most areas. To meet the transportation master plan cross section of 78 feet of right-of-way, 3 lanes with striped bikeways,

and 48 feet of road surface some roadway and several roadside improvements are needed. A pavement width between 6 and 18 feet is needed. Nearly 28 feet of additional right-of-way width acquisition is needed. Sidewalk, curb and gutter is needed throughout especially from Sparks Street to east of Wendell Street and from Fillmore Street to Washington Street.

Filer Avenue
Elm Street to Madrona Street

Filer Avenue from Elm Street to Madrona Street is a collector roadway running through a residential area of Twin Falls City and is bordered on the North by a school. Currently this section of roadway has a pavement width of 42 feet with 54 feet of right-of-way and 2 travel lanes. To meet the transportation master plan cross section of 78 feet of right-of-way, 4 lanes, and 48 feet of road surface several roadway and roadside improvements are needed. Right-of-way acquisition of 24 feet is needed. A minimal 6 feet of pavement width is needed to meet the cross sections specifications. Extensive sidewalk is needed due to deficiencies on the West side and the widening on the east side of the roadway.

Hankins Road
Addison Avenue to 4th Avenue East

Hankins Road from Addison Avenue to 4th Avenue East is an arterial roadway running through a agricultural and residential area of Twin Falls City. This area is currently less developed than other areas. This ¾ mile stretch of roadway is 2 lanes with a pavement width between 28 and 44 feet and a right-of-way width of 50 feet. To meet the transportation master plan cross section of 78 feet of right-of-way, 3 lanes with striped bikeways, and 48 feet of road surface some roadway and several roadside improvements are needed. Right-of-way acquisition of 28 feet is needed throughout the roadway section. Additional pavement width of 20 feet is needed from Addison Avenue to Saphire Drive and 4 feet from Saphire Drive to north of Vickie Lane. Extensive sidewalk, curb and gutter improvements are needed along the side that is widened.

Cheney Drive
Parkview Drive to North College Road

Cheney Drive from Parkview Drive to North College Road is a future collector roadway which will provide better access to CSI. This road does not currently exist. The transportation master plan cross section for this road is 78 feet of right-of-way, 3 lanes with striped bikeways, and 48 feet of road surface.

Eastland Drive
Candleridge Drive to Orchard Drive
Addison Avenue to Orchard Drive

Eastland Drive from Candleridge Drive to Orchard Drive is a 3.5 mile arterial roadway section running through residential, commercial, and agricultural areas of Twin Falls City. Current right-of-way widths are between 45 and 88 feet. Current pavement widths are between 35 and 52 feet. From Candleridge Drive to Addison Avenue several roadway and roadside improvements are needed to meet the transportation masterplan cross section of 78 feet of right-of-way, 5 lanes and 48 feet of road surface. Sidewalk, curb and gutter is needed throughout especially near Addison Avenue. Right-of-way acquisition of up to 48 feet is needed. Pavement widths between 3 and 20 feet are needed throughout. Extensive sidewalk, curb and gutter, and lighting improvements are needed throughout this section of roadway due to deficiencies and the widening. Additionally the estimated cost of this project was costed using a thicker pavement section. A thicker pavement section was used based upon the potential of Eastland being used by a larger than normal percentage of large trucks. Currently Washington Street North is currently being designed

using this thicker pavement section, because it also may be used as a truck route alternative to the current route of State Highways.

Addison Avenue
Morningside to Juniper
This CIP project was on the original expanded CIP list. It was originally removed from consideration as suggested improvements are not directly related to LOS considerations. Based on comments form the TAC and CAC committees it was recommended that this project be inserted back into the CIP list. Currently this section is 4 lanes, but the CIP project would widen the roadway to 5 lanes and is scheduled to be completed with in the next 5-10 years.

Alternatives / Phasing

At the onset of this Transportation Master Plan the CIP encompassed a larger and broader list of projects to be undertaken. This initial list was developed by Twin Falls City staff in conjunction with their impact fee consultant. Based upon input from the TAC, City Council, City Staff, and modeling from the transportation engineering consultant the initial CIP was trimmed down to the 11 projects shown in this Transportation Master Plan. The initial CIP phasing looked at a short term horizon 2015, long term 2030, and an ultimate 2050. Traditional master planning horizons are approximately 25 years, and therefore the 2030 time frame was implemented in this study. In addition, the Comprehensive Plan that is currently being updated, was used as an underlying basis for this Transportation Master Plan and CIP. The comprehensive plan provided information regarding economic and population growth. Utilizing this information as a backdrop the CIP phasing was developed with forecasted transportation system demands in mind. The final phasing incorporates the input of; Twin Falls City Staff, Updated Comprehensive Plan, Technical Advisory Committee, Community Advisory Committee, Twin Falls City Council, Public Comments, transportation modeling, and professional experience.

Capital Improvement Plan Level of Service by Phase

Traffic model results including interim year runs were used to determine the phasing of the proposed Capital Improvement Projects. The model initially looked at a 2015 time frame and then at a 2030 time frame. Initially both of these model year runs were conducted under a no-build assumption to ascertain needs based upon traffic growth. Based on the results from the model runs, it became clear that by 2015 that Eastland, Falls, and North College would be three of the roadways that would need to be widened to alleviate the projected traffic loads. Because an extension to Cheney Drive has been talked about and is planned by the City of Twin Falls, building this roadway will create an alternate route, thus alleviating potential demands on North College, and thus allowing North College to remain sized as it is now. The 2030 model showed sections of Hankins, Blue Lakes, Filer, Grandview, and Falls that will need widening to alleviate the projected traffic demands. The assigning of phasing also considered distribution of costs to maintain a sustainable financing approach.

Maintenance Needs

Pavement Management Program

A pavement management program was implemented as part of this Transportation Master Plan and will be an ongoing program to be implemented by the City of Twin Falls. Civil Science and American GeoTechnics conducted the initial data capture and integration into MicroPAVER software package. This initial data capture phase, was conduced on a percentage of the overall transportation system, and focused on collector and arterial grade roadways. In order for the pavement management program to be fully realized, more data needs to be collected to establish a historical view of pavement conditions. To collect this data a study on the remaining roadway will need to be conducted to obtain a Pavement Condition Index or PCI as well as yearly collection of data in the areas already completed. Integrating this PCI data into the MicroPAVER software package, which has the capability to develop 5, 10, 15 year maintenance plans for each roadway section, will provide the City with a City wide understanding of the transportation maintenance needs. In addition, it also has the capability to provide a cost estimating tool to assist the City in planning for the financial aspect of roadway maintenance.

Funding Sources

At present Twin Falls City relies primarily on local funding sources for the development and maintenance of the transportation network. This includes local taxes and fees that are very limited in scope at approximately $750,000 dollars per year. Currently much of the transportation infrastructure is built as residential and commercial development occurs. This approach will likely continue but the City has begun to consider other local funding sources to address projected needs. This has included an on-going City study to evaluate the possible implementation of impact fees. This impact fee study initially proposed a number of projects which made up the initial CIP used in the alternative evaluations performed in this Transportation Master Plan study. At the conclusion and adoption of this study it is anticipated that the Impact Fee Study will incorporate the aforementioned list of projects into that analysis.

Local Improvement Districts provide a funding opportunity through the implementation of fee structures applied to a specific area and a specific user base. This approach has been utilized for other infrastructure elements in the City in the past although this approach may provide difficulty in appropriately segregating the cost versus the value of the facilities. This dilemma exists as roadway are traditionally used by a broad constituency of users rather than simply those within a geographic area underlying the formulation of the district.

New revenue local revenue sources are currently being considered on several legislative fronts to assess use fees to outside users of local transportation systems. Although these have not received statutory approval the City should observe these discussions closely as the City's transportation network receives use by Magic Valley users that do not reside in Twin Falls.

At present there are limited opportunities for funding of local improvements through state and federal sources. This currently involves coordination with the Local Highway Technical Assistance Council (LHTAC) for federal funds that are very competitive in nature. Recently the City was successful in receiving federal earmark funds for Improvements on Washington Street. Additional efforts in this regard would be recommended to address an anticipated shortfall of recommended improvements against existing local funds currently being accrued.

As Twin Falls grows beyond 50,000 in population they will qualify under Metropolitan Planning Organization (MPO) status. This will allow for additional federal opportunities in the form of urban roadway, transit, congestion management, enhancement and other related funds.

Local option taxes are source of potential funding. In order for this source to be realized it will need to be approved by state legislation. Legislative study and discussion have been offered in recent sessions and will likely receive continued dialogue and study.

Appendix A – Figures

Twin Falls City
2008 Transportation Master Plan
Landmark Existing Land Use

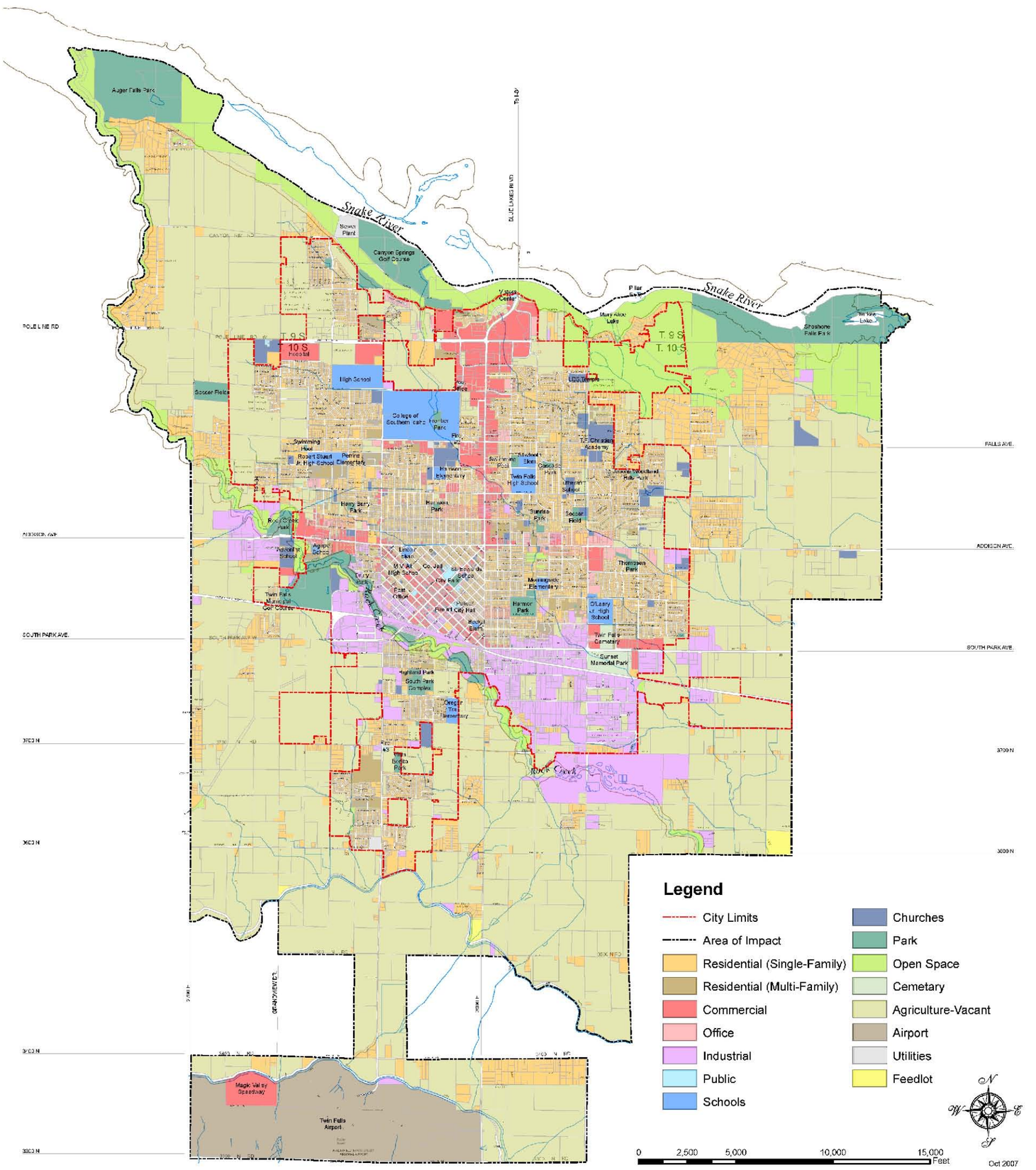


Figure 1
Existing Land Use

This Map came from the Comprehensive Plan that was being updated by LandMark in conjunction with this TMP

26 June 2008

Twin Falls City
2008 Transportation Master Plan
Existing Roadway Classification

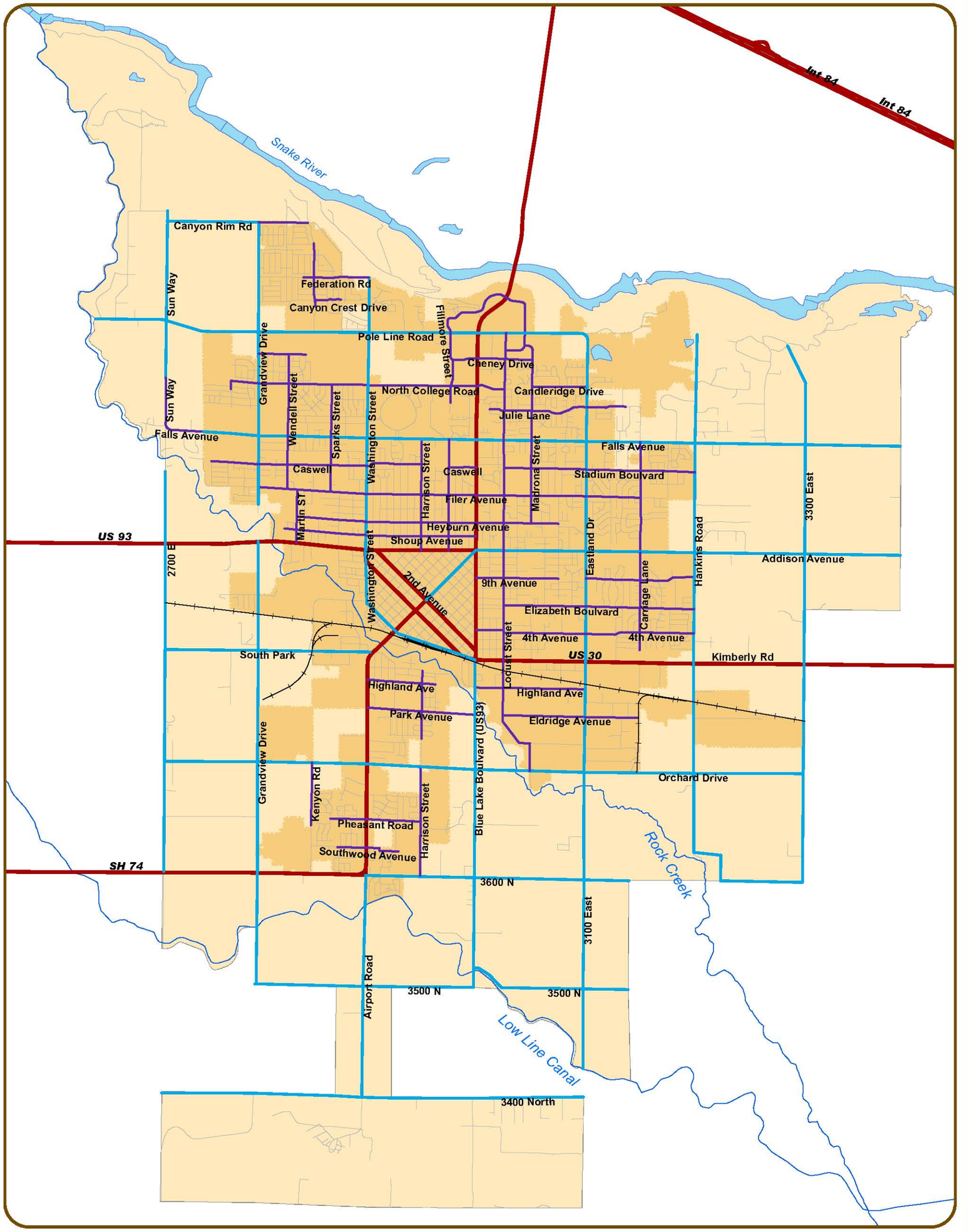


Figure 2
Existing Road Classification

Legend

Street Classification
- Arterial
- Collector

- State Highways
- Twin Falls City Boundary
- Area of Impact (Study Area)

12 March 2008

Twin Falls City
2008 Transportation Master Plan
Existing Signals

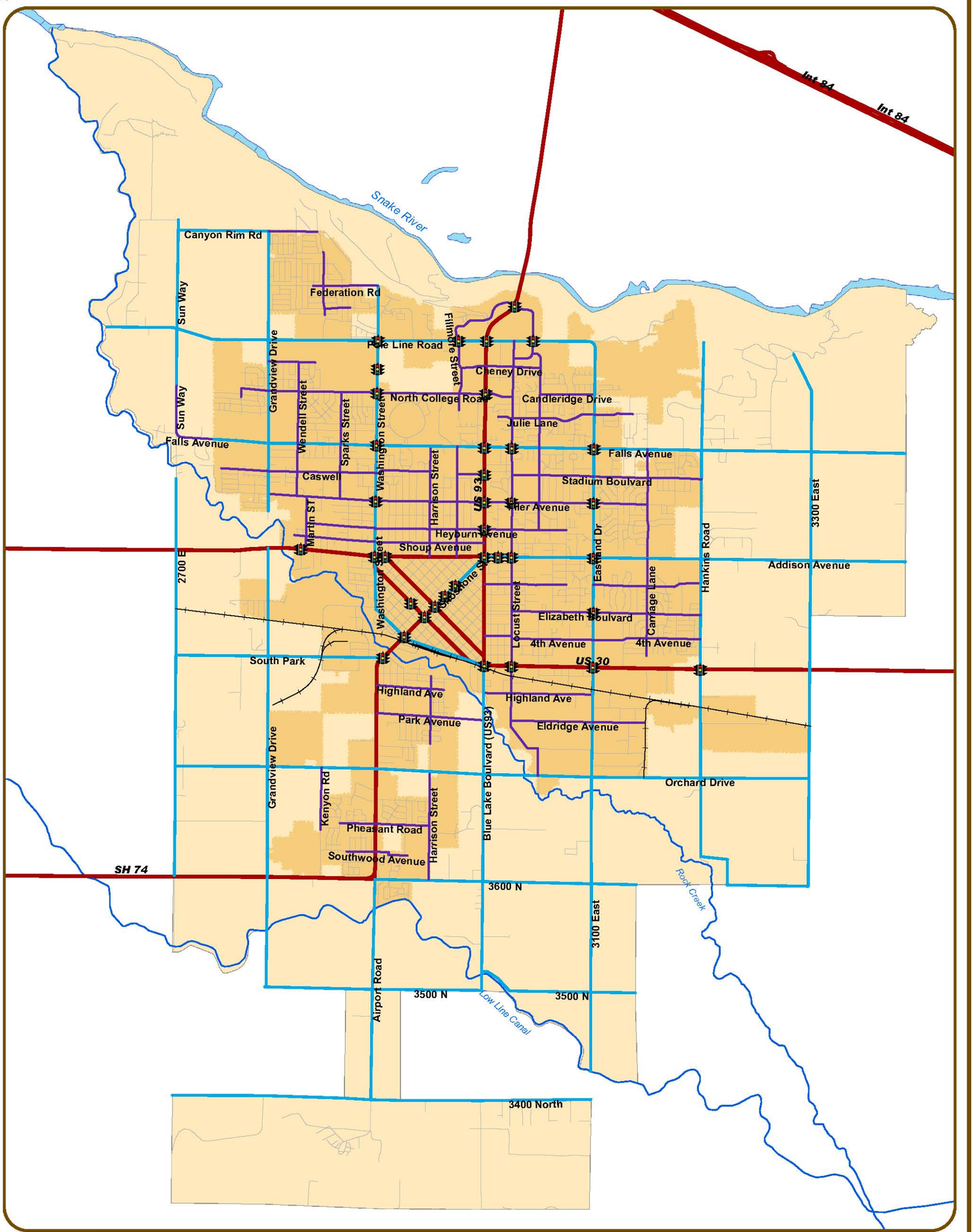


Figure 3
Existing Signals

Legend

- Existing Signal (35)
- Arterial
- Collector
- State Highways
- Twin Falls City Boundary
- Area of Impact (Study Area)

12 March 2008

Twin Falls City
2008 Transportation Master Plan
Existing Level of Service

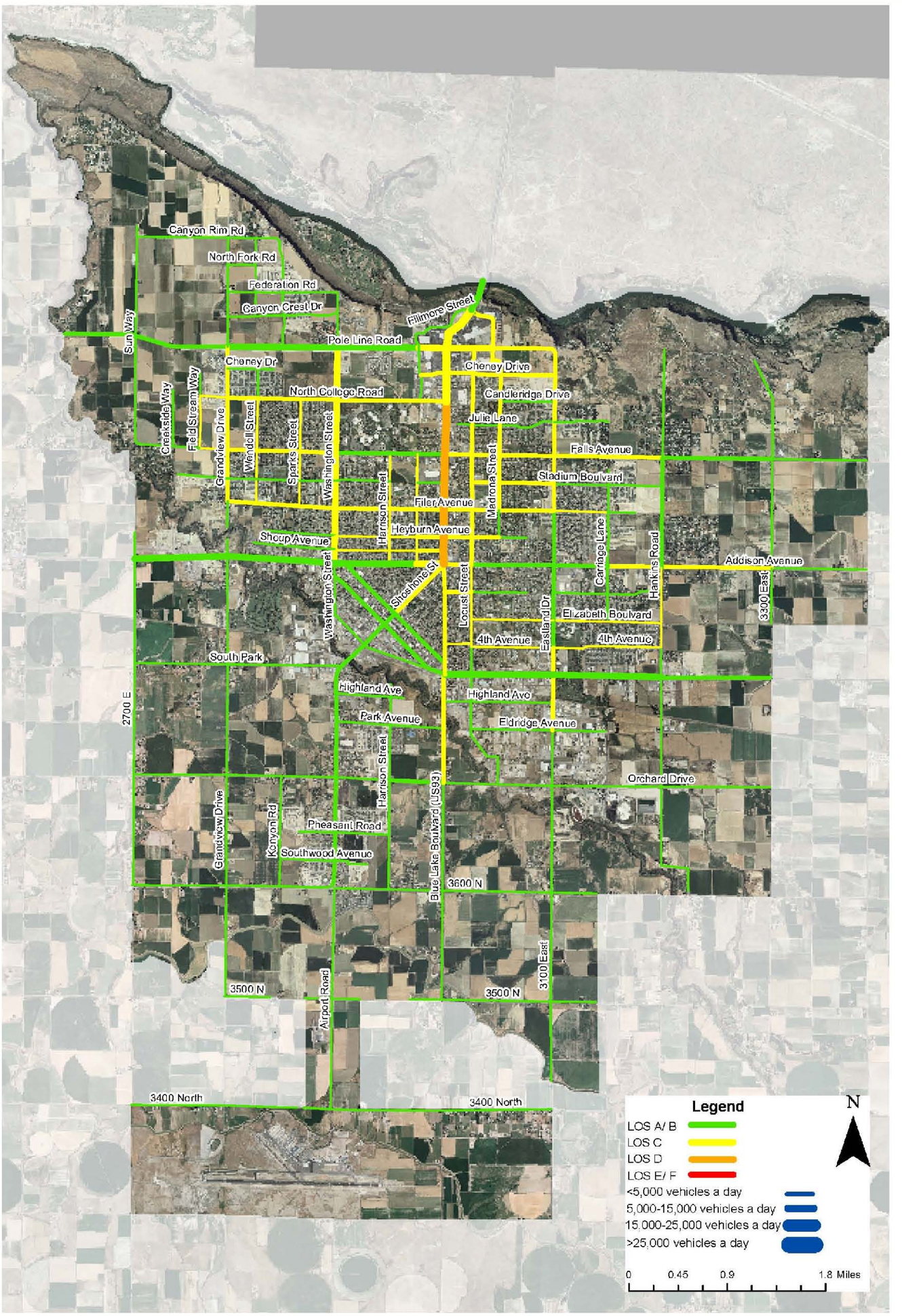


Figure 4
Existing LOS

2008 existing LOS
as depicted in the travel model.

9 May 2008

Twin Falls City
2008 Transportation Master Plan
Accident Locations

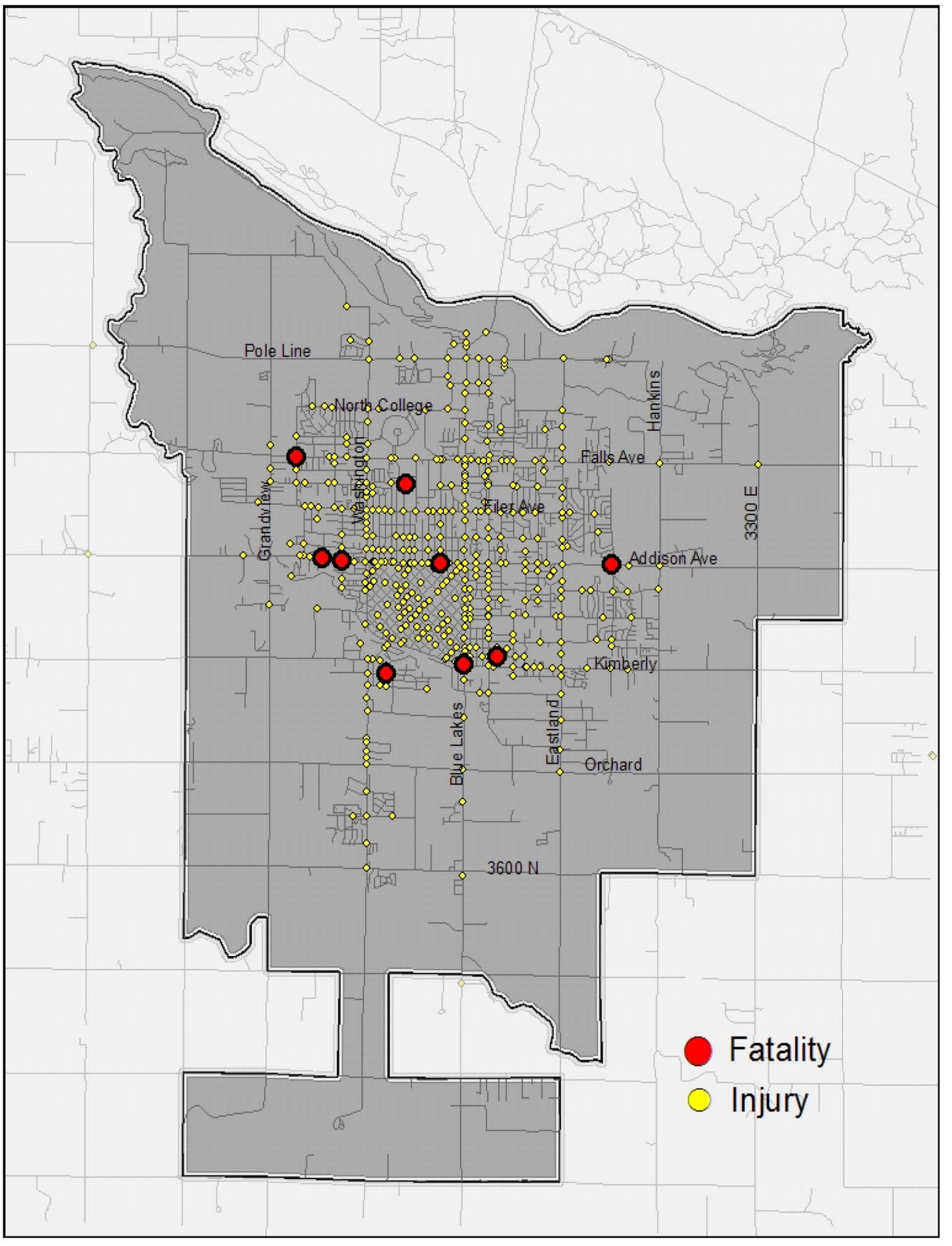


Figure 5 Accident Locations

Accident Data was provided by Twin Falls Police Department

9 May 2008

Twin Falls City
2008 Transportation Master Plan
Roadway Deficiencies

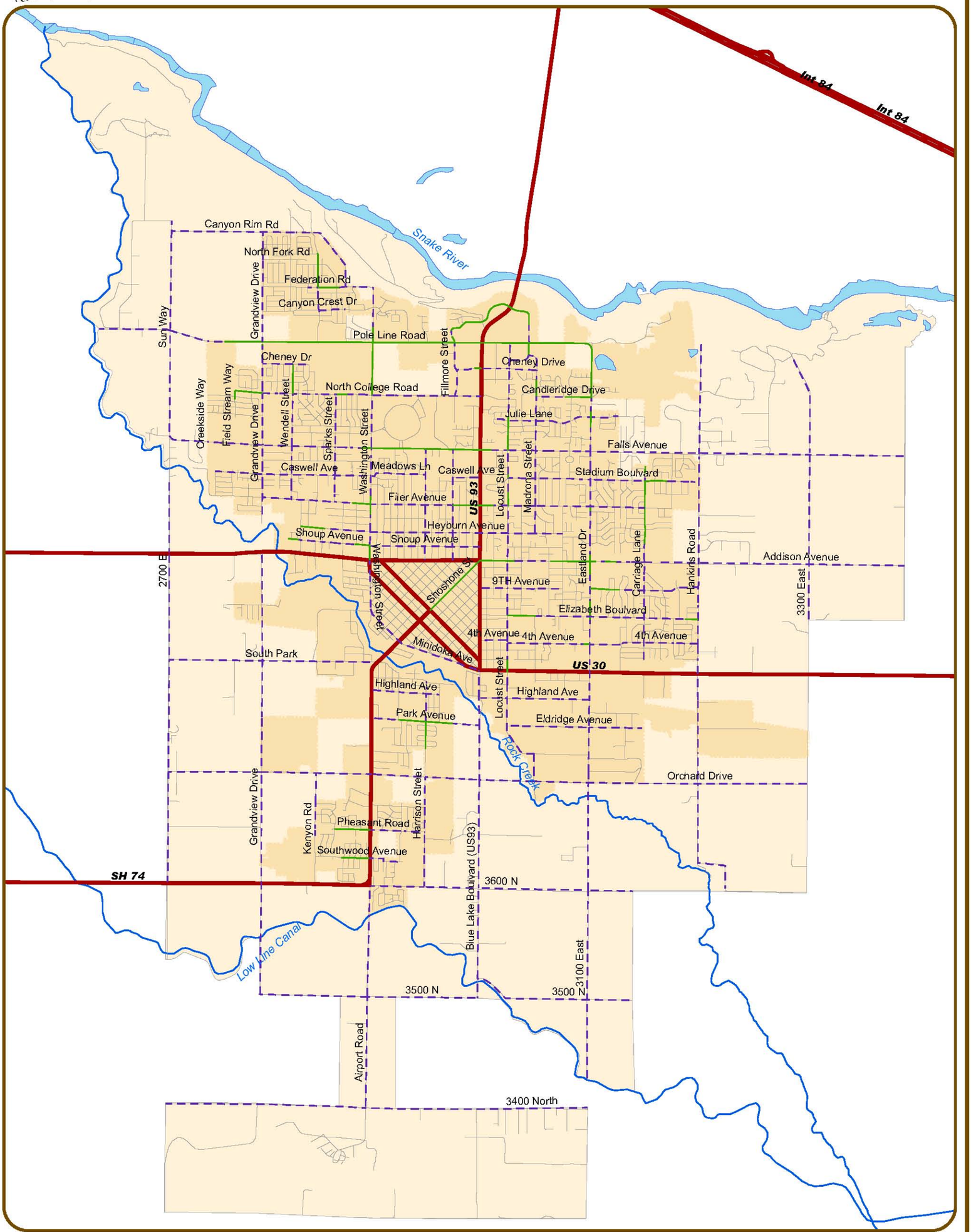


Figure 6
Roadway Deficiencies

Legend

- Meets Width Requirement
- Does Not Meet Width Requirement
- State Highways
- Twin Falls City Boundary
- Area of Impact (Study Area)

11 April 2008

Twin Falls City
2008 Transportation Master Plan
Roadside Improvement Deficiencies

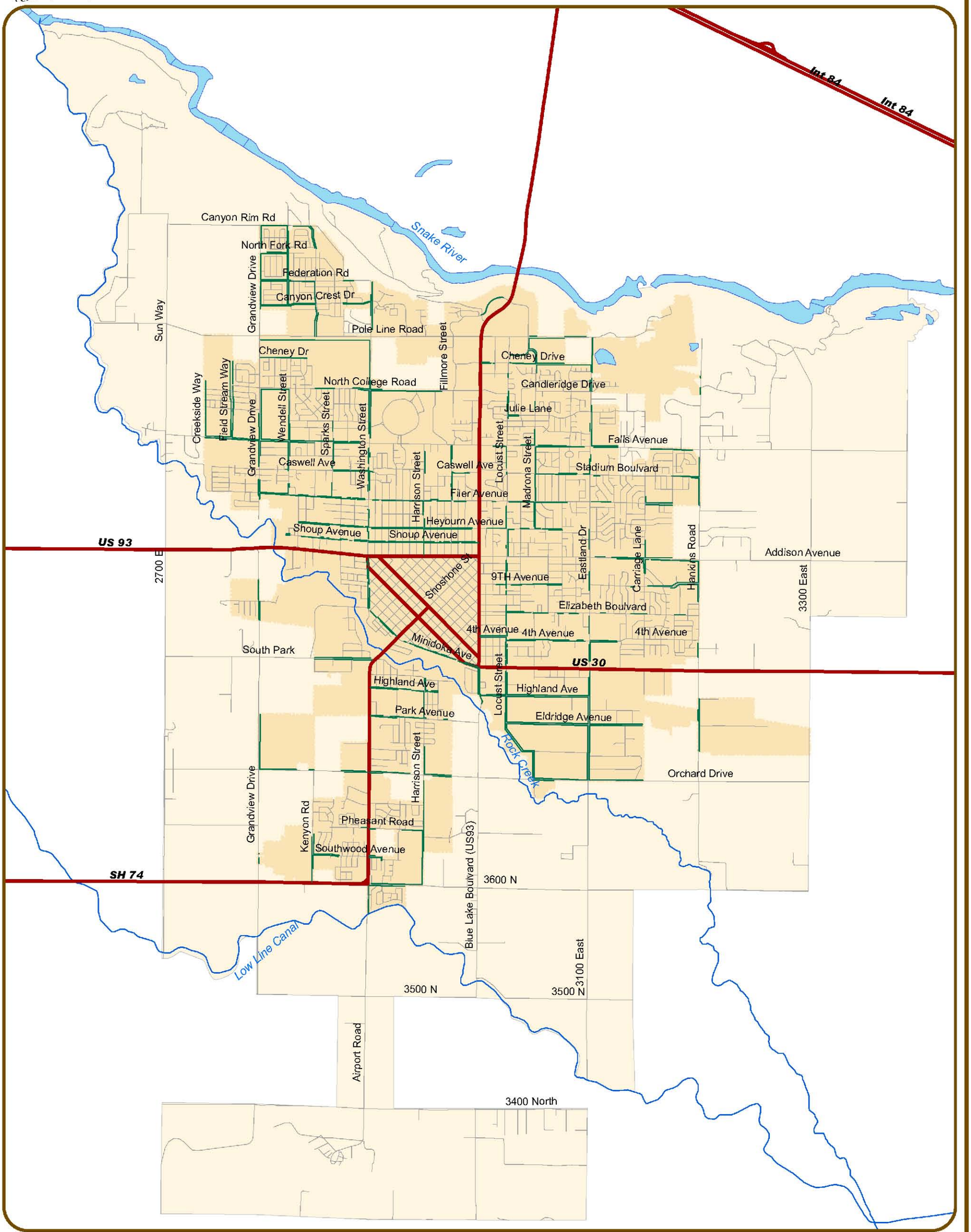


Figure 7
Roadside Deficiencies

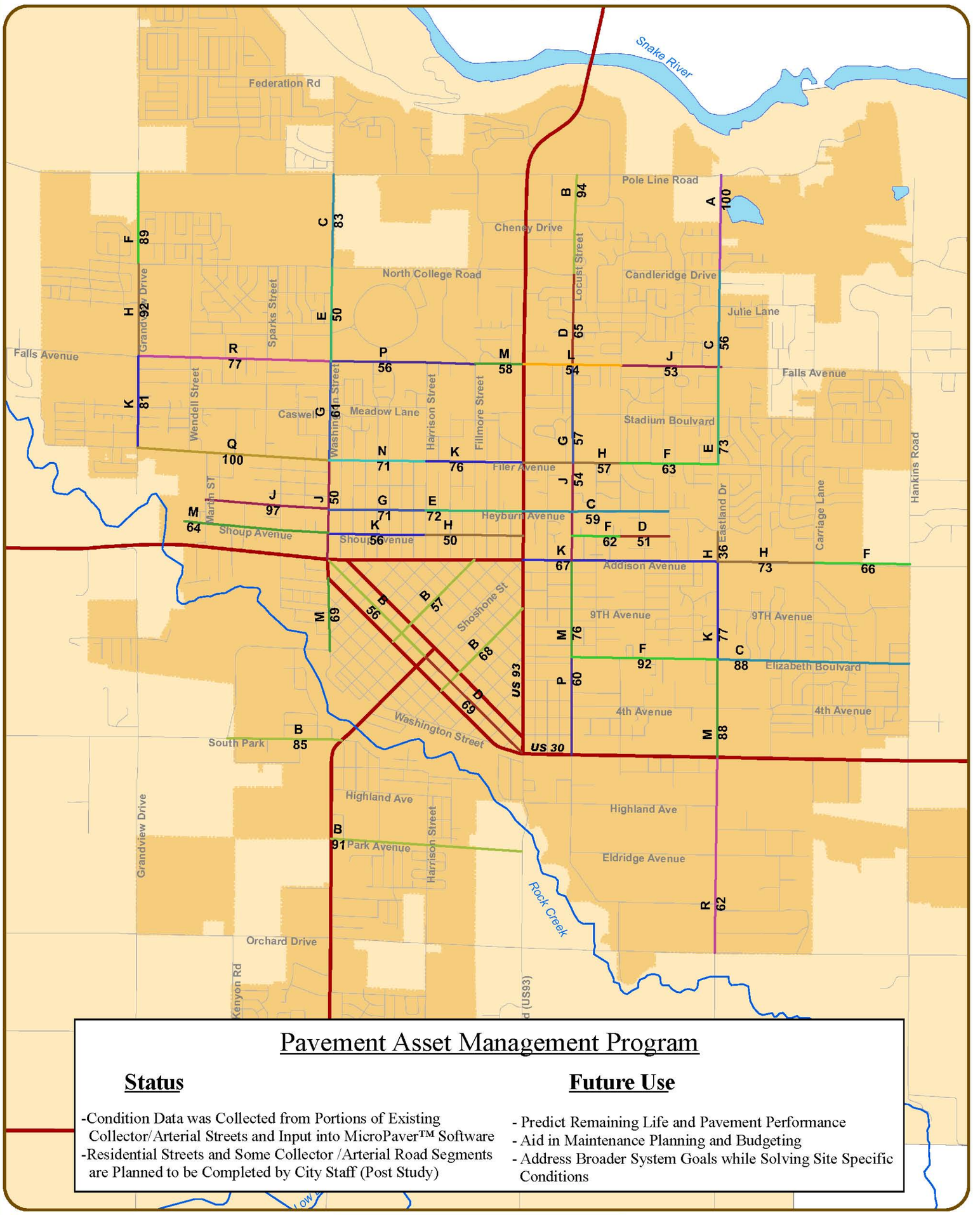
Legend

- Roadside Improvement Needed
- State Highways
- Twin Falls City Boundary
- Area of Impact (Study Area)

Roadside Improvements May Include Curbs, Sidewalks, and Planter Strip

11 April 2008

Twin Falls City
2008 Transportation Master Plan
Pavement Inventory Study
Inventories Performed



Pavement Asset Management Program

Status

-Condition Data was Collected from Portions of Existing Collector/Arterial Streets and Input into MicroPaver™ Software
-Residential Streets and Some Collector /Arterial Road Segments are Planned to be Completed by City Staff (Post Study)

Future Use

- Predict Remaining Life and Pavement Performance
- Aid in Maintenance Planning and Budgeting
- Address Broader System Goals while Solving Site Specific Conditions

Figure 8 Pavement Inventory Study

Legend

- State Highways
- Twin Falls City Boundary
- Area of Impact (Study Area)

Area of Impact is not completely shown for purposes of scale and mapping detail.
See Figure 2 for complete representation of Area of Impact.

Letter Represents Pavement Section ID
Number Denotes the Associated PCI

PCI Range	Pavement Condition Rating
100 to 85	Excellent
85 to 70	Very Good
70 to 55	Good
55 to 40	Fair

03/03/08

Twin Falls City
2008 Transportation Master Plan
Controlled Crosswalks (Existing)

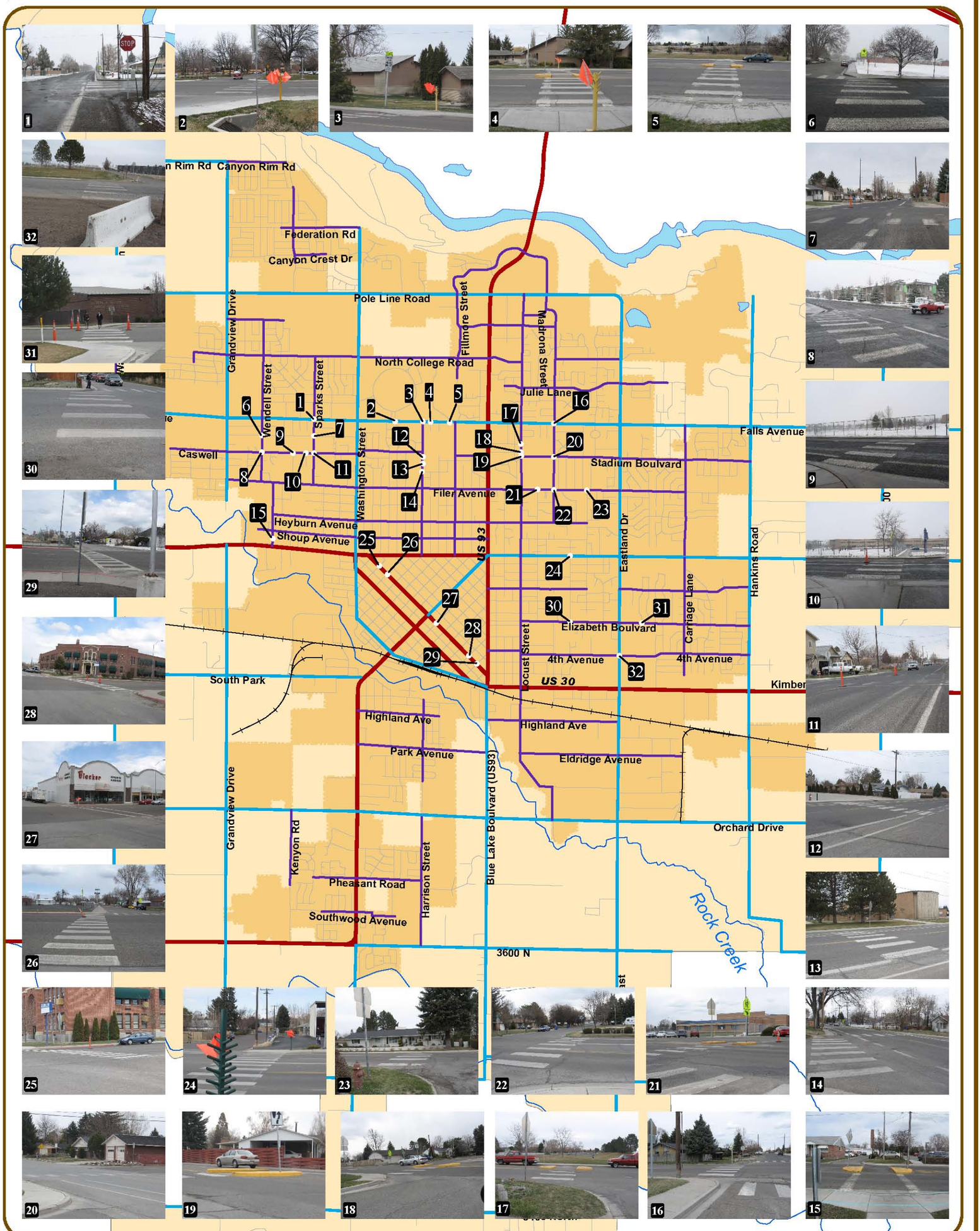


Figure 9
Crosswalks

Legend

Street Classification
- Arterial
- Collector

- State Highways
- Twin Falls City Boundary
- Area of Impact (Study Area)

The numbers found on the photographs correspond to the numbered intersections located on the map.

Area of Impact is not completely shown for purposes of scale and mapping detail.
See Figure 2 for complete representation of Area of Impact.

9 April 2008

Twin Falls City
2008 Transportation Master Plan
Intersection Lighting Study

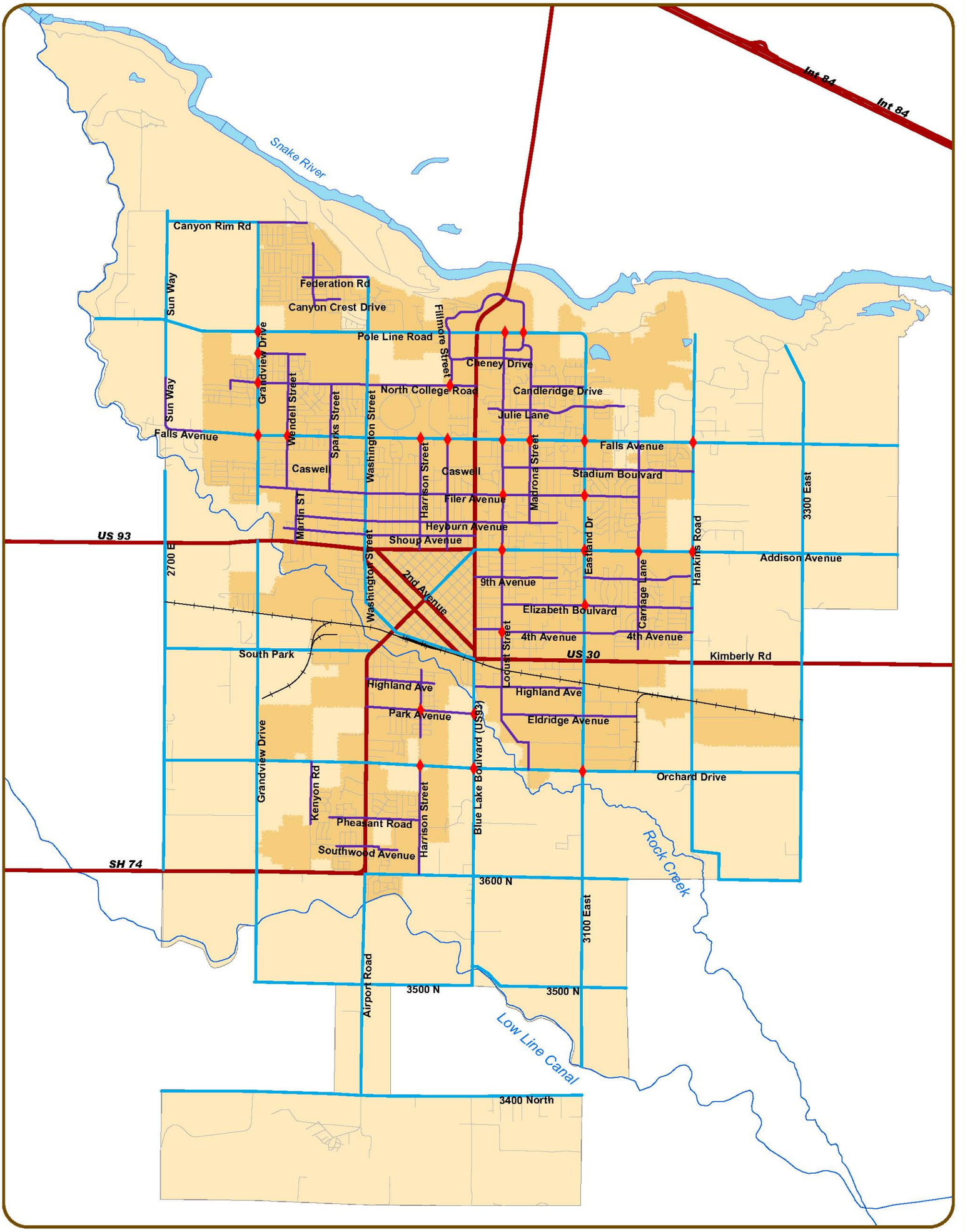


Figure 10
Intersection Lighting

Legend

- Arterial
- Collector
- State Highways
- Twin Falls City Boundary
- Area of Impact (Study Area)
- Illuminance Study Locations

3 April 2008

Twin Falls City
2008 Transportation Master Plan
Landmark Future Land Use

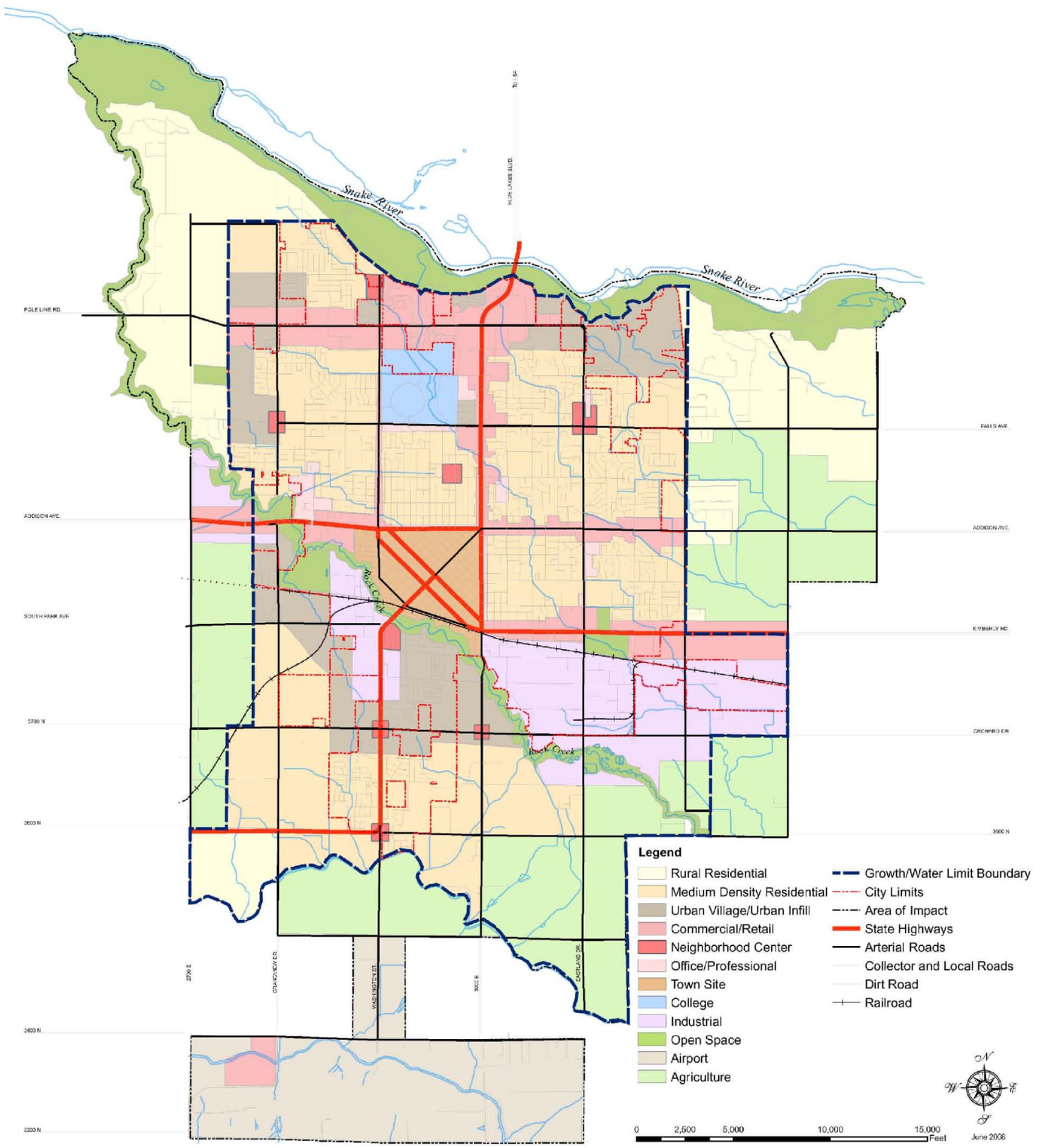


Figure 11 Future Land Use

This Map came from the Comphrensive Plan that was being updated by LandMark in conjunction with this TMP

26 June 2008

Twin Falls City
2008 Transportation Master Plan
2015 No-Build LOS

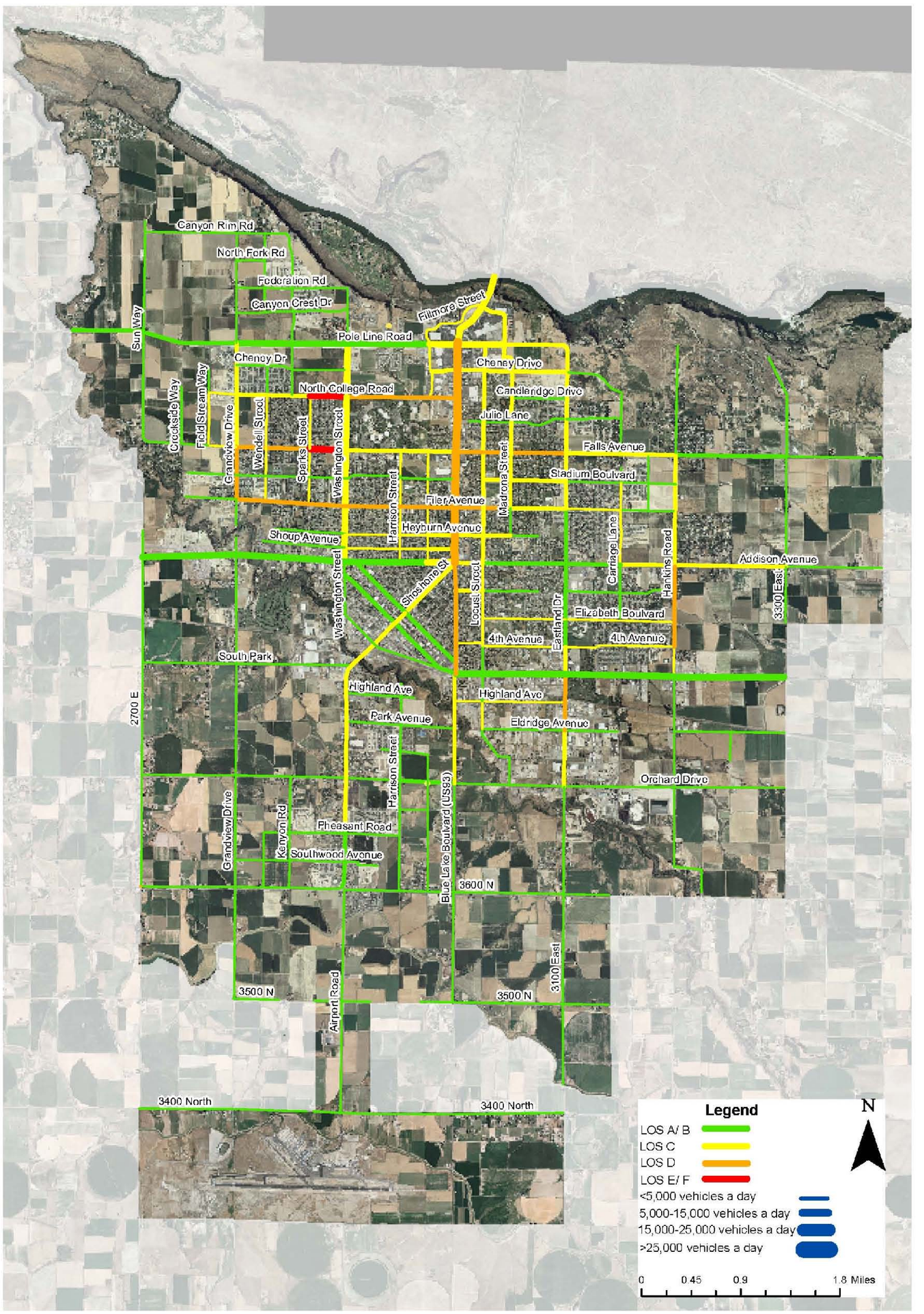


Figure 12
2015 No-Build LOS

The 2015 No-Build LOS data as depicted in the travel model

26 June 2008

Twin Falls City
2008 Transportation Master Plan
2030 No-Build LOS

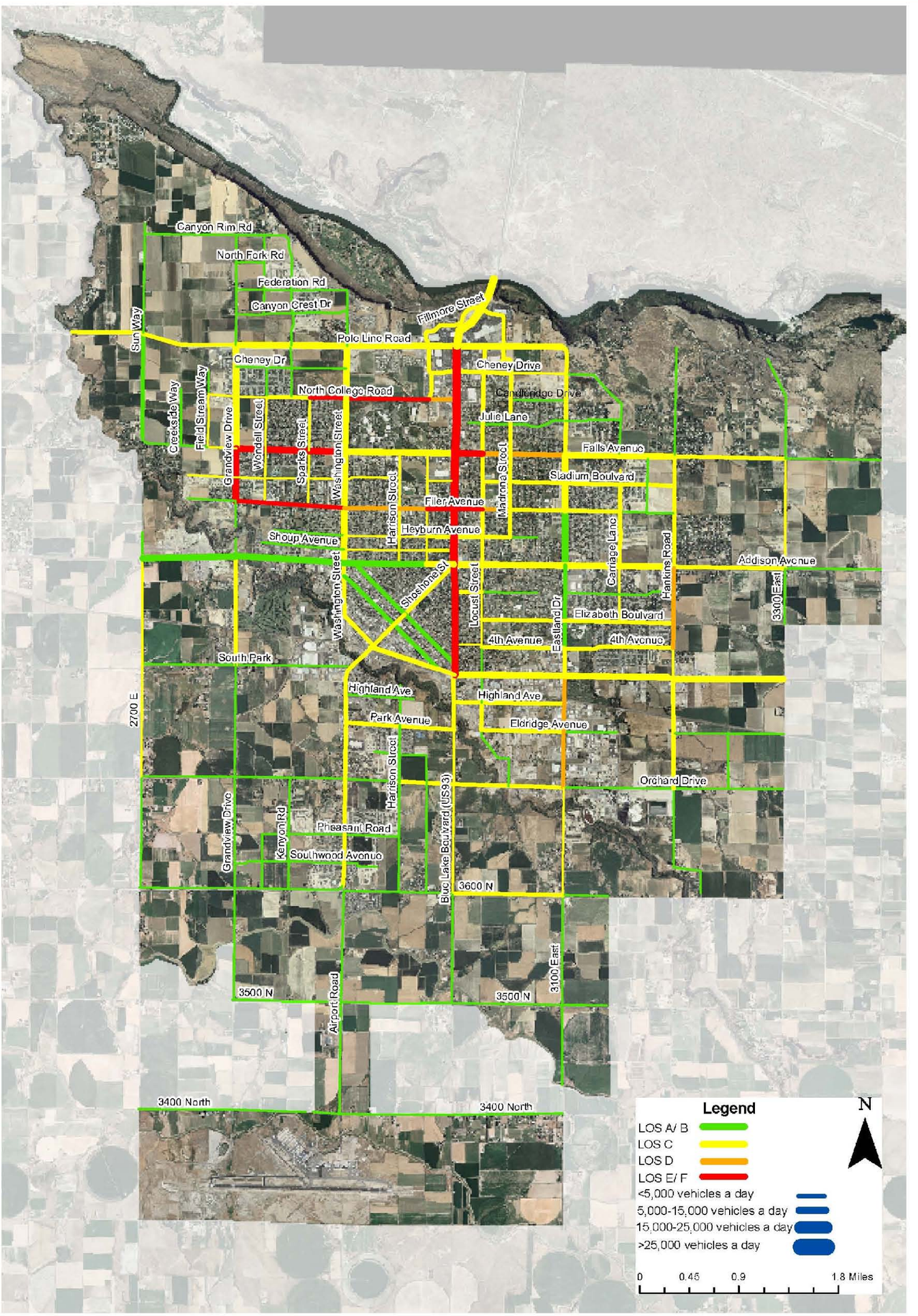


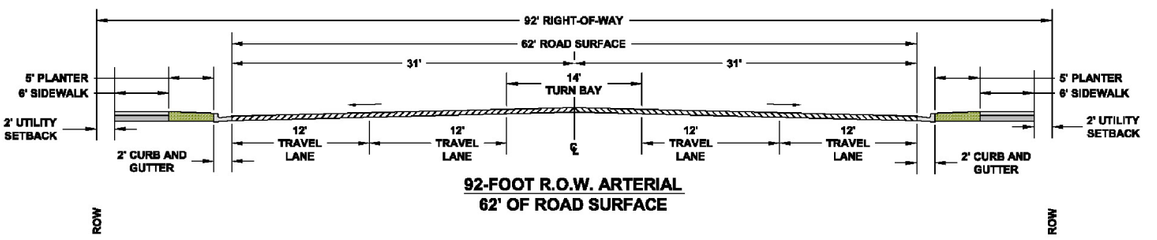
Figure 13
2030 No-Build LOS

The 2030 No-Build LOS data as depicted in the travel model

26 June 2008

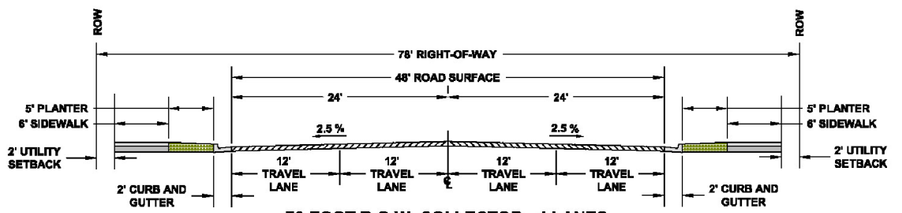
Twin Falls City
2008 Transportation Master Plan
Proposed Cross Sections

PROPOSED ARTERIAL CROSS SECTIONS

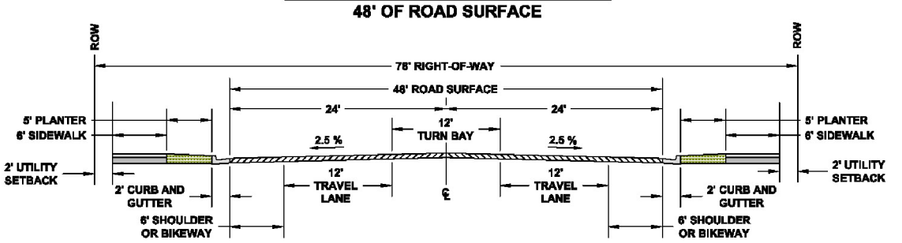


92-FOOT R.O.W. ARTERIAL
62' OF ROAD SURFACE

PROPOSED COLLECTOR CROSS SECTIONS

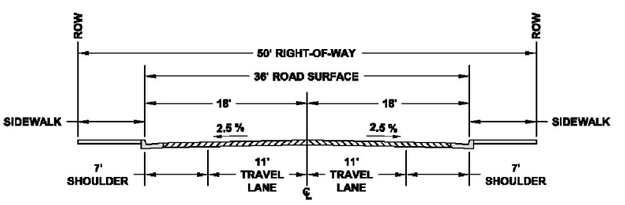


78-FOOT R.O.W. COLLECTOR - 4 LANES
48' OF ROAD SURFACE



78-FOOT R.O.W. COLLECTOR - 3 LANES WITH STRIPED BIKEWAYS
48' OF ROAD SURFACE

LOCAL ROAD CROSS SECTION
NO CHANGE PROPOSAL FROM EXISTING STANDARD



50-FOOT R.O.W. LOCAL ROAD
36' OF ROAD SURFACE

Figure 14
Proposed Cross Sections

Twin Falls City
2008 Transportation Master Plan
Long Term Roadway Classification

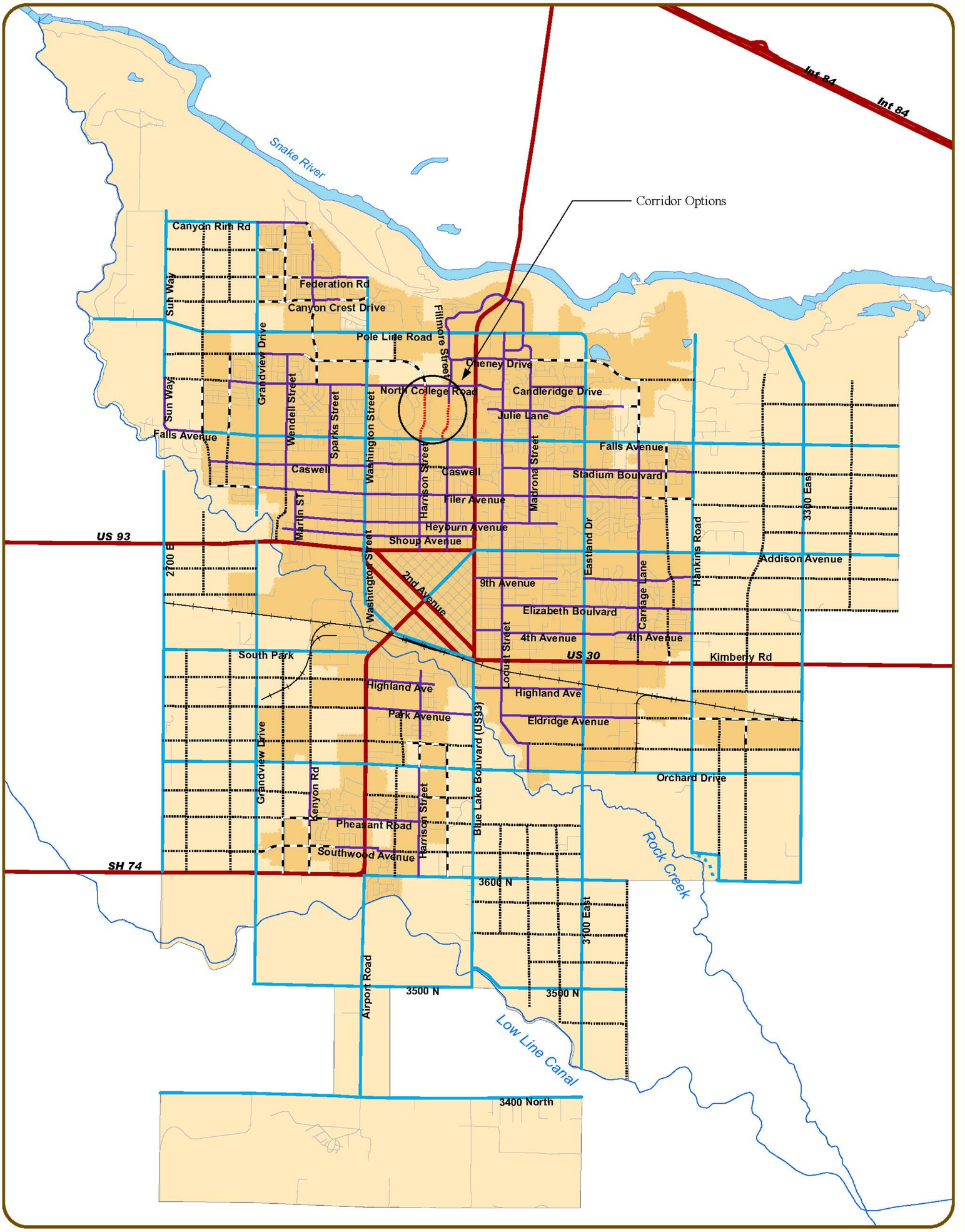


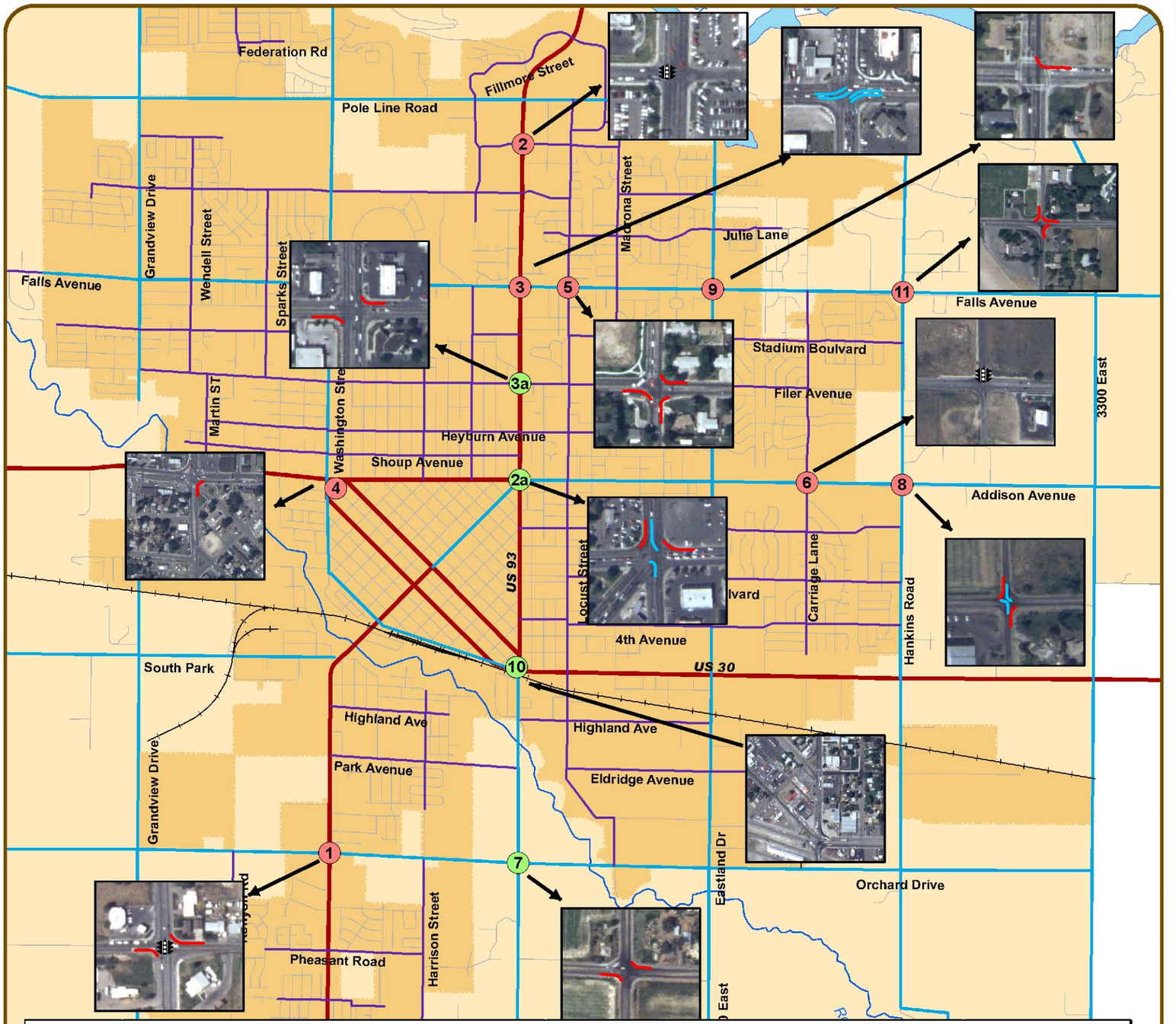
Figure 15
Long Term Roadways

Legend

Street Classification			
Arterial, Existing	Collector, Existing	State Highways
Arterial, Short Term	Collector, Short Term	Twin Falls City Boundary
Arterial, Long Term	Collector, Long Term	Area of Impact (Study Area)
	Collector, Corridor Option	

12 March 2008

Twin Falls City
2008 Transportation Master Plan
Intersection Hot Spots



Twin Falls City
Master Transportation Plan
Intersection Hot Spots

Intersection ID	LOCATION	CONDITION	PRELIMINARY COST
1	Washington & Orchard	Congestion, Poor Turning Conditions	$400,000
2	Blue Lakes & Cheney	Heavy Congestion	$250,000
2a	Blue Lakes & Addison "Five Points Intersection"	Congestion, Confusion, Lack of Some Turning Lanes	$250,000
3	Blue Lakes & Falls	Heavy Congestion, Turn Lane Deficiencies	$400,000
3a	Blue Lakes & Filer	Heavy Congestion, Turn Lane Deficiencies	$250,000
4	Washington & Addison "West Five Points Intersection"	Congestion, Operational Conflicts with North 2nd Ave	$100,000
5	Falls & Locust	Congestion, Turn Lane Deficiencies	$250,000
6	Addison & Carriage	Congestion	$300,000
7	Blue Lakes & Orchard	Truck Traffic, Turning Deficiencies	$400,000
8	Addison & Hankins	Congestion, Turning Conflicts	$400,000
9	Eastland & Falls	Turn Lane Deficiencies. Free Right Turn Island	$100,000
10	Blue Lakes & Kimberly "East Five Points Intersection"	Congestion, Confusion	$500,000
11	Falls & Hankins	Congestion, Turn Lane Deficiencies	$200,000
TOTAL			**$3,800,000** (current day dollars)

Figure 16
Intersection Hot Spots

Legend
Intersection Concerns
Phase
2015
2030
State Highways
Arterial, EXISTING
Collector, EXISTING
Twin Falls City Boundary
Area of Impact (Study Area)

Possible Intersection Improvements
Right Turn Lane
Left Turn Lane
Future Signal

Area of Impact is not completely shown for purposes of scale and mapping detail.
See Figure 2 for complete representation of Area of Impact.

16 May 2008

Twin Falls City
2008 Transportation Master Plan
Future Signals

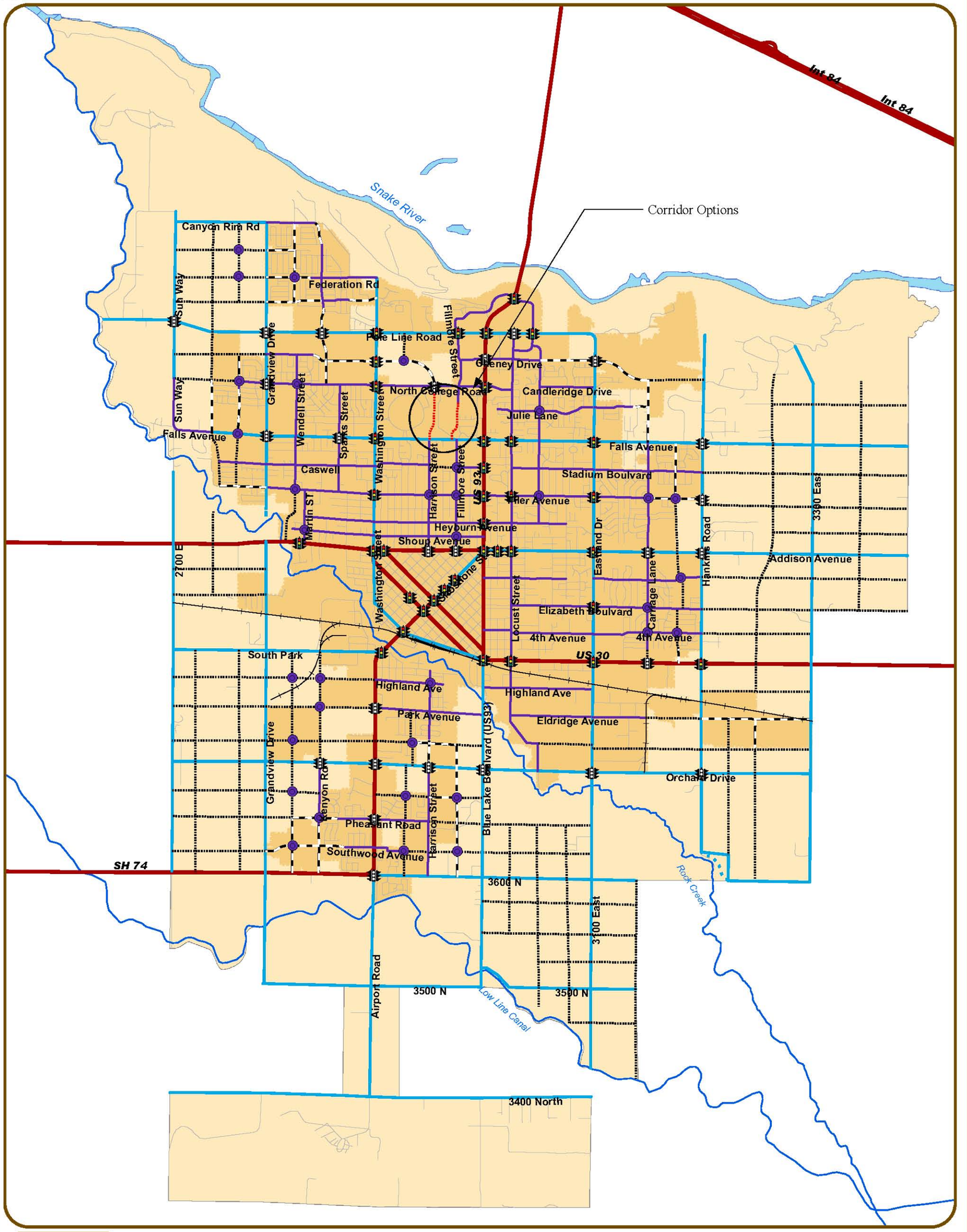


Figure 17
Future Signals

Legend

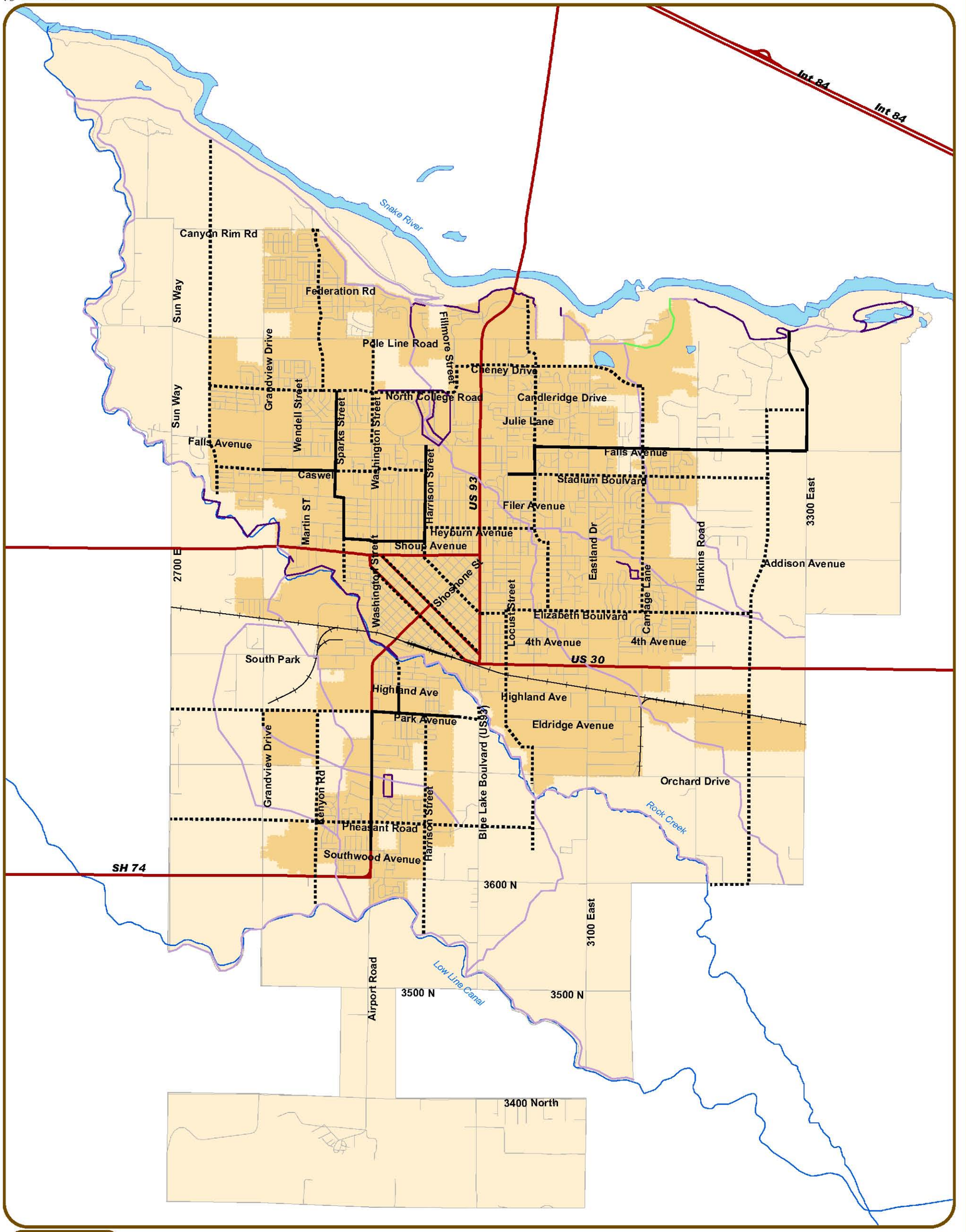
Traffic Signals
- Signal/Roundabout (35)
- Future (25)
- Existing Signal (35)
- State Highways
- Twin Falls City Boundary
- Area of Impact (Study Area)

Street Classification
- Arterial, Existing
- Arterial, Short Term
- Arterial, Long Term
- Collector, Existing
- Collector, Short Term
- Collector, Long Term
- Collector, Corridor Option

Proposed Signal Locations
Were Obtained From Twin Falls City

24 July 2008

Twin Falls City
2008 Transportation Master Plan
Bike Facilities



Legend

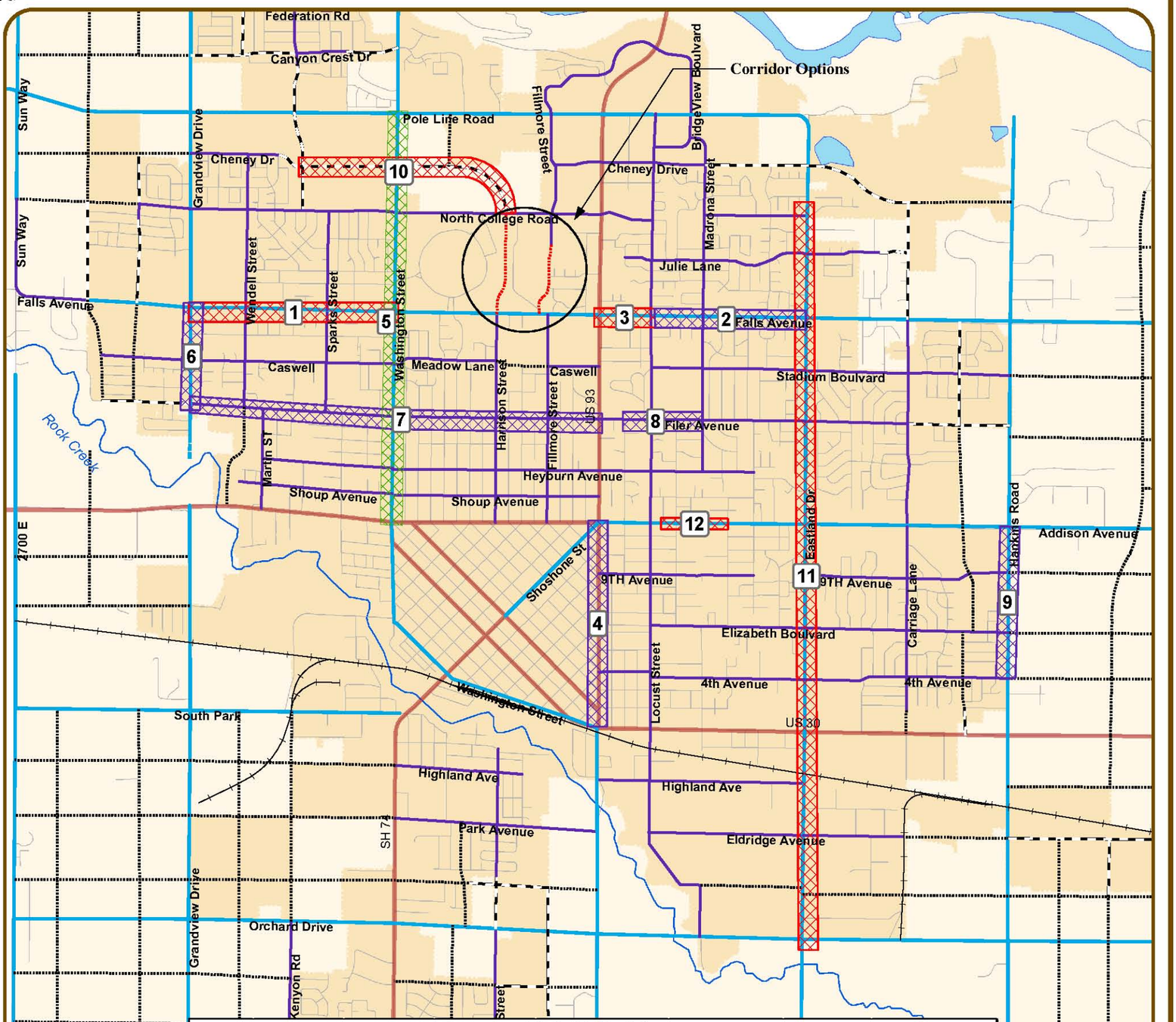
Bike Facility		Off Street Trails	
	Existing		A Existing Recreational Trail
	Future		A Proposed recreational trails
	State Highways		To be Built By Developer
	Twin Falls City Boundary		
	Area of Impact (Study Area)		

Future Roadways were not shown to prevent confusion between Future Roadways & Bike Facilities.

Figure 18
Bike Facilities

24 July 2008

Twin Falls City
2008 Transportation Master Plan
Capital Improvement Plan



Twin Falls City
Master Transportation Plan
CIP List

Project ID #	Street	From	To	Improvement	Preliminary Cost	Phase	Cost at Phase with Inflation
1	Falls	Washington	Grandview	Widen to 4 lanes	$2,826,420	2015	$3,955,683
2	Falls	Locust	Eastland	Widen to 4 lanes	$1,882,279	2030	$4,420,630
3	Falls	Blue Lakes	Locust	Widen to 5 lanes	$377,111	2015	$524,526
4	Blue Lakes	Kimberly	Addison	Widen to 3 lanes	$2,306,257	2030	$5,367,674
5	Washington	Pole Line	Addison	Widen to 5 lanes	Funded, Being Designed Currently		
6	Grandview	Filer	Falls	Widen to 3 lanes	$1,155,788	2030	$2,693,943
7	Filer	Grandview	Blue Lakes	Widen to 3 lanes	$3,891,866	2030	$9,053,128
8	Filer	Elm	Madrona	Widen to 4 lanes	$587,502	2030	$1,373,457
9	Hankins	Addison	4th Ave.	Widen to 3 lanes	$2,489,672	2030	$5,832,024
10	Cheney	Parkview	North College	New road/ 3 lanes	$6,622,357	2015	$9,280,154
11	Eastland	Candleridge	Addison	Widen to 4 lanes	$13,581,316*	2015	$19,110,276*
	Eastland	Addison	Orchard	Widen to 3 lanes			
12**	Addison	Morningside	Juniper	Widen to 5 lanes	$1,206,921	2015	$1,698,259
TOTAL:					**$36,927,488** (current day dollars)		Inflation 5% until 2015 then 3.5% thereafter

* Cost includes Thicker Pavement Section
**Non LOS Justification

Legend
Construction Phasing
2015
2030
In Process
State Highways
Twin Falls City Boundary
Area of Impact (Study Area)

Figure 19 CIP

Area of Impact is not completely shown for purposes of scale and mapping detail.
See Figure 2 for complete representation of Area of Impact.

24 June 2008

Twin Falls City
2008 Transportation Master Plan
TAZ Boundaries

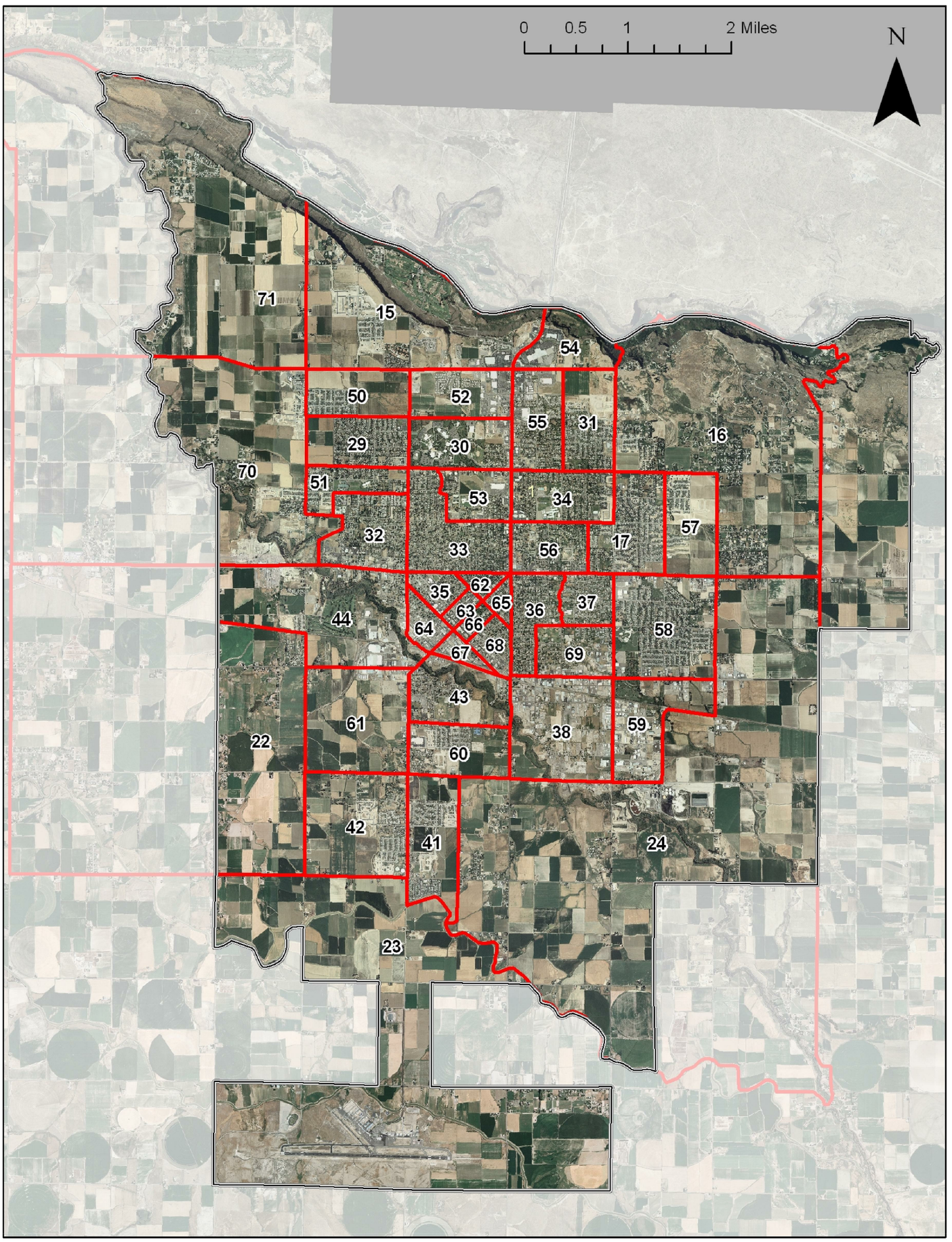


Figure 20 TAZ Boundaries

Boundaries used in the travel model

26 June 2008

Twin Falls City
2008 Transportation Master Plan
2030 CIP LOS

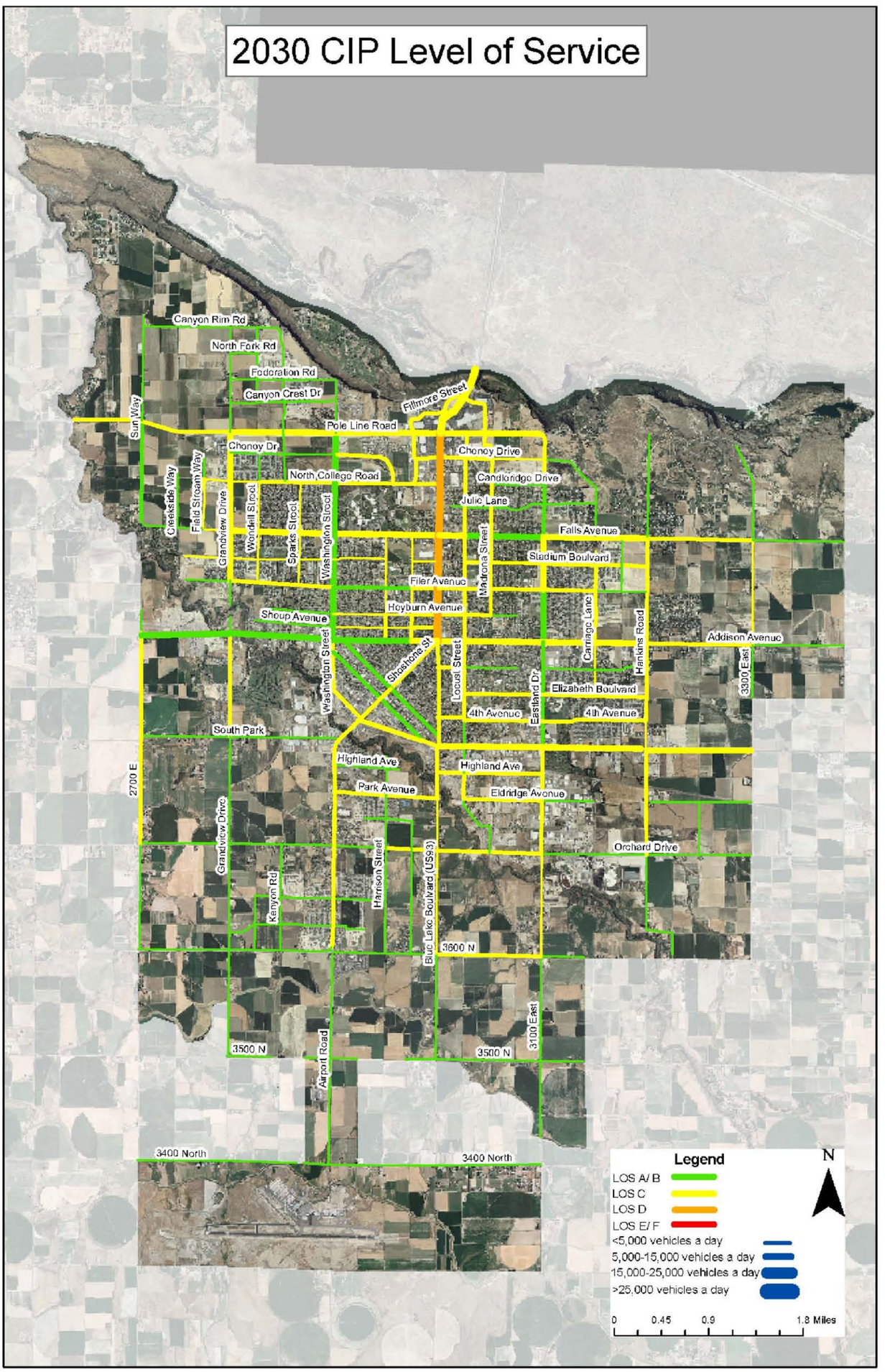


Figure 21
2030 CIP LOS

The 2030 CIP LOS data as depicted in the travel model

26 June 2008

Appendix B – Capital Improvement Plan

Capital Improvement Plan Cost Sheets

Capital improvement costs are identified for each section of roadway shown within the CIP on Figure 19. The following estimating spreadsheets were developed using unit costs that were generated from recent area projects.

TWIN FALLS CITY CAPITAL FACILITIES PLAN
COST ESTIMATE
Falls Ave
From Washington St to Grandview Dr (92' ROW)

ITEM	QUANTITY	UNIT	UNIT COST $	TOTAL COST$	COMMENT
Asphalt	1,615	Tons	$90.00	$145,370.52	
Leveling Course	3556	Tons	$22.00	$78,232.32	
Base Course	10,311	Tons	$12.42	$128,058.85	
Excavation	12,714	Cu. Yds.	$25.00	$317,852.29	
Remove Existing Asphalt	0	Sq. Ft.	$1.00	$0.00	
Sidewalk	57,060	Sq. Ft.	$5.30	$302,418.00	
Curb & Gutter	9,510	Linear Feet	$17.00	$161,670.00	
Landscaping	5,283	Sq. Yds.	$10.00	$52,833.33	
Intersection Improvement	0	# of Intersections	$300,000.00	$0.00	
Roundabout	0	Each	$300,000.00	$0.00	
Irrigation Structures/Piping	0	Linear Feet	$90.00	$0.00	
Canal Structures	0	Sq. Ft.	$60.00	$0.00	
Right of Way Acquisition	145,695	Sq. Ft.	$5.00	$728,475.00	
Perpetual Easements	129,300	Sq. Ft.	$4.00	$517,200.00	
Property Acquisition	0	Each	$280,000.00	$0.00	
Striping	1.3	Mile	$5,000.00	$6,285.98	
Traffic Signs	32	Each	$500.00	$15,850.00	
Ped. Ramps	24	Each	$1,500.00	$36,000.00	
Erosion Control	1	Percentage	$2,520,246.29	$25,202.46	
Clear & Grub	1	Percentage	$2,520,246.29	$25,202.46	
Street Lighting - New	4	Each	$5,000.00	$20,000.00	
Street Lighting - Relocation	4	Each	$2,500.00	$10,000.00	
Traffic Control	2	Percentage	$2,520,246.29	$50,404.93	

Utility Relocation Contingency 5%	$131,053
Subtotal	$2,752,109
Contingency 15%	Included in Total Construcion Costs
Total Construction Cost	$3,164,925
Legal/Engineering 8%	Included in Total Project Costs
Total Project Cost	$3,418,119

TWIN FALLS CITY CAPITAL FACILITIES PLAN
COST ESTIMATE
Falls Ave
From Eastland to Locust St (92' ROW)

ITEM	QUANTITY	UNIT	UNIT COST $	TOTAL COST$	COMMENT
Asphalt	339	Tons	$90.00	$30,468.78	
Leveling Course	2252	Tons	$22.00	$49,551.14	
Base Course	5,525	Tons	$12.42	$68,626.45	
Excavation	8,053	Cu. Yds.	$25.00	$201,322.73	
Remove Existing Asphalt	0	Sq. Ft.	$1.00	$0.00	
Sidewalk	46,224	Sq. Ft.	$5.30	$244,987.20	
Curb & Gutter	7,704	Linear Feet	$17.00	$130,968.00	
Landscaping	4,280	Sq. Yds.	$10.00	$42,800.00	
Intersection Improvement	0	# of Intersections	$300,000.00	$0.00	
Roundabout	0	Each	$300,000.00	$0.00	
Irrigation Structures/Piping	0	Linear Feet	$90.00	$0.00	
Canal Structures	0	Sq. Ft.	$60.00	$0.00	
Right of Way Acquisition	96,780	Sq. Ft.	$5.00	$483,900.00	
Perpetual Easements	102,060	Sq. Ft.	$4.00	$408,240.00	
Property Acquisition	0	Each	$280,000.00	$0.00	
Striping	0.8	Mile	$5,000.00	$3,759.47	
Traffic Signs	26	Each	$500.00	$13,233.33	
Ped. Ramps	32	Each	$1,500.00	$48,000.00	
Erosion Control	1	Percentage	$1,740,857.10	$17,408.57	
Clear & Grub	1	Percentage	$1,740,857.10	$17,408.57	
Street Lighting - New	1	Each	$5,000.00	$5,000.00	
Street Lighting - Relocation	4	Each	$2,500.00	$10,000.00	
Traffic Control	2	Percentage	$1,740,857.10	$34,817.14	

Utility Relocation Contingency 5%	$90,525
Subtotal	$1,901,016
Contingency 15%	Included in Total Construcion Costs
Total Construction Cost	$2,186,168
Legal/Engineering 8%	Included in Total Project Costs
Total Project Cost	$2,361,062

TWIN FALLS CITY CAPITAL FACILITIES PLAN
COST ESTIMATE
Falls Ave
From Blue Lakes to Locust St (92' ROW)

ITEM	QUANTITY	UNIT	UNIT COST $	TOTAL COST$	COMMENT
Asphalt	179	Tons	$90.00	$16,149.24	
Leveling Course	276	Tons	$22.00	$6,068.33	
Base Course	770	Tons	$12.42	$9,566.83	
Excavation	986	Cu. Yds.	$25.00	$24,655.18	
Remove Existing Asphalt	0	Sq. Ft.	$1.00	$0.00	
Sidewalk	4,722	Sq. Ft.	$5.30	$25,026.60	
Curb & Gutter	787	Linear Feet	$17.00	$13,379.00	
Landscaping	437	Sq. Yds.	$10.00	$4,372.22	
Intersection Improvement	0	# of Intersections	$300,000.00	$0.00	
Roundabout	0	Each	$300,000.00	$0.00	
Irrigation Structures/Piping	0	Linear Feet	$90.00	$0.00	
Canal Structures	0	Sq. Ft.	$60.00	$0.00	
Right of Way Acquisition	21,249	Sq. Ft.	$5.00	$106,245.00	
Perpetual Easements	11,805	Sq. Ft.	$4.00	$47,220.00	
Property Acquisition	0	Each	$280,000.00	$0.00	
Striping	0.1	Mile	$5,000.00	$745.27	
Traffic Signs	5	Each	$500.00	$2,623.33	
Ped. Ramps	8	Each	$1,500.00	$12,000.00	
Erosion Control	1	Percentage	$278,051.00	$2,780.51	
Clear & Grub	1	Percentage	$278,051.00	$2,780.51	
Street Lighting - New	0	Each	$5,000.00	$0.00	
Street Lighting - Relocation	4	Each	$2,500.00	$10,000.00	
Traffic Control	2	Percentage	$278,051.00	$5,561.02	

Utility Relocation Contingency 5%	$14,459
Subtotal	$303,632
Contingency 15%	Included in Total Construcion Costs
Total Construction Cost	$349,176
Legal/Engineering 8%	Included in Total Project Costs
Total Project Cost	$377,111

TWIN FALLS CITY CAPITAL FACILITIES PLAN
COST ESTIMATE
Blue Lakes Blvd
From Addison Ave to Kimberly Rd (92' ROW)

ITEM	QUANTITY	UNIT	UNIT COST $	TOTAL COST$	COMMENT
Asphalt	849	Tons	$90.00	$76,385.70	
Leveling Course	3119	Tons	$22.00	$68,620.25	
Base Course	8,511	Tons	$12.42	$105,702.47	
Excavation	11,677	Cu. Yds.	$25.00	$291,929.95	
Remove Existing Asphalt	0	Sq. Ft.	$1.00	$0.00	
Sidewalk	56,418	Sq. Ft.	$5.30	$299,015.40	
Curb & Gutter	9,403	Linear Feet	$17.00	$159,851.00	
Landscaping	5,224	Sq. Yds.	$10.00	$52,238.89	
Intersection Improvement	0	# of Intersections	$300,000.00	$0.00	
Roundabout	0	Each	$300,000.00	$0.00	
Irrigation Structures/Piping	0	Linear Feet	$90.00	$0.00	
Canal Structures	0	Sq. Ft.	$60.00	$0.00	
Right of Way Acquisition	95,744	Sq. Ft.	$5.00	$478,720.00	
Perpetual Easements	119,580	Sq. Ft.	$4.00	$478,320.00	
Property Acquisition	0	Each	$280,000.00	$0.00	
Striping	1.1	Mile	$5,000.00	$5,362.69	
Traffic Signs	34	Each	$500.00	$17,230.00	
Ped. Ramps	42	Each	$1,500.00	$63,000.00	
Erosion Control	1	Percentage	$2,151,376.35	$21,513.76	
Clear & Grub	1	Percentage	$2,151,376.35	$21,513.76	
Street Lighting - New	10	Each	$5,000.00	$50,000.00	
Street Lighting - Relocation	2	Each	$2,500.00	$5,000.00	
Traffic Control	2	Percentage	$2,151,376.35	$43,027.53	

Utility Relocation Contingency 5%	$111,872
Subtotal	$2,349,303
Contingency 15%	Included in Total Construcion Costs
Total Construction Cost	$2,701,698
Legal/Engineering 8%	Included in Total Project Costs
Total Project Cost	$2,917,834

TWIN FALLS CITY CAPITAL FACILITIES PLAN
COST ESTIMATE
Grandview Dr
From Falls Ave to Filer Ave (92' ROW)

ITEM	QUANTITY	UNIT	UNIT COST $	TOTAL COST$	COMMENT
Asphalt	648	Tons	$90.00	$58,317.84	
Leveling Course	1743	Tons	$22.00	$38,350.41	
Base Course	4,849	Tons	$12.42	$60,219.84	
Excavation	6,233	Cu. Yds.	$25.00	$155,814.95	
Remove Existing Asphalt	0	Sq. Ft.	$1.00	$0.00	
Sidewalk	30,036	Sq. Ft.	$5.30	$159,190.80	
Curb & Gutter	5,006	Linear Feet	$17.00	$85,102.00	
Landscaping	2,781	Sq. Yds.	$10.00	$27,811.11	
Intersection Improvement	0	# of Intersections	$300,000.00	$0.00	
Roundabout	0	Each	$300,000.00	$0.00	
Irrigation Structures/Piping	0	Linear Feet	$90.00	$0.00	
Canal Structures	0	Sq. Ft.	$60.00	$0.00	
Right of Way Acquisition	30,246	Sq. Ft.	$5.00	$151,230.00	
Perpetual Easements	64,590	Sq. Ft.	$4.00	$258,360.00	
Property Acquisition	0	Each	$280,000.00	$0.00	
Striping	0.6	Mile	$5,000.00	$2,972.54	
Traffic Signs	17	Each	$500.00	$8,343.33	
Ped. Ramps	22	Each	$1,500.00	$33,000.00	
Erosion Control	1	Percentage	$1,066,212.82	$10,662.13	
Clear & Grub	1	Percentage	$1,066,212.82	$10,662.13	
Street Lighting - New	2	Each	$5,000.00	$10,000.00	
Street Lighting - Relocation	7	Each	$2,500.00	$17,500.00	
Traffic Control	2	Percentage	$1,066,212.82	$21,324.26	

Utility Relocation Contingency 5%	$55,443
Subtotal	$1,164,304
Contingency 15%	Included in Total Construcion Costs
Total Construction Cost	$1,338,950
Legal/Engineering 8%	Included in Total Project Costs
Total Project Cost	$1,446,066

TWIN FALLS CITY CAPITAL FACILITIES PLAN
COST ESTIMATE
Filer Ave
From Blue Lakes to Grandview Dr (78' ROW)

ITEM	QUANTITY	UNIT	UNIT COST $	TOTAL COST$	COMMENT
Asphalt	1,573	Tons	$90.00	$141,562.35	
Leveling Course	2825	Tons	$22.00	$62,140.33	
Base Course	5,453	Tons	$12.42	$67,723.52	
Excavation	10,099	Cu. Yds.	$25.00	$252,471.72	
Remove Existing Asphalt	0	Sq. Ft.	$1.00	$0.00	
Sidewalk	70,470	Sq. Ft.	$5.30	$373,491.00	
Curb & Gutter	8,748	Linear Feet	$17.00	$148,716.00	
Landscaping	6,525	Sq. Yds.	$10.00	$65,250.00	
Intersection Improvement	0	# of Intersections	$300,000.00	$0.00	
Roundabout	0	Each	$300,000.00	$0.00	
Irrigation Structures/Piping	0	Linear Feet	$90.00	$0.00	
Canal Structures	0	Sq. Ft.	$60.00	$0.00	
Right of Way Acquisition	174,948	Sq. Ft.	$5.00	$874,740.00	
Perpetual Easements	164,835	Sq. Ft.	$4.00	$659,340.00	
Property Acquisition	0	Each	$280,000.00	$0.00	
Striping	1.9	Mile	$5,000.00	$9,340.91	
Traffic Signs	56	Each	$500.00	$27,773.33	
Ped. Ramps	58	Each	$1,500.00	$87,000.00	
Erosion Control	1	Percentage	$2,869,549.17	$28,695.49	
Clear & Grub	1	Percentage	$2,869,549.17	$28,695.49	
Street Lighting - New	15	Each	$5,000.00	$75,000.00	
Street Lighting - Relocation	10	Each	$2,500.00	$25,000.00	
Traffic Control	2	Percentage	$2,869,549.17	$57,390.98	

Utility Relocation Contingency 5%	$149,217
Subtotal	$3,133,548
Contingency 15%	Included in Total Construcion Costs
Total Construction Cost	$3,603,580
Legal/Engineering 8%	Included in Total Project Costs
Total Project Cost	$3,891,866

TWIN FALLS CITY CAPITAL FACILITIES PLAN
COST ESTIMATE
Filer Ave
From Elm St to Madrona (78' ROW)

ITEM	QUANTITY	UNIT	UNIT COST $	TOTAL COST$	COMMENT
Asphalt	150	Tons	$90.00	$13,522.68	
Leveling Course	573	Tons	$22.00	$12,615.78	
Base Course	1,792	Tons	$12.42	$22,252.37	
Excavation	2,050	Cu. Yds.	$25.00	$51,257.02	
Remove Existing Asphalt	0	Sq. Ft.	$1.00	$0.00	
Sidewalk	7,908	Sq. Ft.	$5.30	$41,912.40	
Curb & Gutter	1,318	Linear Feet	$17.00	$22,406.00	
Landscaping	732	Sq. Yds.	$10.00	$7,322.22	
Intersection Improvement	0	# of Intersections	$300,000.00	$0.00	
Roundabout	0	Each	$300,000.00	$0.00	
Irrigation Structures/Piping	0	Linear Feet	$90.00	$0.00	
Canal Structures	0	Sq. Ft.	$60.00	$0.00	
Right of Way Acquisition	29,232	Sq. Ft.	$5.00	$146,160.00	
Perpetual Easements	18,270	Sq. Ft.	$4.00	$73,080.00	
Property Acquisition	0	Each	$280,000.00	$0.00	
Striping	0.2	Mile	$5,000.00	$1,248.11	
Traffic Signs	27	Each	$500.00	$13,400.00	
Ped. Ramps	12	Each	$1,500.00	$18,000.00	
Erosion Control	1	Percentage	$433,176.58	$4,331.77	
Clear & Grub	1	Percentage	$433,176.58	$4,331.77	
Street Lighting - New	1	Each	$5,000.00	$5,000.00	
Street Lighting - Relocation	2	Each	$2,500.00	$5,000.00	
Traffic Control	2	Percentage	$433,176.58	$8,663.53	

Utility Relocation Contingency 5%	$22,525
Subtotal	$473,029
Contingency 15%	Included in Total Construcion Costs
Total Construction Cost	$543,983
Legal/Engineering 8%	Included in Total Project Costs
Total Project Cost	$587,502

TWIN FALLS CITY CAPITAL FACILITIES PLAN
COST ESTIMATE
Hankins Rd
From Addison to 4th Ave (92' ROW)

ITEM	QUANTITY	UNIT	UNIT COST $	TOTAL COST$	COMMENT
Asphalt	909	Tons	$90.00	$81,772.20	
Leveling Course	2690	Tons	$22.00	$59,171.45	
Base Course	7,351	Tons	$12.42	$91,293.47	
Excavation	9,616	Cu. Yds.	$25.00	$240,409.34	
Remove Existing Asphalt	0	Sq. Ft.	$1.00	$0.00	
Sidewalk	47,652	Sq. Ft.	$5.30	$252,555.60	
Curb & Gutter	7,942	Linear Feet	$17.00	$135,014.00	
Landscaping	4,412	Sq. Yds.	$10.00	$44,122.22	
Intersection Improvement	0	# of Intersections	$300,000.00	$0.00	
Roundabout	0	Each	$300,000.00	$0.00	
Irrigation Structures/Piping	0	Linear Feet	$90.00	$0.00	
Canal Structures	0	Sq. Ft.	$60.00	$0.00	
Right of Way Acquisition	158,382	Sq. Ft.	$5.00	$791,910.00	
Perpetual Easements	113,130	Sq. Ft.	$4.00	$452,520.00	
Property Acquisition	0	Each	$280,000.00	$0.00	
Striping	1.1	Mile	$5,000.00	$5,650.57	
Traffic Signs	13	Each	$500.00	$6,618.33	
Ped. Ramps	14	Each	$1,500.00	$21,000.00	
Erosion Control	1	Percentage	$2,212,037.18	$22,120.37	
Clear & Grub	1	Percentage	$2,212,037.18	$22,120.37	
Street Lighting - New	5	Each	$5,000.00	$25,000.00	
Street Lighting - Relocation	2	Each	$2,500.00	$5,000.00	
Traffic Control	2	Percentage	$2,212,037.18	$44,240.74	

Utility Relocation Contingency 5%	$115,026
Subtotal	$2,415,545
Contingency 15%	Included in Total Construcion Costs
Total Construction Cost	$2,777,876
Legal/Engineering 8%	Included in Total Project Costs
Total Project Cost	$3,000,106

TWIN FALLS CITY CAPITAL FACILITIES PLAN
COST ESTIMATE
Cheney Dr
From Parkview Dr to North College Rd (78' ROW)

ITEM	QUANTITY	UNIT	UNIT COST $	TOTAL COST$	COMMENT
Asphalt	6,009	Tons	$90.00	$540,825.12	
Leveling Course	6211	Tons	$22.00	$136,650.24	
Base Course	20,064	Tons	$12.42	$249,188.73	
Excavation	22,208	Cu. Yds.	$25.00	$555,200.12	
Remove Existing Asphalt	0	Sq. Ft.	$1.00	$0.00	
Sidewalk	79,068	Sq. Ft.	$5.30	$419,060.40	
Curb & Gutter	13,178	Linear Feet	$17.00	$224,026.00	
Landscaping	7,321	Sq. Yds.	$10.00	$73,211.11	
Intersection Improvement	0	# of Intersections	$300,000.00	$0.00	
Roundabout	0	Each	$300,000.00	$0.00	
Irrigation Structures/Piping	0	Linear Feet	$90.00	$0.00	
Canal Structures	0	Sq. Ft.	$60.00	$0.00	
Right of Way Acquisition	513,942	Sq. Ft.	$5.00	$2,569,710.00	
Perpetual Easements	0	Sq. Ft.	$4.00	$0.00	
Property Acquisition	0	Each	$280,000.00	$0.00	
Striping	5.0	Mile	$5,000.00	$24,958.33	
Traffic Signs	44	Each	$500.00	$21,963.33	
Ped. Ramps	12	Each	$1,500.00	$18,000.00	
Erosion Control	1	Percentage	$4,882,793.39	$48,827.93	
Clear & Grub	1	Percentage	$4,882,793.39	$48,827.93	
Street Lighting - New	10	Each	$5,000.00	$50,000.00	
Street Lighting - Relocation	0	Each	$2,500.00	$0.00	
Traffic Control	2	Percentage	$4,882,793.39	$97,655.87	

Utility Relocation Contingency 5%	$253,905
Subtotal	$5,332,010
Contingency 15%	Included in Total Construcion Costs
Total Construction Cost	$6,131,812
Legal/Engineering 8%	Included in Total Project Costs
Total Project Cost	$6,622,357

TWIN FALLS CITY CAPITAL FACILITIES PLAN
COST ESTIMATE
Eastland Dr
From Candleridge Dr to Orchard Dr (92' ROW)

ITEM	QUANTITY	UNIT	UNIT COST $	TOTAL COST$	COMMENT
Asphalt	3,287	Tons	$90.00	$295,852.64	Cost Includes Thicker Pavement Section
Leveling Course	27291	Tons	$22.00	$600,394.57	Cost Includes Thicker Leveling Course Section
Base Course	46,263	Tons	$12.42	$574,591.72	Cost Includes Thicker Base Course Section
Excavation	71,773	Cu. Yds.	$25.00	$1,794,334.27	
Remove Existing Asphalt	0	Sq. Ft.	$1.00	$0.00	
Sidewalk	171,804	Sq. Ft.	$5.30	$910,561.20	
Curb & Gutter	27,608	Linear Feet	$17.00	$469,327.50	
Landscaping	15,908	Sq. Yds.	$10.00	$159,077.78	
Intersection Improvement	0	# of Intersections	$300,000.00	$3,500,000.00	
Roundabout	0	Each	$300,000.00	$0.00	
Irrigation Structures/Piping	0	Linear Feet	$90.00	$0.00	
Canal Structures	0	Sq. Ft.	$60.00	$0.00	
Right of Way Acquisition	382,048	Sq. Ft.	$5.00	$1,910,240.00	
Perpetual Easements	391,440	Sq. Ft.	$4.00	$1,565,760.00	
Property Acquisition	0	Each	$280,000.00	$0.00	
Striping	3.0	Mile	$5,000.00	$14,983.43	
Traffic Signs	101	Each	$500.00	$50,261.67	
Ped. Ramps	62	Each	$1,500.00	$93,000.00	
Erosion Control	1	Percentage	$12,043,384.77	$120,433.85	
Clear & Grub	1	Percentage	$12,043,384.77	$120,433.85	
Street Lighting - New	13	Each	$5,000.00	$65,000.00	
Street Lighting - Relocation	16	Each	$2,500.00	$40,000.00	
Traffic Control	2	Percentage	$12,043,384.77	$240,867.70	

Utility Relocation Contingency 5%	$626,256
Subtotal	$13,151,376
Contingency 15%	Included in Total Construcion Costs
Total Construction Cost	$15,124,083
Legal/Engineering 8%	Included in Total Project Costs
Total Project Cost	$16,334,009

TWIN FALLS CITY CAPITAL FACILITIES PLAN
COST ESTIMATE
Addison Ave
From Juniper St to Morningside Dr (92' ROW)

ITEM	QUANTITY	UNIT	UNIT COST $	TOTAL COST$	COMMENT
Asphalt	622	Tons	$90.00	$55,951.20	
Leveling Course	1028	Tons	$22.00	$22,626.94	
Base Course	2,539	Tons	$12.42	$31,530.16	
Excavation	3,677	Cu. Yds.	$25.00	$91,931.64	
Remove Existing Asphalt	0	Sq. Ft.	$1.00	$0.00	
Sidewalk	20,952	Sq. Ft.	$5.30	$111,045.60	
Curb & Gutter	3,492	Linear Feet	$17.00	$59,364.00	
Landscaping	1,940	Sq. Yds.	$10.00	$19,400.00	
Intersection Improvement	0	# of Intersections	$300,000.00	$0.00	
Roundabout	0	Each	$300,000.00	$0.00	
Irrigation Structures/Piping	0	Linear Feet	$90.00	$0.00	
Canal Structures	0	Sq. Ft.	$60.00	$0.00	
Right of Way Acquisition	35,112	Sq. Ft.	$5.00	$175,560.00	
Perpetual Easements	47,880	Sq. Ft.	$4.00	$191,520.00	
Property Acquisition	0	Each	$280,000.00	$0.00	
Striping	0.6	Mile	$5,000.00	$3,046.40	
Traffic Signs	12	Each	$500.00	$5,820.00	
Ped. Ramps	12	Each	$1,500.00	$18,000.00	
Erosion Control	1	Percentage	$873,095.94	$8,730.96	
Clear & Grub	1	Percentage	$873,095.94	$8,730.96	
Street Lighting - New	17	Each	$5,000.00	$87,300.00	
Street Lighting - Relocation	0	Each	$2,500.00	$0.00	
Traffic Control	4	Percentage	$873,095.94	$34,923.84	

Utility Relocation Contingency 5%	$46,274
Subtotal	$971,756
Contingency 15%	Included in Total Construcion Costs
Total Construction Cost	$1,117,519
Legal/Engineering 8%	Included in Total Project Costs
Total Project Cost	$1,206,921

Appendix C – Travel Demand Model

QRS II Model

Model Development

As mentioned in Chapter 1, a Travel Demand Model was developed for Twin Falls using known and forecasted socio-economic factors. To begin the modeling process it was essential to take an inventory of the street network within the City of Twin Falls. By studying aerial photography and by touring the street network, an inventory of lane configurations, traffic signals, vehicle speeds and other physical features was taken for creating the model. Model nodes and links were matched to the ground location of intersections and streets.

The inventory was crucial to establish the base condition of the street network. As part of building the travel demand model, traffic analysis zones (TAZs) were developed. These TAZs were obtained from Intermountain Demographic and are based on Census 2000 tract maps and block groups. In some instances it was necessary to split TAZs when geographically large census blocks would not allow the model road network to load properly. In total there are 43 TAZs in the Twin Falls travel demand model. Figure 20 is a representation of the TAZs in the City of Twin Falls.

A crucial input to any travel demand model is the region's socio-economic data. Dwelling Units, be they single family homes, town homes or apartments, are an important piece of data the model uses for trip generation purposes. Dwelling Units by TAZ were obtained from Intermountain Demographic and are based on the same data as the latest, 2008, Twin Falls Comprehensive General Plan. A summary of the dwelling unit data used in the travel demand model is included in the appendix.

Another important piece of socioeconomic data is employment by TAZ. The number and types of jobs by TAZ was obtained from Intermountain Demographic and is based on the same data as the latest Twin Falls Comprehensive General Plan. The model separates employment by three types: retail, non-retail and service. For modeling purposes, each employment type has its own production and attraction rate. A summary of the employment data used in the travel demand model is included in the appendix.

The Twin Falls travel demand model has eight external stations. External stations are where arterials and highways leave the modeled area. Production and attraction attributes were developed for the external stations based on recent traffic counts. The following is a list of the locations of the external stations in the Twin Falls travel demand model.

- Blue Lakes Blvd north of the Perrine Bridge
- Falls Avenue at 3400 East
- Addison Avenue at 3400 East
- Kimberly Road at 3400 East
- Washington Road at 3400 North

- SH-74 at 2700 East
- US-93 at 2700 East
- Pole Line Road at 2700 East

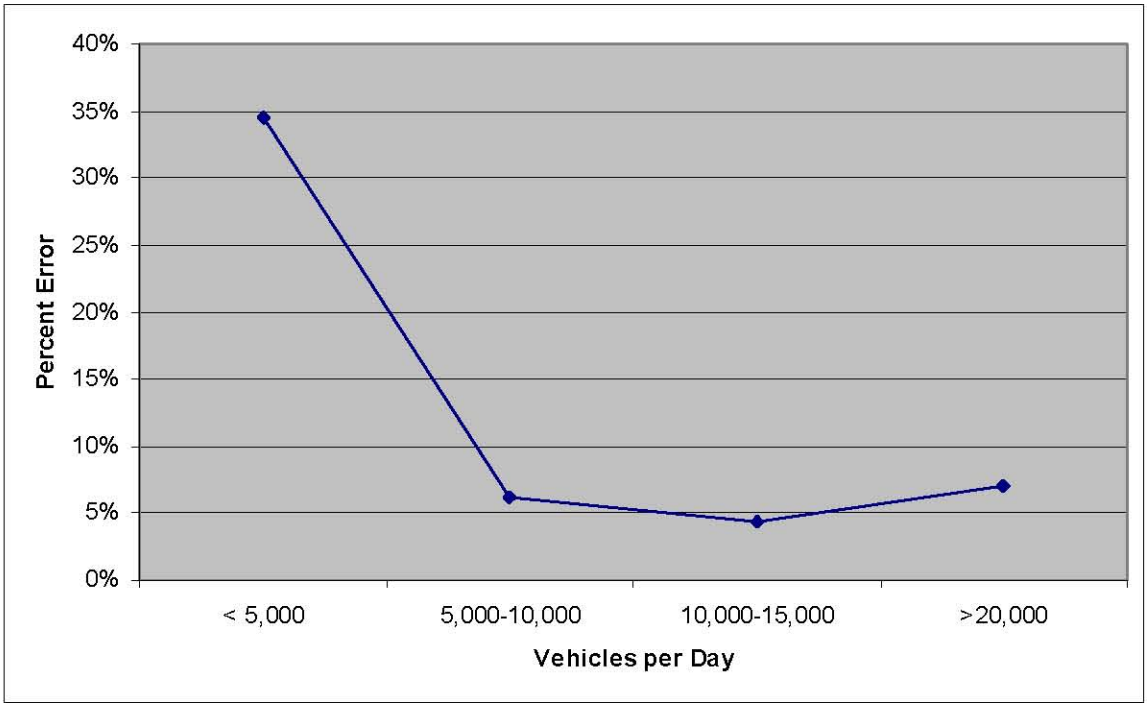
Base Year Model Calibration

Once the model was built, initial computer runs were made to check the accuracy of the model. Traffic counts were taken throughout the City and compared against model results. Initially the model was not all that accurate and steps had to be taken to calibrate the model. In general, the model reported roadway volumes less than those observed. The following steps were taken to calibrate the model:

- Raised production and attraction values at the external stations to better reflect traffic count volumes taken in November of 2007
- Adjusted various link speeds to make the link either more or less attractive
- Adjusted trip lengths to better match Census 2000 Journey to Work data
- Adjusted various intersection delays to make the link either more or less attractive
- Lowered home based non work trips and non home based vehicle occupancy rates in order to raise system wide low modeled roadway volumes.
- Took steps to make busier streets, such as Blue Lakes Blvd., more attractive as initially these streets showed low modeled volumes

Root mean square is a way to test the accuracy of a travel demand model. Generally, roads with a volume of less than 5,000 vehicles a day tend to have a high percentage rate of modeling error. Modeled roads with a volume of more than 20,000 vehicles a day should have an error rate of 10% or less. The percent error of the Twin Falls travel demand model falls within these parameters. The graphic below represents the Twin Falls area model percent of error.

Graph 6: Twin Falls Travel Demand Model Percent Error



Socio- Economic Data

Table 18: Per Capita Income Data

QRS II Per Capita Income Data			
TAZ	Existing	2015	2030
1	$14,864	$21,582	$41,713
2	$15,819	$22,969	$44,393
3	$21,136	$30,689	$59,314
4	$15,788	$22,924	$44,306
5	$18,745	$26,851	$48,853
6	$15,151	$21,703	$39,487
7	$20,996	$30,076	$54,720
8	$20,772	$29,755	$54,136
9	$18,450	$26,429	$48,085
10	$16,961	$24,296	$44,204
11	$22,135	$29,623	$48,397
12	$26,835	$35,914	$58,673
13	$22,703	$30,384	$49,639
14	$20,482	$27,411	$44,783
15	$23,373	$31,280	$51,104

QRS II Per Capita Income Data			
TAZ	Existing	2015	2030
16	$52,186	$69,841	$114,102
17	$29,169	$39,037	$63,777
18	$19,204	$25,701	$41,989
19	$18,408	$24,636	$40,248
20	$18,995	$25,421	$41,532
21	$17,336	$23,201	$37,904
22	$24,322	$32,550	$53,179
23	$21,148	$28,303	$46,239
24	$18,489	$24,744	$40,425
25	$22,590	$30,232	$49,392
26	$16,034	$22,968	$41,788
27	$17,448	$23,351	$38,149
28	$16,701	$22,351	$36,516
29	$22,072	$29,539	$48,259
30	$15,006	$20,083	$32,810
31	$27,616	$36,959	$60,381
32	$17,127	$22,921	$37,447
33	$17,629	$23,593	$38,545
34	$19,515	$26,117	$42,669
35	$14,584	$19,518	$31,887
36	$17,470	$23,380	$38,197
37	$17,781	$23,796	$38,877
38	$19,828	$26,536	$43,353
39	$17,442	$23,343	$38,136
40	$22,567	$30,202	$49,342
41	$15,791	$21,133	$34,526
42	$13,405	$17,940	$29,309
43	$13,537	$18,117	$29,598
44	$16,380	$21,922	$35,814

Table 19: Dwelling Unit Data

QRS II Dwelling Unit Data			
TAZ	Existing	2015	2030
1	548	564	586
2	637	637	637
3	463	538	640
4	459	524	611
5	591	784	986
6	344	344	344
7	571	571	571
8	1122	1307	1637
9	412	861	1759
10	580	580	580
11	380	396	435
12	581	628	741
13	484	492	514
14	422	444	492
15	976	2151	3650
16	592	1059	1675
17	1049	1223	1454
18	371	378	401
19	344	358	394
20	457	477	532
21	324	344	399
22	410	624	990
23	390	605	888
24	442	765	1725
25	332	363	457
26	2849	3024	3243
27	1782	1862	1932
28	679	770	779
29	901	901	901
30	806	806	806
31	1140	1172	1215
32	1659	1659	1659
33	1932	1932	1932
34	1373	1373	1373
35	1518	1518	1518
36	982	982	982
37	2283	2309	2345

QRS II Dwelling Unit Data			
TAZ	Existing	2015	2030
38	213	213	213
39	1016	1087	1216
40	424	723	1008
41	449	459	489
42	588	634	738
43	544	740	1020
44	458	866	1403

Table 20: Retail Employment Data

QRS II Retail Employment Data			
TAZ	Existing	2015	2030
1	92	99	114
2	20	22	26
3	0	0	0
4	0	0	0
5	0	0	0
6	0	0	0
7	0	0	0
8	467	523	615
9	101	131	181
10	117	126	139
11	0	0	0
12	0	0	0
13	11	13	15
14	0	0	0
15	324	839	1113
16	0	0	0
17	67	80	89
18	0	0	0
19	0	0	0
20	73	87	97
21	0	0	0
22	0	0	0
23	0	0	0
24	87	303	462
25	0	0	0
26	301	322	357

QRS II Retail Employment Data			
TAZ	Existing	2015	2030
27	221	263	293
28	71	84	94
29	0	0	0
30	682	811	905
31	1166	1403	1620
32	91	108	121
33	85	101	113
34	344	410	457
35	992	1181	1317
36	43	51	57
37	429	511	569
38	513	611	681
39	55	65	73
40	12	14	16
41	0	0	0
42	0	24	96
43	146	174	194
44	76	90	101

Table 21: Non-Retail Employment Data

QRS II Non Retail Employment Data			
TAZ	Existing	2015	2030
1	674	707	768
2	374	393	426
3	526	553	600
4	635	667	724
5	371	414	580
6	111	125	149
7	363	407	488
8	1110	1368	1743
9	754	1110	1833
10	348	390	468
11	268	298	346
12	114	128	147
13	160	178	207
14	146	163	189
15	613	1412	2364

QRS II Non Retail Employment Data			
TAZ	Existing	2015	2030
16	187	466	1122
17	236	262	305
18	191	212	247
19	161	179	208
20	231	257	299
21	112	125	145
22	211	234	273
23	63	69	81
24	1142	1815	2907
25	151	168	195
26	1946	2187	2619
27	954	1061	1233
28	251	279	324
29	95	1123	1123
30	3715	4165	4927
31	1457	1658	1883
32	3085	3433	3987
33	382	425	494
34	2187	2433	2827
35	5072	5643	6555
36	465	518	601
37	1537	868	1987
38	2144	2385	2771
39	634	705	819
40	169	199	218
41	22	55	105
42	46	81	137
43	506	593	731
44	567	650	811

Table 22: Service Employment Data

QRS II Service Employment Data			
TAZ	Existing	2015	2030
1	0	0	0
2	0	0	0
3	0	0	0
4	0	0	0
5	24	26	29
6	0	0	0
7	0	0	0
8	1027	1065	1114
9	0	0	61
10	0	0	0
11	0	0	0
12	0	0	0
13	0	0	0
14	0	0	0
15	0	0	0
16	0	0	0
17	0	0	0
18	0	0	0
19	0	0	0
20	0	0	0
21	0	0	0
22	0	0	0
23	0	0	0
24	0	0	76
25	0	0	0
26	0	0	0
27	583	600	623
28	0	0	0
29	0	0	0
30	35	36	37
31	0	0	0
32	0	0	0
33	0	0	0
34	0	0	0
35	35	36	37
36	0	0	0
37	128	132	137

QRS II Service Employment Data			
TAZ	Existing	2015	2030
38	304	310	325
39	0	0	0
40	0	0	0
41	0	0	0
42	0	0	0
43	0	0	0
44	587	605	628

Appendix D– Traffic Calming

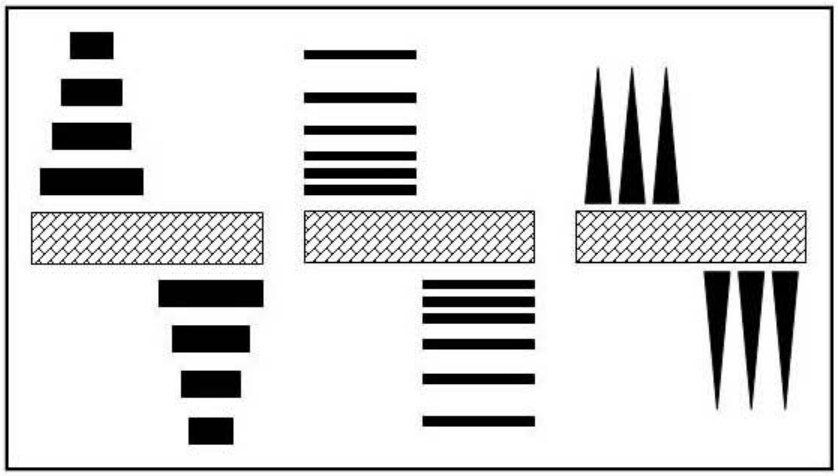
Traffic Calming

Traffic calming exists in many forms, from small, easy, inexpensive, non-intrusive actions and projects to much more intrusive actions and larger capital improvements. Typically, traffic calming is divided into two types: measures intended to divert traffic from one route to another and those meant to slow speeding traffic. Although traffic calming tools are generally divided into these two functional groups, there is much overlap between them and measures intended to divert traffic will often slow traffic as well.

Traffic Calming Tools

One method of slowing vehicles and calming traffic consists of signs, signals and markings which are designed to provide information to drivers. Speed limit signs, yield signs, roadway painting and traffic signals are examples. The figure below represents an example of how striping might effectively slow drivers before entering a crosswalk.

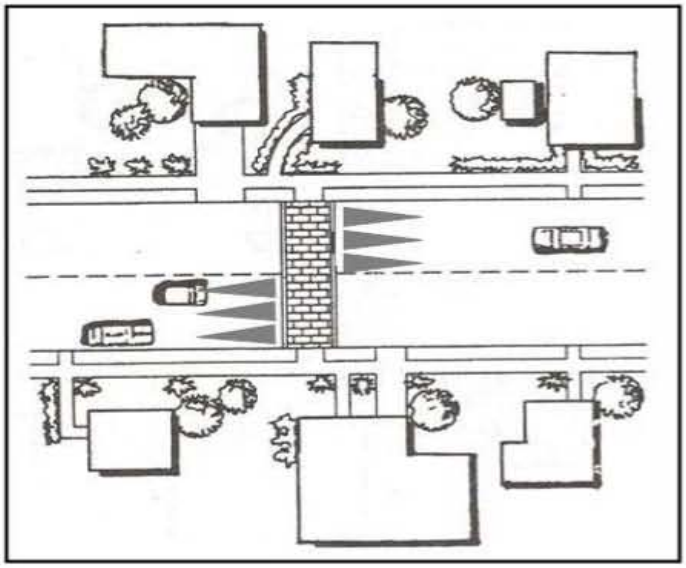
Graphic 2: Various Crosswalk Striping Examples



Another type of traffic calming option consists of street modifications. Street modifications are calming tools that change the vertical or horizontal physical characteristics of the roadway. Speed bumps, speed tables, islands and bulb outs are examples.

A speed table is an example of a traffic calming device. Speed tables come in a variety of forms, from raised asphalt with paint markings to alternative materials such as stamped concrete, cobblestone, or brick pavers. The surface of the speed table is generally about three inches higher than the road surface, with "ramps" of about six feet in length on each side from the road surface to the table surface. The horizontal deflection of the speed tables and overall increased visibility of the treatment causes drivers to reduce speeds. A graphic of a mid-block raised crosswalk is shown in the figure below.

Graphic 3: Mid-Block Raised Crosswalk

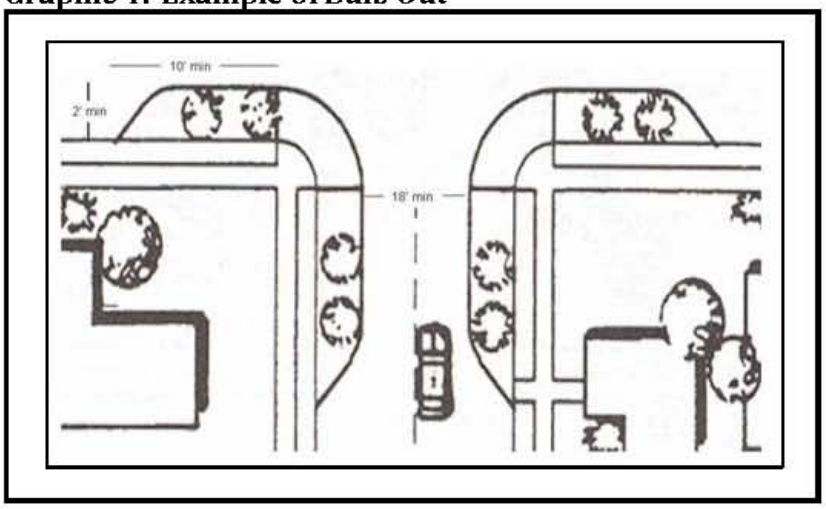


Source: Traffic Calming: State of the Practice

Another example of a street modification traffic calming device is a center island. These are typically landscaped oval-shaped raised medians in the middle of the roadway. Their function is to narrow the roadway coming into an intersection so that drivers are encouraged to slow down and proceed more cautiously. They tend to be more effective when they are smaller in length, as opposed to longer islands that separate traffic flow.

Intersection bulb outs, are another example of an alternative two traffic calming device. Bulb outs are intended to narrow the visual field of the driver at the intersection so more care is taken when proceeding through the intersection. In effect, they reduce the pavement width at the intersection and provide for a more pedestrian and bicycle-friendly roadway. A striped crosswalk can be added, which draws a driver's attention to the intersection. Bulb outs are shown in the Figure 24.

Graphic 4: Example of Bulb Out



Source: Traffic Calming: State of the Practice

The other major type of traffic calming device is route modifications. One way streets, turn prohibitions, and street closures are examples of route modifications. Route modification is a way to change the way traffic is routed, while alternatives mentioned previously focus on changing driver behavior.

Traffic Calming Considerations

The following considerations should be taken into account when implementing a traffic calming device:

- All signage and pavement markings and devices should conform to the *Manual on Uniform Traffic Control Devices* standards. Where traffic calming measures are not specifically identified in the Manual, advanced warning and guide signs must meet appropriate standards for size, shape, etc.

- Streetscaping is an important component to a traffic calming device. Proper streetscaping will "soften" the appearance and make them less controversial in the community.

- If traffic calming devices are spaced too far apart, then speeding is likely to occur between the devices. Traffic calming devices should be spaced close enough together so vehicles will not have the distance to accelerate between the devices.

- Emergency responders should have input on proposed traffic calming devices. Slowing fire access, for example, may cost lives. The input of the emergency service community related to other access points, trade-offs, or preferred options should be considered.

- Traffic calming can be most successful in either up-front neighborhood design or larger scale retrofit actions. Neighborhood design features such as long, straight roads with limited landscaping may foster higher speeds and are counter to traffic calming goals. Retrofit actions should be designed to understand and eliminate the problem and not simply move the problem to a parallel path.

Traffic calming is continually evolving. The latest information should be considered before a traffic calming plan is developed. The Institute of Traffic Engineers produces literature that should be regularly consulted.

Appendix E– Public Involvement Meeting Notes

Technical Advisory Committee Meeting #1 (Combined with CAC Meeting #1)

Date: September 10 / 11, 2007	
Project Number: 06137	**Project Name:** Twin Falls Transportation Master Plan

I. Attendance

- **TAC**
- **CAC**
- **GTFATC**

II. Welcome, Introductions, and Opening Remarks.

Mike Pepper opened the meeting with introductions and discussed the purpose of the meeting which is to introduce the Twin Falls Transportation Master plan process, steps, schedule, and roles of the City, Technical Advisory Committee (TAC), Citizen Advisory Committee (CAC), Consultant Team, and Idaho Transportation Department (ITD). The meeting included presentation and discussion of existing conditions and preliminary local plans review and a brief discussion of the data collection and pavement management system work program. Finally, an important part of this first round of meetings was the identification of the committee's (TAC, CAC and Greater Twin Falls Area Transportation Committee (GTFATC) initial issues and concerns regarding Twin Falls transportation system.

III. Overview of the Planning Area and Process.

Mike and Kyle discussed the project background and development and planning area description. They explained the Transportation Master Plan process, scope of work, and schedule. They also outlined the primary goal of the Twin Falls Master Plan process which is to identify the capital facility improvements, pavement management plan and supporting policies to meet the Twin Falls transportation facility needs for the next 20 years.

IV. Roles and Responsibilities.

Mike discussed the important roles that the City of Twin Falls, CAC, TAC, ITD, and the consultant team will play in the development of the Transportation Master Plan. Each separate group will contribute a vital part to help bring about the completion of this new Master Transportation Plan that meets both the functional requirements of the City's transportation system and the needs of its users.

V. Public Involvement Plan Highlights.

Mike talked about the plan element highlights and the planned schedule of events and opportunities.

VI. Plan Goals and Objectives.

Mike discussed the specific goals and objectives of the Plan with the committee members.

Transportation System Goals from the Committees

- *Need a balance between public needs and engineered solutions.*
  - *Consider project impacts to the public needs*
  - *Consider public needs/ impacts to roadway system needs and changes*
- *Improved connectivity of both roadways and bike/ped systems throughout the City.*
- *Adjust State standards to meet City needs as appropriate and feasible.*
- *Plan for future Right of Way needs (setbacks, etc...)*
- *Provide the TAC and CAC with a good understanding of alternatives and technical issues to assist them in*

understanding and developing final recommendations.

- *Don't get distracted with inappropriate options. What works in one area does not necessarily work in all areas.*
- *Provide connectivity between the City and county planning, roadway systems and needed improvements*
    - *Rural vs. City standards. County based on 1 mile roads, City using 1 mile roads as arterials and ¼ mile roads as collectors.*
    - *Coordinate- Plan accordingly*
        - *Falls E/W*
        - *Blue Lakes South*
        - *Addison East, etc...*
        - *Alignment*

VII. Basic Existing Conditions.

Kyle and Mike informed attendees about current data collected and future data collection efforts, the preliminary local plans summary, the Comprehensive Plan Coordination status, and general issues or concerns that have been raised thus far through stakeholder interviews and other system investigation.

VIII. Pavement Management System Work Program.

Kyle discussed the data collection and program schedule for the Pavement Management System Work Program and explained the relationship of the pavement management system to the capital improvement plan and overall system improvement and management.

IX. Comments and Recommendations.

Mike opened the floor for any comments or recommendations that anyone might have regarding the issues and concerns they have for the City's transportation system. Following is a list of the items that were discussed as well as integration of comments that Mike has received to date as part of personal stakeholder interviews with several community members:

Safety

(Twin Falls Transportation Safety Committee Issues need to be added)

- In/through School Zones and School Routes.
    - Perrine & Morningside areas are particularly problematic.
- Flash lights, etc... should be utilized in these school zones.
- 2nd street in Front of Schools and Downtown.
    - Plan & schedule improvements in this area.
- Lack of Sidewalks.
    - South of Twin Falls (Old Town area) lacks sidewalks.
    - West of Falls also lacks sidewalks.
        - Either there is discontinuity in the sidewalks or the existing sidewalks are in poor condition.
- Open Canals at Crossings.
    - Requires fencing or additional bussing for safety of children.
    - Harmon Park is an example.
- High Speeds in Residential Areas and 2nd streets.
    - Lack of Traffic Calming.
- Pedestrian Safety Improvements Needed.
    - Require new developments to provide pedestrian safety.
    - Develop a Design Criteria for "walk friendly" devices. Need to address compliance and identify a degree of pedestrian responsibility.

Traffic Congestion

Problem Areas:

- ✓ Washington Street
- ✓ Blue Lakes (Don't re-create)

- ✓ Locust
- ✓ North College
- ✓ Filer
- ✓ Falls
- ✓ Madrona
- ✓ Eastland – Addison to Kimberly
- ✓ President Streets – Filmore and Harrison
- ✓ Addison West

Anticipate Alternate Routes that traffic will use to avoid congestion areas.
Evaluate bypasses to reduce congestion through downtown.

Trucking/Overall Regional Circulation

- Lack of workable truck accesses from North to South (I-84 to South Twin Falls, US 93, etc.).
  - Washington Street should be improved to accommodate these trucking needs. (alignment, radii, ballast)
  - Signage also needs to be improved.
- East and West truck access to Twin Falls is difficult.
  - Kimberly Rd. to Minidoka and 2nd streets are currently used by trucks as an East/West access as well as using other roads on the south edge of town.
  - Excessive use is causing damage to the roads.
- There is a desire to move trucks out of town that don't need to run through town.
- There is a shared desire by ITD, the City and the Downtown property/business owners to relocated US 30 off the 2nd Avenues to improve safety and the function of downtown, as well as enhance and clarify the east/west truck route on US 30 through the City..
- Southeast improvements should be implemented per the Southeast Corridor Plan to ease problems.
- Remember that some trucking into the City is necessary to bring goods into the City.

Bike/Pedestrian

- Review impacts to North College in meeting college expansion needs.
- Need bike and pedestrian facilities West of CSI on Washington Street.
- Lack of pedestrian facilities City wide, including main arteries.
  - How should existing sidewalks be maintained?
    - There should be a consistency in sidewalk standards.
    - Should big trees be removed to maintain sidewalks?
    - Should sidewalks be on both sides and in all residential areas?
- Bike paths along City roads should consider impacts to parking.

Congestion/Traffic Flow

- Blue Lakes needs more protected left turns. The unprotected left turns are unsafe and cause delays along Blue Lakes Blvd.
- Blue Lakes Blvd. needs to have restrictions on truck traffic.
- Lack of transit options to assist in reducing traffic volumes.
- Improve signal coordination to improve traffic flow.

Trucking Safety

- Intersection Geometrics should accommodate truck traffic movements.
- Effective truck routes.
  - Provide routes around City for trucks passing through. Provide routes through City with improvements for trucks delivering to or from Twin Falls.
  - Must consider costs early in developing plan for implementations of individual projects.
- Increase in truck weight limits (105,000 lbs) results in additional wear to existing roads.

- Identify feasible alternatives (i.e. where do roundabouts really work?)
- Separate "ideal" from what "makes sense". Avoid overbuilding structure when it is not immediately needed.
- Identify future Right of way needs with this plan for acquisition purposes.
    - Acquire Right of Way at a cheaper rate.
- Evaluate role of public transit in the Transportation Master Plan.
- Access- balance property owner needs with traffic needs. (i.e. Pole Line)
- Predict future traffic patterns- where does the traffic really go?
- Respect private property rights with balance to the City needs.
    - Fillmore extension
    - North/South Corridor
- Roadway classification system connectivity.
- Consistency in landscaping required for major thoroughfares
    - Set landscaping standards by road rather than land use.
    - How do we retrofit the existing landscaping?
    - High Cost to retrofit the existing landscape.
- Effective pavement management program and maintenance.
    - Keep up with the maintenance needs.
    - Evaluate Design Standards etc… to provide adequate roads.
    - Consider Maintenance as equally important to new improvements.
    - Consider impacts of "today's" decisions and improvements on future maintenance.
- Code enforcement for parking and landscaping in intersection sight triangles.
- Identify locations for Fast vs. Slow speeds.
    - Also as applies to design standards.
- Consider coordination between roadway design and traffic control. I.e. Canyon St. behind Dell, traffic calming, consider legal impacts.
- Integrate other infrastructure projects into program to assist in avoiding schedule conflicts and damage to new roads.

Transit:

- Fixed route designation to places to pick up riders.
- Should there be a pullout for public transit or should it stop in the travel lane to pick up/drop off?
- Move from demand to route system.
- Twin Falls may meet urban status thus requiring transit service (MPO Status)
- Develop Standards. (Benches, pockets, ROW, etc…) to accommodate transit operations.

Specific Areas of Concern:

- 3300/3700 intersection
    - Sight distance issues.
    - Is a signal warranted?
    - Coordinate with street classification and connectivity.
- Valley Gutters crossing major roads causes traffic to slow and creates confusion with side road users.
- Pavement Cracking and failing throughout portions of town.
- Poor intersection visibility- landscaping impacting sight distances. Driveways also have sight distance issues. Need to enforce code related to sight distance triangle.
- Economics
    - Keep truck routes available that provide access to and from I-84 within a 5-10 minute time frame.
    - Traffic/pedestrian interface in downtown and 2nd streets.
        - Crossings are not adequate and are dangerous.
        - 2nd streets are too wide to cross safely at uncontrolled crossings.
- Interface with Rock Creek Canyon
    - Need additional roads crossing the Canyon to improve access to south end of town.
- Make improvements to provide a "walk friendly" community.

- Educate public on sidewalk maintenance responsibility. Sidewalk and curb and gutter are on public right of ways but are to be maintained by private ownership.
    - Expect some congestion which acts as a traffic calming device.
- Funding
    - Evaluate performance contracting as an option.
    - City currently evaluating impact fees for funding option.
    - Property Owner participating in reducing project costs by donating or discounting right of way costs.

- Access- Evaluate code requirements and enforcement (i.e. Blue Lakes Blvd.)
- Consider more than 20 year horizon. Evaluate right of way and arterial needs in 30 to 40 year basis.
- Address impacts from increase of truck weights to 129,000 lbs. on Eastland and 2nd streets.
- Need to address substandard railroad crossing and pavement on Eastland.
- Funding- consider impact fees
- Minimize sprawl to reduce impacts to county roads.
- Separate retail traffic from industrial traffic where possible.
- Relocate state highway related traffic off city streets.

X. Next Steps.

Mike concluded the meeting by informing those present of the next steps in the Master Plan process.

- Existing Conditions and Data Gathering will be completed
- Public Workshop #1 is scheduled for Monday, Oct 15th
- City Council Work Session #1 will be held Monday, Oct. 15th
- TAC Meeting #2 will be held on Tuesday, Oct. 16th
- Draft goals will be developed for the transportation system and coordination with comprehensive plan to understand future land use projections.

TAC Meeting #2 Meeting Notes

Date: October 16, 2007		**Time:** 10:00 a.m.- 12:00 p.m.
Project Number: 06137		**Project Name:** Twin Falls Transportation Master Plan

Attendees:

Name	Company Name	Phone No.	Company Address	E-mail Address
Chuck Carnohan	ITD			
Rod Mathis	Riedesel Engineering			
Ryan Beck	Interplan			
Troy Vitek	EHM Engineers			
Bryan Krear	City of Twin Falls			
Glenda Dwight	City of Twin Falls			
Kyle Comer	Civil Science			
Rob Ramsey	Civil Science			
Ryan Horsley	City of Twin Falls			
Debra Rose	City of Twin Falls			
Jackie Fields	City of Twin Falls			
Ann Alvarez	Con Agra Foods			
Melinda Anderson	City of Twin Falls			
Dennis Bowyer	City of Twin Falls			
Bruce Stephens	City of Twin Falls			
Rick Dunn	Twin Falls County			
Mike Pepper	KMP Planning			

I. Welcome, Introductions, and Opening Remarks.

Mike Pepper opened the meeting with introductions and discussed the purpose of the meeting which is to present and discuss additional existing conditions and preliminary plan review for the Transportation Master Plan. The meeting is also to help prioritize the types of issues and concerns that the committee has for the transportation system and to develop draft transportation system goals.

II. Status of the Planning Process.

Kyle and Mike presented to the committee the plan process, activities since the last meeting, and also a schedule review. They discussed the Primary goal of the Transportation Master Plan process which is to identify the capital facility improvements, pavement management plan, and supporting policies to meet the Twin Falls transportation facility needs for the next 20-30 years.

III. Additional Existing Condition Information.

Kyle discussed the data that has been collected to date. So far City road data, and accident data has been collected. Data collection is taking place that locates pavement widths, curb and gutter locations, and sidewalk locations. Every major arterial street north of Addison Ave has had this data collected. A map of Existing Road Classifications was presented and the committee was asked for any comments regarding this map. No No substantive comment was provided for changes regarding the Road Classification Map. The status of the Comprehensive Plan Land Use map (draft) and how it will be a part of the transportation plan was discussed along with what steps are being taken to coordinate with Landmark and the Comprehensive Plan. Kyle then discussed the Pavement Management status. Field investigation on pavement management will begin next week and should take about one month to complete investigation on ¼ of the existing arterials and collectors. Ryan, from Interplan, discussed model status. The current model is working but not accurate at this time. He feels that at least 40 Traffic Analysis Zones (TAZ) are needed to provide a calibrated model. The more TAZ the more accurate the model will be. It was also discussed that Civil Science will be collecting traffic data at 12 various locations to further understanding of traffic volumes. Concern was raised about the sweeping schedule and how that would interfere with traffic data collection. Civil Science will find out what schedule the sweepers have and coordinate with them prior to placing any traffic counters.

IV. Issues Review and Prioritization.

Mike reviewed the issues that have been heard so far from previous meetings with the TAC, CAC, GTFTAC, the Twin Falls City Council, and the public meeting. Mike then asked the committee to present any additional issues they may have thought of. The new issues presented were:

- Need to look at sections without curb and gutter
- Consider/ Emphasize growth to the south side of the City.
    i. What impact is this growth having on Blue Lakes South and Washington Street?
    ii. This is where the majority of the new development is occurring.
    iii. Residential Design/Compatibility.
- Parking Needs.
    i. Downtown parking, possibly parking structures.
    ii. Relationship to street design.
    iii. Consider rear access and parking using alleys.
    iv. Consider permeable surfaces on parking lots for drainage.
- Move traffic out of City core.
    i. Dissipate to local centers using neighborhood commercial centers.
- Consideration for Emergency Services needs and access.
    i. President Streets are hard to get emergency equipment through.
    ii. New Developments have very few accesses into them.
- Consider impacts to Rail Road use as part of the study.
- Shoshone St. signal timing.
    i. Currently fixed timing schedule.
    ii. Consider activated signal system to improve flow and reduce congestion.
    iii. Also consider activated signal system at Filer and Locust.

Mike then asked the committee to identify and prioritize the different types of transportation system issues to be used later in the process to help organize priorities in project recommendations. After some discussion the committee decided that Safety/Design and Congestion/Design were the two most important priorities to the transportation system. The committee discussed the other issues listed below, but agreed that they all fit under the two main categories of Safety/Design and Congestion/Design.

The committee identified the following issues:

- Safety and Design
    i. Including Emergency Services, etc...
- Congestion and Design
- Bike and Pedestrian safety
- Trucking
- Regional Access
- Planning and Coordination
- Maintenance and Cost Efficiency
- Infrastructure Integration.

Other Comments:

- The TAC committee also agreed that there should be a planning horizon of 25-30 years with frequent updates to this plan.
- The TAC also seemed to agree that the perspective of the community seems to be changing toward more support for new ideas to address transportation related issues; but also added that new ideas were best implemented first in areas of new development.

V. Transportation Plan Goals.

Mike presented the draft plan goals that have been set to guide development of improvement projects. He then asked for comments regarding the draft goals or any goals the committee would like to add. While no major objections were raised regarding the draft goals, additional comments were provided as follows:

- Bike and Pedestrian- Add bike ability and safety
- Add Environmental Concerns.

- Include infrastructure with coordination/planning
- Achievability
- Create a sense of community by maintaining neighborhood identity.

Mike will revise the goals for final review at the next TAC meeting in December.

VI. Next Steps/Adjourn.

Mike concluded the meeting by informing the committee of the next steps that will be taken in the Master Plan process. These steps will include:

- Future land use, traffic demand, and traffic analysis zones assessment.
- Completion of data collection and existing systems
- Asset analysis.
- Initial improvement project identification
- Capital improvement Project development.
- Funding investigation
- Preliminary plan recommendation development.
- Future Public workshop meeting will be held in Feb. 2008.
- Next TAC meeting will be held December 10, 2007. (tentative date)
- Future City Council workshop meeting will be held December 10, 2007. (tentative date)

TAC Meeting #3 Meeting Notes

City of Twin Falls
Transportation Master Plan
Technical Advisory Committee

TAC Meeting #3 Results

Monday, December 10, 2007

10 a.m. to Noon
Twin Falls Parks and Recreation Office
136 Maxwell (Near Rock Creek)

I. Welcome, Introductions and Opening Remarks (Mike Pepper)

Purpose of the meeting:

- *To provide an update on the status of the plan development*
- *To review and confirm the transportation system goals*
- *To present and discuss the proposed future land use*
- *To present the current traffic demand, discuss problem areas and the development of the traffic model*

Attendance

- **Committee**
  - Mike Sullivan
  - Dave Burgess
  - Bryan Krear
  - Rod Mathis
  - Bruce Stephens
  - Rick Dunn
  - Bill Crafton
  - Lee Glasemann
  - Dennis Bowyer
  - Chuck Collins
  - Melinda Anderson
  - Don Hall
  - Troy Vitek

- **City Staff**
  - Jackie Fields, City Engineer
  - Mitch Humble, Community Development Director
- **Consultant Team**
  - Kyle Comer, Civil Science
  - Ed Collins, Civil Science
  - Rob Ramsey, Civil Science
  - Matt Riffkin, InterPlan
  - Ryan Beck, InterPlan

- Mike Pepper, KMP Planning

II. Planning Process Status (Mike Pepper / Kyle Comer)

- Primary goal of the TMP process: *To identify the capital facility improvements, pavement management plan and supporting policies to meet the Twin Fall's transportation facility needs for the next 25-30 years*
- Where we are in the process – Phase II – Identification of Existing and Future Conditions

III. Transportation System Goals (Mike Pepper)

- Review and confirm system goals – Mike presented the updated goals
  - Committee comments on goals
    - Connectivity
      - Add bikes
    - Trucking
      - Add signage considerations (south side)
    - Cooperation / Planning
      - Consider flow of traffic
      - Consider roundabouts as alternative to signals at Five Point intersections, signals don't meet need
    - Design
      - Add traffic calming measures
      - Need better identification of right turn lanes – location – through signage or lane striping, or both
    - Congestion
      - Consider cost / affordability in identifying and recommending possible solutions (this applies to all alternatives and plan recommendations)
      - Consider signal function as an element of potential solution to congestion – clarify when it's ok to turn on green light (when opposing traffic is not moving)
      - Enforcement should be part of the solution to reducing congestion
      - Impact fees may help fund congestion reduction related improvements
    - Maintenance
      - Consider the use of impact fees to fund maintenance (City Staff noted that impact fees are not be applicable for this function, but their availability could free up the use of City funds to address maintenance expense)
      - Consider the use of Local Improvement Districts to provide maintenance funds

IV. Future Land Use (Kyle Comer / Rob Ramsey)

- Present and discuss future land use as identified in the comprehensive plan process – Rob presented the comparison of the existing and the proposed future land use map. He explained that it is being developed as part of the comprehensive planning process and would serve as the foundation for land use assumptions in developing the transportation plan. Committee members were also encouraged to visit the City's web site at http://www.ldi-ut.com/projects/twinfalls.htm to review additional information regarding the comprehensive planning process, status and to provide comment.
- Committee comments
  - The new land use map may require modification of the City / Co. planning area to plan for new a new north / south airport runway
  - Consider the impacts of the rural residential growth outside the proposed City growth boundary
    - Impacts to growth and projected services
    - Accommodate proposed densities outside the boundary

- Plan appropriate street standards to support likely densities outside the City boundary

V. Key Issues / Standards and Problem Areas (Kyle Comer and Rob Ramsey)

- ❑ Review of existing data
  - Committee comments
    - Need additional data on Martin St. – should it be considered as a north / south connection – as a collector?
    -
- ❑ Review of key issues identified to date
  - Committee comments
    - Add concern / desire to move trucking route out of downtown (currently on US 30 / 2nd Avenues)
    - Improve the efficiency / connection, safety and clarity of truck routes through and out of town
- ❑ Standards considerations
  - Committee comments
    - Be careful at adopting / implementing a 106ft. right of way standard – significant potential impacts
    - Consider / accommodate parking needs – space for / striping / conflicts w/other uses
    - Consider applying minor collector standard to Martin St.?
    - Intersection standards / improvements – include / require right turn lanes and accel/decl lanes on arterials to accommodate growth and development
    - Consider / incorporate options to retrofit existing intersections to meet growing traffic volumes, reduce congestion and improve safety and level of service
- ❑ Present and discuss most significant problem areas to be addressed

VI. Traffic Model (Matt Riffkin)

- ❑ Discuss traffic analysis zones
- ❑ Preliminary traffic modeling information
  - Committee comments on modeling data
    - Consider additional industrial growth in the southeast area
    - *Action: Matt will send an updated TAZ to the committee for further review and comment, with committee comments due back by December 31*
    - Road network comments
      - Grandview does not cross Rock Creek or make a complete north/south connection at this time
      - Martin St. does not connect – should it in the future??
      - Consider development / designation of a perimeter road around the hospital on the west side of the City
      - Consider a new bridge over Rock Creek at the west extension of Filer Ave.
        - The canyon is narrower here
        - Consider / evaluate potential north / south connections at 2700 E and Sunway
      - *Action: Matt / team will develop alternative concepts for new north/south connections and Rock Creek crossings and present to the committee at the next meeting. When developing consider / assess qualitative, quantitative, cost, congestion relief and level of service comparisons and scenarios*
      - *Action: Matt will reassess the No. College current and projected traffic volumes – consider the new development in progress and planned on the*

west end of No. College; new high school, Wal-Mart, new hospital, additional residential, etc.

- Address opportunities to reduce serious safety problems where feasible – consider impacts from roadway changes on adjacent streets; increased use, changes in traffic types, etc.

- ❑ Accident conditions
  - Committee comments
    - Distinguish "state reportable" accidents from "local reportable" accident data – be sure the accident data used includes the total accident volumes – Team will verify data used with City staff again to be sure totals are correct
- ❑ Preliminary functional classification
- ❑ Preliminary cross sections
  - Committee comments
    - Consider bike / ped needs in future design improvements
    - Consider the identification and incorporation of the City's desired "level of service" for City streets – Note: this is yet to be determined

VII. Next Steps / Adjourn (Mike Pepper)

- ❑ Complete traffic modeling for traffic analysis zones
  - Send out updated TAZ map for committee review and comment back by Dec. 31
- ❑ Prioritize goals
- ❑ Develop preliminary improvement alternatives
- ❑ Continued work on the asset management program
  - Team will send out a package of alternative priorities for comment from the committee members prior to the next meeting
- ❑ Next TAC Meeting #4 – Monday, February 11th – afternoon tentative 1 – 4 p.m.
  - Add 1 hour to the TAC meetings to allow more time for discussion
  - Send materials out in advance for committee review and meeting preparation

Thanks for your continued participation!

TAC Meeting #4 Meeting Notes

City of Twin Falls
Transportation Master Plan
Technical Advisory Committee

TAC Meeting #4 Results

Monday, March 10, 2008

(Committee comments in red italics)

1:00 to 4:00 p.m.
Twin Falls Parks and Recreation Office
136 Maxwell (Near Rock Creek)

I. Welcome, Introductions and Opening Remarks (Mike Pepper)

Purpose of the meeting:

- *To provide an update on the status of the plan development*
- *To present updated transportation system goals*
- *To present and discuss desired future conditions and improvement alternatives*

Attendance

- **Committee**
  - Bill Kyle
  - Rick Dunn
  - Bill Crafton
  - Rod Mathis
  - Dave Burgess
  - Troy Vitek
- **City Staff**
  - Jackie Fields, City Engineer
  - Bruce Stephens, Street Department
  - Dennis Bowyer, Parks and Recreation
- **Consultant Team**
  - Kyle Comer, Civil Science
  - Rob Ramsey, Civil Science
  - Matt Riffkin, InterPlan
  - Mike Pepper, KMP Planning
  - Stan Crawforth, American Geotechnics

II. Planning Process Status (Mike Pepper / Kyle Comer)

- Primary goal of the TMP process: *To identify the capital facility improvements, pavement management plan and supporting policies to meet the Twin Falls transportation facility needs for the next 25-30 years*

- Where we are in the process – Mike presented the status and next steps to complete the transportation planning process

III. Transportation System Goals

- Review of updated system goals

IV. Existing Conditions Review

- Roadway system classification / Connectivity
  - *Hankins north of Falls- discussion if this should be a collector or arterial.*
  - *3300 north of Falls- decision from Jackie Fields to leave as is.*
  - *Show No. College as a collector road from Blue Lakes to Locust*
- Level of Service
- Intersection hot spots
  - *Include 2nd Ave. intersections as part of hot spot #5.*
  - *Add East 5 points intersection hot spot list.*
  - *Add Falls and Hankins intersection to hot spot list.*
- Specific roadway deficiencies – will be addressed as part of the final plan recommendations

V. Future Conditions at 2030 with no build of improvements

- Roadway system classification / Connectivity
- Level of Service
  - *Revisit level of service for South West quadrant (SH-74 between Washington Street and Grandview) to include potential development of 1500 New lots in this area.*

VI. Short Term – Pre-planned Projects

- As identified by City / Relationship to the planning process and recommendations

VII. Long-term Desired Future Conditions at 2030 with improvements

- General roadway classification changes
  - *Eliminate ¼ mile collectors south and north side of Pole Line between Grandview and Rock Creek (state allows access only at ½ mile location)*
- General Level of Service changes – *none recommended different than proposed*
- General intersection function changes
  - *Consider roundabouts in new developed areas rather than signals because R/W may be easier to acquire.*
    - *Consider related R.O.W needs when planning roundabouts, etc.*
- Updated street cross sections and standards
  - *Landscape Buffer*
    - *Hardscape is okay*
    - *Don't prefer the use of plantings due to water demands and maintenance issues.*
  - *Support additional 2' back of sidewalk for additional utility space.*
  - *Use 116' for truck route*
    - *Consider impacts to property when complying with current landscaping requirement at 30' back of sidewalk (gateway arterials).*
    - *Possible change in landscaping ordinance- reduce appropriately to continue to allow space for building construction and business operation, while providing landscaping*
- Bike / Pedestrian system changes
  - *Retain path on Madrona from Falls to Stadium.*
  - *More discussion needed- Jackie and Dennis to review and provide additional comment regarding the bike/pedestrian system needs and recommendations, also collect comments during the Public Meeting.*

- "On Street" bike and ped facilities will be included as part of the Transportation Master Plan
- "Off Street" bike and ped facilities will be included as part of the Comprehensive Plan

VIII. Improvement Alternatives – see handouts (revised alternatives) provided prior to the meeting

- 2030 with City Capital Improvement Plan (CIP) Projects
  - Clarify / Add to the CIP-
    - *Addison Ave. - Widen to 5 lanes between Morningside and Juniper.*
    - *Extend Hankins widening from Filer to Falls on east side.*
    - *Incorporate southeast truck route issues.*

- A) City CIP
- B) 2030 with CIP plus alternatives #1 -
- C) 2030 with CIP plus alternatives #2
  - *Technical Advisory Committee Consensus for Alternatives / Plan recommendations*
    i. *First Priority – City CIP and Alternative #2 - short term top/upper priority projects that are most effective (cost/benefit) at "getting the red out" to improve the level of service (including the City's list of projects in the CIP). Also, add for the public meeting, updated project costs, show benefits for each alternative compared to each of the goals*
    ii. *Next Priority - midterm projects that are part of alternative #2, but are not quite as effective at "getting the red out"*
    iii. *Long term – Alternative #1 - 2nd Ave./ U.S. 30 change – pending funding and community support*

    - *Add in new projects identified in committee meetings*
    - *Include financing alternatives to improve Locust and Fillmore*
    - *Include the intersection hot spot improvement projects*
    - *Include activities that address deficiencies*
    - *Include the list of signal improvements*

IX. Preliminary Supporting Policies

- Pedestrian Safety
- Arterial widening to include accel / decel lanes
- Angle street closures
  - *Close some, perhaps, based on further technical evaluation.*
  - *Continue to meet emergency access needs.*
  - *Blue Lakes Widening may drive some closures.*

X. Plan Implementation

- Application of the plan to the street system was discussed

XI. Asset Management Program Status

XII. Next Steps

- Consider both TAC and CAC input
- Refine alternatives to draft recommendations
- Develop complete list of policies
- Develop funding strategies
- Next TAC Mtg. - April 14th

Thanks for your continued participation!

TAC Meeting #5 Meeting Notes

City of Twin Falls
Transportation Master Plan
Technical Advisory Committee
Meeting #5 Results

Monday, April 14, 2008

1:00 to 3:00 p.m.
Twin Falls Parks and Recreation Office
136 Maxwell (Near Rock Creek)

I. Attendance

- Mitch Humble, Twin Falls Community Development
- Rick Dunn, Twin Falls P & Z
- Dennis Bowyer, City of Twin Falls Parks and Recreation
- Bruce Stephens, City of Twin Falls Street Department
- Dave Burgess, Twin Falls Highway District
- Walter Burnside, Idaho Transportation Department
- Nathan Jerke, Idaho Transportation Department
- Melinda Anderson, Twin Falls City Economic Development
- Chuck Collins, Twin Falls City Assistant Engineer
- Lance Clow, Mayor
- Rod Mathis, Riedesel Engineering
- Planning Team
    - Kyle Comer, Civil Science
    - Rob Ramsey, Civil Science
    - Matt Rifkin, Interplan
    - Mike Pepper, KMP Planning

Purpose of the meeting:

- *To provide an update on the status of the plan development*
- *Provide a review of recent City Council input/direction*
- *Preview information to be presented at tonight's Public Open House*
- *Provide an outline of the draft Transportation Plan and anticipated level of detail*

II. Planning Process Status (Mike Pepper)

- Updates and refinements based upon comments from our last TAC and CAC meetings. Both Committees had a little different stance on issues such as the 2nd Avenue alternatives.
    - TAC comments – no additional general comments at this time
    - *See results below for discussion and additional comments on the 2nd Avenue truck route option*

III. Recent City Council Meeting Input and Direction (Kyle Comer)

- Review of Council Packet (Provide a Copy to each member at the meeting)
- Project priority – desire to maintain comprehensive list for the plan but recognize that funding all priorities may not be feasible. Capital Facility Plan may need to include a reduced project list that better reflects available resources and considers funding needs for deficiency improvements

and maintenance. Council elected to postpone any decision on prioritization of the list of improvements pending public input and consideration of maintenance and deficiency needs.

- 2nd Avenues – Concerned about funding capability but need to provide opportunity for public comment. Initial City council input suggests that this will be a difficult project to implement due to the high cost and transportation benefit as compared to many of the other capital and maintenance needs.
- Townsite modifications – Suggested this be looked at by staff in the future as necessary and considering any additional input from the Mayor.
- Blue Lakes Blvd. Improvements – Did not prefer to pursue auxiliary lane improvements (similar to the lanes in front of the Winco development) as part of future development.
- TAC comments – no additional comments

IV. Funding / Prioritization (Mike Pepper)

- Funding constraints
- Funding options
- Prioritization of needs (project list, existing deficiencies, maintenance)

V. Review of Public Open House Materials/Presentation (Mike Pepper/Kyle Comer/Matt Riffkin)

- Presentation format and materials – Input on tone and content
- *Suggestions and Input from TAC for the public meeting presentation*
  - *Funding: Expand funding explanation and discussion to include other City funding needs (such as weter/sewer), in addition to questions about transportation issues and projects.*
  - *Funding: consider asking the public if they are willing to pay additional fees/taxes, etc. for transportation improvements – in addition to other taxes and fees*
  - *Capital Improvement Plan:*
    - *Consider identifying Harrison St. as the north / south connector instead of Fillmore*
    - *Asset Management Plan: see ITD for ADA data to incorporate into the asset management plan data files*
    - *Consider potential environmental impacts and evaluations when identifying potential projects – could delay or eliminate potential projects*
    - *Truck route: Consider identifying the Washington St. South/2nd Avenue change and re-route of the truck route as a long term truck route and begin preserving the right of way now – also begin applying the arterial/truck street cross section standards to this route to minimize future conflicts and inadequate right of way*
    - *Illumination: add description and consideration for street lights as part of street standards – illumination standards based on comprehensive plan aesthetic and community design recommendations*
    - *CIP Project #9 – Locust to Eastland should be changed to "Elm to Eastland"*
    - *CIP Project #10 – this project may cost more than anticipated in order to build it to state standards for pavement depth, rather than just City arterialpavement standards – coordinate with ITD to resolve any differences in standards if needed*

VI. Truck Route Locations (Rob Ramsey)

- Clarification on truck routes as shown and integration of input/previous studies
  - *TAC comments on the truck route*
    - *Tight corner at Grandview and Addison*
    - *Consider additional input from the manufacturers regarding potential truck routes*

- *Consider identifying a route that works for truck traffic around and into the community as needed*
- *Additional ""through" and "to" truck traffic volume data would be helpful*
- *Consider north/south on 2700 East instead of Grandview*
- *Eastland north/south has some potential for improvement as a truck route*
- *Consider Washington St. South/2nd Ave. re-route instead of Grandview on west side*
- *Hill at Grandview/US 30 is expensive to incorporate in design for trucks*
- *Orchard may not be a suitable route due to residential impacts*
- *Minidoka/2nd Ave. change*
    - *Consider identifying this option as a long term future truck route with arterial cross section design to meet truck use requirements*

▪ *The consultant team will gather additional comments on the truck route at the public meeting and make revisions accordingly for the final draft plan*

VII. Master Plan Outline (provided prior to the meeting) (Matt Riffkin/Kyle Comer)

- Level of Detail and general layout
    - TAC comments – no comments at this time

XIII. Asset Management Status (Mike Pepper/Kyle Comer)

- Recent discussion with Council about completing data collection efforts so that the asset management plan is usable.
    - TAC comments – no additional comments at this time

XIV. Next Steps

- Public Open House tonight at CSI, Taylor Administration Build., Rm. #276, 7 pm to 9 pm
- Consider input and recommend changes/updates
- Develop more refined cost estimates and prioritization
- Provide opportunity for staff and City Council review/comment of these changes and draft priorities
- Additional public involvement opportunities – tentative pending City direction
- Prepare Draft Transportation Master Plan for TAC Review
- Next TAC Mtg. - Late May / Early June – tentative based upon City direction on additional public involvement opportunities – Review Master Plan and Capital Facility components
- Submission of Draft Plan to the City for review/finalization

Thanks for your continued participation!

TAC Meeting #6 Meeting Notes

City of Twin Falls

Transportation Master Plan

Technical Advisory Committee Meeting #6
Community Advisory Committee Meeting #4
(Combined)

TAC Meeting #6 Results

Wednesday, July 9th 2008

1:00 to 3:00 p.m.
Twin Falls Parks and Recreation Office
136 Maxwell (Near Rock Creek)

I. Welcome, Introductions and Opening Remarks (Mike Pepper)

Purpose of the meeting:

- *To present and gather comments on the revised CIP*
- *To present the updated truck route plans and gather input*
- *To present the updated proposed multi-use pathway plan and gather input*
- *To discuss the draft plan document and invite comments over the following week*

II. Attendance

- Lance Clow, Mayor
- Jackie Fields, City Engineer
- Melinda Anderson, City Economic Development Director
- Walter Burnside, ITD
- Nathan Jerke, ITD
- Bruce Stephens, City Street Dept.
- Bill Kyle, McDonalds
- Dennis Bowyer, Parks and Recreation
- Mitch Humble, Community Dev. Director
- Shawn Barigar, TF Chamber of Commerce
- Tony Hughes, MV Builder's Assoc.
- Rod Mathis, Riedesel Engineering
- George Ambrose, Ambrose Trucking
- Gerardo Munoz, City resident
- Chuck Collins, Asst. City Engineer
- Rob Ramsey, Civil Science
- Kyle Comer, Civil Science

Planning Process Status (Mike Pepper / Kyle Comer)

- Brief report on plan activities and input since the last TAC and CAC meetings
  - Additional technical analysis and planning – New LOS standards (LOS C or above on all roads except Blue Lakes Blvd. which is modeled at LOS D)
  - Additional staff input
  - Additional public input activities – Western Days, utility bill notices, newspaper article and web page posting of the revised CIP and draft plan – inviting public comments

III. Revised CIP (Kyle Comer)

- Present the updated Level of Service information and new standard for desired level of service in 2030
- Present and gather comments on the Revised CIP for roadways and intersections

  - **<u>Comments from committee on the revised CIP</u>**
    - ITD - This approach is comparable to the state approach – reduced list of recommended capital projects to align with available / potential funding
    - Falls Ave. and Eastland are shown within the CIP at 4 lanes to address traffic needs while also considering overall cost. The Long Term Classification map shows these roads as 5 lanes to correspond with arterial section standards. It is ok to show the 4 lanes on the CIP but include an asterisk to CIP map that ROW costs for the future 5th lane are additional.
    - Addison Ave. - Consider adding to the CIP a previously identified project to widen the Addison Ave section – Morningside to Juniper – add width to complete the five lane section (now 4 lanes) - include as a near term project – 5-10 years
      - Define the reasons clearly for adding this project to the CIP, as this project is not supported by the same LOS justification as all the other projects on the CIP list.
    - N/S connection between Falls and No. College. - Add and show on the transportation system plan map, an additional connection between Falls Ave. and No. College
      - Agree to define the need as a midpoint connection between Falls Ave. and No. College that could be either Harrison St. or Fillmore St.– to support the function of and help retain the desired LOS on Blue Lakes Blvd.
        - Some preference for Harrison – existing width is good
        - Consider routing around areas thru CSI if needed to avoid undesired impacts – still connecting at the new (planned) Cheney intersection – this may be accomplished through negotiation with CSI
    - South Eastland Dr. improvements - Clarification of the South Eastland project – what about reducing the grade separation at the RR to an "at-grade crossing?" – lack of support by RR, safety concerns and high ROW cost for an overpass had the committee conclude to leave the option as shown.

  - **<u>Comments from the Committee on the proposed intersection projects</u>**
    - ADA - Remember to incorporate ADA requirements into intersection improvements
    - Additional comments – See Dale Riedesel's comments – address as needed
      - Specific questions and discussion regarding the East 5 Pts intersection – left turn movement is restricted for SB from Blue Lakes Blvd. to WB onto Addison or Shoshone

- Consider alignments that support improved movement through this intersection
- Consider adding left turn lanes EB/NB from Addison to No. Blue Lakes Blvd. to improve traffic flow

- ITD notes: the Washington St. South and Orchard intersection / signal project is tentatively scheduled for FY 2009

IV. Updated Proposed Truck Route (Rob Ramsey)

- Present and gather input on the proposed truck route plan
  - **Comments from the committee on the truck route**
    - Committee's Truck Route Recommendation - Recommend that the designated truck routes are on state highways, with the following notes:
      - West side truck traffic - Washington St. North is an acceptable option, until the 93 Alternate Route is completed - but do not designate north / south route on the west side of the city on the maps within the updated Master Plan,
      - East side truck traffic - Eastland Dr. is an acceptable, but not designated north / south route on the east side of the city
        - Both the Washington St. North and Eastland Dr. route sections will be built to stronger standards to support more truck use, but not wider
        - Delete the proposed 116 ft. "truck route" section from the plan
        - Delete the proposed right of way acquisition on Eastland, that was needed to support the 116 ft. "truck route" section
      - Section design - Include stronger section designs in the industrial area near Hankins Rd. south of Kimberly Rd. to support local large truck use
        - Include wider intersection radius as needed to support truck turning movements
      - *Note to the consultant team: Check with the Twin Falls Highway District on their transportation plan's recommended truck route – Committee comments stated that it includes Orchard St., which was not what was recommended in the SE Twin Falls Alternate Route.*

V. Updated Bike Facility Map (Rob Ramsey)

- Present and gather comments on the updated proposed multi-use pathway
- Comparison to the Comprehensive Plan's proposed trails system
  - Committee comments
    - Show the bike facility that is planned along Washington St. No.
    - Carriage lane north of Falls Ave – as part of new development planned
    - Add off street connection between the north end of Harrison and the existing off-system pathway. Comp plan consultants will address this change in their maps which are referenced into the maps for the Transportation Master Plan.
    - Consider Mayor Clow's comments regarding pathway / street system connections
    - Add trail extension from Mountain View west to Madrona St (Comp Plan map update).

XV. Master Plan Document (Kyle Comer)

- Overview of the master plan document
  - Follows the process we've used in the meetings
- Highlight other outstanding elements that are significant plan components; street system deficiencies, street system asset management plan
- Associated policy recommendations – gather comments

- Access management
  - Collector Streets: maintain a minimum of 150 ft. from intersections to nearest driveway
  - Arterial Streets: maintain a minimum of 300 ft. from intersections to nearest driveway
- Potential funding sources – gather comments
  - Add Local Option Taxes as a potential funding source, if approved by the legislature
- Discussion and request input within one week following meeting
  - Set up the draft plan document to allow for editing and comments in PDF

XVI. Next Steps to Plan Adoption

- Revisions as needed following TAC/CAC input – by July 18
- Final staff review – edit as needed by July 25
- Final city council review – if needed – edits as needed by the week of July 28
  i. May include presentation to the City Council by the consultant team. Allow for additional City review and comment time.
- Add opportunity for additional public input – 4-6 weeks
  1. May involve additional public presentations, such as Chamber of Commerce, Rotary Club, BID, etc. – these opportunities may be conducted by city staff
     a. Consultant team may assist if budget allows
- Submit final plan to City Council for adoption and incorporation into the Comp plan
  - Tentatively hold the public hearing in early September

Thanks for your continued participation!

Community Advisory Committee (CAC) Meeting #1 (Was combined with TAC meeting)

Date: September 10 / 11, 2007	
Project Number: 06137	**Project Name:** Twin Falls Transportation Master Plan

XI. Attendance

- **TAC**
- **CAC**
- **GTFATC**

XII. Welcome, Introductions, and Opening Remarks.

Mike Pepper opened the meeting with introductions and discussed the purpose of the meeting which is to introduce the Twin Falls Transportation Master plan process, steps, schedule, and roles of the City, Technical Advisory Committee (TAC), Citizen Advisory Committee (CAC), Consultant Team, and Idaho Transportation Department (ITD). The meeting included presentation and discussion of existing conditions and preliminary local plans review and a brief discussion of the data collection and pavement management system work program. Finally, an important part of this first round of meetings was the identification of the committee's (TAC, CAC and Greater Twin Falls Area Transportation Committee (GTFATC) initial issues and concerns regarding Twin Falls transportation system.

XIII. Overview of the Planning Area and Process.

Mike and Kyle discussed the project background and development and planning area description. They explained the Transportation Master Plan process, scope of work, and schedule. They also outlined the primary goal of the Twin Falls Master Plan process which is to identify the capital facility improvements, pavement management plan and supporting policies to meet the Twin Falls transportation facility needs for the next 20 years.

XIV. Roles and Responsibilities.

Mike discussed the important roles that the City of Twin Falls, CAC, TAC, ITD, and the consultant team will play in the development of the Transportation Master Plan. Each separate group will contribute a vital part to help bring about the completion of this new Master Transportation Plan that meets both the functional requirements of the City's transportation system and the needs of its users.

XV. Public Involvement Plan Highlights.

Mike talked about the plan element highlights and the planned schedule of events and opportunities.

XVI. Plan Goals and Objectives.

Mike discussed the specific goals and objectives of the Plan with the committee members.

Transportation System Goals from the Committees

- *Need a balance between public needs and engineered solutions.*
  - *Consider project impacts to the public needs*
  - *Consider public needs/ impacts to roadway system needs and changes*
- *Improved connectivity of both roadways and bike/ped systems throughout the City.*
- *Adjust State standards to meet City needs as appropriate and feasible.*
- *Plan for future Right of Way needs (setbacks, etc...)*
- *Provide the TAC and CAC with a good understanding of alternatives and technical issues to assist them in understanding and developing final recommendations.*
- *Don't get distracted with inappropriate options. What works in one area does not necessarily work in all areas.*

- *Provide connectivity between the City and county planning, roadway systems and needed improvements*
    - *Rural vs. City standards. County based on 1 mile roads, City using 1 mile roads as arterials and ¼ mile roads as collectors.*
    - *Coordinate- Plan accordingly*
        - *Falls E/W*
        - *Blue Lakes South*
        - *Addison East, etc…*
        - *Alignment*

XVII. Basic Existing Conditions.

Kyle and Mike informed attendees about current data collected and future data collection efforts, the preliminary local plans summary, the Comprehensive Plan Coordination status, and general issues or concerns that have been raised thus far through stakeholder interviews and other system investigation.

XVIII. Pavement Management System Work Program.

Kyle discussed the data collection and program schedule for the Pavement Management System Work Program and explained the relationship of the pavement management system to the capital improvement plan and overall system improvement and management.

XIX. Comments and Recommendations.

Mike opened the floor for any comments or recommendations that anyone might have regarding the issues and concerns they have for the City's transportation system. Following is a list of the items that were discussed as well as integration of comments that Mike has received to date as part of personal stakeholder interviews with several community members:

Safety

(Twin Falls Transportation Safety Committee Issues need to be added)

- In/through School Zones and School Routes.
    - Perrine & Morningside areas are particularly problematic.
- Flash lights, etc… should be utilized in these school zones.
- 2nd street in Front of Schools and Downtown.
    - Plan & schedule improvements in this area.
- Lack of Sidewalks.
    - South of Twin Falls (Old Town area) lacks sidewalks.
    - West of Falls also lacks sidewalks.
        - Either there is discontinuity in the sidewalks or the existing sidewalks are in poor condition.
- Open Canals at Crossings.
    - Requires fencing or additional bussing for safety of children.
    - Harmon Park is an example.
- High Speeds in Residential Areas and 2nd streets.
    - Lack of Traffic Calming.
- Pedestrian Safety Improvements Needed.
    - Require new developments to provide pedestrian safety.
    - Develop a Design Criteria for "walk friendly" devices. Need to address compliance and identify a degree of pedestrian responsibility.

Traffic Congestion

Problem Areas:

- ✓ Washington Street
- ✓ Blue Lakes (Don't re-create)
- ✓ Locust
- ✓ North College

- ✓ Filer
- ✓ Falls
- ✓ Madrona
- ✓ Eastland – Addison to Kimberly
- ✓ President Streets – Filmore and Harrison
- ✓ Addison West

Anticipate Alternate Routes that traffic will use to avoid congestion areas.
Evaluate bypasses to reduce congestion through downtown.

Trucking/Overall Regional Circulation

- Lack of workable truck accesses from North to South (I-84 to South Twin Falls, US 93, etc.).
  - Washington Street should be improved to accommodate these trucking needs. (alignment, radii, ballast)
  - Signage also needs to be improved.
- East and West truck access to Twin Falls is difficult.
  - Kimberly Rd. to Minidoka and 2nd streets are currently used by trucks as an East/West access as well as using other roads on the south edge of town.
  - Excessive use is causing damage to the roads.
- There is a desire to move trucks out of town that don't need to run through town.
- There is a shared desire by ITD, the City and the Downtown property/business owners to relocated US 30 off the 2nd Avenues to improve safety and the function of downtown, as well as enhance and clarify the east/west truck route on US 30 through the City..
- Southeast improvements should be implemented per the Southeast Corridor Plan to ease problems.
- Remember that some trucking into the City is necessary to bring goods into the City.

Bike/Pedestrian

- Review impacts to North College in meeting college expansion needs.
- Need bike and pedestrian facilities West of CSI on Washington Street.
- Lack of pedestrian facilities City wide, including main arteries.
  - How should existing sidewalks be maintained?
    - There should be a consistency in sidewalk standards.
    - Should big trees be removed to maintain sidewalks?
    - Should sidewalks be on both sides and in all residential areas?
- Bike paths along City roads should consider impacts to parking.

Congestion/Traffic Flow

- Blue Lakes needs more protected left turns. The unprotected left turns are unsafe and cause delays along Blue Lakes Blvd.
- Blue Lakes Blvd. needs to have restrictions on truck traffic.
- Lack of transit options to assist in reducing traffic volumes.
- Improve signal coordination to improve traffic flow.

Trucking Safety

- Intersection Geometrics should accommodate truck traffic movements.
- Effective truck routes.
  - Provide routes around City for trucks passing through. Provide routes through City with improvements for trucks delivering to or from Twin Falls.
  - Must consider costs early in developing plan for implementations of individual projects.
- Increase in truck weight limits (105,000 lbs) results in additional wear to existing roads.
- Identify feasible alternatives (i.e. where do roundabouts really work?)
- Separate "ideal" from what "makes sense". Avoid overbuilding structure when it is not immediately needed.
- Identify future Right of way needs with this plan for acquisition purposes.

  - Acquire Right of Way at a cheaper rate.
- Evaluate role of public transit in the Transportation Master Plan.
- Access- balance property owner needs with traffic needs. (i.e. Pole Line)
- Predict future traffic patterns- where does the traffic really go?
- Respect private property rights with balance to the City needs.
  - Fillmore extension
  - North/South Corridor
- Roadway classification system connectivity.
- Consistency in landscaping required for major thoroughfares
  - Set landscaping standards by road rather than land use.
  - How do we retrofit the existing landscaping?
  - High Cost to retrofit the existing landscape.
- Effective pavement management program and maintenance.
  - Keep up with the maintenance needs.
  - Evaluate Design Standards etc… to provide adequate roads.
  - Consider Maintenance as equally important to new improvements.
  - Consider impacts of "today's" decisions and improvements on future maintenance.
- Code enforcement for parking and landscaping in intersection sight triangles.
- Identify locations for Fast vs. Slow speeds.
  - Also as applies to design standards.
- Consider coordination between roadway design and traffic control. I.e. Canyon St. behind Dell, traffic calming, consider legal impacts.
- Integrate other infrastructure projects into program to assist in avoiding schedule conflicts and damage to new roads.

Transit:

  - Fixed route designation to places to pick up riders.
  - Should there be a pullout for public transit or should it stop in the travel lane to pick up/drop off?
  - Move from demand to route system.
  - Twin Falls may meet urban status thus requiring transit service (MPO Status)
  - Develop Standards. (Benches, pockets, ROW, etc…) to accommodate transit operations.

Specific Areas of Concern:

- 3300/3700 intersection
  - Sight distance issues.
  - Is a signal warranted?
  - Coordinate with street classification and connectivity.
- Valley Gutters crossing major roads causes traffic to slow and creates confusion with side road users.
- Pavement Cracking and failing throughout portions of town.
- Poor intersection visibility- landscaping impacting sight distances. Driveways also have sight distance issues. Need to enforce code related to sight distance triangle.
- Economics
  - Keep truck routes available that provide access to and from I-84 within a 5-10 minute time frame.
  - Traffic/pedestrian interface in downtown and 2nd streets.
    - Crossings are not adequate and are dangerous.
    - 2nd streets are too wide to cross safely at uncontrolled crossings.
- Interface with Rock Creek Canyon
  - Need additional roads crossing the Canyon to improve access to south end of town.
- Make improvements to provide a "walk friendly" community.
- Educate public on sidewalk maintenance responsibility. Sidewalk and curb and gutter are on public right of ways but are to be maintained by private ownership.
  - Expect some congestion which acts as a traffic calming device.

- Funding
    - Evaluate performance contracting as an option.
    - City currently evaluating impact fees for funding option.
    - Property Owner participating in reducing project costs by donating or discounting right of way costs.

- Access- Evaluate code requirements and enforcement (i.e. Blue Lakes Blvd.)
- Consider more than 20 year horizon. Evaluate right of way and arterial needs in 30 to 40 year basis.
- Address impacts from increase of truck weights to 129,000 lbs. on Eastland and 2nd streets.
- Need to address substandard railroad crossing and pavement on Eastland.
- Funding- consider impact fees
- Minimize sprawl to reduce impacts to county roads.
- Separate retail traffic from industrial traffic where possible.
- Relocate state highway related traffic off City streets.

XX. Next Steps.

Mike concluded the meeting by informing those present of the next steps in the Master Plan process.

- Existing Conditions and Data Gathering will be completed
- Public Workshop #1 is scheduled for Monday, Oct 15th
- City Council Work Session #1 will be held Monday, Oct. 15th
- TAC Meeting #2 will be held on Tuesday, Oct. 16th
- Draft goals will be developed for the transportation system and coordination with comprehensive plan to understand future land use projections.

CAC Meeting #2 Meeting Notes

City of Twin Falls
Transportation Master Plan
Community Advisory Committee

CAC Meeting #2 Results

Monday, December 10, 2007

1:00 p.m. to 3:00 p.m.
Twin Falls Parks and Recreation Office
136 Maxwell (Near Rock Creek)

I. Welcome, Introductions and Opening Remarks (Mike Pepper)

Purpose of the meeting:

- *To provide an update on the status of the plan development*
- *To review and confirm the transportation system goals and primary issues*
- *To present and discuss the proposed future land use*
- *To present the current traffic demand, discuss problem areas and the development of the traffic model*

Attendance

- **Committee**
  - Mayor Lance Clow
  - Wiley Dobbs
  - Bill Kyle
  - Jill Skeem
  - Tony Hughes
  - Shawn Barigar
  - John Miller
- **City Staff**
  - Jackie Fields, City Engineer
- **Consultant Team**
  - Kyle Comer, Civil Science
  - Ed Collins, Civil Science
  - Rob Ramsey, Civil Science
  - Matt Riffkin, InterPlan
  - Ryan Beck, InterPlan
  - Mike Pepper, KMP Planning

II. Planning Process Status (Mike Pepper / Kyle Comer)

- ❑ Primary goal of the TMP process: *To identify the capital facility improvements, pavement management plan and supporting policies to meet the Twin Fall's transportation facility needs for the next 25-30 years*
- ❑ Where we are in the process – Phase II - Identification of Existing and Future Conditions

III. Transportation System Goals (Mike Pepper)

- ❑ Review and confirm system goals
  - Committee comments
    - Trucking and Design goals

- Maintain the function of alleys for trucking deliveries and pedestrian access

- Trucking
  - Add "out of" to in, around and through
  - Consider desired alternate routes for trucks – to remove trucks from current use of 2nd Avenues as the through route – this includes rerouting of US 30 to Washington / Minidoka
    - *** Note – the TF Chamber has issued a survey to business owners to assess interest in this option. Results are not yet available*
- Coordination / Planning and Design goals
  - Add traffic control and signage, signing, lighting and crosswalks
  - Consider raised sidewalks and separated routes and facilities for pedestrians and bicycles
  - Consider lighted signs and speed control as design issues
  - Identify funding needs and potential sources for improvement projects implementation
- Transit
  - Change name of goal to "Public Transportation"
  - Consider language that states "affirmatively address" public transportation
  - Plan for the short and long term public transportation needs
  - Include reference to funding, without committing the City to 100% responsibility for all funding – will also need to identify potential funding
  - Incorporate public transportation into the development of the transportation plan, even thought funding is not yet identified
    - Include identification of possible public transportation facilities, such as commuter lots, bus terminals and passenger pick up locations
- Bike / Pedestrian
  - See / consider the school district's "Safety Bus Routes" information and facility needs – Wiley Dobbs will provide the list of needed improvements to support the Safe Bus Routes to planning team as needed and requested
  - Consider including a policy recommendation in the plan that requires separate and dedicated bike / ped facilities to be included in all new developments
- Design / Operation
  - Enhancements should be designed to reflect our community environment /climate; such as low water landscaping
  - Consider maintenance needs of any new facilities / enhancements when recommending improvements
  - Include arterial approaches only where appropriate and necessary – in order to maintain the safety and level of service on the arterial
- Capacity / Congestion
  - Reduce the number of driveways where and when feasible
  - Provide incentives where possible
  - Include in new development standards

- ***Additional Goals/Plan note**** *identify who (what entity) may be responsible to fund and implement the proposed improvements*

IV. Future Land Use (Kyle Comer / Rob Ramsey)

- ❑ Present and discuss future land use as identified in the comprehensive plan process
  - Committee comments – none at this time

- Committee members were encouraged to visit the City's web site at http://www.ldi-ut.com/projects/twinfalls.htm to review additional information regarding the comprehensive planning process, status and to provide comment.

V. Existing Features / Key Issues / Standards and Problem Areas (Kyle Comer and Rob Ramsey)

- ❑ Brief review of existing data
  - Committee comments
    - Team to verify with City staff the housing data presented to be sure it reflects the most current numbers/projections and aligns with the data being used in the comprehensive plan process
    - Review the job number projections for the new hospital area
    - Question the accuracy of the job growth projections for CSI, as part of the area north of No. College Ave.
    - Adjust and move the projected increases to the west to better reflect the location of the new hospital, new high school, Wal-Mart, etc.
    - Consider more industrial development than projected south of Hankins Rd. – Eastland to 3300
    - Consider more development than projected in the east side of the City near the Temple and Eastland Ave.
- ❑ Review of key issues identified to date
  - Committee comments – none at this time
- ❑ Standards considerations
  - Committee comments – none at this time
- ❑ Present and discuss most significant problem areas to be addressed
  - Committee comments
    - Signal confusion exists at the corner of So. Blue Lakes Blvd. and Kimberly Rd. (East Five Points) – is this a protected left turn movement for north bound traffic on Blue Lakes Blvd. or not??? – *(Generally discussed that this level of detail is appropriately addressed by ongoing City and ITD traffic operational review)*

VI. Traffic Model (Matt Riffkin)

- ❑ Preliminary traffic modeling information
  - Traffic model scenarios
    - Committee comments
      - Consider impacts of the completion of the US 93 Alternate Rte.
      - Consider impacts of the addition of a new Snake River Bridge
      - Consider the implications of $5 per gallon gas
        - *Consultant Note: the current price of gas is equivalent to the price of gas in the 1970's*
  - Traffic volume projections
    - Committee comments
      - Review and update the traffic volumes projections to more accurately reflect the planned growth and development; such as in the area of the No. College / Washington Blvd. area (new high school, hospital and Wal-Mart)
      - Consider impacts of truck traffic re-routed off/on Pole Line Rd. / Washington Blvd. as planned roadway improvements are completed
      - Consider impacts of implementation of additional public transportation that might be developed in future as densities and user demand supports
        - Commuter rail, light rail, etc.
- ❑ Accident conditions
- ❑ Preliminary functional classification

VII. Next Steps / Adjourn (Mike Pepper)

- ❑ Complete traffic modeling for traffic analysis zones

- Prioritize goals
- Establish desired level of service for City roadways (according to hierarchy)
- Develop preliminary improvement alternatives
    - Team will send out a package of alternative priorities for comment from the committee members prior to the next meeting
- Next CAC Meeting #3 – Monday, February 11th – 10 a.m. to noon - tentative

CAC Meeting #3 Meeting Notes

City of Twin Falls
Transportation Master Plan
Technical Advisory Committee

CAC Meeting #3 Results

Monday, March 10, 2008

(Committee Comments shown in red italics)

10 a.m. to Noon
Twin Falls Parks and Recreation Office
136 Maxwell (Near Rock Creek)

I. Welcome, Introductions and Opening Remarks (Mike Pepper)

Purpose of the meeting:

- *To provide an update on the status of the plan development*
- *To present updated transportation system goals*
- *To present and discuss desired future conditions and improvement alternatives*

Attendance

- **Committee**
  - Tony Hughes
  - George Ambrose
  - Wiley Dobbs
  - Ron Yates
  - Lynn Baird
- **City Staff**
  - Jackie Fields, City Engineer
  - Chuck Collins, Assistant City Engineer
  - Lee Glaesman
- **Consultant Team**
  - Kyle Comer, Civil Science
  - Rob Ramsey, Civil Science
  - Matt Riffkin, InterPlan
  - Mike Pepper, KMP Planning

II. Planning Process Status

- Primary goal of the TMP process: *To identify the capital facility improvements, pavement management plan and supporting policies to meet the Twin Falls transportation facility needs for the next 25-30 years*
- Where we are in the process – Mike explained the status of the planning process, and next steps that follow this meeting

III. Transportation System Goals

- Review of updated system goals

IV. Existing Conditions Review

- Roadway system classification / connectivity
  - *Add N. College from Blue Lakes to Locust as a collector on the Existing Classification Map.*
- Level of Service
  - *Pole Line Rd. L.O.S. is from 2006 prior to completion of Twin Falls Alternative Stage 1 project completion.*
    - *Verify typical section of road used in model. Update the model to reflect full build out of Pole Line Rd. for the public meeting*
- Intersection hot spots
  - Washington Street
    - *What is the status of No Washington after the new school opens?*
    - *Will there be a 20 mph school zone on No Washington? (City is trying to avoid speed reduction if possible.)*
    - *The new school will be set back off of Washington. Accesses to the school will be from N. College.*
    - *Signal at No. College and No. Washington will help traffic in this area*
    - *Washington reconstruction schedule needs to be moved up if possible to be completed in advance of the new school opening and accommodate school traffic.*
  - *No. College Signals*
    - *Signals at both Cheney and Fillmore on No. College may be too many in this area - This requires additional study*
  - *Review the intersection of Locust and Pole Line to see if a future signal is needed at this location.*
- Specific roadway deficiencies in the existing roadway system were discussed and will be included as part of the final plan recommendations

V. Future Conditions at 2030 with no build of improvements

- Roadway system classification / connectivity
  - *Fillmore extension*
    - *Show as impacted by future development*
    - *Minimize alignment changes in this section.*
  - *Lacking a north/south connection west of Washington. Options include:*
    - *Extend Grandview to Addison- a structure will be needed to cross Rock Creek Canyon*
    - *Extend Wendell to Addison by connection to Martin.*
    - *Need to identify future roadway connections / extensions and designate and preserve corridors as appropriate*
- Level of Service was presented for the future roadway system with no improvements
- Intersection hot spots were presented – without priority order

VI. Short Term – Pre-planned Projects

- Capital Improvement Projects as identified by the City were presented, along with a description of their relationship to the planning process and transportation plan recommendations

VII. Long-term Desired Future Conditions at 2030 with improvements

- The long-term desired future conditions of the system at 2030 were presented and discussed including the following elements;
  - General roadway classification changes
  - General Level of Service changes
  - General intersection function changes
    - *Improving valley gutter at Falls and Sparks will address issues at this location.*
      - *Bus traffic on Sparks between schools.*
  - *Updated street cross sections and standards were presented*

- *Sections*
  - *Allow 2 Ft. additional back of sidewalk for fire hydrants and power poles.*
  - *Widen truck routes to 116' total R/W width.*
  - *"Landscape" area, hardscape vs. "soft"/drainable" (i.e. rocks, pavers, etc.) Concern with landscape maintenance and water supply.*
  - *Consider maintaining "landscaped area" as asphalt at road grade- Separate from roadway lane with striping.*
    - *Resolves sight distance and water issues*
    - *Improves bike safety*
- *Collectors*
  - *Develop 2 options for collector street standards:*
    - *3 lane with bike lanes with center turn lane*
    - *4 lane without bike lanes*

- Bike / Pedestrian system changes
  - *Falls Ave.: cannot remove bike lanes due to previous commitment and use of federal money to create bike lanes.*
  - *Bike Lanes / Routes*
    - *Dead ends are not desirable (Locust Street-Cheney to Pole Line, Elizabeth Blvd.- East End)*
    - *Connect bike path from Falls to Locust and from Falls to Madrona.*
    - *Extend Harrison Street path to low line canal.*
    - *Include an east/west path on Pheasant Rd. from west of Grandview to Harrison Street.*
    - *Need more east/west connections*
    - *Additional bike lane comments from the committee are welcome after the meeting: fax, e mail, etc.*
  - Note: the "On Street" bicycle / pedestrian system will be planned as part of the Transportation Master Plan
  - "Off Street" as bicycle / pedestrian system will be planned as part of the Comprehensive Plan

VIII. Improvement Alternatives

- The range of improvement options were presented in 3 groups; A) The City's Capital Improvement Plan related to the Impact Fees, B) the Capital Improvement Plan plus the projects outlined in Alternative #1 and C) the Capital Improvement Plan plus the projects in Alternative #2 – Refer to the handouts mailed to the Committee prior to the meeting (these are the revised versions issued approximately one week prior to the meeting.)

- A) 2030 with City Capital Improvement Plan (CIP) Projects
  - *Leave all the CIP projects on list for public comment*
  - *Re-evaluate Kimberly Rd. for needed number of lanes: 4 lanes or 5?*
  - *Add the intersection improvement projects presented at the meeting to this alternative*

- B) 2030 with CIP plus Alternatives #1
  - Alternatives #1 projects include improvements to Washington Blvd and changing the 2nd Avenues to two-way streets and re-routing US 30

- C) 2030 with CIP plus Alternatives #2
  - Alternative #2 projects include improvements to Hankins, Cheney, Grandview and Falls Ave.
    1. These are projects designed to "get the red out" – improve level of service at 2030

- *The Citizen Committee Consensus for their desired alternative to be included in the plan recommendations is as follows:*
  - *Include the City's Capital Improvement Plan projects*
  - *Blend Alternative #1 (removal of US 30 off 2nds) with #2 to "get the red out".*
  - *Adjust costs estimates*
  - *Include financing alternatives to improve Locust and Fillmore*
  - *Include the intersection hot spot improvement projects*
  - *Include activities that address deficiencies*
  - *Include the list of signal improvements*

IX. Preliminary Supporting Policies

- *The Committee recommended that the following policies be addressed as part of the final plan recommendations*
  - *Pedestrian safety*
  - *Arterial widening to include accel / decel lanes*
- *The committee also discussed the possible closure of the angled streets located in the townsite. Comments were received as follows:*
  - *Don't close 9th, 4th, & 6th*
  - *Assess how local streets function in interior*
- Curb radius- address curb radius on arterial roads to accommodate truck turning movements

X. Plan Implementation

- Application of the plan to the street system – presentation of steps – no comments received

XI. Next Steps

- Gather comments from the TAC / combine with CAC comments
- Refine alternatives to draft recommendations
- Develop complete list of policies
- Develop funding strategies
- Public Mtg. – April 14th- tentative

Thanks for your continued participation!

Please join us at the public meeting in April

CAC Meeting #4 Meeting Notes

City of Twin Falls

Transportation Master Plan

Community Advisory Committee #4
Technical Advisory Committee #6
(Combined)

CAC Meeting #4 Results

Wednesday, July 9th 2008

1:00 to 3:00 p.m.
Twin Falls Parks and Recreation Office
136 Maxwell (Near Rock Creek)

I. Welcome, Introductions and Opening Remarks (Mike Pepper)

Purpose of the meeting:

- *To present and gather comments on the revised CIP*
- *To present the updated truck route plans and gather input*
- *To present the updated proposed multi-use pathway plan and gather input*
- *To discuss the draft plan document and invite comments over the following week*

II. Attendance

- Lance Clow, Mayor
- Jackie Fields, City Engineer
- Melinda Anderson, City Economic Development Director
- Walter Burnside, ITD
- Nathan Jerke, ITD
- Bruce Stephens, City Street Dept.
- Bill Kyle, McDonalds
- Dennis Bowyer, Parks and Recreation
- Mitch Humble, Community Dev. Director
- Shawn Barigar, TF Chamber of Commerce
- Tony Hughes, MV Builder's Assoc.
- Rod Mathis, Riedesel Engineering
- George Ambrose, Ambrose Trucking
- Gerardo Munoz, City resident
- Chuck Collins, Asst. City Engineer
- Rob Ramsey, Civil Science
- Kyle Comer, Civil Science

Planning Process Status (Mike Pepper / Kyle Comer)

- Brief report on plan activities and input since the last TAC and CAC meetings
  - Additional technical analysis and planning – New LOS standards (LOS C or above on all roads except Blue Lakes Blvd. which is modeled at LOS D)
  - Additional staff input
  - Additional public input activities – Western Days, utility bill notices, newspaper article and web page posting of the revised CIP and draft plan – inviting public comments

III. Revised CIP (Kyle Comer)

- Present the updated Level of Service information and new standard for desired level of service in 2030
- Present and gather comments on the Revised CIP for roadways and intersections

  - **<u>Comments from committee on the revised CIP</u>**
    - ITD - This approach is comparable to the state approach – reduced list of recommended capital projects to align with available / potential funding
    - Falls Ave. and Eastland are shown within the CIP at 4 lanes to address traffic needs while also considering overall cost. The Long Term Classification map shows these roads as 5 lanes to correspond with arterial section standards. It is ok to show the 4 lanes on the CIP but include an asterisk to CIP map that ROW costs for the future 5th lane are additional.
    - Addison Ave. - Consider adding to the CIP a previously identified project to widen the Addison Ave section – Morningside to Juniper – add width to complete the five lane section (now 4 lanes) - include as a near term project – 5-10 years
      - Define the reasons clearly for adding this project to the CIP, as this project is not supported by the same LOS justification as all the other projects on the CIP list.
    - N/S connection between Falls and No. College. - Add and show on the transportation system plan map, an additional connection between Falls Ave. and No. College
      - Agree to define the need as a midpoint connection between Falls Ave. and No. College that could be either Harrison St. or Fillmore St.– to support the function of and help retain the desired LOS on Blue Lakes Blvd.
        - Some preference for Harrison – existing width is good
        - Consider routing around areas thru CSI if needed to avoid undesired impacts – still connecting at the new (planned) Cheney intersection – this may be accomplished through negotiation with CSI
    - South Eastland Dr. improvements - Clarification of the South Eastland project – what about reducing the grade separation at the RR to an "at-grade crossing?" – lack of support by RR, safety concerns and high ROW cost for an overpass had the committee conclude to leave the option as shown.

  - **<u>Comments from the Committee on the proposed intersection projects</u>**
    - ADA - Remember to incorporate ADA requirements into intersection improvements
    - Additional comments – See Dale Riedesel's comments – address as needed
      - Specific questions and discussion regarding the East 5 Pts intersection – left turn movement is restricted for SB from Blue Lakes Blvd. to WB onto Addison or Shoshone

- Consider alignments that support improved movement through this intersection
- Consider adding left turn lanes EB/NB from Addison to No. Blue Lakes Blvd. to improve traffic flow

- ITD notes: the Washington St. South and Orchard intersection / signal project is tentatively scheduled for FY 2009

IV. Updated Proposed Truck Route (Rob Ramsey)

- Present and gather input on the proposed truck route plan
  - **Comments from the committee on the truck route**
    - Committee's Truck Route Recommendation - Recommend that the designated truck routes are on state highways, with the following notes:
      - West side truck traffic - Washington St. North is an acceptable option, until the 93 Alternate Route is completed - but do not designate north / south route on the west side of the city on the maps within the updated Master Plan,
      - East side truck traffic - Eastland Dr. is an acceptable, but not designated north / south route on the east side of the city
        - Both the Washington St. North and Eastland Dr. route sections will be built to stronger standards to support more truck use, but not wider
        - Delete the proposed 116 ft. "truck route" section from the plan
        - Delete the proposed right of way acquisition on Eastland, that was needed to support the 116 ft. "truck route" section
      - Section design - Include stronger section designs in the industrial area near Hankins Rd. south of Kimberly Rd. to support local large truck use
        - Include wider intersection radius as needed to support truck turning movements
      - *Note to the consultant team: Check with the Twin Falls Highway District on their transportation plan's recommended truck route – Committee comments stated that it includes Orchard St., which was not what was recommended in the SE Twin Falls Alternate Route.*

V. Updated Bike Facility Map (Rob Ramsey)

- Present and gather comments on the updated proposed multi-use pathway
- Comparison to the Comprehensive Plan's proposed trails system
  - Committee comments
    - Show the bike facility that is planned along Washington St. No.
    - Carriage lane north of Falls Ave – as part of new development planned
    - Add off street connection between the north end of Harrison and the existing off-system pathway. Comp plan consultants will address this change in their maps which are referenced into the maps for the Transportation Master Plan.
    - Consider Mayor Clow's comments regarding pathway / street system connections
    - Add trail extension from Mountain View west to Madrona St (Comp Plan map update).

XVII. Master Plan Document (Kyle Comer)

- Overview of the master plan document
  - Follows the process we've used in the meetings
- Highlight other outstanding elements that are significant plan components; street system deficiencies, street system asset management plan
- Associated policy recommendations – gather comments

- Access management
  - Collector Streets: maintain a minimum of 150 ft. from intersections to nearest driveway
  - Arterial Streets: maintain a minimum of 300 ft. from intersections to nearest driveway
- Potential funding sources – gather comments
  - Add Local Option Taxes as a potential funding source, if approved by the legislature
- Discussion and request input within one week following meeting
  - Set up the draft plan document to allow for editing and comments in PDF

XVIII. Next Steps to Plan Adoption

- Revisions as needed following TAC/CAC input – by July 18
- Final staff review – edit as needed by July 25
- Final city council review – if needed – edits as needed by the week of July 28
  i. May include presentation to the City Council by the consultant team. Allow for additional City review and comment time.
- Add opportunity for additional public input – 4-6 weeks
  1. May involve additional public presentations, such as Chamber of Commerce, Rotary Club, BID, etc. – these opportunities may be conducted by city staff
     a. Consultant team may assist if budget allows
- Submit final plan to City Council for adoption and incorporation into the Comp plan
  - Tentatively hold the public hearing in early September

Thanks for your continued participation!

Public Open House #1 Meeting Notes

City of Twin Falls
Transportation Master Plan

Public Meeting #1 / Results

Monday, October 15, 2007
7:00 to 9:00 p.m. / CSI

I. Attendance

Public

- Carol Roseberry
- Del Carraway
- Angie Burgess
- Del McGuire
- Dick Boyd
- Lynn Baird
- Jeff Harmon
- Gary Amoth
- S. Cash Sigler
- LaMar N. Orton
- Dave Buddecke
- Linda Wills
- Christy Williams
- Jeremy Ainsworth

Planning Team

- Jackie Fields, Twin Falls City Engineer
- Kyle Comer, Civil Science, Project Mgr.
- Rob Ramsey, Civil Science, Project Mgr.
- Mike Pepper, KMP Planning

Purpose of the meeting:

- *To introduce the Twin Falls Transportation Master Plan process, steps, schedule and roles of the City, TAC, CAC, Consultant Team and ITD*
- *To present and discuss basic existing conditions and preliminary plans review*
- *To identify initial issues and concerns regarding Twin Fall's transportation system*
- *To briefly discuss the data collection and Pavement Management System work program*

II. PPT Overview of the Planning Area and Process (Mike Pepper / Kyle Comer)

- ❑ Project Background, development and planning area description
- ❑ The Transportation Master Plan process, scope of work, schedule and public involvement opportunities

- ❑ Primary goal of the TMP process: *To identify the capital facility improvements, pavement management plan and supporting policies to meet the Twin Fall's transportation facility needs for the next 20 years*

III. Plan Goals (Mike Pepper)

- ❑ Discuss specific goals & objectives of Plan – What do you want this plan to do for you?
  - No additions from the group

IV. Pavement Management System Work Program (Kyle Comer, Rob Ramsey)

- ❑ Discuss data collection program and schedule
- ❑ Describe data organization and use
  - No additional comments from the group

V. Next Steps (Mike Pepper)

- ❑ Complete Existing Conditions & Data Gathering
- ❑ Develop goals for the system
- ❑ Future land use and traffic assessments
- ❑ Continued coordination with the comprehensive plan process
- ❑ Identify possible improvement projects
- ❑ CIP / Funding information development
- ❑ Draft plan recommendations
- ❑ Public Wkshp #2 (Feb 2008)

VI. Basic Existing Conditions (Kyle Comer / Mike Pepper)

- ❑ Data collected to date and future data collection efforts
- ❑ Preliminary local plans summary
- ❑ Comprehensive Plan Coordination - status
- ❑ Issues and concerns – Mike presented what we've heard so far / Additions from the CAC / TAC

  - **New issues from the group were gathered as follows:**
    - Trucking
      - Question if Pole Line Rd. extension will help trucking into/through the City or not
      - Conflict / safety concern between trucks and ped/cars on Washington use
        - Especially near new high school location
    - Bike / Ped
      - Safety concern for ped crossings on Washington between Campus Park apts and CSI
        - Consider a ped overpass
      - Lack of sidewalks on Falls Ave. and Washington St.
      - Consider bike / pedestrian needs at crossings to improve safety and connectivity
        - Especially on arterials with many lanes
        - Consider medians to provide a refuge for crossing pedestrian
      - Improve safety for pedestrian throughout the community
      - Consider impacts of bike lanes on parking areas
      - Don't believe that planned bike lanes on Washington St. No. will be used
      - Consider development of a bike/ped system "off roadway network"
      - Existing Pole Line Rd. pedestrian tunnel leaks
      - Want Canyon Rim Trail connection to CSI
    - Public Transportation
      - Plan for future bus turnouts and bus system / services development
      - Plan for future fixed transit routes as feasible
        - Consider opportunities from future MPO
        - Consider cost avoidance in justification / cost/benefit assessment
        - Look at Logan, Utah for an example of a working transit system

- Safety
  - Need for more traffic calming measures in residential areas and in the area of the existing high school – especially in the fall of the year where the sun on Filer Ave. creates sight problems in front of high school – makes it very difficult to see pedestrians
    - Consider speed bumps
  - High speed truck traffic on No. College Rd.
    - Consider reducing the speed to 25 from existing 35 mph
  - High speed traffic on Washington St.
  - Concern with the fact that a public street (No. College Rd.) runs through the CSI campus – this is a security risk
  - Speeds on many collectors and local streets are too high; i.e. Falls Ave. West
    - Consider traffic calming such as landscaping, curved streets, bike lanes, narrower streets
- Planning / Coordination / Scheduling
  - Conflict between scheduled opening of the new high school and planned Washington St. reconstruction
- Connectivity
  - Disconnected north / south streets
    - West side of new high school – will cause more traffic on Washington St. No.
    - Maintain the street hierarchy in a logical way.
- Congestion
  - Traffic delays leaving No. College Rd. onto either Washington St. or Blue Lakes Blvd.
    - Consider adding a right turn lane
- Aesthetics
  - Consider burying the electric transmission lines
- Design
  - Consider a landscaped median on Eastland – why has this not been planned into the current Eastland reconstruction project?
  - Consider roundabouts in new developments to:
    - Reduce speeds
    - Reduce the number of traffic signals
    - Possible location at No. College and Cheney Rd.
  - Consider that landscaped medians may increase property values of adjacent developments and will improve aesthetics
    - Review landscape requirements
    - Incorporate landscape standards in future developments
  - Keep vegetation in landscaped medians low to not block driver view of other traffic – i.e. on Pole Line Rd. near Costco/Target crossing and turning
  - Washington St. No. / Pole Line Rd. intersection signal poles block view of signals for westbound traffic
  - Consider extending Harrison Blvd. south from Pole Line Rd. to No. College Rd. to improve connectivity and provide an additional north/south connection

Public Meeting #2 Meeting Notes

City of Twin Falls
Transportation Master Plan

Public Meeting #2
Monday, April 14, 2008
7:00 to 9:00 p.m.
CSI - Taylor Admin. Room #277

Comment Form #2 / April 2008
Draft Plan Recommendations
Public Mtg Comments received 4-14-08

I. Attendance

- L "J" Muir
- Lynn Baird
- Dick Boyd
- Gary L. Young
- Chris Wilhaus
- Linda S. Wills
- Mary J. Inman
- Jackie Fields
- **Planning Team**
  - Kyle Comer, Civil Science
  - Rob Ramsey, Civil Science
  - Matt Rifkin, Interplan
  - Amber Buckley, Civil Science
  - _____, Civil Science
  - Mike Pepper, KMP Planning

II. Improvement Project Recommendations

Do you support the list of improvement project recommendations? Yes __2__ No __2__

If not, what changes would you make to the project list?

- Wendell/Martin; Filer to Addison. Carriage Lane; North end to Falls Ave. Carriage Lane; South end to Kimberly Road. Caswell/ Meadows Lane; Harrison to Fillmore. Caswell/Spruce; Blue Lakes to Locust
- You forgot Harrison St. at the half mile between Poleline and North College.
- Harrison St. between Poleline and North College Road needs to be put into the plan. It is on the half mile on a stage four road (Poleline) and would connect to the frontage road (North College).

What are your top 3 most important transportation improvement projects?

- Response #1
  - Harrison St. expanded between Poleline Road and North College
  - North College is the only East-West road to get across town
- Response #2
  - #18 Fillmore St.
  - #7 Filer Ave.
  - #15
- Response #3
  - Turn outs and bus stops for public trams when we become urban
- Response #4
  - Turn outs for public transportation
  - Factor in "outside" traffic- shoppers, workers from immediate area (25 mile radius)
  - Regional concept

- Response #5
  - In 2010 Twin Falls City will be "renewed." About that time, the Magic Valley will become the Snake River Canyon National Heritage area. Both will attract many, many tourists to add to the thousands of people from around the valley who take I-84 to the North end of Twin Falls to shop. Now is the time to plan for public transportation from the North end to downtown Twin Falls. The town will be ready, the Magic Valley will be ready for the Heritage Tourism, the people will come, and the money will come. We need public transportation; a monorail!
  - Reroute SH 30 to avoid the 2nd Avenues, make them 2-way with angle parking and landscaping
  - Change the 45mph sign to 35mph on Washington just south of No. College Rd…one of the hardest intersections to cross, especially with the speed of cars on Washington.

III. Goals

Please rank the transportation system goals according to your order of importance. 1 – most important, 2 next important, etc.

Response #1

__3___ Connectivity:	Complete street, sidewalk and bikepath connections
__4___ Trucking:	Truck routes and roadway design to accommodate trucks
__5___ Coordination/Planning:	Coordinate with other agencies and completed plans
__2___ Public transportation:	Accommodate current and future transit needs
__8___ Pedestrians / Bicycles:	Facilities that support safe "walk-ability" and "bike-ability"
__6___ Design/Operation:	Appropriate design standards, minimize impacts, traffic calming
__1___ Capacity / Congestion:	Lane capacity to meet traffic demands, minimize congestion
__7___ Maintenance:	Maintain or enhance the condition of streets, sidewalks, etc.

Response #2

__2___ Connectivity:	Complete street, sidewalk and bike path connections
__6___ Trucking:	Truck routes and roadway design to accommodate trucks
__5___ Coordination/Planning:	Coordinate with other agencies and completed plans
__8___ Public transportation:	Accommodate current and future transit needs
__7___ Pedestrians / Bicycles:	Facilities that support safe "walk-ability" and "bike-ability"
__4___ Design/Operation:	Appropriate design standards, minimize impacts, traffic calming
__3___ Capacity / Congestion:	Lane capacity to meet traffic demands, minimize congestion
__1___ Maintenance:	Maintain or enhance the condition of streets, sidewalks, etc.

Response #3

__1___ Connectivity:	Complete street, sidewalk and bike path connections
__2___ Trucking:	Truck routes and roadway design to accommodate trucks
_____ Coordination/Planning:	Coordinate with other agencies and completed plans
__1___ Public transportation:	Accommodate current and future transit needs
_____ Pedestrians / Bicycles:	Facilities that support safe "walk-ability" and "bike-ability"
__1___ Design/Operation:	Appropriate design standards, minimize impacts, traffic calming
__1___ Capacity / Congestion:	Lane capacity to meet traffic demands, minimize congestion
_____ Maintenance:	Maintain or enhance the condition of streets, sidewalks, etc. "This has always been the poor 2nd cousin – very important"

Response #4

__X___ Connectivity:	Complete street, sidewalk and bike path connections
_____ Trucking:	Truck routes and roadway design to accommodate trucks
_____ Coordination/Planning:	Coordinate with other agencies and completed plans
_____ Public transportation:	Accommodate current and future transit needs
_____ Pedestrians / Bicycles:	Facilities that support safe "walk-ability" and "bike-ability"
_____ Design/Operation:	Appropriate design standards, minimize impacts, traffic calming
_____ Capacity / Congestion:	Lane capacity to meet traffic demands, minimize congestion
_____ Maintenance:	Maintain or enhance the condition of streets, sidewalks, etc.

Response #5

__X___ Connectivity:	Complete street, sidewalk and bike path connections
_____ Trucking:	Truck routes and roadway design to accommodate trucks
_____ Coordination/Planning:	Coordinate with other agencies and completed plans
_____ Public transportation:	Accommodate current and future transit needs

_____ Pedestrians / Bicycles:	Facilities that support safe "walk-ability" and "bike-ability"
_____ Design/Operation:	Appropriate design standards, minimize impacts, traffic calming
_____ Capacity / Congestion:	Lane capacity to meet traffic demands, minimize congestion
_____ Maintenance:	Maintain or enhance the condition of streets, sidewalks, etc.

IV. Priorities

What is your priority for the type of projects that the City should fund and pursue? 1 – most important, 2 – next important, etc., 5 – not important at all

Response #1

__2___ Capital improvement projects:	Addl. lanes, new road connections, widening
__3___ Intersection improvements:	Turn lanes, signals, etc.
__4___ Correct street and sidewalk deficiencies:	Missing curbs and sidewalks, etc.
__5___ Neighborhood street renovation:	Street reconstruction, sidewalk replacement
__1___ Maintenance of existing streets/sidewalks:	Fill potholes, resurface streets, etc.

Response #2

__x___ Capital improvement projects:	Addl. lanes, new road connections, widening
__x___ Intersection improvements:	Turn lanes, signals, etc.
__x___ Correct street and sidewalk deficiencies:	Missing curbs and sidewalks, etc.
__x___ Neighborhood street renovation:	Street reconstruction, sidewalk replacement
__x___ Maintenance of existing streets/sidewalks: "All are important"	Fill potholes, resurface streets, etc.

Response #3

__x__ Capital improvement projects:	Addl. lanes, new road connections, widening
_____ Intersection improvements:	Turn lanes, signals, etc.
_____ Correct street and sidewalk deficiencies:	Missing curbs and sidewalks, etc.
_____ Neighborhood street renovation:	Street reconstruction, sidewalk replacement
_____ Maintenance of existing streets/sidewalks:	Fill potholes, resurface streets, etc.

Response #4

__x__ Capital improvement projects:	Addl. lanes, new road connections, widening,
_____ Intersection improvements:	Turn lanes, signals, etc.
_____ Correct street and sidewalk deficiencies:	Missing curbs and sidewalks, etc.
_____ Neighborhood street renovation:	Street reconstruction, sidewalk replacement
_____ Maintenance of existing streets/sidewalks:	Fill potholes, resurface streets, etc.

V. Funding

Would you be willing to pay additional taxes or fees to support transportation system improvements?
Yes __3___ No __0___ __1___"What other options are available?"

VI. Other Comments

Please provide any additional comments on the information provided

Response #1

- Bad estimate on the cost of #11, just the signal
- Changes would exceed $100,000
- Revise limits of projects

Response #2

- Cheney St. West should not be a bypass road. Poleline Road is a bypass road. Bypass roads are limited access roads, why have two roads next to each other that are both bypass with limited access on both!!

Response #3

- The College of Southern Idaho should not have the power to affect roads that hurt their neighbors. We all should have property rights. Those rights include good access and roads to other property.

Response #4

- Public transportation – why not think about removing vehicles rather than trying to accommodate. The "Baby Boomers" are going to want/demand services to include public transportation.
- Road tax on all vehicles.

City Council Coordination #1

City Council Work Session #1

Date: October 15, 2007			**Time:** 3:30 – 4:30 p.m.	
Project Number: 06137			**Project Name:** Twin Falls Transportation Master Plan	
Attendees:				
Name	**Company Name**	**Phone No.**	**Company Address**	**E-mail Address**
Kyle Comer	Civil Science			
Rob Ramsey	Civil Science			
Mike Pepper	KMP Planning			
Greg Lantig	City of Twin Falls			
Trip Craig	City of Twin Falls			
Dave Johnson	City of Twin Falls			
Don Hall	City of Twin Falls			
Glenda Dwight	City of Twin Falls			
Lance Clow	City of Twin Falls			
Tom Courtney	City of Twin Falls			
Jackie Fields	City of Twin Falls			

II. Welcome, Introductions, and Opening Remarks.

The meeting was opened with introductions and discussion on the purpose of the meeting, which is, to present and introduce the Twin Falls Transportation Master Plan process, steps, and schedule. The meeting will also identify the roles of the City, the City Council, TAC, CAC, Consultant Team, and ITD. Presentation and discussion of existing conditions and preliminary local plan review with a brief discussion of the data collection and pavement management system work program will occur in this meeting. This meeting will allow the City Council to identify initial issues and concerns regarding the Twin Falls transportation system.

III. Overview of the Planning Process.

Mike and Kyle discussed the project background, development, and planning area description. They explained the Transportation Master Plan process, scope, and schedule. They also discussed how the transportation plan will coordinate with the Comprehensive Plan involving status and future land use alternatives. They explained that the primary goal of the Transportation Master Plan process will be to identify the capital facility improvements, pavement management plan, and supporting policies to meet the Twin Falls transportation facility needs for the next 20 years. Upon further discussion with the Council it was decided that the plan horizon should be extended to a 25-30 year plan with frequent updates.

IV. Pavement Management System Work Program.

Kyle discussed the current data collection taking place and the schedule for data collection. At the present time data collection is taking place that identifies roadway widths, sidewalk locations, and curb and gutter locations. After this data collection is complete it will be combined with the data that the City of Twin Falls has already collected and shown in a GIS format. Beginning next week Civil Science will collect field data from sample sections on a portion of City arterial and collector roads to evaluate and identify existing pavement conditions. Due to budget constraints approximately ¼ of these roads will be evaluated with the plan to have City staff complete inventories as they have availability. Rob then discussed the use of Micropaver Software and technology for Pavement Management. This software will work with the current Cityworks Database to manage Public Work activity and help predict the remaining life and performance of the pavement network. This will then allow the City to prioritize which projects are most crucial. The Micropaver data will aid in cost effective maintenance planning by providing a cost benefit analysis of the proposed projects.

V. Plan Goals and Objectives.

Mike discussed the goals and objectives of the Plan that had been set forth by the TAC, CAC, and GTFTAC. These goals are:

- To balance public needs and engineered solutions.
- Improve connectivity of both roadways and bike/pedestrian systems to allow for better bike/pedestrian safety.
- Adjust state standards to meet City needs as appropriate and feasible.
- Plan for future Right of Way needs.
- Provide the TAC and CAC with a good understanding of alternatives and technical issues to assist them in understanding and developing final recommendations.
- Not getting distracted with inappropriate options.
- Provide connectivity between the City and county planning, roadway systems and needed improvements.

- Address congestion problems, design needs, and appropriate operation needs.
- Provide planning to allow for future support and development of a transit system and its related facilities.
- Provide sufficient roadway capacity to meet future needs.

VII. Basic Existing Conditions/ Issues and Concerns.

Kyle and Mike informed the Council about the preliminary local plan summary, the Comprehensive Plan Coordination status, and general issues or concerns that have been raised thus far by stakeholders, the TAC, the CAC, and the GTFTAC. Mike then opened the floor for any additional comments or recommendations that the Council might have regarding issues or concerns for the City's transportation system. Following is a list of items that were provided by the City Council:

- Trucking concerns
  - Define locations- where truck traffic will occur.
  - Intersections need to be designed to accommodate truck turning movements.
  - Increase in truck weight allowance and how it impacts the existing roads.
- MPO Request Requirements- Evaluate when Twin Falls will meet the MPO population; initial thoughts on impacts and opportunities, etc. .
- 2nd Ave. and US 30 re-routes.
- Consider Southeast Study- how will traffic in the southeast area impact transportation?
- School safety.
  - Are pedestrian overpasses or underpasses a feasible alternative?
  - Pedestrian visibility by the High School is poor in the mornings due to the sun. There has already been an accident this year by the High School because of poor visibility.
  - U.S. 30 school crossings for Bickel and Lincoln Elementary.
- 2nd Ave.
  - School crossing safety
  - 2 lane traffic not stopping for school pedestrian traffic- one car will stop but other lanes are not stopping.
  - Resolution to meet Twin Falls needs.
- Pavement/ street maintenance- repairs versus replacement.
- Sidewalk connectivity and conditions/ repairs needed.
- Environmental Considerations that impact transportation.
  - I.E. lighting/energy savings
  - Funding Relationships
- Valley Gutter impacts on vehicles- Valley Gutters that cross collectors and arterials are creating problems.
  - No curb and gutter- There are areas in town without curb and gutter.
  - Other options to address drainage.
- Public Transportation
  - Geometrics- intersections designed to accommodate bus turning movements.
  - Stop locations- are pull outs needed for bus stops?
  - Consider and anticipate future needs to support the City as the population and demand grows; also consider funding needs, opportunities and limitations.
- MPO Thresholds
  - 2010 consider impacts and opportunities with Kimberly related to MPO.
  - Develop Regional plan as feasible, to be ready for future transition MPO and Regional Transportation Plan funds
- Consider Roundabouts
  - Help reduce traffic speeds – traffic calming
  - Locate in newer sections of town where impact will be lower.
- Design
- Balance technical needs with design solutions that appropriately meet public / user needs

VIII. Next Steps/ Adjourn

Mike concluded the meeting by informing the council of the next steps that will be taken in the Master Plan process. These steps will include:

- Future land use, traffic demand, and traffic analysis zones assessment.
- Completion of data collection and existing systems
- Asset analysis.
- Initial improvement project identification
- Capital improvement Project development.
- Funding investigation

- Preliminary plan recommendation development.
- Future Public workshop meetings will be held Oct. 15, 2007 and in Feb. 2008.
- Future TAC meetings will be held Oct.16, 2007, and in December of this year.
- Future City Council workshop meetings will be held December 10, 2007 and in April 2008.

City Council Meeting #2 Meeting Notes

City of Twin Falls
Transportation Master Plan
City Council Workshop #2

Results

Monday, December 10, 2007
4:00 to 5:00 p.m.

I. Welcome, Introductions and Opening Remarks (Mike Pepper)

Purpose of the meeting:

- *To provide an update on the status of the plan development*
- *To review and confirm the transportation system goals*
- *To present and discuss the proposed future land use*
- *To present the current traffic demand, discuss problem areas and the development of the traffic model*

Attendance

- **City Council Members**
  - Mayor Lance Clow
  - Dave Johnson
  - Trip Craig
  - Don Hall
  - Shawn Barigar
- **Consultant Team**
  - Kyle Comer, Civil Science
  - Ed Collins, Civil Science
  - Rob Ramsey, Civil Science
  - Matt Riffkin, InterPlan
  - Ryan Beck, InterPlan
  - Mike Pepper, KMP Planning

II. Planning Process Status (Mike Pepper / Kyle Comer)

- ❑ Primary goal of the TMP process: *To identify the capital facility improvements, pavement management plan and supporting policies to meet the Twin Fall's transportation facility needs for the next 25-30 years*
- ❑ Where we are in the process - Phase II – Identification of Existing and Future Conditions

III. Transportation System Goals (Mike Pepper)

- ❑ Review and confirm system goals
  - No City Council comment at this time

IV. Future Land Use (Kyle Comer / Rob Ramsey)

- ❑ Present and discuss future land use as identified in the comprehensive plan process
  - No City Council comment at this time

V. Existing Features / Key Issues / Standards and Problem Areas (Kyle Comer Rob Ramsey)

- ❑ Review of existing data
- ❑ Review of key issues identified to date
- ❑ Standards considerations
- ❑ Present and discuss most significant problem areas to be addressed
  - City Council comments
    - Safety / visibility issues exist in the downtown / old township area: Consider closing some of the angled streets in the downtown original township area where they meet major streets at an angle; such as intersections with Blue Lakes Blvd., Addison Ave., etc.

VI. Traffic Model (Matt Riffkin)

- ❑ Discuss traffic analysis zones
- ❑ Preliminary traffic modeling information
  - City Council Comments
    - Re-evaluate traffic counts that may be affected by the reopening of Eastland, Poleline Rd., etc. since the traffic counts were taken
- ❑ Accident Conditions
- ❑ Preliminary Functional Classification
- ❑ Preliminary Cross Sections

- ❑ ***General / Miscellaneous comments***
  - *Be sure that the transportation plan takes into consideration and coordinates with all other relevant planning and policy efforts such as the comprehensive plan, impact fee implementation, downtown planning, etc.*

VII. Next Steps / Adjourn (Mike Pepper)

- ❑ Complete traffic modeling for traffic analysis zones
- ❑ Develop preliminary improvement alternatives
- ❑ Continued work on the asset management program
- ❑ Next City Council Workshop #3 – Monday, April 14th, 2008
  - Present / discuss improvement options, policies and funding options

City Council Meeting #3 Meeting Notes

City of Twin Falls
Transportation Master Plan
City Council Workshop #3

Results

Monday, April 7, 2008
5:00 p.m.

I. Welcome, Introductions and Opening Remarks (Mike Pepper)

Purpose of the meeting:

- *To provide an update on the status of the plan development*
- *To present and gather comments on the preliminary draft capital improvement project list*
- *To obtain council direction for the upcoming public meting*

Attendance

- **City Council Members**
  - Dave Johnson
  - Trip Craig
  - Don Hall
  - Will Kesley
  - Lee Heider
  - Greg Lanting
- **Consultant Team**
  - Kyle Comer, Civil Science
  - Rob Ramsey, Civil Science
  - Mike Pepper, KMP Planning

II. Planning Process Status (Mike Pepper / Kyle Comer)

- ❑ Primary goal of the TMP process: *To identify the capital facility improvements, pavement management plan and supporting policies to meet the Twin Fall's transportation facility needs for the next 25-30 years*
- ❑ Where we are in the process - Phase III / IV – Alternatives evaluation and draft CIP development

III. Brief Review of Priority Goals (Mike Pepper)

- ❑ Review of all established transportation system goals and top three priority goals

IV. Traffic Conditions (Kyle Comer / Rob Ramsey)

- ❑ Present and discuss current traffic volumes and Level of Service (LOS)
- ❑ Present and discuss intersection "Hot Spots"
- ❑ Present and discuss projected future traffic volumes and 2030 "No build" LOS

V. Preliminary Capital Improvement Project List (Kyle Comer / Rob Ramsey / Mike Pepper)

- ❑ Present the list of preliminary capital improvement projects (CIP) for roadways and intersections
- ❑ Brief review that the CIP does not include the list of street deficiency improvements or maintenance to the existing system components – these will require additional funding

- City Council comments
  - Project priority – the Council desires to maintain the comprehensive list of preliminary capital improvements as presented for the plan but recognize that funding all priorities may not be feasible. A final Capital Improvement Plan (a revised version of the current preliminary list of projects) may need to include a reduced project list that better reflects available resources and considers funding needs for deficiency improvements and maintenance.
    - The Council elected to postpone any decision on prioritization of the preliminary list of improvements pending public input at the upcoming public meeting on April 14th, and consideration of maintenance and deficiency needs.
  - 2nd Avenues – the Council expressed concern about funding capability to complete this project, but agreed to provide opportunity for public comment. City council input at this time suggests that this will be a difficult project to implement due to the high cost and transportation benefit as compared to many of the other identified capital and maintenance needs.
  - Townsite modifications – the consultant team presented comments recently received from the Mayor at the last TAC meeting regarding the intersection of angled streets in the townsite with Blue Lakes Blvd. and Addison Ave. East. The Mayor had suggested that some of these streets should be evaluated for potential closure where they intersect Blue Lakes Blvd. and Addison Ave. East. They present a safety hazard due to sight distance limitations and speed of vehicles using these streets to cut through from Blue Lakes Blvd. to 2nd Ave. The Council suggested this issue be evaluated by staff in the future as necessary and considering any additional input from the Mayor.
  - Blue Lakes Blvd. Improvements; addition of accel/decel lanes – the Council did not prefer to pursue auxiliary lane improvements (similar to the lanes in front of the Winco development) as part of future transportation system development. They believed that the intermittent use of these lanes is confusing to motorists.

VI. Next Steps / Adjourn (Mike Pepper)

- Public meeting #2 – Monday, April 14th, 2008 - 7 to 9 p.m. – CSI Taylor Admin #276
  - Present / discuss / gather comments on the preliminary Capital Improvement Plan projects
    - Current and future traffic volumes and LOS
    - Intersection "Hot Spots"
    - 2030 "No build"
    - Recommended street standards
    - 2030 "CIP"

Western Days Feedback

Twin Falls Transportation Master Plan
Western Days Public Input

May 31, 2008 – Updated June 10, 2008

The Western Day booth included the following displays:

- Existing level of service
- Intersection hot spots
- 2030 "No build" level of service
- Updated CIP – roadway improvements
- Updated CIP – intersection improvements
- 2030 CIP level of service

** Comment forms, which included reference to the project web site, were made available for completion at the booth or return mail.

Mike Pepper:

I manned the booth Saturday afternoon from around noon to just after 3 p.m. I spoke to approximately 25 people and handed out about a dozen comment forms with invitation to visit the project web site and submit written comments if desired. The general response to the list of draft capital projects was positive, with most of the discussion focusing on individual issues outlined below.

- Intersection delays at Elm and Addison; SB to EB delay
  - Pedestrian safety is a concern here
  - Signal is very short and goes directly from green to red
- Need a signal at Washington and No. College
- Consider adding a bike / pedestrian facility on Fillmore extension through the CSI property to connect Fillmore between Falls and No. College, thereby improving the N/S connectivity for bikes and peds
- Crossing Addison is unsafe for bikes and peds – lack of crosswalks
- Sidewalk repairs are needed throughout the local streets; especially in the area of Harmon Park and on Locust St.
- Intersection of Cheney and Parkview is congested
- Intersection of Washington St. No. and No. College is congested – needs signal
- Bike lanes issues
  - Need connectivity between the "on street" bike system to the "off street" trail system
  - Need bike lane routes and connections to key community facilities; CSI, parks, etc.
  - Consider reducing 4 lane sections to 3 lanes with a center turn lane and room for a striped bike lane on each side
  - Need continuity in the bike route system
  - Need more proactive planning for bike system needs
- Transit
  - Need transit services now and as City grows
    - Consider a transit service (bus) up and down Blue Lakes Blvd. from the Perrine Bridge to downtown – with regular and frequent service
    - Consider routes along Poleline and Addison
- A belt route is needed for trucks – get the trucks off Blue Lakes
- Difficult access on/off Blue Lakes at Spruce
- Need pedestrian facility improvements throughout the City – lack of sidewalks
- Medians on Blue Lakes would help improve safety

Rob Ramsey:

I manned the booth Saturday afternoon from around 3:00 pm to 6:00 pm. It seemed like every five minutes or so someone would stop at the booth to look at the displays. My tally indicated I spoke to about 25 individuals in that time frame. After 5:30 pm it slowed down so I took the booth down at 6:00 pm. I kept some notes on what people were saying, I had one individual feel out a comment sheet at the booth (see attached), and I handed out comment sheets to others so that they could go to the website to review the maps and comment at that time. I informed them that they can mail the comments to the address on the sheet or drop the comments off at the City Office when they pay their utility bill. Following are the verbal comments that were made:

- Reduce Speed on Hankins from Addison to Kimberly
- Allow 2 south bound lanes through the intersection of Addison and Blue Lakes
- Allow for left turns from South Bound Blue Lakes to East bound Addison
- Need a signal at Orchard and Blue Lakes
- Need a signal at Pole Line and Locust
- Need a signal at Fillmore and North College
- Need a signal at Hankins and Addison
- Need a signal at Orchard and Washington
- Need bike paths that are accessible and connect to existing trails
- Need to remove dead-end sign from Pheasant Drive west of Washington
- Need to remove US-93 traffic from Twin Falls using a new Snake River Bridge Crossing
- Need an overhead structure along Blue Lakes that allows US-93 traffic to bypass Twin Falls (like Los Angeles has)
- Need transit system.
- Need commuter rail for workers from outside of Twin Falls
- Need to improve intersection at Blue Lakes and Kimberly Road.
- Need to widen Washington Street
- Need to widen Eastland
- Block off the crossing between Costco and Target on Pole Line
- Need raised medians along Blue Lakes
- Need to complete Pole Line Expansion to the West
- Adjust signal timing on Shoshone Street and 2nd Avenue East

1 Submitted Comment Form Results (as Rob noted above)

1. Do you support the list of improvement project recommendations? Yes
    a. Top 3 most important improvement projects
        i. Blue Lakes N. needs a barrier to stop left turns
        ii. The crossing on Pole Line between Costco and Target needs blocked off
2. Priorities
    1. Capital improvement projects
    Correct street and sidewalk deficiencies
    2. Intersection improvements
    Neighborhood street renovation
    Maintenance of existing streets/sidewalks
3. Funding – would you be willing to pay additional taxes or fees to support transportation system improvements? Yes