



**COMPASS**  
COMMUNITY PLANNING ASSOCIATION  
OF SOUTHWEST IDAHO

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# Treasure Valley Congestion Management System Annual Report: 2004



*Community Planning Association of Southwest Idaho*

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## **Summary**

This document fulfills an annual reporting commitment of the Treasure Valley Congestion Management System (CMS). The document also evaluates how well congestion is managed and provides congestion data to entities that design and develop roadway projects and congestion mitigation measures.

As part of the annual reporting process, travel time data for 2004 were collected on interstate and principal arterial roadways. These data were converted to travel time indices (Sanderson Index, or SI), which were used to classify the level of congestion encountered. Changes in congestion classification from base year data (2003 data) were noted and possible reasons for the changes collected. Due to a lack of historical travel time data, an evaluation of congestion mitigation measures (or CMS “Toolbox”) is not reasonable at this time. Modeled travel time analyses, however, conducted for Northern Ada County’s long-range transportation plan, indicate that as the valley continues to grow, travel times (and congestion) are likely to increase, despite planned roadway projects.

## **Background**

A Congestion Management System (CMS) is a process for collecting data and identifying congested transportation facilities with the intent of identifying and implementing appropriate mitigation measures. A CMS will not eliminate congestion, but will instead slow the rate at which it increases. Although Federal regulations provide general requirements for a CMS, Federal approval of the CMS is not required.

Generally, a CMS should be designed to:

- Define and measure congestion
- Identify and evaluate congestion and its causes
- Identify and evaluate mitigation strategies
- Define implementation responsibilities
- Define an evaluation process
- Be included in all aspects of transportation planning

In 1991, the Intermodal Surface Transportation Efficiency Act (ISTEA) required metropolitan planning organizations in Transportation Management Areas (TMAs) to implement a CMS. An urbanized area is designated a TMA when its population exceeds 200,000. The results of the 2000 Census indicated that the population of the urbanized area in Northern Ada County was 272,625. Therefore, on July 8, 2002 the Federal Highway Administration officially designated the Boise Urbanized Area as a TMA.

A document outlining the elements of the Treasure Valley CMS, *The Treasure Valley Congestion Management System Plan*, will be given to the COMPASS Board for adoption in early 2005. The CMS plan outlines how travel time data will be collected and used. Specific definitions for congestion and a “toolbox” of mitigation strategies are also part of the plan. For specific information of the system’s design, refer to *The Treasure Valley Congestion Management System Plan*.

## **Introduction**

In the spring of 2004, travel time data were collected on highways and principal arterials within both the Nampa and Boise urbanized areas by the Idaho Transportation Department (ITD) and COMPASS. Data collection occurs annually as part of the Treasure Valley CMS. Travel time data are collected to quantify and identify trends in roadway congestion. The annual data collection process is summarized in an annual report to help transportation and land use entities identify (and implement) congestion management strategies and projects to improve travel time, particularly in locations defined by the CMS as highly congested.

This document serves to fulfill the annual reporting commitment of the Treasure Valley CMS. It also acts as an evaluation tool to measure “how we are doing” in way of managing congestion and provide congestion data to entities that design and develop specific roadway projects and congestion mitigation measures.

## Travel Time Data Collection

The Idaho Transportation Department (ITD) and COMPASS staff drive Treasure Valley interstates and principal arterials during peak (6:30 to 8:30 a.m. and 4:00 to 6:30 p.m.) and free flow, or ideal, (2:00 a.m. to 5:00 a.m.) periods. Travel times for a given section of roadway is recorded into a computer for processing. The ratio of peak travel time to free flow travel time produces an index used to identify congestion. This ratio is referred to as the Sanderson Index (or SI). An SI of 2.0, for example, means that it takes twice as long to travel the route during the peak (or congested) period than during free flow (or ideal) conditions. Analysis of this travel time data yields information about trends in roadway congestion on specific travel routes within cities, districts, or specific locations (e.g. near intersections).

Notes are made regarding transportation projects or delays encountered during data collection efforts impacting travel time. Travel time data collection for a given facility is postponed if spontaneous delays, such as those caused by vehicle accidents, are encountered. In extreme cases, data on some facilities are not collected due to road construction occurring throughout a given data collection campaign.

Based on SI and general roadway location, the Treasure Valley CMS defines low, medium, and high levels of congestion. Table 1 displays the Treasure Valley CMS definitions of congestion, which were established by local transportation experts. For classification purposes, urban roadways are located in Downtown Boise (the regional central business district) only.

**Table 1: Treasure Valley Definitions of Congestion**

<b>Congestion Thresholds (Based on SI* Values)</b>			
<b>Roadway Class</b>	<b>Low</b>	<b>Medium</b>	<b>High</b>
Freeway	<1.25	1.25-1.50	>1.50
Suburban	<1.75	1.75-2.25	>2.25
Urban	<2.00	2.00-2.50	>2.50

\*Sanderson Index (SI) is a ratio of peak travel time to ideal travel time.

Figures 1 and 2 display the results of the 2004 travel time data collection effort by identifying congestion as defined by the Treasure Valley CMS. To aid in the analysis of transportation corridors in Ada County, segment level travel time data are weighted on segment distance and reported. This reporting method removes congestion “hot spots” along a corridor, giving a feel for how the corridor is functioning as a whole. Figures 3 and 4 display identified congestion as defined by the Treasure Valley CMS based on weighted (corridor level) travel time data. Travel time data and corresponding SIs used to produce Figures 1-4 are contained in the attached appendix.

## Congested Facilities – 2004:

The 2004 travel time data collection campaign began the last week on March and ended the first week of June, 2004. Based on this data, Table 2 lists the principal arterial and interstate roadway segments identified in the “high” range as per the Treasure Valley CMS. Ascending data refers to northbound or eastbound travel, while descending data references southbound or westbound travel.

**Table 2: Treasure Valley Facilities Identified as Congestion Level “High” in 2004**

<b>“High” Congestion Roadways</b>				
Road Name*	Location	Direction	City	SI** 2004
Main St.	1st St. to Broadway/Ave B	Eastbound	Boise	3.41
Franklin Rd.	Milwaukee St. to Cole Rd.	Eastbound	Boise	2.73
Franklin Rd.	Nola Rd. to Eagle Rd.	Eastbound	Meridian	3.45
I-84	Eagle Rd. to Five Mile Rd.	Eastbound	Regional	2.16
I-84	Franklin Blvd. to Garrity IC	Eastbound	Regional	1.56
IB-84	Kimball Ave. to 10 <sup>th</sup> Ave.	Northbound	Caldwell	2.98
Orchard St.	I-184 EB Ramp to Bond St.	Northbound	Boise	2.37
Orchard St.	Bond St. to I-184 EB Ramp	Southbound	Boise	2.50
SH-44 (State St.)	Horseshoe Bend Rd. to Hwy 55	Westbound	Boise/Eagle	2.37
SH-55 (Eagle Rd.)	St. Lukes Ln. to Franklin Rd.	Northbound	Meridian	2.62
SH-69 (Meridian Rd.)	Victory Rd. to Overland Rd.	Northbound	Meridian/Kuna	2.79
US-20/26	Muller Rd. to I-84 WB ramps	Westbound	Caldwell	2.43
Ustick Rd.	Kimball Ave. to 10th Ave.	Eastbound	Caldwell	2.35
Vista Ave.	Wright St. to I-84 EB Ramps	Northbound	Boise	3.29
9 <sup>th</sup> St.	Main St. to Myrtle St.	Southbound	Boise	2.58

\*SH = State Highway, IB-84 = Interstate 84-Business Route, US = United States Highway

\*\*Sanderson Index (SI) is a ratio of peak travel time to ideal travel time.

Figure 1: 2004 Ascending Congestion Map

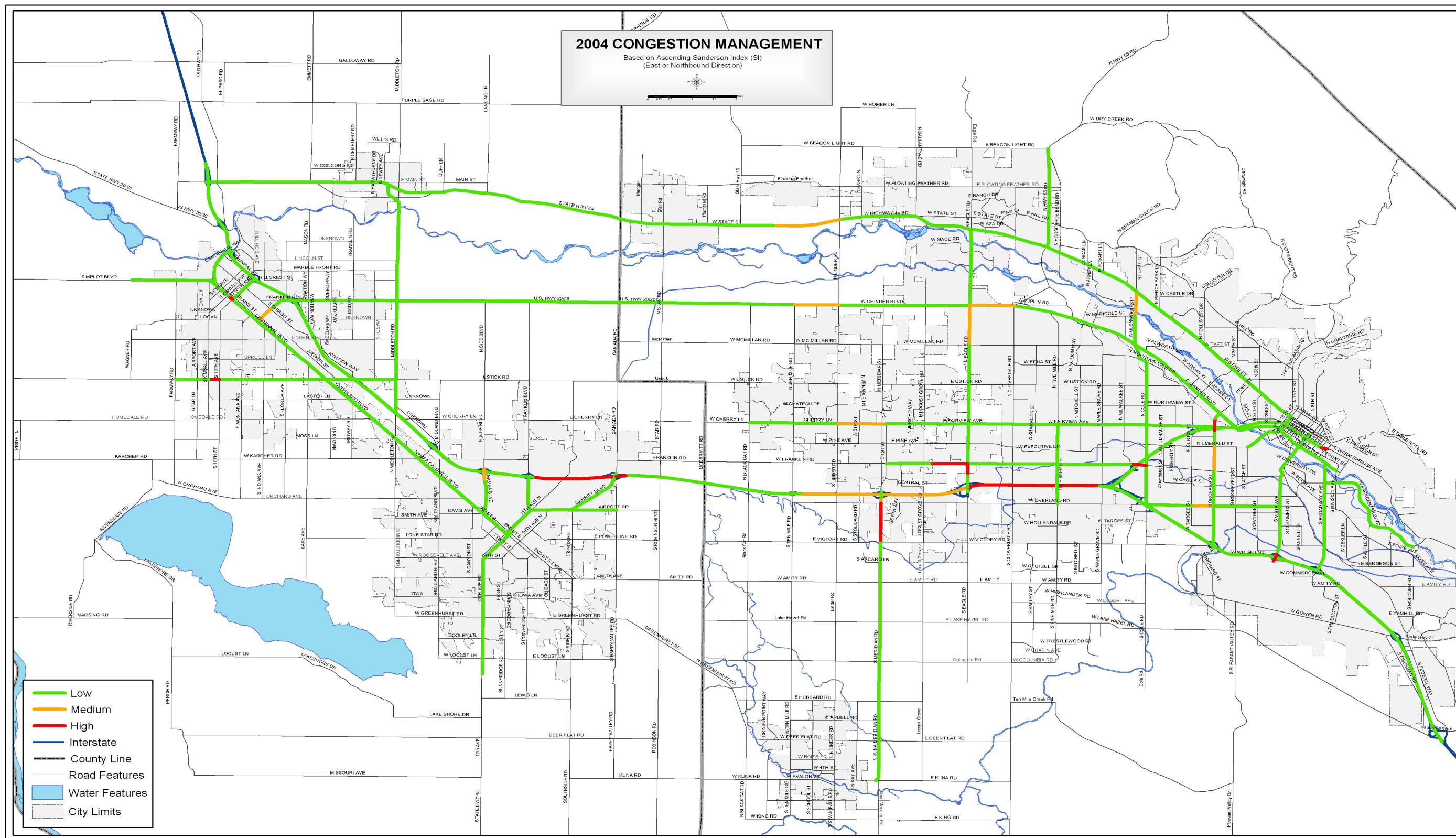


Figure 2: 2004 Descending Congestion Map

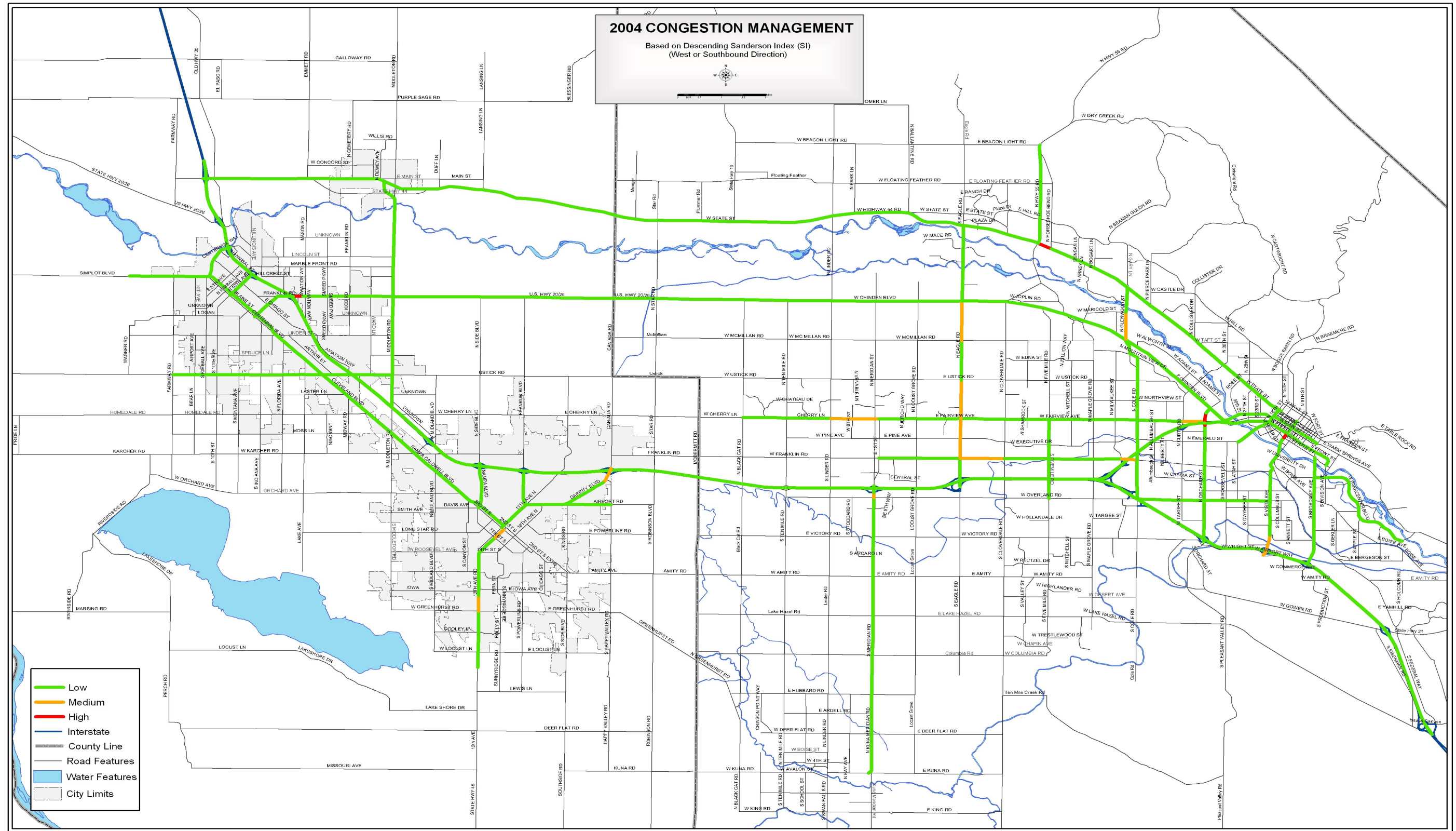




Figure 3: 2004 Weighted Ascending Congestion Map

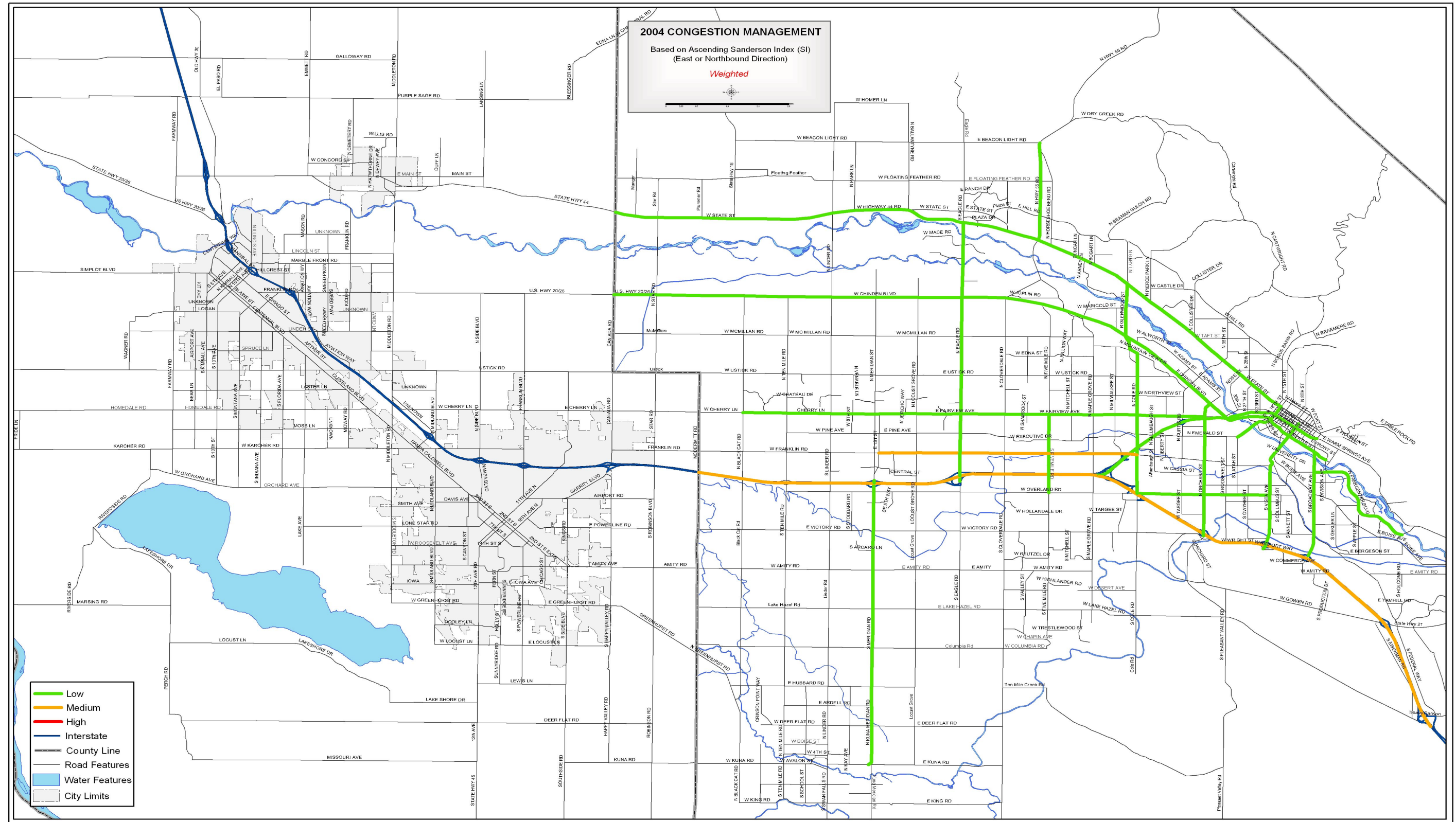
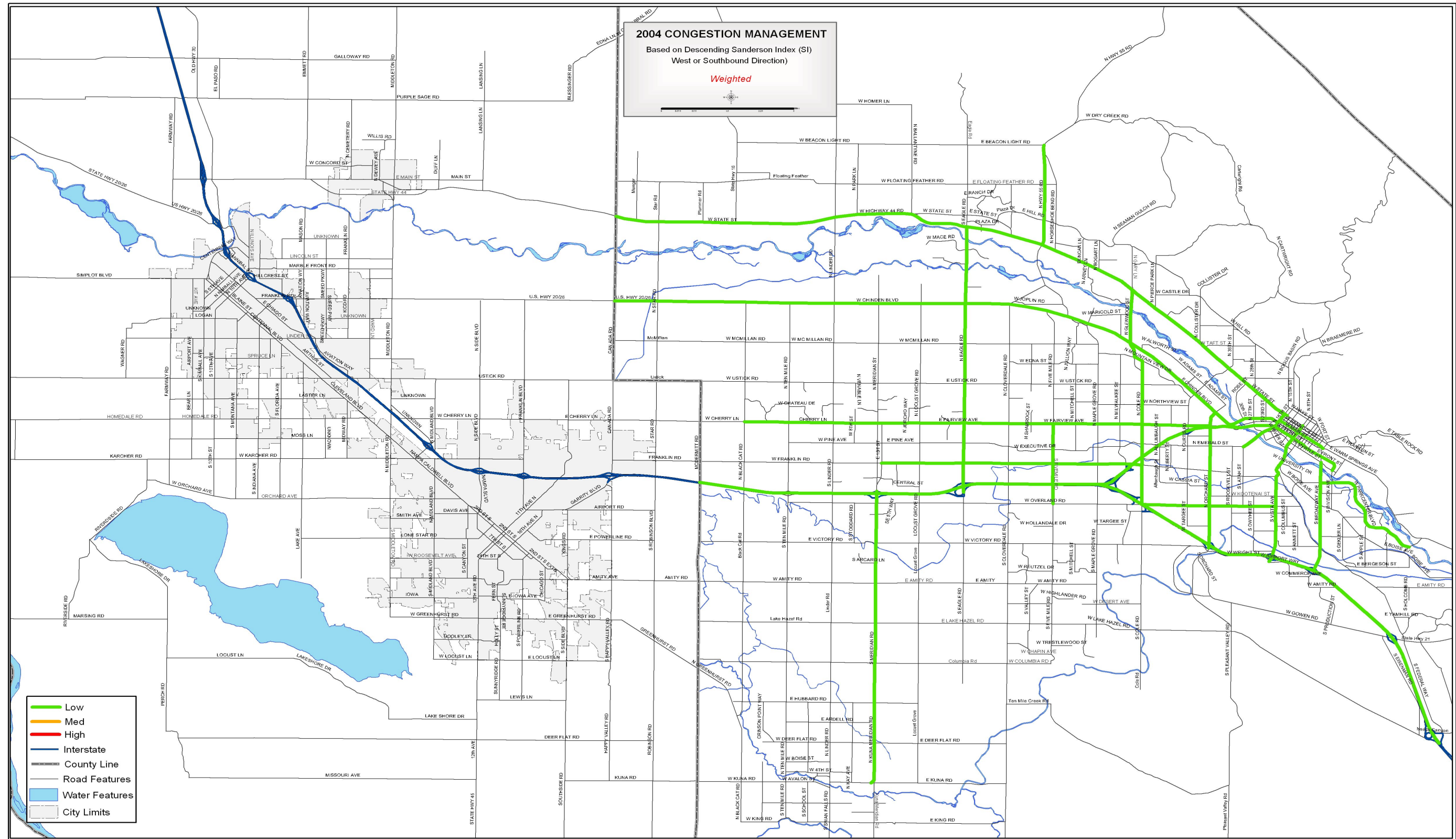


Figure 4: 2004 Weighted Descending Congestion Map



## Congestion Analysis

Because only two years worth of travel time data are available, it is difficult to identify any trends in Treasure Valley congestion. Nonetheless, baseline CMS data collected in 2003 was compared to the data collected in 2004. Tables 3 and 4 display the amount and type of congestion identified in both the base year (2003) and in 2004. It is important to note approximately 38 miles of principal arterials were added to the data collection effort in 2004. The majority of the added miles are located in Canyon County.

**Table 3: Ascending Congestion Comparison – Treasure Valley**

Ascending (Eastbound/Northbound) Travel				
Congestion Threshold	2003 miles	2003 %	2004 miles	2004 %
High	7.75	5.3%	8.57	4.6%
Medium	10.12	6.7%	11.90	6.4%
Low	129.64	88%	164.5	89%
<b>Total Miles of Data</b>	<b>147.50</b>	<b>100%</b>	<b>184.97</b>	<b>100%</b>

**Table 4: Descending Congestion Comparison – Treasure Valley**

Descending (Westbound/Southbound) Travel				
Congestion Threshold	2003 miles	2003 %	2004 miles	2004 %
High	7.23	4.9%	0.98	0.5%
Medium	27.25	18.6%	8.46	4.6%
Low	111.67	76.4%	175.77	94.9%
<b>Total Miles of Data</b>	<b>146.15</b>	<b>100%</b>	<b>185.21</b>	<b>100%</b>

Table 5 lists the largest classification changes in 2004, those facilities that either moved into or out of the “high” congestion classification as a result of the 2004 data collection effort. Based on the notes made during data collection and input provided by Treasure Valley transportation agencies, potential reasons for the observed changes in congestion were identified. Potential projects/policies that may have contributed to the changes identified in Table 5 include:

- a. Construction and/or completion of the Garrity Interchange Project in Nampa
- b. Shoulder construction and reduced speed limit on Interstate 84 between Meridian and the Wye Interchange
- c. Ramp Closures due to Wye Interchange construction
- d. Significant changes in land use (e.x. Costco’s move to Cole/Overland area)
- e. Franklin Road construction
- f. Various signalization improvements
- g. Deployment of intelligent transportation system (ITS) improvements
- h. Improvements in data collection

**Table 5: Largest changes in Travel Time**

<b>Changes in Congestion Thresholds from 2003 to 2004</b>						
Road*	Location	Direction	City	2003 Threshold	2004 Threshold	Potential Reason(s)**
10th Ave.	I-84 WB Ramps to Chicago St	Southbound	Caldwell	High	Low	h
Idaho St.	13th St to 9th St.	Eastbound	Boise	High	Low	h
Fairview Ave.	Liberty St. to Curtis Rd.	Eastbound	Boise	High	Low	f
Fairview Ave.	Mitchell St. to Five Mile Rd	Westbound	Boise	High	Low	f
Fairview Ave.	Orchard St. to Curtis Rd.	Westbound	Boise	High	Medium	f, g
Franklin Rd.	Five Mile Rd. to Cloverdale Rd.	Westbound	Boise	High	Low	g, e
Franklin Rd.	Milwaukee St. to Maple Grove Rd.	Westbound	Boise	High	Low	d, f
Franklin Rd.	Cole Rd. to Milwaukee St.	Westbound	Boise	High	Medium	d, f, g
I-184	Curtis Rd. to Orchard St.	Eastbound	Boise	High	Low	c
I-84	Meridian Rd. to Eagle Rd.	Eastbound	Boise	High	Medium	b, g
I-84	Eagle Rd. to Five Mile Rd.	Eastbound	Boise	Low	High	b, g
I-84	Franklin Blvd. to Garrity IC	Eastbound	Nampa	Low	High	a
IB-84	End Raised Median to Linden St.	Eastbound	Caldwell	High	Low	h
IB-84	Flamingo to I-84 WB Ramps	Eastbound	Nampa	High	Low	a
IB-84	Kimball to 10th	Northbound	Caldwell	Low	High	a, h
IB-84	I-84 WB Ramps to Flamingo Ave.	Westbound	Nampa	High	Medium	a
Orchard St.	Bond St. to Chinden Blvd.	Northbound	Boise	High	Low	c, h
Orchard St.	I-184 EB Ramp to Bond St.	Northbound	Boise	Low	High	c, h
Overland Rd.	Owyhee St. to Vista Ave.	Eastbound	Boise	High	Low	h
Overland Rd.	Roosevelt St. to Orchard St	Westbound	Boise	High	Low	f
SH-44 (State St.)	Begin New Alignment to Linder Rd.	Westbound	Boise/Eagle	High	Low	f
SH-55	1st St. N to 3rd St. S	Southbound	Nampa	High	Low	f
US-20/26	Muller Rd. to I-84 WB ramps	Westbound	Caldwell	n/a	High	h
Ustick Rd.	Kimball Ave. to 10th Ave.	Eastbound	Caldwell	n/a	High	h
Vista Ave.	Overland Rd to Kootenai St.	Southbound	Boise	High	Low	h

Capitol Blvd.	Eastover Rd. to University Dr.	Southbound	Boise	High	Low	h
Vista Ave.	I-84 EB Ramps to Wright St.	Southbound	Boise	High	Medium	f, g, h

SH = State Highway, IB-84 = Interstate 84-Business Route, US = United States Highway  
 \*\*Potential reasons for the changes in travel time offered by ACHD and ITD technical staff.

## Congestion Mitigation

The development of applicable congestion mitigation measures to address specific areas of congestion is delegated to each transportation agency in the valley. However, the Treasure Valley CMS does provide some guidance on mitigation measures to the local transportation agencies in the form of a “Toolbox.” The “Toolbox” is presented in Table 6. With only two years worth of travel time data collected and only a handful of projects identified, an evaluation of the ”Toolbox” is not feasible. As more data are collected, quantitative and qualitative evaluations of the “Toolbox” may be possible.

**Table 6: Treasure Valley CMS “Toolbox”**

CMS “Toolbox” - Congestion Mitigation Strategy Categories		
	Area Wide	Corridor / Project Specific
Short Term (Within 5 Years)	<ul style="list-style-type: none"> <li>❖ Access Management policies for all congested roadways</li> <li>❑ Zoning Ordinance Standards</li> <li>❑ Employer Based Strategies</li> <li>❑ Access Management policies for all development along congested roadways</li> </ul>	<ul style="list-style-type: none"> <li>❖ Intelligent Transportation Systems</li> <li>➤ Intelligent Transportation Systems</li> <li>❖ Additional Roadway Capacity</li> <li>❖ Non-motorized Mode Improvements</li> <li>❖ Intersection Improvements</li> <li>❖ Preferential Based Strategies</li> <li>➤ New or increased access to transit</li> <li>❑ Non-motorized Mode Improvements</li> </ul>
Long Term (Greater than 5 Years)	<ul style="list-style-type: none"> <li>❑ Comprehensive Plan land use strategies</li> <li>➤ Intermodal Project integration / design</li> <li>➤ New or increased access to transit</li> <li>➤ Additional transit services</li> </ul>	<ul style="list-style-type: none"> <li>❖ Additional Roadway Capacity listed in regional long-range plan</li> <li>➤ Addition of transit oriented fixed-guide way</li> </ul>

Implementing Agency Legend (note: the current draft only applies to roadway congestion):

- ❖ Roadway Agencies (Ada County Highway District (ACHD), Idaho Transportation Department (ITD), all cities and highway districts in Canyon County, and some cities in Ada County)
- Transit Providers (ValleyRide and ACHD Commuteride)
- ❑ City and County Level Governments

As part of the transportation improvement program (TIP) development process, proposed surface transportation program (STU) projects are ranked according to various criteria. One of those criteria, system efficiency, awards ranking points to projects attempting to implement congestion mitigation projects identified in the CMS “Toolbox.” Table 7 lists those STP projects proposed for Ada County, which received CMS considerations in the FY2005-2009 TIP. It should be noted that CMS ranking points were given regardless of roadway classification. As previously stated, travel time data is only collected on principal arterials and interstates, but improvements to minor arterials may also influence travel time on other facilities.

**Table 7: FY 2005-2009 Transportation Improvement Program (TIP) CMS Project Ranking**

Implement System Efficiency (i.e., CMS consideration) - Possible 5 points		
Project	Location	System Efficiency Points*
Roadway Widening: Franklin Rd.	Touchmark Way to Five Mile Rd.	5
Roadway Widening: Franklin Rd.	Black Cat Road to Ten Mile Rd.	1
Roadway Widening: Franklin Rd.	Ten Mile Rd to Linder Rd.	1
New Roadway: Three Cities River Crossing	Between Eagle Rd. and Glenwood Rd.	3

\* CMS points were awarded to projects regardless of current/proposed roadway classification.

Chapter 11 of *Destination 2030 – Limited Plan Update*, Northern Ada County’s current long-range transportation plan, attempts to qualitatively forecast travel time impacts associated with growth. This is done by comparing current year and future year modeled travel time data produced by COMPASS’ travel demand model. Table 8 displays the model data comparison for travel routes on primarily interstate and principal arterial routes in Ada and Canyon Counties. Due to forecasted growth and the planned transportation improvements currently modeled, travel times will most likely increase over the next 20 years. Although the model does not capture the critical role intersection design and signalization has on travel time, it does speak to intent of the Treasure Valley CMS... congestion mitigation, not elimination.

**Table 8: Modeled Travel Time Comparison Based on Long Range Transportation Plans**

From	To	2005 Time (min)	2030 Time (min)	Change in Travel Time (%)	Primary Route
City of Meridian	Crossroads Shopping Center (Eagle and Fairview)	4.9	5.6	13.0	Franklin Rd.
City of Eagle	St. Luke’s in Meridian	10.0	11.6	16.6	Eagle Rd. (SH 55)
City of Nampa	Downtown Boise	30.3	35.9	18.5	I-84
City of Caldwell	Micron	42.2	47.1	11.7	I-84
City of Meridian	St Al’s	14.7	17.7	20.4	Fairview Ave.
City of Star	Hewlett Packard	14.0	17.4	23.9	SH 44 and US 20/26
City of Star	Downtown Boise	25.4	31.1	22.4	SH 44 (State St.)
North Meridian	HP	9.7	10.5	8.5	US 20/26 (Chinden)
City of Middleton	City of Eagle	18.5	21.2	14.8	SH 44 (State St.)
North Caldwell	Boise Towne Square	29.3	34.3	17.2	I-84
South Nampa	Boise Airport	29.2	34.1	17.0	I-84
Broadway IC	Boise State University	4.8	5.7	18.8	Broadway Ave.

## Conclusion

As part of the Treasure Valley CMS, 2004 travel time data was collected and analyzed to classify congestion on interstate and principal arterial roadways in the Treasure Valley. A small fraction of these roadways were identified as highly congested. Comparisons between

2004 and base year (2003) data were used to identify significant changes in congestion classification. Although more travel time data need to be collected before trends in congestion and congestion mitigation can be assessed, signalization improvements, changes in land use, and completion of roadway construction projects contributed to improved travel times. However, travel time forecasts produced by COMPASS' travel demand model indicate, based on forecasted growth, travel times are likely to increase on Treasure Valley interstates and principal arterials.

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# Appendices



## Appendix –A: Detailed 2004 Travel Time Data

Table A-1: Ascending Data – Boise Urbanized Area

Ascending Travel Time Data for the Boise Urbanized Area, 2004									
Name	Description	Distance	2004 Theoretic Time	2004 Congested Time	2004 Ideal Time	2004 SI	2004 SI Prime	2004 SI Average	2004 SI Prime Average
Americana/15th St.	Main St. to State St.	0.26	31.200	67.117	56.207	1.194	1.802	1.356	1.227
Americana/15th St.	Shoreline Dr. to Jct. 15th St.	0.51	61.680	87.356	72.684	1.202	1.178		
Americana/15th St.	Jct. 15th St. to Main St.	0.51	61.680	87.356	72.684	1.202	1.178		
Americana/15th St.	Emerald St. to Shoreline Dr.	0.54	64.800	102.159	64.630	1.581	0.997		
Cherry Lane / Fairview Ave.	Black Cat Rd. to Ten Mile Rd.	1.01	103.890	127.849	110.010	1.162	1.059	1.377	1.053
Cherry Lane / Fairview Ave.	Ten Mile Rd. to Linder St.	1.02	104.910	138.990	111.310	1.249	1.061		
Cherry Lane / Fairview Ave.	Linder St. to E 1st St.	1.12	114.790	218.795	124.140	1.762	1.081		
Cherry Lane / Fairview Ave.	E 1st St. to Locust Grove St.	0.85	87.630	131.344	88.350	1.487	1.008		
Cherry Lane / Fairview Ave.	Locust Grove St. to Eagle Rd.	1.00	91.480	140.170	95.580	1.467	1.045		
Cherry Lane / Fairview Ave.	Eagle Rd. to Cloverdale Rd.	1.01	90.900	141.060	95.310	1.480	1.049		
Cherry Lane / Fairview Ave.	Cloverdale Rd. to Five Mile Rd.	1.01	90.900	136.901	92.530	1.480	1.018		
Cherry Lane / Fairview Ave.	Five Mile Rd. to Mitchell St.	0.39	50.500	70.908	53.260	1.331	1.055		
Cherry Lane / Fairview Ave.	Maple Grove Rd. to Milwaukee St.	0.50	51.220	60.295	52.920	1.139	1.033		
Cherry Lane / Fairview Ave.	Milwaukee St. to Cole Rd.	0.51	52.050	65.268	58.880	1.108	1.131		
Cherry Lane / Fairview Ave.	Cole Rd. to Liberty St.	0.66	67.370	69.480	70.310	0.988	1.044		
Cherry Lane / Fairview Ave.	Liberty St. to Curtis Rd.	0.38	39.090	61.733	41.490	1.488	1.061		
Cherry Lane / Fairview Ave.	Curtis Rd. to Orchard St.	0.56	52.560	67.367	58.920	1.143	1.121		
Cherry Lane / Fairview Ave.	Mitchell St. to Maple Grove Rd.	0.52	53.380	89.014	53.910	1.651	1.010		
Cole Rd.	Overland Rd. to Franklin Rd.	1.00	102.550	145.156	113.690	1.277	1.109	1.234	1.235
Cole Rd.	Franklin Rd. to Emerald St.	0.52	53.380	85.826	59.400	1.445	1.113		
Cole Rd.	Emerald St. to Fairview Ave.	0.49	50.190	89.270	100.180	0.891	1.996		
Cole Rd.	Fairview Ave. to Northview St.	0.51	52.660	74.647	59.490	1.255	1.130		
Cole Rd.	Northview St. to Ustick Rd.	0.54	55.850	82.226	60.800	1.352	1.089		

Cole Rd.	Ustick Rd. to Mountainview Dr.	0.60	62.130	75.919	74.200	1.023	1.194		
Cole Rd.	Mountainview Dr. to Chinden Blvd.	0.61	73.200	117.858	87.590	1.346	1.197		
Fairview/Main	Chinden to 27th	0.60	61.303	78.070	57.340	1.362	0.935	1.428	1.234
Fairview/Main	27th to 23rd	0.28	28.800	33.092	47.920	0.691	1.664		
Fairview/Main	23rd to 16th	0.24	26.130	40.328	33.550	1.202	1.284		
Fairview/Main	16th St to 13th St	0.21	25.200	29.170	54.800	0.532	2.175		
Fairview/Main	13th St to 9th St.	0.29	34.800	68.028	35.030	1.942	1.007		
Fairview/Main	9th St. to 5th St.	0.28	33.600	59.762	37.870	1.578	1.127		
Fairview/Main	5th St. to 1st St.	0.30	36.000	52.259	36.530	1.431	1.015		
Fairview/Main	1st St. to Broadway/Ave B	0.15	18.000	79.981	23.470	3.408	1.304		
Five Mile Rd.	Overland Rd. to Franklin Rd.	1.02	104.810	147.200	119.100	1.236	1.136	1.368	1.154
Five Mile Rd.	Franklin Rd. to Fairview Ave.	1.03	106.150	186.306	124.270	1.499	1.171		
Franklin Rd.	E 1st St. to Nola Rd.	0.98	87.840	120.550	106.815	1.129	1.216	1.801	1.057
Franklin Rd.	Nola Rd. to Eagle Rd.	1.01	117.257	362.705	105.100	3.451	0.896		
Franklin Rd.	Eagle Rd. to Cloverdale Rd.	1.06	84.720	136.012	91.924	1.480	1.085		
Franklin Rd.	Cloverdale Rd. to Five Mile Rd.	1.01	80.800	113.744	85.610	1.329	1.060		
Franklin Rd.	Five Mile Rd. to Maple Grove Rd.	1.01	84.230	138.892	86.290	1.610	1.024		
Franklin Rd.	Maple Grove Rd. to Milwaukee St.	0.65	66.860	92.515	72.020	1.285	1.077		
Franklin Rd.	Milwaukee St. to Cole Rd.	0.36	37.030	104.777	38.360	2.731	1.036		
I-184	Jct. I-84 to Franklin Rd.	1.08	70.950	85.170	71.683	1.188	1.010	1.064	1.011
I-184	Franklin Rd. to Curtis Rd.	1.46	95.300	97.946	97.222	1.007	1.020		
I-184	Curtis Rd. to Orchard St.	0.55	36.000	34.249	34.444	0.994	0.957		
I-184	Orchard St. to Chinden Blvd.	0.50	32.730	35.395	34.105	1.038	1.042		
I-84	Ten Mile Rd. to Meridian Rd.	2.01	111.160	147.358	111.160	1.326	1.000	1.303	1.000
I-84	Meridian Rd. to Eagle Rd.	1.99	110.270	160.199	110.270	1.453	1.000		
I-84	Eagle Rd. to Five Mile Rd.	2.04	113.210	244.177	113.210	2.157	1.000		
I-84	Five Mile Rd. to Maple Grove	2.10	116.200	141.684	116.200	1.219	1.000		
I-84	Maple Grove to Overland Rd.	2.10	116.200	141.684	116.200	1.219	1.000		

I-84	Overland Rd. to Orchard St.	1.86	105.370	122.970	105.370	1.167	1.000		
I-84	Orchard St. to Vista Ave.	1.49	82.300	92.669	82.300	1.126	1.000		
I-84	Vista Ave. to Broadway Ave.	1.00	55.500	61.899	55.500	1.115	1.000		
I-84	Broadway Ave. to Gowen Rd.	2.45	135.530	133.260	135.530	0.983	1.000		
I-84	Gowen Rd. to Eisenman	2.58	123.744	140.993	123.744	1.139	1.000		
Orchard St.	I-84 EB Ramps to Overland Rd.	1.08	119.310	174.519	127.160	1.372	1.066	1.505	1.115
Orchard St.	Overland Rd. to Franklin Rd.	0.85	102.000	165.237	119.660	1.381	1.173		
Orchard St.	Franklin Rd. to Emerald St	0.54	65.160	144.638	77.910	1.856	1.196		
Orchard St.	Emerald St to I-184 EB Ramp	0.42	50.400	57.485	51.080	1.125	1.013		
Orchard St.	I-184 EB Ramp to Bond St.	0.20	23.400	71.461	30.110	2.373	1.287		
Orchard St.	Bond St. to Chinden Blvd.	0.28	34.080	57.226	34.160	1.675	1.002		
Overland Rd.	Cole Rd. to Curtis Rd.	0.81	83.520	135.385	112.290	1.206	1.344	1.320	1.208
Overland Rd.	Curtis Rd. to Orchard St.	0.51	52.457	99.841	55.240	1.807	1.053		
Overland Rd.	Orchard St. to Roosevelt St.	0.49	50.400	58.288	59.430	0.981	1.179		
Overland Rd.	Roosevelt St. to Owyhee St.	0.50	51.429	74.040	53.450	1.385	1.039		
Overland Rd.	Owyhee St. to Vista Ave/Overland Rd	0.49	50.400	86.442	67.850	1.274	1.346		
Park/Parkcenter Blvd	Broadway Ave. to Park / Parkcenter / Clearwater	0.31	32.300	48.621	38.700	1.256	1.198	1.138	1.040
Park/Parkcenter Blvd	Park/Parkcenter/Clearwater to Beacon St.	0.32	32.710	40.501	29.610	1.368	0.905		
Park/Parkcenter Blvd	Beacon St. to Mallard Dr.	0.52	53.180	68.986	55.200	1.250	1.038		
Park/Parkcenter Blvd	Mallard Dr. to River Run Dr.	0.55	56.570	61.726	57.780	1.068	1.021		
Park/Parkcenter Blvd	River Run Dr. to Apple St.	0.45	46.290	55.410	48.410	1.145	1.046		
Park/Parkcenter Blvd	Apple St. to Monterey	0.88	90.510	93.156	94.310	0.988	1.042		
SH-44	Linder to Begin New Alignment	1.53	100.150	169.878	107.862	1.575	1.077	1.286	1.247
SH-44	Begin New Alignment to Eagle Rd.	1.54	100.730	161.534	103.380	1.563	1.026		
SH-44	Hwy 55 to Horseshoe Bend Rd.	0.19	12.240	37.634	24.650	1.527	2.014		
SH-44	Horseshoe Bend Rd. to Glenwood	2.03	144.970	176.700	150.714	1.172	1.040		
SH-44	Marigold to State St.	0.61	62.740	141.413	74.626	1.895	1.189		
SH-44	Chinden Blvd. to Marigold	0.70	72.000	74.605	76.862	0.971	1.068		
SH-44	Eagle Rd. to MP Equation	1.89	123.770	188.068	222.190	0.846	1.795		

SH-44	MP Equation to Hwy 55	1.89	123.770	188.068	222.190	0.846	1.795		
SH-44	Kingsbury Rd. to Blessinger Lane	1.01	65.847	64.893	65.724	0.987	0.998	1.312	1.014
SH-44	Blessinger Lane to Can-Ada Rd.	1.05	68.924	67.322	69.510	0.969	1.008		
SH-44	Can-Ada Rd. to Star Rd.	1.00	88.411	98.156	90.947	1.079	1.029		
SH-44	Star Rd. to Taurus Way	0.44	63.360	0.000	65.869	0.000	1.040		
SH-44	Taurus Way to Jct SH 16	1.30	92.818	125.123	93.845	1.333	1.011		
SH-44	Jct SH 16 to Palmer Lane	0.75	49.222	59.248	50.887	1.164	1.034		
SH-44	Palmer Lane to Linder	1.51	99.033	197.046	99.617	1.978	1.006		
SH-55	I-84 EB Ramps to St. Lukes Ln.	0.42	30.460	83.100	51.060	1.627	1.676	1.525	1.100
SH-55	St. Lukes Ln. to Franklin	0.25	18.000	58.634	22.418	2.615	1.245		
SH-55	Franklin to Fairview	1.00	72.140	125.134	73.908	1.693	1.025		
SH-55	Fairview to Ustick	0.98	68.420	118.571	67.888	1.747	0.992		
SH-55	Ustick to McMillan	1.01	66.170	123.454	73.094	1.689	1.105		
SH-55	McMillan to Chinden	1.01	66.040	141.229	69.912	2.020	1.059		
SH-55	Chinden to Hwy 44	1.91	129.510	172.454	143.782	1.199	1.110		
SH-55	Hwy 44 to Hill Rd.	0.62	40.320	60.254	48.940	1.231	1.214		
SH-55	Hill Rd. to Floating Feather	0.89	58.450	70.818	59.842	1.183	1.024		
SH-55	Floating Feather to Beacon Light	0.99	64.800	82.859	65.618	1.263	1.013		
SH-69	Amity Rd. to Victory Rd.	1.01	66.040	73.648	66.626	1.105	1.009	1.298	1.024
SH-69	Victory Rd. to Overland Rd.	1.01	69.480	197.123	70.575	2.793	1.016		
SH-69	Overland Rd. to I-84 EB Ramps	0.13	11.540	26.334	13.936	1.890	1.208		
SH-69	I-84 EB Ramps to I-84 WB Ramps	0.17	17.070	23.502	17.074	1.376	1.000		
SH-69	Kuna Rd. to Deer Flat Rd.	0.98	64.080	67.662	68.885	0.982	1.075		
SH-69	Deer Flat Rd. to Hubbard Rd.	0.99	64.996	63.880	66.164	0.965	1.018		
SH-69	Hubbard Rd. to Columbia Rd.	1.01	66.044	64.628	66.653	0.970	1.009		
SH-69	Columbia Rd. to Lake Hazel Rd.	1.00	65.585	65.850	66.167	0.995	1.009		
SH-69	Lake Hazel Rd. to Amity Rd.	1.01	66.044	78.090	67.186	1.162	1.017		
State St.	Glenwood to Pierce Park	0.69	54.960	66.610	73.860	0.902	1.344	1.313	1.091
State St.	Pierce Park to Collister	1.32	105.840	136.829	107.390	1.274	1.015		

State St.	Collister to Veterans Parkway	0.91	93.810	159.343	98.200	1.623	1.047		
State St.	Veterans Parkway to 27th St	0.93	95.350	139.254	98.440	1.415	1.032		
State St.	27th St to 18th St.	0.66	74.540	94.830	81.440	1.164	1.093		
State St.	18th St. to 15th St.	0.24	28.680	52.391	33.990	1.541	1.185		
US-20/26	Linder to Eagle Rd.	2.97	194.470	305.222	222.204	1.374	1.143	1.303	1.113
US-20/26	Eagle Rd. to Cloverdale Rd.	1.00	65.520	151.147	73.724	2.050	1.125		
US-20/26	Cloverdale Rd. to Garrett	1.84	123.070	204.639	141.584	1.445	1.150		
US-20/26	Garrett to Glenwood	1.09	98.070	114.587	104.184	1.100	1.062		
US-20/26	Glenwood to Veterans Pkwy.	1.96	201.090	295.573	207.608	1.424	1.032		
US-20/26	Veterans Pkwy. to 36th	0.65	66.650	76.207	69.362	1.099	1.041		
US-20/26	36th to Main St.	0.48	49.580	60.242	49.620	1.214	1.001		
US-20/26	Main St. to 13th.	1.26	96.770	145.842	115.276	1.265	1.191		
US-20/26	13th. to 9th	0.30	30.960	51.752	54.684	0.946	1.766		
US-20/26	9th to Capitol Blvd.	0.14	14.810	24.367	23.434	1.040	1.582		
US-20/26	Capitol Blvd. to Broadway	0.72	74.470	72.278	78.214	0.924	1.050		
US-20/26	Broadway/Myrtle to Beacon	0.51	52.460	65.238	57.968	1.125	1.105		
US-20/26	Beacon to Boise Ave.	0.55	56.670	70.221	62.186	1.129	1.097		
US-20/26	Boise Ave. to Federal Way	1.07	110.060	124.481	109.192	1.140	0.992		
US-20/26	Federal Way to I-84 EB Ramps	0.69	60.210	61.304	63.714	0.962	1.058		
US-20/26	11th Ave. N Ext. to Can-Ada Rd.	1.02	66.436	65.953	66.861	0.986	1.006	1.277	1.004
US-20/26	Can-Ada Rd. to Star Rd.	0.98	63.949	93.356	63.996	1.459	1.001		
US-20/26	Star Rd. to McDermitt Rd.	1.01	65.913	79.965	66.077	1.210	1.002		
US-20/26	McDermitt Rd. to Black Cat Rd.	0.99	64.669	66.243	65.029	1.019	1.006		
US-20/26	Black Cat Rd. to Ten Mile Rd.	1.00	65.520	66.007	65.793	1.003	1.004		
US-20/26	Ten Mile Rd. to Linder	1.00	65.127	130.758	65.562	1.994	1.007		
Vista / Capitol / 9th	Wright St. to I-84 EB Ramps	0.08	8.023	27.321	8.310	3.288	1.036	1.278	1.099
Vista / Capitol / 9th	I-84 EB Ramps to Canal St.	0.48	49.371	63.640	52.400	1.214	1.061		
Vista / Capitol / 9th	Canal St. to Targee St.	0.37	38.057	44.638	39.610	1.127	1.041		
Vista / Capitol / 9th	Targee St. to Overland Rd.	0.49	50.400	58.772	53.560	1.097	1.063		
Vista / Capitol / 9th	Vista Ave/Overland Rd to Kootenai St.	0.24	24.686	29.965	26.660	1.124	1.080		

Vista / Capitol / 9th	Kootenai St. to Eastover Rd.	0.61	62.229	70.407	61.650	1.142	0.991
Vista / Capitol / 9th	University Dr. to Eastover Rd.	0.29	30.030	68.889	40.900	1.684	1.362
Vista / Capitol / 9th	Myrtle St. to University Dr.	0.54	62.540	97.166	72.020	1.349	1.152
Vista / Capitol / 9th	Front St. to Myrtle St.	0.12	14.400	28.305	22.340	1.267	1.551
Vista / Capitol / 9th	Front St. to Bannock St.	0.27	38.160	46.021	38.030	1.210	0.997

**Table A-2: Ascending Data – Nampa Urbanized Area**

<b>Ascending Travel Time Data for the Nampa Urbanized Area, 2004</b>									
<b>Name</b>	<b>Description</b>	<b>Distance</b>	<b>2004 Theoretic Time</b>	<b>2004 Congested Time</b>	<b>2004 Ideal Time</b>	<b>2004 SI</b>	<b>2004 SI Prime</b>	<b>2004 SI Average</b>	<b>2004 SI Prime Average</b>
10th Ave.	Cleveland Blvd. to Chicago St.	0.43	43.92	55.96	55.29	1.01	1.26	1.18	1.26
10th Ave.	Chicago St. to I-84 WB Ramps	0.32	32.40	57.70	41.05	1.41	1.27		
21st Ave.	Cleveland Blvd. to Chicago St.	0.43	51.24	120.79	60.84	1.99	1.19	1.58	1.32
21st Ave.	Chicago St. to Franklin Rd.	0.32	32.71	40.99	39.40	1.04	1.20		
21st Ave.	Franklin Rd. to I-84 EB Ramps	0.17	17.90	51.75	32.76	1.58	1.83		
Airport Rd.	Garrity Blvd. to Happy Valley Rd.	1.03	106.15	148.90	127.93	1.16	1.21	1.16	1.21
Franklin Blvd.	11th Ave. N to I-84 WB Ramps	0.94	85.26	113.38	94.91	1.19	1.11	1.19	1.11
I-84	Hwy 44 to US 20/26	1.16	63.97	61.38	63.97	0.96	1.00	1.02	1.00
I-84	US 20/26 to IB-84	0.73	40.38	39.64	40.38	0.98	1.00		
I-84	IB-84 to 10th St.	0.90	49.68	48.16	49.68	0.97	1.00		
I-84	10th St. to US-20/26	1.03	57.05	58.37	57.05	1.02	1.00		
I-84	US-20/26 to Nampa Blvd.	6.31	349.70	362.34	349.70	1.04	1.00		
I-84	Nampa Blvd. to Franklin Blvd.	1.02	56.55	57.80	56.55	1.02	1.00		
I-84	Franklin Blvd. to Garrity IC	1.96	108.55	171.27	110.09	1.56	1.01	1.31	1.01
I-84	Garrity IC to Ten Mile Rd.	4.06	224.58	267.29	225.65	1.18	1.00		
IB-84	Cleveland/Centennial Way to Kimball	0.50	72.58	84.10	79.20	1.06	1.09	1.18	1.00
IB-84	Kimball to 10 <sup>th</sup>	0.14	20.30	66.87	22.46	2.98	1.11		
IB-84	10 <sup>th</sup> to 18 <sup>th</sup>	0.58	66.12	65.56	65.91	0.99	1.00		
IB-84	18 <sup>th</sup> to 21 <sup>st</sup>	0.22	22.42	26.29	24.21	1.09	1.08		
IB-84	21st to End Raised Median	0.68	69.74	98.55	63.02	1.56	0.90		
IB-84	End Raised Median to Linden	0.68	69.74	98.55	63.02	1.56	0.90		
IB-84	Linden to Ustick	1.44	118.56	128.72	121.98	1.06	1.03		
IB-84	Ustick to Homedale Rd.	1.47	117.28	125.87	114.78	1.10	0.98		

IB-84	Homedale Rd. to Middleton Rd.	0.73	63.03	91.55	65.90	1.39	1.05	1.15	1.11
IB-84	Middleton Rd. to Karcher Rd.	0.74	76.53	100.49	78.65	1.28	1.03		
IB-84	Karcher Rd. to Midland	0.64	66.24	92.35	78.94	1.17	1.19		
IB-84	Midland to Canyon St.	1.05	107.59	125.14	107.85	1.16	1.00		
IB-84	Canyon St. to Yale/Hwy 55	0.30	31.06	41.18	38.53	1.07	1.24		
IB-84	Yale/Hwy 55 to 7 <sup>th</sup> Ave.	0.45	46.39	51.88	50.32	1.03	1.08		
IB-84	7th Ave. to 11th/3rd	0.28	34.25	61.24	48.63	1.26	1.42		
IB-84	11th/3rd to Garrity/Franklin	0.86	104.48	118.92	117.56	1.01	1.13		
IB-84	Garrity/Franklin to 16th	0.33	33.53	39.88	36.45	1.09	1.09		
IB-84	16th to Flamingo	1.65	149.55	177.88	170.78	1.04	1.14		
IB-84	Flamingo to I-84 WB Ramps	0.30	23.76	40.52	28.44	1.42	1.20		
Middleton Rd.	Center I-84 Overpass to Ustick Rd.	0.83	65.93	63.79	66.11	0.96	1.00	1.11	1.01
Middleton Rd.	Ustick Rd. to Linden Rd.	1.03	73.87	76.67	72.80	1.05	0.99		
Middleton Rd.	Linden Rd. to US-20/26	1.03	74.45	115.14	80.81	1.42	1.09		
Middleton Rd.	US-20/26 to Lincoln St. W.	1.03	74.16	76.20	76.87	0.99	1.04		
Middleton Rd.	Lincoln St. W. to Ctr Boise Rv. Br.	1.37	129.60	134.50	121.44	1.11	0.94		
Middleton Rd.	Ctr Boise Rv. Br. To Jct SH-44	0.74	106.56	0.00	109.79	0.00	1.03		
SH-19/IB-84	Simplot Exit #3 to Farmway	1.01	66.18	74.74	69.44	1.08	1.05	1.00	1.11
SH-19/IB-84	Farmway to Paynter	0.75	62.60	67.71	68.81	0.98	1.10		
SH-19/IB-84	Paynter to Blaine/Simplot Blvd.	0.11	11.21	21.90	19.49	1.12	1.74		
SH-19/IB-84	Blaine to Chicago	0.28	44.02	42.21	47.44	0.89	1.08		
SH-19/IB-84	Chicago to I-84 WB Ramps	0.52	44.75	46.26	51.51	0.90	1.15		
SH-44	Old Hwy 30 to I-84 EB ramps	0.25	25.92	0.00	25.74	0.00	0.99	1.01	1.01
SH-44	Old Hwy 30 to Emmett Rd.	2.14	142.00	145.69	142.97	1.02	1.01		
SH-44	Emmett Rd. to Cemetery Rd.	1.03	75.36	81.39	76.78	1.06	1.02		
SH-44	Cemetery Rd. to Middleton Rd.	0.73	94.73	93.39	100.13	0.93	1.06		
SH-44	Middleton Rd. to Marjorie Ave.	0.53	45.51	45.70	45.77	1.00	1.01		
SH-44	Marjorie Ave. to Duff Lane	0.77	52.42	56.88	52.37	1.09	1.00		
SH-44	Duff Lane to Lansing Lane	1.01	66.11	65.06	66.34	0.98	1.00		
SH-44	Lansing Lane to Kingsbury Rd.	1.03	67.55	67.13	68.72	0.98	1.02		



SH-45	Ruth Ln. to Greenhurst	1.55	133.75	154.29	139.55	1.11	1.04	1.15	1.12
SH-45	Greenhurst to Iowa	0.44	45.57	62.18	55.22	1.13	1.21		
SH-45	Iowa to Lake Lowell Ave.	0.56	57.29	76.45	57.90	1.32	1.01		
SH-45	Lake Lowell Ave. to 7th	1.03	105.94	137.87	113.51	1.21	1.07		
SH-45	7th to 3 <sup>rd</sup>	0.29	32.79	54.94	54.66	1.01	1.67		
SH-45	3rd to 2nd/11 <sup>th</sup>	0.15	21.02	28.53	28.64	1.00	1.36		
SH-55	3rd St. S to 1st St. N	0.38	39.19	48.86	40.81	1.20	1.04		
SH-55	1st St. N to 6th St. N	0.53	42.96	57.43	45.42	1.26	1.06		
SH-55	6th St. N to I-84 WB Ramps	0.25	19.84	57.07	25.66	2.22	1.29		
US-20/26	I-84 EB off ramp to I-84 WB ramps	0.18	18.31	63.74	40.83	1.56	2.23	1.13	1.03
US-20/26	I-84 WB ramps to Muller Rd.	0.20	20.67	20.81	20.52	1.01	0.99		
US-20/26	Muller Rd. to KCID Rd.	1.08	77.87	76.99	78.33	0.98	1.01		
US-20/26	KCID Rd. to Middleton Rd.	0.99	64.87	87.25	63.88	1.37	0.98		
US-20/26	Middleton Rd. to Midland Blvd.	1.00	65.59	80.48	65.82	1.22	1.00		
US-20/26	Midland Blvd. to Northside Blvd.	1.00	65.19	70.16	65.39	1.07	1.00		
US-20/26	Northside Blvd. to Franklin Rd.	1.01	65.85	71.77	66.20	1.08	1.01		
US-20/26	Franklin Rd. to 11th Ave. N Ext.	1.02	66.57	66.83	66.45	1.01	1.00		
Ustick Rd.	Farmway Rd to Kimball	0.71	72.51	72.25	81.60	0.89	1.13	1.08	1.14
Ustick Rd.	Kimball to 10th Ave.	0.25	25.82	76.76	32.70	2.35	1.27		
Ustick Rd.	10th Ave. to Indiana Ave	1.00	103.17	113.36	114.90	0.99	1.11		
Ustick Rd.	Indiana Ave to Lake Ave	1.01	103.68	104.94	113.83	0.92	1.10		
Ustick Rd.	Lake Ave to Caldwell Blvd	0.40	41.14	75.84	63.33	1.20	1.54		
Ustick Rd.	Caldwell Blvd to RR Crossing	0.35	35.49	41.72	37.47	1.11	1.06		
Ustick Rd.	RR Crossing to Middleton Rd	1.28	106.92	125.26	114.81	1.09	1.07		

**Table A-3: Descending Data – Boise Urbanized Area**

<b>Descending Travel Time Data for the Boise Urbanized Area, 2004</b>									
<b>Name</b>	<b>Description</b>	<b>Distance</b>	<b>2004 Theoretic Time</b>	<b>2004 Congested Time</b>	<b>2004 Ideal Time</b>	<b>2004 SI</b>	<b>2004 SI Prime</b>	<b>2004 SI Average</b>	<b>2004 SI Prime Average</b>
Americana/16th St.	State St. to Main St	0.25	30.00	55.36	48.96	1.13	1.63	1.27	1.17
Americana/16th St.	Main St to Front St	0.45	54.00	95.51	55.39	1.72	1.03		
Americana/16th St.	Front St. to Jct. 15th St.	0.45	54.00	95.51	55.39	1.72	1.03		
Americana/16th St.	Jct. 15th St. to Shoreline Dr.	0.45	54.00	95.51	55.39	1.72	1.03		
Americana/16th St.	Shoreline Dr. to Emerald St.	0.54	64.80	66.12	69.14	0.96	1.07		
Cole Rd.	Chinden Blvd. To Mountainview Dr.	0.61	73.20	102.31	84.00	1.22	1.15	1.42	1.15
Cole Rd.	Mountainview Dr. to Ustick Rd.	0.60	62.13	79.74	74.79	1.07	1.20		
Cole Rd.	Ustick Rd. to Northview St.	0.54	55.85	78.46	55.54	1.41	0.99		
Cole Rd.	Northview St. to Fairview Ave.	0.51	52.66	107.44	68.18	1.58	1.29		
Cole Rd.	Fairview Ave. to Emerald St.	0.49	50.19	73.96	53.38	1.39	1.06		
Cole Rd.	Emerald St. to Franklin Rd.	0.52	53.38	102.96	64.19	1.60	1.20		
Cole Rd.	Franklin Rd. to Overland Rd.	1.00	102.55	183.36	115.16	1.59	1.12		
Fariview Ave.	Orchard St. to Curtis Rd.	0.56	52.56	107.01	58.82	1.82	1.12	1.34	1.09
Fariview Ave.	Curtis Rd. to Liberty St.	0.38	39.09	45.04	41.09	1.10	1.05		
Fariview Ave.	Liberty St. to Cole Rd.	0.66	67.37	85.82	81.81	1.05	1.21		
Fariview Ave.	Cole Rd. to Milwaukee St.	0.51	52.05	60.81	60.31	1.01	1.16		
Fariview Ave.	Milwaukee St. to Maple Grove Rd.	0.50	51.22	78.46	54.53	1.44	1.06		
Fariview Ave.	Maple Grove Rd. to Mitchell St.	0.62	53.38	67.82	53.42	1.27	1.00		
Fariview Ave.	Mitchell St. to Five Mile Rd.	0.49	50.50	95.05	55.17	1.72	1.09		
Fariview Ave.	Five Mile Rd. to Cloverdale Rd.	1.01	90.90	126.02	94.44	1.33	1.04		
Fariview Ave.	Cloverdale Rd. to Eagle Rd.	1.01	90.90	142.56	97.10	1.47	1.07		
Fariview Ave.	Eagle Rd. to Locust Grove St.	1.00	91.48	131.51	112.34	1.17	1.23		
Fariview Ave.	Locust Grove St. to E 1st St.	0.85	87.63	94.48	91.11	1.04	1.04		
Fariview Ave.	E 1st St. to Linder St.	1.12	114.79	245.59	117.76	2.09	1.03		
Fariview Ave.	Linder St. to Ten Mile Rd.	1.02	104.91	123.14	108.60	1.13	1.04		
Fariview Ave.	Ten Mile Rd. to Black Cat Rd.	1.01	103.89	116.16	114.63	1.01	1.10		

Five Mile Rd.	Fairview Ave. to Franklin Rd.	1.03	106.15	165.98	115.62	1.44	1.09	1.40	1.10
Five Mile Rd.	Franklin Rd. to Overland Rd.	1.02	104.81	157.77	116.14	1.36	1.11		
Franklin Rd.	Cole Rd. to Milwaukee St.	0.36	37.03	82.03	38.37	2.14	1.04	1.56	1.06
Franklin Rd.	Milwaukee St. to Maple Grove Rd.	0.65	66.86	87.76	72.20	1.22	1.08		
Franklin Rd.	Maple Grove Rd. to Five Mile Rd.	1.01	84.23	128.79	84.96	1.52	1.01		
Franklin Rd.	Five Mile Rd. to Cloverdale Rd.	1.01	80.80	123.01	86.70	1.42	1.07		
Franklin Rd.	Cloverdale Rd. to Eagle Rd.	1.06	84.72	191.33	95.03	2.01	1.12		
Franklin Rd.	Eagle Rd. to Nola Rd.	1.01	117.26	113.34	94.08	1.20	0.80		
Franklin Rd.	Nola Rd. to E 1st St.	0.98	87.84	182.70	112.43	1.63	1.28		
I-184	Chinden Blvd. to Orchard St.	0.50	32.73	35.72	32.16	1.11	0.98	1.04	1.00
I-184	Orchard St. to Curtis Rd.	0.55	36.00	37.24	34.77	1.07	0.97		
I-184	Curtis Rd. to Franklin Rd.	1.46	95.30	96.57	99.87	0.97	1.05		
I-184	Franklin Rd. to Jct. I-84	1.08	70.95	75.31	68.42	1.10	0.96		
I-84	Eisenman to Gowen Rd.	2.58	123.74	133.65	123.74	1.08	1.00	1.11	1.00
I-84	Gowen Rd. to Broadway Ave.	2.45	135.53	141.37	135.53	1.04	1.00		
I-84	Broadway Ave. to Vista Ave.	1.00	55.50	57.76	55.50	1.04	1.00		
I-84	Vista Ave. to Orchard St.	1.49	82.30	90.08	82.30	1.09	1.00		
I-84	Orchard St. to Overland Rd.	1.86	105.37	113.41	105.37	1.08	1.00		
I-84	Overland Rd. to Maple Grove	2.10	116.20	139.45	116.20	1.20	1.00		
I-84	Maple Grove to Five Mile Rd.	2.10	116.20	139.45	116.20	1.20	1.00		
I-84	Five Mile Rd. to Eagle Rd.	2.04	113.21	128.91	113.21	1.14	1.00		
I-84	Eagle Rd. to Meridian Rd.	1.99	110.27	127.64	110.27	1.16	1.00		
I-84	Meridian Rd. to Ten Mile Rd.	2.01	111.16	127.28	111.16	1.15	1.00		
Idaho / Main	1st St. to Main St/Ave. B	0.13	15.60	27.43	22.78	1.20	1.46	1.19	1.21
Idaho / Main	6th St. to 1st St.	0.36	42.60	85.33	47.78	1.79	1.12		
Idaho / Main	9th St. to 6th St.	0.19	22.80	31.54	26.42	1.19	1.16		
Idaho / Main	13th St. to 9th St.	0.29	34.80	38.14	34.39	1.11	0.99		
Idaho / Main	16th St. to 13th St.	0.26	31.20	42.07	26.33	1.60	0.84		
Idaho / Main	16th/Idaho to Main St	0.15	18.00	25.82	24.98	1.03	1.39		
Idaho / Main	16th St to Grove St.	0.15	18.00	25.82	24.98	1.03	1.39		

Idaho / Main	Grove St. to 23rd St.	0.19	19.25	21.46	46.20	0.46	2.40		
Idaho / Main	23rd St. to 27th St.	0.28	29.01	30.87	31.99	0.96	1.10		
Idaho / Main	27th St. to End Bridge	0.39	40.42	42.02	42.01	1.00	1.04		
Orchard St.	Chinden Blvd. to Bond St.	0.28	34.08	32.65	36.37	0.90	1.07	1.27	1.08
Orchard St.	Bond St. to I-184 EB Ramp	0.20	23.40	64.89	26.00	2.50	1.11		
Orchard St.	I-184 EB Ramp to Emerald St	0.42	50.40	59.89	52.19	1.15	1.04		
Orchard St.	Emerald St to Franklin Rd.	0.54	65.16	116.58	78.12	1.49	1.20		
Orchard St.	Franklin Rd. to Overland Rd.	0.85	102.00	137.79	118.40	1.16	1.16		
Orchard St.	Overland Rd. to I-84 EB Ramps	1.08	119.31	135.83	117.55	1.16	0.99		
Overland Rd.	Vista Ave/Overland Rd to Owyhee St.	0.49	50.40	74.42	56.14	1.33	1.11	1.31	1.18
Overland Rd.	Owyhee St. to Roosevelt St.	0.50	51.43	72.22	54.98	1.31	1.07		
Overland Rd.	Roosevelt St. to Orchard St.	0.49	50.40	74.67	66.76	1.12	1.32		
Overland Rd.	Orchard St. to Curtis Rd.	0.51	52.46	90.95	53.39	1.70	1.02		
Overland Rd.	Curtis Rd. to Cole Rd.	0.81	83.52	130.29	110.16	1.18	1.32		
Park / Parkcenter Blvd	Monterey to Apple St.	0.88	90.51	103.17	96.53	1.07	1.07	1.18	1.04
Park / Parkcenter Blvd	Apple St. to River Run Dr.	0.45	46.29	56.95	47.39	1.20	1.02		
Park / Parkcenter Blvd	River Run Dr. to Mallard Dr.	0.55	56.57	70.61	57.06	1.24	1.01		
Park / Parkcenter Blvd	Mallard Dr. to Beacon St.	0.52	53.18	60.54	55.51	1.09	1.04		
Park / Parkcenter Blvd	Beacon St. to Park / Parkcenter / Clearwater	0.32	32.71	33.30	28.45	1.17	0.87		
Park / Parkcenter Blvd	Park / Parkcenter / Clearwater to Broadway Ave.	0.52	53.18	85.69	61.87	1.39	1.16		
SH-44	Marigold to Chinden Blvd.	0.70	72.00	151.58	77.75	1.95	1.08	1.34	1.06
SH-44	State St. to Marigold	0.61	62.74	92.42	68.87	1.34	1.10		
SH-44	Glenwood to Horseshoe Bend Rd.	2.03	144.97	200.20	152.28	1.31	1.05		
SH-44	Horseshoe Bend Rd. to Hwy 55	0.19	12.24	52.91	22.29	2.37	1.82		
SH-44	Hwy 55 to MP Equation	1.89	123.77	150.12	128.72	1.17	1.04		
SH-44	MP Equation to Eagle Rd.	1.89	123.77	150.12	128.72	1.17	1.04		
SH-44	Eagle Rd. to Begin New Alignment	1.54	100.73	110.60	102.64	1.08	1.02		
SH-44	Begin New Alignment to Linder	1.53	100.15	144.29	101.57	1.42	1.01		
SH-44	Linder to Palmer Lane	1.51	99.03	103.12	99.72	1.03	1.01	1.01	1.02

SH-44	Palmer Lane to Jct SH 16	0.75	49.22	52.94	53.95	0.98	1.10		
SH-44	Jct SH 16 to Taurus Way	1.30	92.82	98.16	96.64	1.02	1.04		
SH-44	Taurus Way to Star Rd.	0.44	63.36	63.18	66.56	0.95	1.05		
SH-44	Star Rd. to Can-Ada Rd.	1.00	88.41	0.00	86.65	0.00	0.98		
SH-44	Can-Ada Rd. to Blessinger Lane	1.05	68.92	69.19	68.70	1.01	1.00		
SH-44	Blessinger Lane to Kingsbury Rd.	1.01	65.85	67.29	66.33	1.01	1.01		
SH-55	Beacon Light to Floating Feather	0.99	64.80	64.26	76.62	0.84	1.18	1.53	1.09
SH-55	Floating Feather to Hill Rd.	0.89	58.45	66.14	59.65	1.11	1.02		
SH-55	Hill Rd. to Hwy 44	0.62	40.32	65.29	44.18	1.48	1.10		
SH-55	Hwy 44 to Chinden	1.91	129.51	180.63	138.01	1.31	1.07		
SH-55	Chinden to McMillan	1.01	66.04	126.24	67.91	1.86	1.03		
SH-55	McMillan to Ustick	1.01	66.17	115.57	67.09	1.72	1.01		
SH-55	Ustick to Fairview	0.98	68.42	139.35	68.47	2.04	1.00		
SH-55	Fairview to Franklin	1.00	72.14	153.01	78.30	1.95	1.09		
SH-55	Franklin to St. Lukes Ln.	0.25	18.00	33.72	20.43	1.65	1.14		
SH-55	St. Lukes Ln. to I-84 EB Ramps	0.42	30.46	80.63	50.42	1.60	1.66		
SH-69	I-84 WB Ramps to I-84 EB Ramps	0.17	17.07	22.45	17.19	1.31	1.01	1.07	1.03
SH-69	I-84 EB Ramps to Overland Rd.	0.13	11.54	32.75	15.24	2.15	1.32		
SH-69	Overland Rd. to Victory Rd.	1.01	69.48	75.14	72.25	1.04	1.04		
SH-69	Victory Rd. to Amity Rd.	1.01	66.04	85.97	66.46	1.29	1.01		
SH-69	Amity Rd. to Lake Hazel Rd.	1.01	66.04	71.28	66.51	1.07	1.01		
SH-69	Lake Hazel Rd. to Columbia Rd.	1.00	65.59	64.24	66.20	0.97	1.01		
SH-69	Columbia Rd. to Hubbard Rd.	1.01	66.04	64.43	66.57	0.97	1.01		
SH-69	Hubbard Rd. to Deer Flat Rd.	0.99	65.00	65.02	66.21	0.98	1.02		
SH-69	Deer Flat Rd. to Kuna Rd.	0.98	64.08	66.57	67.96	0.98	1.06		
State St.	15th St. to 18th St.	0.24	28.68	70.02	44.58	1.57	1.55	1.33	1.09
State St.	18th St. to 27th St	0.66	74.54	107.65	81.44	1.32	1.09		
State St.	27th St to Veterans Parkway	0.93	95.35	152.39	98.96	1.54	1.04		
State St.	Veterans Parkway to Collister	0.91	93.81	102.64	96.81	1.06	1.03		
State St.	Collister to Pierce Park	1.32	105.84	140.83	113.33	1.24	1.07		
State St.	Pierce Park to Glenwood	0.69	54.96	89.51	59.90	1.49	1.09		

US-20/26	I-84 EB Ramps to Federal Way	0.69	60.21	59.91	60.76	0.99	1.01	1.24	1.07
US-20/26	Federal Way to Boise Ave.	1.07	110.06	164.45	115.89	1.42	1.05		
US-20/26	Boise Ave. to Beacon	0.55	56.67	70.66	65.58	1.08	1.16		
US-20/26	Beacon to Broadway/Myrtle	0.51	52.46	67.13	57.60	1.17	1.10		
US-20/26	Myrtle to Front	0.14	14.19	47.29	21.04	2.25	1.48		
US-20/26	Front/Broadway to Capitol Blvd.	0.65	66.65	103.27	86.88	1.19	1.30		
US-20/26	Capitol Blvd. to 9th	0.14	14.81	18.44	15.77	1.17	1.06		
US-20/26	9th to 13th	0.29	29.62	47.82	29.67	1.61	1.00		
US-20/26	13th. to Main St.	1.26	96.77	98.05	95.95	1.02	0.99		
US-20/26	Main St. to 36th	0.48	49.58	75.58	50.42	1.50	1.02		
US-20/26	36th to Veterans Pkwy.	0.65	66.65	97.36	78.25	1.24	1.17		
US-20/26	Veterans Pkwy. to Glenwood	1.96	201.09	225.51	208.41	1.08	1.04		
US-20/26	Glenwood to Garrett	1.09	98.07	121.03	101.64	1.19	1.04		
US-20/26	Garrett to Cloverdale Rd.	1.84	123.07	167.97	130.42	1.29	1.06		
US-20/26	Cloverdale Rd. to Eagle Rd.	1.00	65.52	80.73	76.99	1.05	1.18		
US-20/26	Eagle Rd. to Linder	2.97	194.47	287.59	203.07	1.42	1.04		
US-20/26	Linder to Ten Mile Rd.	1.00	65.13	71.83	66.20	1.09	1.02	1.09	1.01
US-20/26	Ten Mile Rd. to Black Cat Rd.	1.00	65.52	69.94	65.54	1.07	1.00		
US-20/26	Black Cat Rd. to McDermitt Rd.	0.99	64.67	63.89	64.82	0.99	1.00		
US-20/26	McDermitt Rd. to Star Rd.	1.01	65.91	90.99	66.93	1.36	1.02		
US-20/26	Star Rd. to Can-Ada Rd.	0.98	63.95	67.79	64.41	1.05	1.01		
US-20/26	Can-Ada Rd. to 11th Ave. N Ext.	1.02	66.44	65.38	66.46	0.98	1.00		
Vista / Capitol / 9th	Main St. to State St.	0.39	39.70	54.49	66.84	0.82	1.68	1.32	1.21
Vista / Capitol / 9th	Myrtle St. to Main St.	0.10	10.29	47.57	18.43	2.58	1.79		
Vista / Capitol / 9th	University Dr. to Myrtle St.	0.50	51.84	76.13	67.03	1.14	1.29		
Vista / Capitol / 9th	Eastover Rd. to University Dr.	0.29	30.03	37.79	35.32	1.07	1.18		
Vista / Capitol / 9th	Eastover Rd. to Kootenai St.	0.61	62.23	101.84	62.95	1.62	1.01		
Vista / Capitol / 9th	Kootenai St. to Vista Ave/Overland Rd	0.24	24.69	33.15	38.88	0.85	1.57		
Vista / Capitol / 9th	Overland Rd. to Targee St.	0.49	50.40	61.12	55.47	1.10	1.10		
Vista / Capitol / 9th	Targee St. to Canal St.	0.37	38.06	46.97	38.92	1.21	1.02		
Vista / Capitol / 9th	Canal St. to I-84 EB Ramps	0.48	49.37	94.97	51.63	1.84	1.05		
Vista / Capitol / 9th	I-84 EB Ramps to Wright St.	0.08	8.02	11.81	5.74	2.06	0.72		

**Table A-4: Descending Data – Nampa Urbanized Area**

<b>Descending Travel Time Data for the Nampa Urbanized Area, 2004</b>									
<b>Name</b>	<b>Description</b>	<b>Distance</b>	<b>2004 Theoretic Time</b>	<b>2004 Congested Time</b>	<b>2004 Ideal Time</b>	<b>2004 SI</b>	<b>2004 SI Prime</b>	<b>2004 SI Average</b>	<b>2004 SI Prime Average</b>
10th Ave.	I-84 WB Ramps to Chicago St.	0.32	32.40	55.16	41.32	1.34	1.28	0.96	1.91
10th Ave.	Chicago St. to Cleveland Blvd.	0.43	43.92	71.03	104.26	0.68	2.37		
21st Ave.	I-84 EB Ramps to Franklin Rd.	0.17	17.90	25.76	25.60	1.01	1.43	1.16	1.27
21st Ave.	Franklin Rd. to Chicago St.	0.32	32.71	42.73	34.87	1.23	1.07		
21st Ave.	Chicago St. to Cleveland Blvd.	0.43	51.24	81.68	69.47	1.18	1.36		
Airport Rd.	Happy Valley Rd. to Garrity Blvd.	1.03	106.15	138.70	129.76	1.07	1.22	1.07	1.22
Franklin Blvd.	I-84 WB Ramps to 11th Ave. N	0.94	85.26	120.01	97.19	1.23	1.14	1.23	1.14
I-84	Franklin Blvd. to Nampa Blvd.	1.02	56.55	55.60	56.55	0.98	1.00	1.00	1.00
I-84	Nampa Blvd. to US-20/26	6.31	349.70	342.33	349.70	0.98	1.00		
I-84	US-20/26 to 10th St.	1.03	57.05	60.41	57.05	1.06	1.00		
I-84	10th St. to IB-84	0.90	49.68	48.24	49.68	0.97	1.00		
I-84	IB-84 to US 20/26	0.73	40.38	43.95	40.38	1.09	1.00		
I-84	US 20/26 to Hwy 44	1.16	63.97	66.63	63.97	1.04	1.00		
I-84	Ten Mile Rd. to Garrity IC	4.06	224.58	230.24	225.62	1.02	1.00	1.02	1.01
I-84	Garrity IC to Franklin Blvd.	1.96	108.55	113.63	110.31	1.03	1.02		
IB-84	Homedale Rd. to Ustick	1.47	117.28	148.50	115.69	1.28	0.99	1.18	1.03
IB-84	Ustick to Linden	1.44	118.56	150.03	120.53	1.24	1.02		
IB-84	Linden to End Raised Median	0.69	71.38	85.85	76.65	1.12	1.07		
IB-84	Begin Raised Median to 21st	0.69	71.38	85.85	76.65	1.12	1.07		
IB-84	21st to 18th	0.22	22.73	24.79	24.04	1.03	1.06		
IB-84	18th to 10th	0.58	64.41	84.38	73.33	1.15	1.14		
IB-84	10th to Kimball	0.14	20.38	21.38	22.82	0.94	1.12		
IB-84	Kimball to Blaine/Simplot Blvd.	0.48	76.15	69.39	75.13	0.92	0.99		

IB-84	I-84 WB Ramps to Flamingo	0.30	23.76	55.44	28.29	1.96	1.19	1.16	1.18
IB-84	Flamingo to 16th	1.65	149.55	158.04	150.42	1.05	1.01		
IB-84	16th to Garrity/Franklin	0.33	33.53	66.64	43.15	1.54	1.29		
IB-84	Garrity/Franklin to 11th/3rd	0.86	104.48	123.12	113.46	1.09	1.09		
IB-84	11th/2nd to 7th Ave.	0.29	34.14	35.38	45.56	0.78	1.33		
IB-84	7th Ave. to Hwy 55	0.47	48.55	92.48	104.51	0.88	2.15		
IB-84	Hwy 55 to Canyon St.	0.26	27.15	34.55	70.62	0.49	2.60		
IB-84	Canyon St. to Midland	1.05	107.59	136.74	115.38	1.19	1.07		
IB-84	Midland to Karcher Rd.	0.64	66.24	101.79	66.82	1.52	1.01		
IB-84	Karcher Rd. to Middleton Rd.	0.74	76.53	98.98	76.76	1.29	1.00		
IB-84	Middleton Rd. to Homedale Rd.	0.73	63.03	63.77	60.04	1.06	0.95		
Middleton Rd.	Jet SH-44 to Ctr Boise Rv. Br.	0.74	106.56	0.00	105.63	0.00	0.99	1.08	1.00
Middleton Rd.	Ctr Boise Rv. Br. to Lincoln St. W.	1.37	129.60	0.00	125.42	0.00	0.97		
Middleton Rd.	Lincoln St. W. to US-20/26	1.03	74.16	94.18	77.03	1.22	1.04		
Middleton Rd.	US-20/26 to Linden Rd.	1.03	74.45	82.99	76.54	1.08	1.03		
Middleton Rd.	Linden Rd. to Ustick Rd.	1.03	73.87	72.24	72.86	0.99	0.99		
Middleton Rd.	Ustick Rd. to Center I-84 Overpass	0.83	65.93	63.18	64.20	0.98	0.97		
SH-19/IB-84	I-84 WB Ramps to Chicago	0.52	44.75	45.15	51.02	0.89	1.14	0.97	1.17
SH-19/IB-84	Chicago to Blaine	0.28	44.02	45.34	47.45	0.96	1.08		
SH-19/IB-84	Blaine/Simplot Blvd. to Paynter	0.11	11.21	0.00	19.49	0.00	1.74		
SH-19/IB-84	Paynter to Farmway	0.75	62.60	69.53	82.40	0.84	1.32		
SH-19/IB-84	Farmway to Simplot Exit #3	1.01	66.18	75.88	68.74	1.10	1.04		
SH-44	Kingsbury Rd. to Lansing Lane	1.03	67.55	67.73	68.25	0.99	1.01	1.05	1.02
SH-44	Lansing Lane to Duff Lane	1.01	66.11	67.16	66.55	1.01	1.01		
SH-44	Duff Lane to Marjorie Ave.	0.77	52.42	54.34	54.18	1.00	1.03		
SH-44	Marjorie Ave. to Middleton Rd.	0.53	45.51	48.10	49.33	0.98	1.08		
SH-44	Middleton Rd. to Cemetery Rd.	0.73	94.73	109.16	99.65	1.10	1.05		
SH-44	Cemetery Rd. to Emmett Rd.	1.03	75.36	79.85	76.91	1.04	1.02		
SH-44	Emmett Rd. to Old Hwy 30	2.14	142.00	160.19	140.55	1.14	0.99		
SH-44	Old Hwy 30 to I-84 EB ramps	0.25	25.92	25.87	25.70	1.01	0.99		



SH-45	11th Ave./3rd St. to 12th Ave./3rd St.	0.07	5.60	13.16	11.57	1.14	2.07	1.26	1.04
SH-45	3rd to 7th	0.29	32.79	67.23	30.05	2.24	0.92		
SH-45	7th to Lake Lowell Ave.	1.03	105.94	131.28	111.09	1.18	1.05		
SH-45	Lake Lowell Ave. to Iowa	0.56	57.29	57.28	57.90	0.99	1.01		
SH-45	Iowa to Greenhurst	0.44	45.57	89.78	51.20	1.75	1.12		
SH-45	Greenhurst to Ruth Ln.	1.55	133.75	145.84	133.58	1.09	1.00		
SH-55	I-84 WB Ramps to 6th St. N	0.25	19.84	38.78	23.80	1.63	1.20	1.29	1.15
SH-55	6th St. N to 1st St. N	0.53	42.96	47.85	42.99	1.11	1.00		
SH-55	1st St. N to 3rd St. S	0.38	39.19	68.55	51.97	1.32	1.33		
US-20/26	11th Ave. N Ext. to Franklin Rd.	1.02	66.57	65.44	66.80	0.98	1.00	1.14	1.06
US-20/26	Franklin Rd. to Northside Blvd.	1.01	65.85	64.87	66.07	0.98	1.00		
US-20/26	Northside Blvd. to Midland Blvd.	1.00	65.19	64.13	65.38	0.98	1.00		
US-20/26	Midland Blvd. to Middleton Rd.	1.00	65.59	98.00	65.30	1.50	1.00		
US-20/26	Middleton Rd. to KCID Rd.	0.99	64.87	71.75	65.35	1.10	1.01		
US-20/26	KCID Rd. to Muller Rd.	1.08	77.87	78.86	79.20	1.00	1.02		
US-20/26	Muller Rd. to I-84 WB ramps	0.20	20.67	79.94	32.93	2.43	1.59		
US-20/26	I-84 WB ramps to I-84 EB off ramp	0.18	18.31	60.86	42.28	1.44	2.31		
Ustick Rd.	Middleton Rd to RR Crossing	1.28	106.92	144.75	107.96	1.34	1.01	1.09	1.12
Ustick Rd.	RR Crossing to Caldwell Blvd	0.35	35.49	62.85	55.75	1.13	1.57		
Ustick Rd.	Caldwell Blvd to Lake Ave	0.40	41.14	51.06	48.46	1.05	1.18		
Ustick Rd.	Lake Ave to Indiana Ave	1.01	103.68	106.43	112.65	0.94	1.09		
Ustick Rd.	Indiana Ave to 10th Ave.	1.00	103.17	113.59	112.42	1.01	1.09		
Ustick Rd.	10th Ave. to Kimball	0.25	25.82	27.01	29.06	0.93	1.13		
Ustick Rd.	Kimball to Farmway Rd	0.71	72.51	84.20	84.20	1.00	1.16		

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