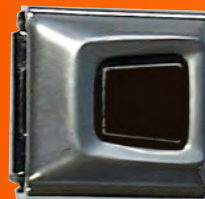


2012 Observational Seat Belt Survey



**8 out of 10 Idahoans
Buckle Up.**

Do you?



Idaho Observational Seat Belt Survey

2012

Final Report

Prepared by the Office of Highway Safety

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Background

The methodology concerning the observational seat belt survey was changed in 1998 in accordance with The National Highway Traffic Safety Administration’s (NHTSA) guidelines. An entirely new sample of observation sites was selected using a two-stage probabilistic sampling method. The method of analysis also changed to correct for the probabilistic sampling and determine the standard error correctly. Comparisons of 1998 and future surveys to historical data (1986 – 1997 surveys) should be made with caution as the new methodology differs greatly from the previous methodology.

It is physically impossible to observe every front seat occupant of every vehicle on every roadway for every day of the year. For this reason, a sample of sites was taken that covers the state geographically and captures the different types of traffic patterns, by adequately selecting the different types of roadways. The sample was selected randomly; however, counties with higher Annual Vehicle Miles of Travel (AVMT) and roadways with greater Average Daily Traffic (ADT) were more likely to be picked. While this helps to insure a cost-effective sample, it also introduces bias that must be accounted for and corrected in the analysis. Site-specific weights are calculated for a number of aspects and special software is used in the estimation process. The following table shows the 2012 estimated statewide usage, the standard error and the 95% confidence interval for the statewide estimate.

The estimated usage is the percentage of people observed wearing seat belts. The standard error is the average difference between the observed usage at each site and the estimated usage. The standard error is also an indication of how precise the sample is. The lower and upper 95% confidence limits define the 95% confidence interval. The 95% confidence interval is derived from the estimated usage and the standard error. The appropriate interpretation of the confidence interval is that if we were to do 100 surveys, we would expect 95 out of the resulting 100 confidence intervals to contain the “true” usage. The “true” usage is what we would get if we could observe every front seat occupant of every vehicle on every road for every day of the year. In other words, we are 95% confident the “true” statewide usage in 2012 lies between the 73.3% and 84.8%.

2012 Statewide Seat Belt Usage

	Estimated Usage	Standard Error	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Statewide	79.0%	2.9%	73.3%	84.8%

2012 Statewide Seat Belt Usage by Vehicle Type

	Estimated Usage	Standard Error	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Passenger Cars	81.3%	3.3%	74.7%	87.8%
Vans & SUV's	82.9%	2.6%	77.9%	88.0%
Pick-Up Trucks	70.8%	3.3%	64.3%	77.3%

The estimated seat belt usage for pick-up truck occupants continues to be substantially lower than seat belt usage for either passenger cars or vans and sport utility vehicles (SUV's). The difference between seat belt use in pick-up trucks and in other vehicles is not statistically significant.

2012 Seat Belt Usage by Transportation District

	Estimated Usage	Standard Error	Lower 95% Confidence Limit	Upper 95% Confidence Limit
District 1	71.8%	1.5%	68.9%	74.8%
District 2	86.1%	1.3%	83.5%	88.6%
District 3	93.1%	2.0%	89.2%	97.1%
District 4	66.0%	3.1%	60.0%	72.0%
District 5	64.3%	2.0%	60.3%	68.3%
District 6	70.9%	2.1%	66.9%	75.0%

2012 Seat Belt Usage by County

	Estimated Usage	Standard Error	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Ada	94.7%	2.4%	90.1%	99.4%
Bannock	67.2%	1.8%	63.6%	70.7%
Bingham	57.0%	0.6%	55.9%	58.1%
Blaine	71.2%	0.4%	70.5%	72.0%
Bonner	71.0%	2.2%	66.7%	75.3%
Bonneville	67.3%	1.7%	63.9%	70.6%
Canyon	94.2%	1.3%	91.6%	96.8%
Cassia	57.8%	4.4%	49.1%	66.4%
Elmore	76.4%	3.2%	70.1%	82.7%
Kootenai	72.3%	2.0%	68.4%	76.1%
Latah	85.4%	2.4%	80.7%	90.0%
Madison	74.4%	2.0%	70.5%	78.4%
Minidoka	60.5%	2.6%	55.4%	65.5%
Nez Perce	86.5%	1.4%	83.8%	89.1%
Payette	92.4%	1.5%	89.4%	95.4%
Twin Falls	73.6%	1.7%	70.3%	76.9%

Not all counties in Idaho are included in the sample. For a more detailed explanation of how and why these counties were selected, please refer to Appendix A (page 11).

2012 Seat Belt Usage by Types of Road

	Estimated Usage	Standard Error	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Urban	80.1%	3.8%	72.7%	87.6%
Rural	76.4%	3.3%	69.9%	82.8%

Urban and rural designations are determined from the functional classification of the road.

	Estimated Usage	Standard Error	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Major	83.6%	5.4%	73.0%	94.1%
Minor	76.7%	2.9%	71.0%	82.4%

Major and minor designations are determined from the functional classification of the road. Major roads are Interstates and Principal Arterials, minor roads comprise all other functional classifications.

	Estimated Usage	Standard Error	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Urban Major	84.2%	6.1%	72.2%	96.2%
Urban Minor	77.4%	4.0%	69.5%	85.3%
Rural Major	80.5%	7.6%	65.7%	95.3%
Rural Minor	75.3%	3.7%	68.2%	82.5%

2012 Seat Belt Usage by Functional Classification

	Estimated Usage	Standard Error	Lower 95% Confidence Limit	Upper 95% Confidence Limit
<u>Rural</u>				
Interstate	88.3%	2.7%	83.1%	93.6%
Principal Arterial	79.5%	8.2%	63.3%	95.6%
Minor Arterial	79.6%	1.9%	76.0%	83.3%
Major Collector	72.3%	4.4%	63.8%	80.9%
Minor Collector	46.3%	0.0%	46.3%	46.3%
Local	85.2%	4.2%	76.9%	93.5%
<u>Urban</u>				
Interstate	98.5%	1.8%	94.9%	100.0%
Principal Arterial	79.4%	4.4%	70.7%	88.2%
Minor Arterial	79.6%	4.7%	70.5%	88.8%
Collector	71.9%	3.0%	66.0%	77.7%
Local	89.7%	0.0%	89.7%	89.7%

2012 Seat Belt Usage by Day of the Week

	Estimated Usage	Standard Error	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Sunday	72.1%	1.1%	70.0%	74.3%
Monday	83.5%	2.6%	78.3%	88.7%
Tuesday	75.2%	3.9%	67.6%	82.8%
Wednesday	75.7%	3.7%	68.5%	82.9%
Thursday	81.3%	8.8%	64.0%	98.5%
Friday	79.5%	4.5%	70.7%	88.2%
Saturday	88.7%	3.3%	82.3%	95.0%

2011 Usage by Time of Day

	Estimated Usage	Standard Error	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Morning (7 - 11)	82.1%	5.7%	70.9%	93.3%
Afternoon (11 - 3)	77.3%	2.7%	72.1%	82.5%
Evening (3 - 7)	77.2%	2.8%	71.8%	82.6%

2012 Usage – ITD District by Vehicle Type

ITD District	Passenger Cars	Vans and Sport Utility Vehicles	Pickup Trucks	All Vehicles
1	70.4%	74.8%	70.6%	71.8%
2	89.8%	92.1%	75.9%	86.1%
3	94.3%	93.5%	90.1%	93.1%
4	71.6%	78.7%	50.9%	66.0%
5	66.1%	72.1%	50.4%	64.3%
6	75.3%	76.6%	54.5%	70.9%
Statewide	81.3%	82.9%	70.8%	79.0%

2012 Usage - County by Vehicle Type

County	Passenger Cars	Vans and Sport Utility Vehicles	Pickup Trucks	All Vehicles
Ada	95.4%	94.8%	93.1%	94.7%
Bannock	69.8%	74.7%	51.1%	67.2%
Bingham	55.2%	66.1%	48.9%	57.0%
Blaine	77.4%	78.3%	54.0%	71.2%
Bonner	75.0%	76.1%	62.5%	71.0%
Bonneville	70.7%	73.0%	56.7%	67.3%
Canyon	95.4%	94.6%	91.9%	94.2%
Cassia	63.1%	83.2%	36.1%	57.8%
Elmore	81.0%	81.1%	62.8%	76.4%
Kootenai	67.9%	74.1%	76.7%	72.3%
Latah	89.3%	87.4%	75.4%	85.4%
Madison	78.6%	80.3%	50.6%	74.4%
Minidoka	64.1%	74.2%	49.5%	60.5%
Nez Perce	90.0%	94.9%	76.1%	86.5%
Payette	93.5%	90.9%	92.6%	92.4%
Twin Falls	81.0%	79.4%	61.3%	73.6%

2012 Usage by Observation Site

County	Location	Designated Road	Intersection	Usage
Bonner	1	Cedar (US 95)	at N. 2nd	71.9%
	2	Albeni Rd (US 2)	at SH 57	80.5%
	3	Dufort Rd	at US 95	68.7%
	4	US 95	at Larch	85.0%
	5	Cedar	at Boyer	82.0%
	6	US 2	at Division	84.0%
Kootenai	7	I-90 - Off Ramp	Exit # 7 (SH 41)	69.8%
	8	Mullan Rd	at SH 41	69.1%
	9	SH 41	at SH 53	61.7%
	10	SH 53	at US 95	70.9%
	11	15th Street	at Sherman Ave	75.0%
	12	I-90 - Off Ramp	Exit #14	84.0%
	13	US 95	At SH 53	89.5%
Latah	14	Lincoln Way (US 95)	at Appleway	83.0%
	93	SH 8	at Blaine	93.0%
	94	6th St	at Blaine	86.6%
	95	Jackson St	at 6th St	81.3%
Nez Perce	96	US 95	at Sweet Ave	86.0%
	97	US 12	at 3rd Ave N.	90.5%
	98	Main	at 13th St	87.6%
	99	16th Ave	at 17th St.	84.2%
Ada	100	Powers Ave	at Thain Rd	88.5%
	15	Overland	at Meridian Rd.	98.8%
	16	SH 55	at Floating Feather	98.0%
	17	Collister Dr	at Catalpa Dr	96.8%
	18	Mcmillan Rd	at Locust Grove	92.0%
	19	Franklin Rd	at Ten Mile	91.2%
	20	I-184 - Off Ramp	Curtis Road Exit	100.0%
	21	Chinden Blvd	at 36th St.	98.0%
22	Cole Road	at Emerald	98.5%	
	23	9th Street	at River St	95.1%
	24	Hayes St	at 13th St	95.0%
	25	N. Liberty	at Fairview	82.2%

2012 Usage by Observation Site - Continued

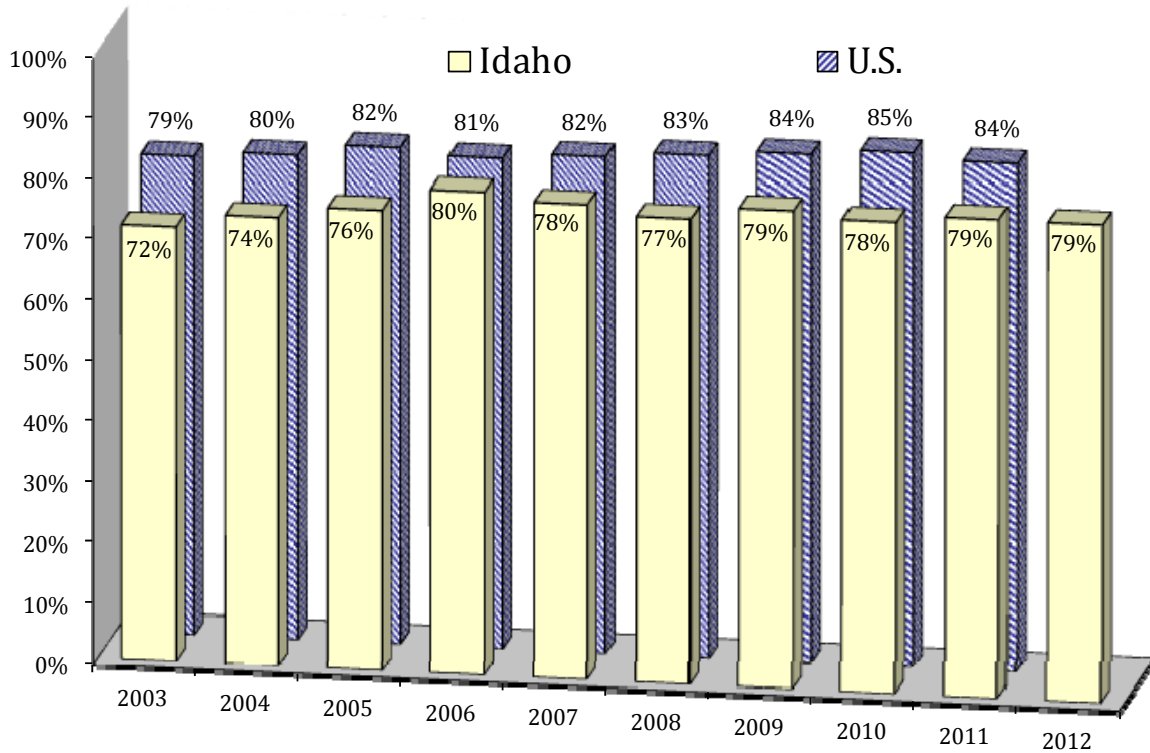
County	Location	Designated Road	Intersection	Usage
Canyon	26	Gekeler Rd	at W Boise Ave	94.3%
	27	Eagle Road	at Chinden Blvd	97.5%
	28	Jupiter (Entertainment)	at Overland	92.0%
	29	Adams Rd.	at E 44th St	87.6%
	30	SH 16	Jct w/ SH 44	90.1%
	31	Linden	at Indiana	96.5%
	32	US 20	at Middleton Rd	94.0%
	33	SH 55	at South 10th Ave	96.0%
	34	Centennial Way	at SH 19	89.5%
	35	I-84 - Off Ramp	Exit # 38-Garrity	96.5%
	36	Amity Rd	at South Side Blvd	95.5%
Elmore	37	Greenhurst	at 12th Ave	96.0%
	38	7th Ave	at 3rd St	95.5%
	39	I-84 Business Loop	at SH 51	62.6%
	40	I-84 - Off Ramp	Exit # 95	92.6%
	41	SH 51	at SH 67	76.4%
	42	American Legion	at 3rd East	75.9%
	43	3rd E St	at 10th N St	67.8%
Payette	44	McMurtrey	at Canyon Creek	74.8%
	45	US 95 (16th St)	at 8th St	84.5%
	46	8th Street	at Center St	93.0%
	47	US 95	at NW 16th St	93.0%
	48	SH 72	at US 30	96.0%
Blaine	67	Gannett Rd	at US 20	69.0%
	68	US 20	at Jct US 93/26	80.4%
	69	US 20	at SH 75	68.2%
Cassia	70	Saddle Rd	at Sun Valley Rd	63.5%
	71	Main St (SH 75)	at 1st St	78.2%
	72	Main St (SH 75)	at Bullion St	74.3%
	49	E. 5th St	at Overland	63.6%
	50	W Main	at Oakly	61.1%
	51	SH 77	at SH 81	53.0%
	52	I-84 - Off Ramp	Exit # 216	76.4%

2012 Usage by Observation Site – Continued

County	Location	Designated Road	Intersection	Usage
Minidoka	53	200 S.	at SH 27	46.3%
	54	Overland Ave	at 14th St	67.5%
	55	I-84 - Off Ramp	Exit #211 Rupert/Heyburn Exit	83.1%
	56	I-84 - Off Ramp	Exit # 201 Paul Exit	54.2%
	57	Overland Rd	at 5th St	66.1%
	58	O St	at 21st St	57.7%
Twin Falls	59	SH 24 (8th St)	at Meridian	69.5%
	60	SH 25	at SH 27	55.1%
	61	3700 N	at US 93	67.8%
	62	Blue Lakes Blvd	at Falls Ave	75.5%
	63	3rd St E (Idaho St)	at 6th Ave E	77.6%
	64	Washington St	at South Park	75.9%
Bannock	65	Kimberly Rd (US 30)	at Eastland	69.5%
	66	Eastland Dr	at Orchard	75.0%
	73	Garrett Way (US 30)	at E Gould St	69.1%
	74	West Quinn Rd	at Poleline Rd	60.7%
Bingham	75	I-15 - Off Ramp	Exit # 47 (US 30)	87.5%
	76	S Main	at Benton Rd	71.0%
	77	Fir St	at US 91	51.1%
	78	US 91	at Fir St	63.5%
Bonneville	79	W Judicial St	at Broadway	57.1%
	80	I-15 - Off Ramp	Exit # 89	77.8%
	81	SH 43 (Ucon Exit US 20)	at SH 43/Yellowstone	68.0%
	82	Sunnyside Dr	at Woodruff Ave	67.4%
	83	Lincoln Rd	at Woodruff Ave	61.9%
	84	US 26	at 15th E (St Leon Rd)	69.7%
	85	Grandview Dr	at Skyline Dr	73.3%
	86	US 20	Riverside - Exit #93	75.2%
Madison	87	N Holmes Ave	at 5th St	71.2%
	88	I-15BL (Exit #113)	at Jct US 91	62.7%
	89	S 2nd E	at E 1st S	71.1%
	90	S 2nd W	at W 2nd S	73.4%
	91	US 20	at SH 33 (Rexburg Exit)	70.5%
	92	E Main St	at Center St	78.3%

Seat Belt Usage Trends

Idaho Seat Belt Usage vs. U.S. Seat Belt Usage



Slight changes in the observational seat belt survey existed from year to year prior to 1998. In 1998 the observational survey was completely revised to ensure national compliance and to produce a more accurate usage estimate. Comparisons of 1998 and future surveys to historical surveys (1986 – 1997) should be made conservatively as the new methodology differs greatly from the previous methodologies. The U.S. observed usage is calculated from the observed usage rates in each state and is obtained from the National Center for Statistics and Analysis.

There was a change to the legislation regarding seat belt use (Idaho Code 49-673) that took effect July 1st, 2003. The observational survey was done after the law took effect in 2003.

From 2011 to 2012 the Idaho observed seat belt usage decreased slightly from 79.1% to 79.0%. This represents a 0.1% decrease in seat belt usage from 2011 to 2012.

Observed Usage - Transportation District by Year

	2008	2009	2010	2011	2012	Ave Yearly Change 2008-2012
District 1	82.3%	77.2%	71.1%	71.7%	71.8%	-3.3%
District 2	85.2%	82.8%	87.4%	86.2%	86.1%	0.3%
District 3	87.9%	90.7%	93.2%	93.4%	93.1%	1.5%
District 4	71.6%	70.3%	71.0%	66.7%	66.0%	-2.0%
District 5	63.3%	64.7%	62.6%	60.6%	64.3%	0.5%
District 6	59.6%	66.7%	64.3%	68.0%	70.9%	4.6%

Observed Usage – County by Year

	2008	2009	2010	2011	2012	Ave Yearly Change 2008-2012
Ada	91.1%	94.0%	96.9%	95.5%	94.7%	1.0%
Bannock	66.0%	66.7%	65.5%	62.2%	67.2%	0.5%
Bingham	50.5%	58.0%	54.2%	55.0%	57.0%	3.4%
Blaine	72.7%	69.9%	79.1%	71.4%	71.2%	-0.2%
Bonner	86.2%	71.1%	74.0%	66.9%	71.0%	-4.2%
Bonneville	58.7%	65.0%	65.2%	67.3%	67.3%	3.6%
Canyon	86.3%	87.7%	90.2%	92.7%	94.2%	2.2%
Cassia	61.9%	65.6%	60.7%	56.5%	57.8%	-1.5%
Elmore	71.3%	72.2%	72.3%	72.8%	76.4%	1.8%
Kootenai	78.1%	82.2%	70.2%	75.8%	72.3%	-1.5%
Latah	81.8%	80.3%	84.7%	81.0%	85.4%	1.2%
Madison	60.7%	68.8%	63.2%	68.6%	74.4%	5.6%
Minidoka	75.2%	66.1%	67.3%	66.1%	60.5%	-5.1%
Nez Perce	86.9%	84.0%	89.0%	88.6%	86.5%	-0.1%
Payette	82.1%	88.5%	91.3%	92.6%	92.4%	3.0%
Twin Falls	73.7%	75.5%	76.6%	69.1%	73.6%	0.2%

Observed Usage – Vehicle Type by Year

	2008	2009	2010	2011	2012	Ave Yearly Change 2008-2012
Passenger Cars	79.9%	82.7%	80.2%	81.0%	81.3%	0.4%
SUV's/Vans	82.3%	84.5%	82.3%	83.4%	82.9%	0.2%
Pickup Trucks	65.1%	67.3%	68.3%	71.2%	70.8%	2.1%
Overall Usage	76.9%	79.2%	77.9%	79.1%	79.0%	0.7%

Appendix A

Idaho Observational Seat Belt Survey Methodology

Geographic Area

Counties were used as the primary sampling units. Of the 44 counties in Idaho, 24 were excluded by the demographic guideline in the Federal Register. This guideline states that at least 85% of the population must be eligible for inclusion in the sample. The 20 counties in the following table cover 85.8% of the 1997 statewide population. The sample size of the first stage selection was determined by the guidelines in the Federal Register. Since Idaho has 44 counties, 16 were selected from the 20 eligible counties for the sample. The Annual Average Vehicle Miles of Travel (AVMT) was used as the measure of size for each county. Each county was then assigned a weight directly proportional to its AVMT (selection weight = (county AVMT / total AVMT)*100). The probability of selection for each county is equal to the selection weight divided by 100. The following is a list of the counties eligible for inclusion, the counties in bold are the counties that were selected.

District	County	1997 Population	1997 AVMT	Selection Weight
1	Kootenai	98,767	1,671,072	11
1	Bonner	34,771	778,357	5
2	Nez Perce	36,819	423,701	3
2	Latah	32,532	410,497	3
2	Idaho	15,082	381,344	3
3	Ada	267,168	2,383,219	16
3	Canyon	116,675	1,402,957	9
3	Elmore	24,880	1,044,385	7
3	Payette	20,220	483,524	3
3	Gem	14,454	105,920	1
4	Twin Falls	61,298	550,769	4
4	Cassia	21,441	598,483	4
4	Minidoka	20,655	409,461	3
4	Jerome	17,665	799,534	5
4	Blaine	17,213	435,581	3
5	Bannock	73,850	1,058,016	7
5	Bingham	41,621	839,888	6
6	Bonneville	80,294	721,225	5
6	Madison	23,508	220,272	1
6	Jefferson	18,942	345,048	2
Totals (All 20 Counties)		1,037,855	15,063,253	100

Distribution of Observation Sites

The total number of observation sites was doubled from 50 (1986-1997 surveys) to 100. The average number of road segments in the sampled counties was 497. Counties with higher traffic volumes and/or more roadways need more observation sites in order to obtain an accurate sample. Therefore, each selected county was allocated a minimum of 4 observation sites and the remaining 36 sites were distributed randomly in pairs with a probability proportional to the county AVMT (=weight/100).

County	Population	AVMT	Weight (% Total VMT)	Total # of Sites
Kootenai	98,767	1,671,072	12	8
Bonner	34,771	778,357	6	6
Nez Perce	36,819	423,701	3	4
Latah	32,532	410,497	3	4
Ada	267,168	2,383,219	18	16
Canyon	116,675	1,402,957	10	8
Elmore	24,880	1,044,385	8	6
Payette	20,220	483,524	4	4
Twin Falls	61,298	550,769	4	6
Cassia	21,441	598,483	4	6
Minidoka	20,655	409,461	3	6
Blaine	17,213	435,581	3	6
Bannock	73,850	1,058,016	8	4
Bingham	41,621	839,888	6	4
Bonneville	80,294	721,225	5	8
Madison	23,508	220,272	2	4

Stratification of Roadway Segments

Roadway segments were grouped into four strata: urban major, urban minor, rural major and rural minor. The Federal Highway Administration functional classification was used to assign the road segments to the strata. Major roads were defined to be Interstate highways and principal arterials. Minor roads were defined to be everything else, which includes minor arterials, major and minor collectors and local roads. Urban roads were defined to be roads within the urban limits of any city with a population of 5,000 or more. Rural roads were defined to be roads everywhere else.

To determine how the sites should be allocated to the strata, the 1997 average Daily Vehicle Miles of Travel (DVMT) estimates of each road type were examined. The two factors that determine the DVMT are the miles of roadway and the Average Daily Traffic (ADT). Breaking the DVMT up into its two components revealed some interesting differences. The following tables show the percentage break-up of the 1997 DVMT, 1997 Road Mileage and 1997 ADT between major/minor roads and urban/rural roads.

Percentage of DVMT

	Major	Minor	Total
Urban	16.4%	17.4%	33.7%
Rural	29.1%	37.2%	66.3%
Total	45.5%	54.5%	100%

Percentage of Road Mileage

	Major	Minor	Total
Urban	0.5%	5.7%	6.2%
Rural	3.7%	90.1%	93.8%
Total	4.2%	95.8 %	100%

Percentage of ADT

	Major	Minor	Total
Urban	63.4%	13.7%	77.1%
Rural	18.5%	4.4%	22.9%
Total	81.9%	18.1%	100%

It is important to obtain a sample that is both representative of the state and cost effective. While sites were distributed to road type as the DVMT suggested insuring a representative sample, sites were distributed to area (urban/rural) closer to what the ADT suggested to insure cost effectiveness. The following table displays how the sites were distributed to the specific strata.

Allocation of Sites to the Strata

	Major	Minor	Total
Urban	29	34	63
Rural	16	21	37
Total	45	55	100

Road Segment Selection

The population of road segments from which the sample was taken is the Milepost And Coded Segment/Roadway Segment (MACS/ROSE) database. MACS/ROSE is our linear referencing system. Road segments were selected with a probability proportional to their Average Daily Traffic (ADT) in the same manner the counties were selected. Road segment selection was done within each specified county and strata. First the road segments were given a weight. The weight is equal to the rounded value of 100 times the road segment ADT divided by the total ADT within the county and strata. Road segments with unknown ADT and weights that rounded to zero were defined to have a weight of 1 and thus still had a probability of being selected. The probability of selection is equal to the weight divided by the sum of the weights for the county and strata.

Number of Observations per Site

The number of observations per site was set to be 200 occupants or 2 hours, whichever came first. The amount of time used to complete the survey at each site is recorded and used as a weight in the estimation process.

Direction of Travel, Day of the Week and Time of Day

Direction of travel was randomly assigned with equal probability. Depending on which direction of travel was assigned, the intersection with the best vantagepoint on the road segment was selected. This was done with an on-site visual inspection done by the Office of Highway Safety's Research Analyst Principal.

Observation sites were combined according to geographic proximity. Each group of sites was then randomly assigned a day of the week. This was done so that multiple sites could be done in one day. This maximizes efficiency and minimizes the cost of doing the survey. All days of the week, except Sunday, were eligible for selection. In 2000, sites were assigned to be done on Sunday at the direction of the National Highway Traffic Safety Administration, Pacific Northwest Region.

Eligible Vehicles

All drivers and front seat outboard passengers, where the shoulder harness can be seen, in non-commercial and non-emergency vehicles are observed. Observations can be made from multiple lanes, if the volume of traffic permits. A lane adjustment factor is applied in the estimation process. Vehicles where the shoulder harness cannot be seen, due to tinted glass or other obstructions, are not counted. Vehicles are categorized into one of three types. The three types are 1: passenger cars, 2: pick ups, and 3: vans and sport utility vehicles.

Observation Process and Training

Since 2003, the survey has been done in June/July by the District Health Promotion Coordinators with the Idaho Department of Health and Welfare. In 2002, the survey was done in June by the Center for Health Policy at Boise State University. Previously the survey had been done in December by the Traffic Survey and Analysis Section of the Idaho Transportation Department. Prior to the observations being made, each observer attended training specifying the manner in which the counts should be made. The training included information on which types of vehicles to count, how to observe seat belt usage, and what elements were necessary for the estimation process and how to record those elements. A practice session followed the training, allowing the observers to be evaluated and ask any questions.

The observers were provided with a table of the observation sites specifying the intersection, direction of travel, and day of the week. A map of each location was also provided.

Estimation Procedures

The statewide usage (the proportion wearing shoulder harnesses) will be computed by the following equation:

$$\text{Weighted Usage} = U_W = \Sigma (\text{AWT} * \# \text{ Observed Using}) / \Sigma (\text{AWT} * \# \text{ Observed})$$

Where the adjusted weight, $\text{AWT} = [(1 / (\text{P}_{\text{PSU}} * \text{P}_{\text{SITE}})) * \text{LAF} * \text{TAF}]$ and where

P_{PSU} = Probability of selection of the County

P_{SITE} = Probability of selection of the road segment conditional on the county and strata it is in

LAF = adjustment for the number of lanes = # of lanes on roadway / # of lanes observed

TAF = Time Adjustment Factor = 120 Minutes / Amount of time to conduct the survey at a site (in minutes)

Calculation of the weighted usage and the standard error will be done with the PC CARP software. PC CARP is a software package designed specifically to handle survey data and control for the positive correlation between sample elements and the bias introduced by probabilistic sampling. PC CARP uses Taylor approximations to estimate the covariance matrices.

PC CARP defines the estimated totals and the covariance matrix as the following (Using the Ratio Estimator):

If we let $\{Y_{ijk1}, X_{ijk1}, Y_{ijk2}, X_{ijk2}, \dots, Y_{ijkp}, X_{ijkp}\}$ denote the vector of variables to be analyzed. Where i is the stratum identification (Rural Major, Rural Minor, Urban Major Urban Minor), j is the cluster identification (primary sampling unit = county), k is the element-within-cluster identification (road segment). Y_{ijks} is the ijk -th observation for the s -th variable, where $s=1, 2, \dots, p$. The estimated totals are

$$\hat{R}hat_s = \hat{Y}hat_s / \hat{X}hat_s \quad \text{where}$$

$$\hat{Y}hat_s = \sum_{i=1}^{L} \cdot \sum_{j=1}^{n_i} \cdot \sum_{k=1}^{m_{ij}} W_{ijk} \cdot Y_{ijks} \quad s = 1, 2, \dots, p \text{ (# Using – weighted)}$$

$$\hat{X}hat_s = \sum_{i=1}^{L} \cdot \sum_{j=1}^{n_i} \cdot \sum_{k=1}^{m_{ij}} W_{ijk} \cdot X_{ijks} \quad s = 1, 2, \dots, p \text{ (# Observed – weighted)}$$

The covariance matrix of the vector of estimates $\hat{R}hat = \{\hat{R}hat_1, \hat{R}hat_2, \dots, \hat{R}hat_p\}$ is estimated by:

$$\mathbf{V}hat\{\mathbf{R}hat\} = \sum_{i=1}^{L} (n_i - 1)^{-1} n_i (1 - f_i) \sum_{j=1}^{n_i} (\mathbf{d}_{ij} - \mathbf{d}bar_{i..})' (\mathbf{d}_{ij} - \mathbf{d}bar_{i..})$$

where

$$\mathbf{d}_{ij} = \{d_{ij,1}, d_{ij,2}, \dots, d_{ij,p}\}$$

$$d_{ij,s} = (\hat{X}hat^{-1}) \sum_{k=1}^{m_{ij}} W_{ijk} (Y_{ijks} - \hat{R}hat_s X_{ijks}), \quad s = 1, 2, \dots, p.$$

$$\mathbf{d}bar_{i..} = n_i^{-1} \sum_{j=1}^{n_i} \mathbf{d}_{ij}.$$

$$\mathbf{Xhats} = \sum_{i=1} \text{to } 1 \sum_{j=1} \text{to } n_i \sum_{k=1} \text{to } m_{ij} W_{ijk} X_{ijks}, \quad s = 1, 2, \dots, p.$$

f_i is the sampling rate for the i -th stratum, n_i is the number of clusters in the i -th stratum, m_{ij} is the number of elements in the ij -th cluster, and W_{ijk} is the weight for the ijk -th observation. For the Idaho Observational Seat Belt Survey $f_i = 0$, $n_i = 16$ and m_{ij} varies, depending on the strata (i) and county (j).

Appendix B

Survey Specifications

HOW TO CONDUCT A SAFETY BELT OBSERVATION SURVEY

Selection and Preparation

1. Conduct seat belt observation surveys at each intersection listed on attachments. The National Highway Traffic Safety Administration recommends that selected intersections should be "controlled by signals or stop signs." Signal stops are the preferred choice. The sites should provide sufficient traffic flow--at least one car will stop for every change of the traffic signal.
2. Observations for the official statewide survey must be made on the designated road, at the specified day and time. Only observe traffic flowing in the direction that is specified. If observations cannot be made at the specified time due to heavy rain/snow, construction, a safety problem, etc., the observations will have to be made the following week at the designated time. If the observations cannot be made at the designated intersection, find the nearest intersection on the designated road and make the observations there. Please note the change on the observation form.
3. If you park on private property, such as a business, please to explain what you are doing to the person in charge and ask for permission to park on the property.
4. A survey can be conducted in one of two ways:
 - a. Standing on the street corner (never in the roadway); or
 - b. Seated in your vehicle.
5. If you choose to stand on the street corner, wear an orange safety vest.
6. People may be curious and ask what you are doing--please be prepared explain the importance of what you are doing.
7. As a helpful reminder, you may want to have something warm or cool to drink depending upon the number of observation sites, length of time and weather conditions.

The Survey

1. Do not leave the site during the observation period.
2. There are three (3) categories of vehicles of which to report counts. **Observe All Vehicles.** (Do not be concerned about whether the vehicle is out-of-state) The categories are: 1) cars; 2) passenger vans and sport utility vehicles; and 3) pickup trucks.
3. Vehicles to be included are **two axle, four tires**, which include cars, pickups (not dually one-tons), sport utility vehicles, vans, mini-vans, or any other vehicle of this type where the shoulder harness is visible. Vehicles which should **not** be included are: all commercial vehicles (namely semis and large trucks), postal vehicles, law enforcement vehicles and EMS vehicles

4. Do not count vehicles where you cannot see the shoulder restraint system – due to tinted glass, dirty windshields, etc....An effort should be made to determine non use by observing the shoulder belt not fastened.
5. Collect data for a maximum of 200 vehicles or 2 hours, whichever comes first. The amount of time spent at each site needs to be recorded for estimation purposes (i.e. how long did it take to count 200 vehicles).
6. Please record the number of lanes on the designated roadway. If the observation site is an off ramp, record the number of lanes on the primary roadway that the off ramp is exiting, not the number of lanes on the off-ramp (i.e. I-15, I-80, I-84, I-90, US 20)
7. Please record the number of lanes from which the observations were made. You may observe traffic from multiple lanes if traffic is not too heavy.
8. Count the **driver first**, then the front seat passenger.

Recording the Data

1. Use one form per site.
2. Complete the upper portion of the form prior to conducting the survey. Please be sure to include starting and ending times, the number of lanes on the roadway and the number of lanes from which the observations were made.
3. Upon completion of the survey count, enter on line A, the number of persons observed using the shoulder restraints for each vehicle category. Enter the number of persons not using shoulder restraints on line B for each vehicle category. It is not necessary to compute the totals or percentage using safety restraints.
4. The Notes and Comments section is where you can enter any additional driver/passenger behavior information, such as children in or not in car seats, children in back seats or any other behavior that appear to show some level of positive/negative trend or unusual observations you have made. This section is optional.

**Thank you for your assistance in obtaining this needed information.
Please submit copies of your surveys:**

Steve Rich
Office of Highway Safety
Idaho Transportation Department
PO Box 7129
Boise ID 83707-1129
Steve.Rich@itd.idaho.gov
(208) 334-8116

Appendix C

Survey Forms

SEAT BELT OBSERVATION FORM

Observer:	Date:
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Location:

City:

# of Lanes on Roadway (1 direction):	# of Lanes Observed:
--------------------------------------	----------------------

Start Time: AM/PM	End Time: AM/PM
--	--

Traffic Direction:

Vehicle Type	CARS	PICK-UPS	SPORT UTILITY / VANS	TOTAL OBSERVED
A. Total persons observed using shoulder restraints				
B. Total persons observed not using shoulder restraints				

CARS Restrained	Not Restrained

PICK-UPS Restrained	Not Restrained

SUV/VANS Restrained	Not Restrained

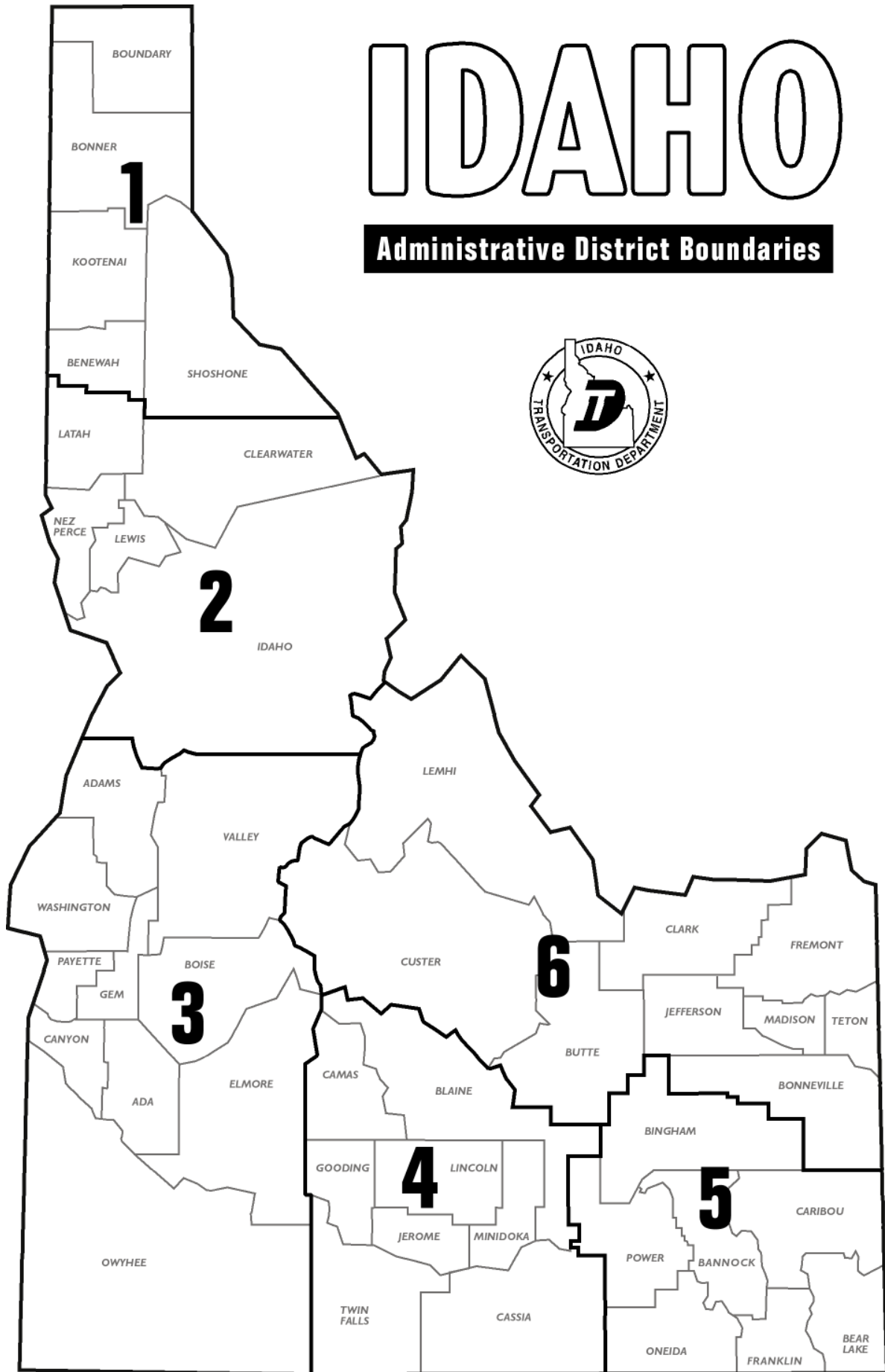
Notes and Comments

Appendix D

Idaho Counties and Transportation Districts

IDAHO

Administrative District Boundaries



Appendix E

Raw Data

Raw Data for Each Location

District 1

County	Location Area	Strata	Direction	Cars		Pick-Ups		Vans/SUV		Total		County Weight	Road Weight	Time Weight	Lane Weight	Day of the Week	Time Period	Time Minutes	
				Using	Observed	Using	Observed	Using	Observed	Using	Observed								
Bonner	1	Sandpoint	Urban Minor	W	50	78	27	37	74	95	151	210	1.0000	10.767	2.400	1.0	Thursday	1	50
	2	Priest River	Rural Major	W	65	75	60	79	57	72	182	226	1.0000	40.850	2.182	1.0	Thursday	2	55
	3	S of Sandpoint	Rural Minor	E	49	67	38	64	38	51	125	182	1.0000	1120.765	1.000	1.0	Thursday	2	120
	4	N. Sandpoint	Urban Major	S	71	83	48	58	51	59	170	200	1.0000	5.674	3.429	1.0	Friday	1	35
	5	Sandpoint	Urban Minor	E	59	71	51	64	54	65	164	200	1.0000	53.295	1.091	1.0	Friday	2	110
	6	Sandpoint	Urban Major	N.E.	63	74	43	54	62	72	168	200	1.0000	18.053	2.182	1.0	Friday	2	55
Kootenai	7	E of Post Falls	Urban Major	W	43	74	31	42	69	89	143	205	1.0000	11.468	1.622	2.0	Tuesday	1	74
	8	Post Falls	Urban Minor	W	57	91	47	60	46	66	150	217	1.0000	570.928	2.182	1.0	Tuesday	1	55
	9	Rathdrum	Rural Minor	N	51	87	32	57	46	65	129	209	1.0000	9.258	2.182	1.0	Tuesday	2	55
	10	N of C'DA	Rural Minor	E	55	73	41	68	50	65	146	206	1.0000	14.343	1.263	1.0	Tuesday	2	95
	11	C'DA	Urban Minor	S	61	80	42	60	47	60	150	200	1.0000	228.371	1.333	1.0	Wednesday	1	90
	12	C'DA	Rural Minor	E	67	79	41	52	60	69	168	200	1.0000	48.492	1.714	2.0	Wednesday	2	70
	13	N of C'DA	Rural Major	N	68	75	45	55	66	70	179	200	1.0000	16.350	2.400	1.0	Wednesday	2	50
	14	C'DA	Urban Major	S	70	84	39	48	57	68	166	200	1.0000	15.052	4.800	1.5	Wednesday	2	25

District 2

County	Location Area	Strata	Direction	Cars		Pick-Ups		Vans/SUV		Total		County Weight	Road Weight	Time Weight	Lane Weight	Day of the Week	Time Period	Time Minutes	
				Using	Observed	Using	Observed	Using	Observed	Using	Observed								
Latah	93	Moscow	Urban Minor	W	104	108	46	52	37	41	187	201	1.5725	18.441	2.857	1.0	Monday	2	42
	94	Moscow	Urban Minor	E	100	107	23	34	52	61	175	202	1.5725	33.254	1.600	1.0	Monday	3	75
	95	Moscow	Urban Major	S	88	104	39	56	38	43	165	203	1.5725	22.528	5.455	1.0	Monday	2	22
	96	Moscow	Urban Major	N	85	96	45	55	42	49	172	200	1.5725	12.672	4.000	1.0	Monday	2	30
Nez Perce	97	Lewiston	Urban Major	S	85	95	62	68	35	38	182	201	1.5235	4.749	7.059	1.0	Sunday	2	17
	98	Lewiston	Urban Major	W	96	108	38	50	42	43	176	201	1.5235	18.844	3.158	1.0	Sunday	3	38
	99	Lewiston	Urban Minor	E	82	93	42	59	46	50	170	202	1.5235	75.814	3.158	1.0	Monday	2	38
	100	SE Lewiston	Rural Minor	W	75	80	66	84	36	36	177	200	1.5235	91.975	1.875	1.0	Monday	2	64

Raw Data for Each Location

District 3

County	Location Area	Strata	Direction	Cars		Pick-Ups		Vans/SUV		Total	Total	County Weight	Road Weight	Time Weight	Lane Weight	Day of the Week	Time Period	Time Minutes	
				Using	Observed	Using	Observed	Using	Observed	Using	Observed								
Ada	15	S Meridian	Urban Minor	W	66	67	37	37	64	65	167	169	1.0000	117.033	1.000	1.0	Monday	1	120
	16	NE of Eagle	Rural Major	S	75	76	51	53	70	71	196	200	1.0000	16.803	1.905	1.0	Monday	2	63
	17	NW Boise	Urban Minor	N	74	75	31	33	47	49	152	157	1.0000	59.257	1.000	1.0	Monday	2	120
	18	N of Meridian	Rural Minor	E	68	74	36	40	81	87	185	201	1.0000	168.050	1.905	1.0	Friday	1	63
	19	SW of Meridian	Urban Minor	W	47	50	38	43	39	43	124	136	1.0000	91.790	1.000	1.0	Saturday	2	120
	20	Boise	Urban Major	E	115	115	31	31	54	54	200	200	1.0000	145.856	2.857	2.0	Thursday	1	42
	21	Garden City	Urban Major	NW	85	87	40	42	74	74	199	203	1.0000	36.464	2.449	1.0	Thursday	1	49
	22	Boise	Urban Major	N	122	123	20	21	55	56	197	200	1.0000	46.674	2.105	1.0	Thursday	1	57
	23	Boise	Urban Major	W	114	121	33	35	48	49	195	205	1.0000	55.564	3.077	2.0	Thursday	2	39
	24	Boise	Urban Minor	NW	68	74	22	22	61	63	151	159	1.0000	78.022	1.000	1.0	Friday	2	120
	25	Boise	Urban Minor	S	58	68	34	38	28	40	120	146	1.0000	195.055	1.000	1.0	Friday	3	120
	26	SE Boise	Urban Minor	N	88	93	26	28	68	72	182	193	1.0000	57.794	1.000	1.0	Thursday	2	120
	27	S of Eagle	Rural Major	N	75	78	35	36	85	86	195	200	1.0000	14.403	2.609	2.0	Saturday	2	46
28	Boise	Urban Minor	N	81	85	43	50	60	65	184	200	1.0000	234.066	1.111	1.0	Saturday	1	108	
29	Garden City	Urban Minor	W	72	84	49	54	55	63	176	201	1.0000	275.371	1.034	1.0	Friday	2	116	
30	E of Star	Rural Minor	S	100	109	34	44	48	49	182	202	1.0000	33.610	2.105	1.0	Friday	1	57	
Canyon	31	Caldwell	Urban Minor	E	101	103	41	43	51	54	193	200	1.0000	44.073	2.927	1.0	Wednesday	2	41
	32	E of Caldwell	Rural Major	E	71	74	72	77	45	49	188	200	1.0000	28.975	1.905	1.0	Wednesday	2	63
	33	S of Caldwell	Rural Major	E	60	64	47	50	85	86	192	200	1.0000	20.215	2.727	1.0	Wednesday	1	44
	34	Caldwell	Urban Major	S	75	83	43	50	61	67	179	200	1.0000	138.577	1.875	1.0	Wednesday	1	64
	35	E. Nampa	Urban Major	W	97	100	45	47	51	53	193	200	1.0000	16.789	2.857	2.0	Tuesday	1	42
	36	Nampa	Urban Minor	W	87	90	38	42	66	68	191	200	1.0000	82.637	1.277	1.0	Tuesday	2	94
	37	Nampa	Urban Minor	E	68	69	59	62	65	69	192	200	1.0000	46.393	3.243	1.0	Tuesday	2	37
	38	Nampa	Urban Minor	NE	82	85	48	52	61	63	191	200	1.0000	146.910	1.277	1.0	Tuesday	2	94
Elmore	39	Mtn. Home	Urban Minor	NW	63	74	54	64	52	62	169	200	1.0000	10.048	2.400	1.0	Friday	2	50
	40	Mtn. Home	Rural Major	E	83	90	41	48	64	65	188	203	1.0000	12.294	1.967	2.0	Saturday	1	61
	41	SW of Mtn Home	Rural Minor	N	58	76	54	79	43	48	155	203	1.0000	41.826	1.154	1.0	Friday	2	104
	42	Mtn. Home	Urban Major	E	84	106	34	48	43	58	161	212	1.0000	21.250	3.636	1.0	Saturday	1	33
	43	Mtn. Home	Urban Minor	S	50	73	26	46	61	83	137	202	1.0000	21.100	1.905	1.0	Saturday	1	63
	44	Mtn. Home	Urban Minor	W	51	60	14	31	42	52	107	143	1.0000	143.864	1.000	1.0	Friday	3	120
Payette	45	Payette	Urban Major	S	63	74	54	64	52	62	169	200	1.3350	11.530	2.400	1.0	Monday	1	50
	46	Payette	Urban Minor	N	66	70	51	55	69	75	186	200	1.3350	39.415	1.667	1.0	Monday	2	72
	47	Fruitland	Rural Major	N	72	76	50	54	64	70	186	200	1.3350	15.600	2.727	1.0	Monday	2	44
	48	S of New Plymouth	Rural Minor	W	41	42	72	75	31	33	144	150	1.3350	55.894	1.000	1.0	Monday	2	120

Raw Data for Each Location

District 4

County	Location	Area	Strata	Direction	Cars		Pick-Ups		Vans/SUV		Total	Total	County Weight	Road Weight	Time Weight	Lane Weight	Day of the Week	Time Period	Time Minutes
					Using	Observed	Using	Observed	Using	Observed	Using	Observed							
Blaine	67	S of Gannett	Rural Minor	S	6	8	7	11	7	10	20	29	1.4820	124.795	1.000	1.0	Tuesday	1	120
	68	Carey	Rural Major	E	33	37	15	25	26	30	74	92	1.4820	6.500	1.000	1.0	Tuesday	2	120
	69	S of Bellvue	Rural Major	W	5	7	8	12	2	3	15	22	1.4820	6.882	1.000	1.0	Monday	1	120
	70	NE Ketchum	Rural Minor	E	40	54	19	49	70	100	129	203	1.4820	18.220	1.463	1.0	Monday	2	82
	71	Ketchum	Rural Minor	S	44	54	34	60	83	92	161	206	1.4820	6.507	3.333	1.0	Monday	2	36
	72	Hailey	Rural Minor	N	44	57	27	49	85	104	156	210	1.4820	6.073	3.529	1.0	Monday	2	34
Cassia	49	Burley	Urban Minor	E	14	24	14	25	21	28	49	77	1.0786	43.203	1.000	1.0	Thursday	2	120
	50	Burley	Urban Major	E	47	72	36	78	41	53	124	203	1.0786	12.511	1.935	1.0	Thursday	2	62
	51	Delco	Rural Minor	S	18	27	15	51	20	22	53	100	1.0786	123.571	1.000	1.0	Wednesday	1	120
	52	Burley	Rural Major	E	41	52	33	48	23	27	97	127	1.0786	6.147	1.000	2.0	Friday	2	120
	53	S. Burley	Rural Minor	E	12	26	4	23	15	18	31	67	1.0786	86.500	1.000	1.0	Tuesday	3	120
	54	Burley	Urban Major	N	60	86	26	54	51	63	137	203	1.0786	8.469	3.636	1.0	Tuesday	3	33
Minidoka	55	Self Explanatory	Rural Major	W	22	26	22	29	30	34	74	89	1.5765	1.692	1.000	2.0	Wednesday	2	120
	56	Self Explanatory	Rural Major	E	4	5	7	13	2	6	13	24	1.5765	1.353	1.000	2.0	Friday	1	120
	57	S of I-84 Exit #208	Urban Major	S	60	103	32	55	54	63	146	221	1.5765	7.862	4.800	1.0	Wednesday	2	25
	58	Heyburn	Urban Minor	N	23	35	22	46	11	16	56	97	1.5765	207.290	1.000	1.0	Wednesday	2	120
	59	Rupert	Urban Major	S	36	50	16	31	39	50	91	131	1.5765	16.510	1.000	1.0	Thursday	3	120
	60	Paul	Rural Minor	W	22	33	16	36	11	20	49	89	1.5765	35.549	1.000	1.0	Thursday	1	120
Twin Falls	61	SE of Filer	Rural Minor	W	18	20	16	30	6	9	40	59	1.1720	159.915	1.000	1.0	Wednesday	1	120
	62	Twin Falls	Urban Major	N	77	93	22	45	58	70	157	208	1.1720	8.423	5.714	1.0	Wednesday	1	21
	63	Twin Falls	Urban Minor	NE	25	32	16	23	18	21	59	76	1.1720	111.779	1.000	1.0	Wednesday	2	120
	64	Twin Falls	Urban Minor	S	72	96	39	52	53	68	164	216	1.1720	15.170	2.927	1.0	Wednesday	2	41
	65	S.E. Twin Falls	Urban Major	E	55	68	56	96	35	46	146	210	1.1720	11.486	3.000	1.0	Thursday	1	40
	66	S.E. Twin Falls	Urban Minor	S	30	37	42	61	21	26	93	124	1.1720	49.391	1.000	1.0	Thursday	1	120

Raw Data for Each Location

District 5

County	Location	Area	Strata	Direction	Cars		Pick-Ups		Vans/SUV		Total	Total	County Weight	Road Weight	Time Weight	Lane Weight	Day of the Week	Time Period	Time Minutes
					Using	Observed	Using	Observed	Using	Observed	Using	Observed							
Bannock	73	Pocatello	Urban Major	SE	78	111	32	58	40	48	150	217	1.0000	70.685	2.182	1.5	Monday	2	55
	74	Pocatello/Chubbuck	Urban Minor	W	64	106	13	34	51	71	128	211	1.0000	91.635	2.857	1.0	Thursday	2	42
	75	South of Pocatello	Rural Major	S	66	78	41	46	61	68	168	192	1.0000	15.298	1.000	2.0	Monday	2	120
	76	Pocatello	Urban Minor	NW	84	102	26	50	47	69	157	221	1.0000	64.777	2.553	1.0	Monday	2	47

Bingham	77	Shelley	Rural Minor	E	48	99	14	45	50	75	112	219	1.0000	51.603	1.333	1.0	Thursday	2	90
	78	Shelley	Rural Minor	SW	66	98	30	58	38	55	134	211	1.0000	23.383	2.034	1.0	Thursday	2	59
	79	Blackfoot	Urban Minor	NE	46	86	31	58	44	68	121	212	1.0000	73.404	2.034	1.0	Sunday	2	59
	80	SW of Blackfoot	Rural Major	NW	28	34	20	29	15	18	63	81	1.0000	6.447	1.000	2.0	Sunday	2	120

District 6

County	Location	Area	Strata	Direction	Cars		Pick-Ups		Vans/SUV		Total	Total	County Weight	Road Weight	Time Weight	Lane Weight	Day of the Week	Time Period	Time Minutes
					Using	Observed	Using	Observed	Using	Observed	Using	Observed							
Bonneville	81	Ucon	Rural Minor	E	50	72	31	59	55	69	136	200	1.0000	81.616	1.319	1.0	Wednesday	2	91
	82	Ammon	Urban Major	W	76	105	23	53	46	57	145	215	1.0000	20.105	7.500	1.0	Wednesday	2	16
	83	Idaho Falls	Urban Major	E	75	111	16	33	42	71	133	215	1.0000	24.848	7.500	1.0	Wednesday	2	16
	84	Idaho Falls	Urban Major	SW	56	73	23	51	61	77	140	201	1.0000	23.279	4.138	1.0	Wednesday	2	29
	85	Idaho Falls	Urban Minor	E	66	88	43	57	39	57	148	202	1.0000	39.262	2.791	1.0	Friday	1	43
	86	Idaho Falls	Urban Major	NE	71	95	29	43	52	64	152	202	1.0000	20.105	2.553	1.0	Friday	1	47
	87	Idaho Falls	Urban Minor	S	55	75	45	73	51	64	151	212	1.0000	52.350	4.615	1.0	Friday	1	26
	88	S of Idaho Falls	Rural Major	E	46	70	47	82	33	49	126	201	1.0000	153.045	1.905	1.0	Friday	2	63

Madison	89	Rexburg	Urban Minor	N	81	112	7	19	55	70	143	201	2.9305	40.216	3.429	1.0	Tuesday	2	35
	90	Rexburg	Urban Major	S	79	102	25	46	45	55	149	203	2.9305	14.600	4.800	2.0	Tuesday	3	25
	91	W of Rexburg	Urban Major	S	53	67	46	81	42	52	141	200	2.9305	21.900	1.200	2.0	Tuesday	2	100
	92	Rexburg	Rural Minor	W	103	124	13	26	43	53	159	203	2.9305	28.066	6.667	2.0	Tuesday	2	18