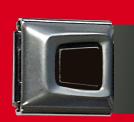


2011 Observational Seat Belt Survey

8 out of 10 Idahoans Buckle Up.







Idaho Observational Seat Belt Survey

2011

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 2011 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 2011 lies between the 72.3% and 85.9%.

2011 Statewide Seat Belt Usage

	Estimated	Standard	Lower 95%	Upper 95%
	Usage	Error	Confidence Limit	Confidence Limit
Statewide	79.1%	3.5%	72.3%	85.9%

2011 Statewide Seat Belt Usage by Vehicle Type

	Estimated Usage	Standard Error	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Passenger Cars	81.0%	3.4%	74.3%	87.6%
Vans & SUV's	83.4%	2.9%	77.7%	89.0%
Pick-Up Trucks	71.2%	4.0%	63.4%	79.0%

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.

2011 Seat Belt Usage by Transportation District

	Estimated Usage	Standard Error	Lower 95% Confidence Limit	Upper 95% Confidence Limit
District 1	71.7%	2.8%	66.3%	77.1%
District 2	86.2%	1.8%	82.6%	89.7%
District 3	93.4%	1.7%	90.0%	96.8%
District 4	66.7%	2.6%	61.6%	71.7%
District 5	60.6%	1.3%	57.9%	63.2%
District 6	68.0%	1.9%	64.3%	71.6%

2011 Seat Belt Usage by County

	Estimated Usage	Standard Error	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Ada	95.5%	1.6%	92.3%	98.6%
Bannock	62.2%	1.2%	59.9%	64.5%
Bingham	55.0%	7.8%	39.7%	70.3%
Blaine	71.4%	3.2%	65.1%	77.7%
Bonner	66.9%	1.3%	64.5%	69.4%
Bonneville	67.3%	2.7%	62.0%	72.5%
Canyon	92.7%	2.2%	88.5%	96.9%
Cassia	56.5%	5.1%	46.6%	66.4%
Elmore	72.8%	4.2%	64.6%	81.1%
Kootenai	75.8%	1.5%	72.9%	78.8%
Latah	81.0%	0.7%	79.7%	82.3%
Madison	68.6%	2.5%	63.8%	73.5%
Minidoka	66.1%	6.3%	53.8%	78.5%
Nez Perce	88.6%	1.7%	85.3%	91.8%
Payette	92.6%	1.1%	90.6%	94.7%
Twin Falls	69.1%	1.5%	66.2%	72.1%

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).

2011 Seat Belt Usage by Types of Road

	Estimated Usage	Standard Error	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Urban	81.0%	4.2%	72.9%	89.2%
Rural	74.4%	3.7%	67.2%	81.6%

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	76.6%	3.9%	69.1%	84.2%
Minor	83.6%	5.7%	72.4%	94.9%

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	83.9%	6.9%	70.4%	97.4%
Urban Minor	79.1%	4.8%	69.6%	88.6%
Rural Major	82.4%	5.0%	72.6%	92.1%
Rural Minor	72.1%	3.9%	64.4%	79.8%

2011 Seat Belt Usage by Functional Classification

	Estimated Usage	Standard Error	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Rural				
Interstate	89.1%	2.8%	83.7%	94.5%
Principal Arterial	81.5%	5.3%	71.1%	91.9%
Minor Arterial	75.6%	3.0%	69.7%	81.5%
Major Collector	59.8%	4.2%	51.5%	68.1%
Minor Collector	44.8%	3.2%	38.6%	51.1%
Local	83.5%	4.1%	75.5%	91.4%
<u>Urban</u>				
Interstate	97.5%	1.3%	95.0%	100.0%
Principal Arterial	77.0%	4.9%	67.4%	86.7%
Minor Arterial	78.4%	5.6%	67.4%	89.4%
Collector	73.8%	3.1%	67.7%	79.8%
Local	93.1%	3.6%	86.1%	100.1%

2011 Seat Belt Usage by Day of the Week

	Estimated Usage	Standard Error	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Sunday	74.5%	1.4%	71.9%	77.2%
Monday	79.1%	4.8%	69.6%	88.6%
Tues day	75.0%	4.0%	67.1%	82.9%
Wednesday	78.0%	3.1%	72.0%	84.1%
Thurs day	80.3%	9.6%	61.5%	99.0%
Friday	79.7%	5.5%	68.8%	90.6%
Saturday	90.9%	3.0%	85.0%	96.7%

2011 Usage by Time of Day

	Estimated Usage	Standard Error	Lower 95% Confidence Limit	Upper 95% Confidence Limit
Morning (7 - 11)	87.8%	3.6%	80.7%	94.8%
Afternoon (11 - 3)	74.9%	3.2%	68.7%	81.1%
Evening (3 - 7)	68.5%	3.1%	62.4%	74.6%

2011 Usage – ITD District by Vehicle Type

Vans and

ITD District	Passenger Cars	Sport Utility Vehicles	Pickup Trucks	All Vehicles
1	72.7%	76.7%	66.2%	71.7%
2	89.5%	91.0%	76.1%	86.2%
3	94.3%	94.4%	90.4%	93.4%
4	71.8%	76.7%	51.7%	66.7%
5	62.5%	68.6%	47.3%	60.6%
6	71.0%	72.6%	55.0%	68.0%
Statewide	81.0%	83.4%	71.2%	79.1%

2011 Usage - County by Vehicle Type

Vans and

County	Passenger Cars	Sport Utility Vehicles	Pickup Trucks	All Vehicles
Ada	95.5%	96.8%	93.5%	95.5%
Bannock	62.0%	71.0%	52.1%	62.2%
Bingham	64.1%	59.7%	33.0%	55.0%
Blaine	75.1%	81.6%	52.0%	71.4%
Bonner	67.1%	73.7%	62.3%	66.9%
Bonneville	69.7%	72.3%	58.4%	67.3%
Canyon	94.4%	92.7%	90.0%	92.7%
Cassia	64.3%	72.8%	35.7%	56.5%
Elmore	76.9%	74.8%	65.2%	72.8%
Kootenai	76.2%	78.8%	71.6%	75.8%
Latah	87.1%	88.7%	65.5%	81.0%
Madison	71.9%	72.9%	48.6%	68.6%
Minidoka	71.6%	78.8%	48.9%	66.1%
Nez Perce	90.4%	92.2%	81.7%	88.6%
Payette	94.4%	92.8%	90.4%	92.6%
Twin Falls	74.0%	73.3%	60.3%	69.1%

Usage by Observation Site

County	Location	Designated Road	Intersection	Usage
Bonner	1	Cedar (US 95)	at N. 2nd	70.0%
	2	Albeni Rd (US 2)	at SH 57	69.3%
	3	Dufort Rd	at US 95	65.7%
	4	US 95	at Larch	81.5%
	5	Cedar	at Boyer	78.0%
	6	US 2	at Division	83.5%
Kootenai	7	I-90 - Off Ramp	Exit # 7 (SH 41)	56.9%
	8	Mullan Rd	at SH 41	72.4%
	9	SH 41	at SH 53	66.2%
	10	SH 53	at US 95	73.6%
	11	15th Street	at Sherman Ave	80.0%
	12	I-90 - Off Ramp	Exit #14	81.5%
	13	US 95	At SH 53	85.4%
	14	Lincoln Way (US 95)	at Appleway	86.5%
Latah	93	SH 8	at Blaine	74.6%
	94	6th St	at Blaine	84.5%
	95	Jackson St	at 6th St	78.5%
	96	US 95	at Sweet Ave	88.1%
Nez Perce	97	US 12	at 3rd Ave N.	97.0%
	98	Main	at 13th St	92.5%
	99	16th Ave	at 17th St.	87.0%
	100	Powers Ave	at Thain Rd	86.6%
Ada	15	Overland	at Meridian Rd.	95.6%
	16	SH 55	at Floating Feather	99.0%
	17	Collister Dr	at Catalpa Dr	93.5%
	18	Memillan Rd	at Locust Grove	97.0%
	19	Franklin Rd	at Ten Mile	95.5%
	20	I-184 - Off Ramp	Curtis Road Exit	98.6%
	21	Chinden Blvd	at 36th St.	93.6%
	22	Cole Road	at Emerald	96.1%
	23	9th Street	at River St	97.5%
	24	Hayes St	at 13th St	98.5%
	25	N. Liberty	at Fairview	81.3%

2011 Usage by Observation Site - Continued

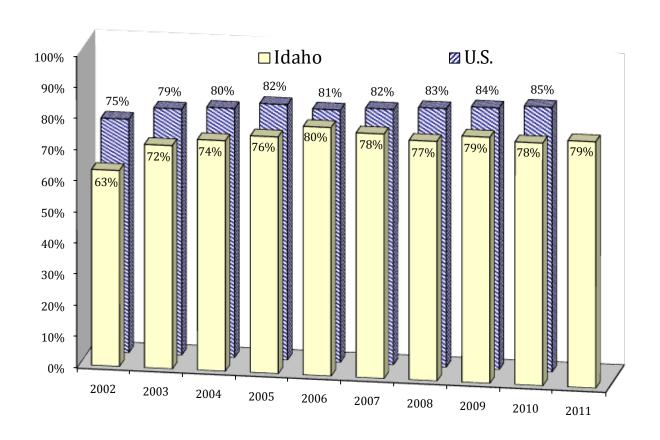
County	Location	Designated Road	Intersection	Usage
	26	Gekeler Rd	at W Boise Ave	92.6%
	27	Eagle Road	at Chinden Blvd	98.5%
	28	Jupiter (Entertainment)	at Overland	93.1%
	29	Adams Rd.	at E 44th St	93.1%
	30	SH 16	Jet w/ SH 44	86.1%
Canyon	31	Linden	at Indiana	93.5%
	32	US 20	at Middleton Rd	96.5%
	33	SH 55	at South 10th Ave	93.5%
	34	Centennial Way	at SH 19	86.0%
	35	I-84 - Off Ramp	Exit # 38-Garrity	95.0%
	36	Amity Rd	at South Side Blvd	94.5%
	37	Greenhurst	at 12th Ave	97.0%
	38	7th Ave	at 3rd St	96.0%
Elmore	39	I-84 Business Loop	at SH 51	62.6%
	40	I-84 - Off Ramp	Exit # 95	93.7%
	41	SH 51	at SH 67	74.8%
	42	American Legion	at 3rd East	63.6%
	43	3rd E St	at 10th N St	64.9%
	44	McMurtrey	at Canyon Creek	70.8%
Payette	45	US 95 (16th St)	at 8th St	92.0%
	46	8th Street	at Center St	93.0%
	47	US 95	at NW 16th St	90.0%
	48	SH 72	at US 30	95.5%
Blaine	67	Gannett Rd	at US 20	75.6%
	68	US 20	at Jct US 93/26	74.6%
	69	US 20	at SH 75	82.1%
	70	Saddle Rd	at Sun Valley Rd	59.3%
	71	Main St (SH 75)	at 1st St	73.2%
	72	Main St (SH 75)	at Bullion St	75.7%
Cassia	49	E. 5th St	at Overland	81.0%
	50	W Main	at Oakly	55.1%
	51	SH 77	at SH 81	49.3%
	52	I-84 - Off Ramp	Exit # 216	80.0%

2011 Usage by Observation Site – Continued

County	Location	Designated Road	Intersection	Usage
	53	200 S.	at SH 27	44.8%
	54	Overland Ave	at 14th St	65.7%
Minidoka	55	I-84 - Off Ramp	Exit #211 Rupert/Heyburn Exit	91.6%
	56	I-84 - Off Ramp	Exit # 201 Paul Exit	82.1%
	57	Overland Rd	at 5th St	77.2%
	58	O St	at 21st St	59.3%
	59	SH 24 (8th St)	at Meridian	77.8%
	60	SH 25	at SH 27	49.3%
Twin Falls	61	3700 N	at US 93	62.8%
	62	Blue Lakes Blvd	at Falls Ave	79.4%
	63	3rd St E (Idaho St)	at 6th Ave E	63.8%
	64	Washington St	at South Park	64.8%
	65	Kimberly Rd (US 30)	at Eastland	64.4%
	66	Eastland Dr	at Orchard	78.1%
Bannock	73	Garrett Way (US 30)	at E Gould St	60.8%
	74	West Quinn Rd	at Poleline Rd	65.1%
	75	I-15 - Off Ramp	Exit # 47 (US 30)	87.0%
	76	S Main	at Benton Rd	58.2%
Bingham	77	Fir St	at US 91	57.5%
	78	US 91	at Fir St	48.6%
	79	W Judicial St	at Broadway	54.8%
	80	I-15 - Off Ramp	Exit # 89	76.5%
Bonneville	81	SH 43 (Ucon Exit US 20)	at SH 43/Yellowstone	70.0%
	82	Sunnyside Dr	at Woodruff Ave	74.8%
	83	Lincoln Rd	at Woodruff Ave	59.5%
	84	US 26	at 15th E (St Leon Rd)	62.0%
	85	Grandview Dr	at Skyline Dr	63.9%
	86	US 20	Riverside - Exit #93	68.2%
	87	N Holmes Ave	at 5th St	59.1%
	88	I-15BL (Exit #113)	at Jct US 91	73.3%
Madison	89	S 2nd E	at E 1st S	71.0%
	90	S 2nd W	at W 2nd S	59.2%
	91	US 20	at SH 33 (Rexburg Exit)	65.2%
	92	E Main St	at Center St	72.0%

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 2009 to 2010 the Idaho observed seat belt usage decreased from 79.2% to 77.9%. This represents a 1.6% decrease in seat belt usage from 2009 to 2010.

Observed Usage - Transportation District by Year

						Ave Yearly
	2007	2008	2009	2010	2011	Change 2007-2011
District 1	87.3%	82.3%	77.2%	71.1%	71.7%	-4.8%
District 2	81.7%	85.2%	82.8%	87.4%	86.2%	1.4%
District 3	87.0%	87.9%	90.7%	93.2%	93.4%	1.8%
District 4	68.5%	71.6%	70.3%	71.0%	66.7%	-0.6%
District 5	62.2%	63.3%	64.7%	62.6%	60.6%	-0.6%
District 6	60.0%	59.6%	66.7%	64.3%	68.0%	3.3%

Observed Usage – County by Year

						Ave Yearly
	2007	2008	2009	2010	2011	Change 2007-2011
Ada	90.5%	91.1%	94.0%	96.9%	95.5%	1.4%
Bannock	65.1%	66.0%	66.7%	65.5%	62.2%	-1.1%
Bingham	54.8%	50.5%	58.0%	54.2%	55.0%	0.5%
Blaine	66.9%	72.7%	69.9%	79.1%	71.4%	2.0%
Bonner	89.8%	86.2%	71.1%	74.0%	66.9%	-6.7%
Bonneville	60.9%	58.7%	65.0%	65.2%	67.3%	2.6%
Canyon	82.9%	86.3%	87.7%	90.2%	92.7%	2.8%
Cassia	68.1%	61.9%	65.6%	60.7%	56.5%	-4.4%
Emore	72.8%	71.3%	72.2%	72.3%	72.8%	0.0%
Kootenai	86.3%	78.1%	82.2%	70.2%	75.8%	-2.7%
Latah	76.7%	81.8%	80.3%	84.7%	81.0%	1.5%
Madison	59.0%	60.7%	68.8%	63.2%	68.6%	4.2%
Minidoka	66.7%	75.2%	66.1%	67.3%	66.1%	0.2%
Nez Perce	84.6%	86.9%	84.0%	89.0%	88.6%	1.2%
Payette	83.4%	82.1%	88.5%	91.3%	92.6%	2.7%
Twin Falls	71.1%	73.7%	75.5%	76.6%	69.1%	-0.5%

Observed Usage – Vehicle Type by Year

						Ave Yearly
	2007	2008	2009	2010	2011	Change 2007-2011
Passenger Cars	81.2%	79.9%	82.7%	80.2%	81.0%	0.0%
SUV's/Vans	83.6%	82.3%	84.5%	82.3%	83.4%	-0.1%
Pickup Trucks	68.6%	65.1%	67.3%	68.3%	71.2%	1.0%
Overall Usage	78.5%	76.9%	79.2%	77.9%	79.1%	0.2%

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 Counti	ies)	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		17.4%	
Rural	29.1%	37.2%	66.3%
Total	45.5%	54.5%	100%

Percentage of Road Mileage

Percentage of ADT

	Major	Minor	Total		Major	Minor	Total
Urban	0.5%	5.7%	6.2%	Urban	63.4%	13.7%	77.1%
Rural	3.7%	90.1%	93.8%	Rural	18.5%	4.4%	22.9%
Total	4.2%	95.8 %	100%	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

i	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:

Weighted Usage =
$$U_W = \Sigma$$
 (AWT * # Observed Using) / Σ (AWT * # Observed)

Where the adjusted weight, AWT = $[(1/(P_{PSU} * P_{SITE})) * LAF * TAF]$ 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 $s=1,2,\ldots,p$. The estimated totals are

Rhat
$$_{s} = Yhat _{s} / Xhat _{s}$$
 where

$$\begin{aligned} &\text{Yhat }_s = \Sigma_{i=1 \text{ to } L} \cdot \Sigma_{j=1 \text{ to } ni} \cdot \Sigma_{k=1 \text{ to } mij} \cdot W_{ijk} \cdot Y_{ijks} & s = 1, 2, ..., p \text{ ($\#$ Using $-$ weighted)} \\ &\text{Xhat }_s = \Sigma_{i=1 \text{ to } L} \cdot \Sigma_{j=1 \text{ to } ni} \cdot \Sigma_{k=1 \text{ to } mij} \cdot W_{ijk} \cdot X_{ijks} & s = 1, 2, ..., p \text{ ($\#$ Observed $-$ weighted)} \end{aligned}$$

The covariance matrix of the vector of estimates Rhat = $\{Rhat_1, Rhat_2, ..., Rhat_p\}$ is estimated by:

Vhat{**Rhat**} =
$$\sum_{i=1 \text{ to } L} (n_i - 1)^{-1} n_i (1 - f_i) \sum_{j=1 \text{ to } ni} (d_{ij.} - dbar_{i..})' (d_{ij.} - dbar_{i..})$$

where

$$\begin{split} & \boldsymbol{d_{ij.}} = \{ \ d_{ij.1} \ , \ d_{ij.2} \ , \ \ldots, d_{ij.p} \ \} \\ & d_{ij.s} = (Xhat^{-1}) \ \Sigma_{k=1 \ to \ mij} \ W_{ijk} \ (\ Y_{ijks} - Rhat_s \ X_{ijks} \) \ , \quad \ s = 1, \, 2, \, \ldots, \, p. \\ & \boldsymbol{dbar_{i..}} = n_i^{-1} \ \Sigma_{i=1 \ to \ ni} \ \boldsymbol{d_{ij.}} \end{split}$$

$$\textbf{Xhats} = \Sigma_{i=1 \text{ to } 1} \ \Sigma_{j=1 \text{ to } ni} \ \Sigma_{k=1 \text{ to } mij} \ W_{ijk} \ X_{ijks} \ , \quad s=1, \, 2, \, ..., \, p.$$

 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

- 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 <u>not</u> 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:

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Idaho Transportation Department
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Boise ID 83707-1129
Steve.Rich@itd.idaho.gov
(208) 334-8116

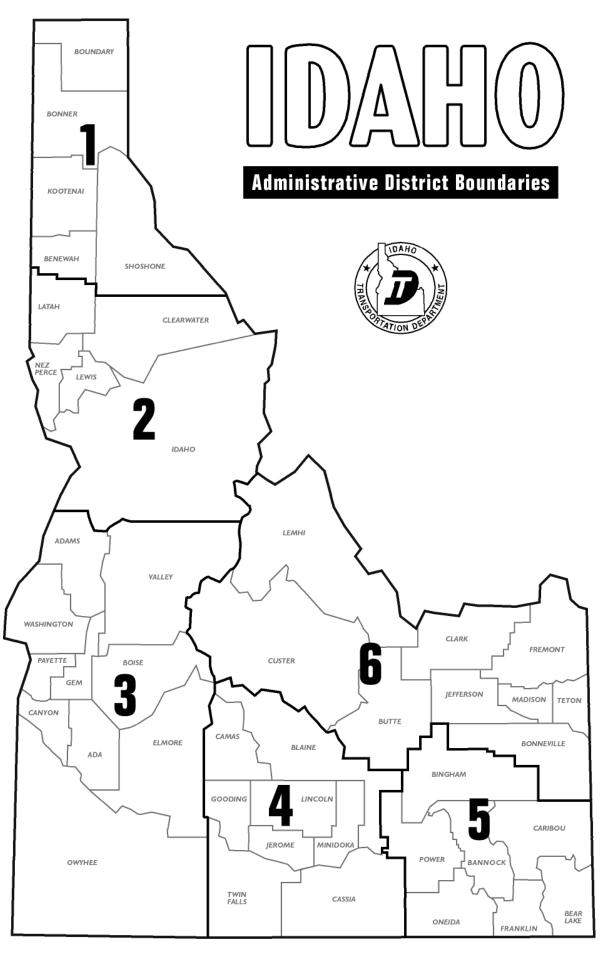
Appendix C

Survey Forms

	M			
Da	ate:			
#	of Lanes O	bserved:		
Er	nd Time:			AM/PM
	CARS	PICK-UPS	SPORT UTILITY / VANS	TOTAL OBSERVED
		Not Res	trained	1
	#	End Time:	# of Lanes Observed: End Time: CARS PICK-UPS Not Res Not Res	# of Lanes Observed: End Time: CARS PICK-UPS SPORT UTILITY /

Appendix D

Idaho Counties and Transportation Districts



Appendix E

Raw Data

District 1

County	Location	Area	Strata	Direction	Cars Using	Cars Observed	Pick-Ups Using	Pick-Ups Observed	Vans/SUV Using	Vans/SUV Observed	Total Using	Total Observed	County Weight	Road Weight	Time Weight	Lane Weight	Day of the Week	Time Period	Time Minutes
Bonner	1	Sandpoint	Urban Minor	W	60	93	33	47	52	67	145	207	1.0000	10.767	1.846	2	Thursday	1	65
	2	Priest River	Rural Major	W	60	86	38	57	44	62	142	205	1.0000	40.850	2.400	1	Thursday	2	50
	3	S of Sandpoint	Rural Minor	E	40	61	55	90	41	56	136	207	1.0000	1120.765	1.333	1	Thursday	2	90
	4	N. Sandpoint	Urban Major	S	61	75	50	64	52	61	163	200	1.0000	5.674	4.000	2	Friday	1	30
	5	Sandpoint	Urban Minor	E	55	71	52	68	49	61	156	200	1.0000	53.295	1.143	1	Friday	1	105
	6	Sandpoint	Urban Major	N.E.	66	77	49	58	52	65	167	200	1.0000	18.053	2.000	1	Friday	2	60
Kootenai	7	E of Post Falls	Urban Major	W	58	103	24	46	34	55	116	204	1.0000	11.468	1.176	2	Tuesday	1	102
	8	Post Falls	Urban Minor	W	65	89	36	53	51	68	152	210	1.0000	570.928	2.000	1	Tuesday	2	60
	9	Rathdrum	Rural Minor	N	57	85	28	48	48	68	133	201	1.0000	9.258	1.846	1	Tuesday	2	65
	10	N of C'DA	Rural Minor	E	57	78	53	74	43	56	153	208	1.0000	14.343	1.333	1	Tuesday	2	90
	11	C'DA	Urban Minor	S	62	76	41	55	57	69	160	200	1.0000	228.371	1.600	1	Wednesday	1	75
	12	C'DA	Rural Minor	E	68	84	36	48	59	68	163	200	1.0000	48.492	2.667	2	Wednesday	2	45
	13	N of C'DA	Rural Major	N	67	77	51	63	52	59	170	199	1.0000	16.350	3.000	1	Wednesday	3	40
	14	C'DA	Urban Major	S	71	83	52	60	50	57	173	200	1.0000	15.052	6.000	2	Wednesday	3	20

Area	ea Strata	Direction	Cars Using	Cars Observed	Pick-Ups Using	Pick-Ups Observed	Vans/SUV Using	Vans/SUV Observed	Total Using	Total Observed	County Weight	Road Weight	Time Weight	Lane Weight	Day of the Week	Time Period	Time Minutes
Moscow	scow Urban Mino	w	60	77	42	65	48	59	150	201	1.5725	18.441	2.105	1	Monday	2	57
Moscow	scow Urban Mino	E	81	91	29	41	59	68	169	200	1.5725	33.254	1.333	1	Monday	2	90
Moscow	scow Urban Majo	S	64	74	41	70	52	56	157	200	1.5725	22.528	3.429	3	Monday	1	35
Moscow	scow Urban Majo	N	71	75	48	62	58	64	177	201	1.5725	12.672	3.243	1	Monday	1	37
					1						1				1		
Lewiston	viston Urban Majo	S	75	77	58	61	63	64	196	202	1.5235	4.749	8.000	2	Sunday	2	15
Lewiston	viston Urban Majo	W	80	87	45	49	60	64	185	200	1.5235	18.844	3.750	1	Sunday	2	32
Lewiston	viston Urban Mino	E	93	106	42	50	39	44	174	200	1.5235	75.814	2.000	1	Monday	1	60
SE Lewiston	Lewiston Rural Minor	W	83	91	42	57	49	53	174	201	1.5235	91.975	2.000	1	Monday	2	60
Lewiston	viston	Urban Minor	Urban Minor E	Urban Minor E 93	Urban Minor E 93 106	Urban Minor E 93 106 42	Urban Minor E 93 106 42 50	Urban Minor E 93 106 42 50 39	Urban Minor E 93 106 42 50 39 44	Urban Minor E 93 106 42 50 39 44 174	Urban Minor E 93 106 42 50 39 44 174 200	Urban Minor E 93 106 42 50 39 44 174 200 1.5235	Urban Minor E 93 106 42 50 39 44 174 200 1.5235 75.814	Urban Minor E 93 106 42 50 39 44 174 200 1.5235 75.814 2.000	Urban Minor E 93 106 42 50 39 44 174 200 1.5235 75.814 2.000 1	Urban Minor E 93 106 42 50 39 44 174 200 1.5235 75.814 2.000 1 Monday	Urban Minor E 93 106 42 50 39 44 174 200 1.5235 75.814 2.000 1 Monday 1

County	Location	Area	Strata	Direction	Cars Using	Cars Observed	Pick-Ups Using	Pick-Ups Observed	Vans/SUV Using	Vans/SUV Observed	Total Using	Total Observed	County Weight	Road Weight	Time Weight	Lane Weight	Day of the Week	Time Period	Time Minutes
Ada	15	S Meridian	Urban Minor	w	90	95	35	39	70	70	195	204	1.0000	117.033	1.622	1	Monday	1	74
	16	NE of Eagle	Rural Major	S	64	64	57	57	77	79	198	200	1.0000	16.803	1.846	2	Monday	1	65
	17	NW Boise	Urban Minor	N	86	93	29	32	72	75	187	200	1.0000	59.257	1.165	1	Monday	2	103
	18	N of Meridian	Rural Minor	E	71	74	45	47	78	79	194	200	1.0000	168.050	1.429	1	Friday	1	84
	19	SW of Meridian	Urban Minor	W	66	69	43	48	84	85	193	202	1.0000	91.790	1.446	1	Saturday	2	83
	20	Boise	Urban Major	E	105	106	49	49	56	58	210	213	1.0000	145.856	4.286	2	Thursday	1	28
	21	Garden City	Urban Major	NW	107	115	32	34	52	55	191	204	1.0000	36.464	3.333	3	Thursday	1	36
	22	Boise	Urban Major	N	107	115	13	13	76	76	196	204	1.0000	46.674	3.243	2	Thursday	1	37
	23	Boise	Urban Major	W	93	96	24	25	79	80	196	201	1.0000	55.564	1.765	3	Thursday	2	68
	24	Boise	Urban Minor	NW	92	93	32	34	73	73	197	200	1.0000	78.022	1.263	1	Friday	2	95
	25	Boise	Urban Minor	S	70	87	21	25	31	38	122	150	1.0000	195.055	1.000	1	Friday	3	120
	26 27	SE Boise	Urban Minor	N N	102 83	109 85	21 40	27 41	64 78	66 78	187 201	202 204	1.0000	57.794 14.403	1.364 4.615	1 2	Thursday	2 2	88 26
	28	S of Eagle Boise	Rural Major Urban Minor	N N	74	85 77	40	51	78 72	78 75	189	204	1.0000	234.066	1.348	2	Saturday Saturday	1	26 89
	29	Garden City	Urban Minor	W	80	88	58	63	51	52	189	203	1.0000	275.371	1.304	1	Friday	2	92
	30	E of Star	Rural Minor	S	73	86	43	48	57	67	173	201	1.0000	33.610	1.791	1	Friday	1	67
Canyon	31	Caldwell	Urban Minor	E	94	97	38	46	55	57	187	200	1.0000	44.073	3.000	1	Wednesday	1	40
	32	E of Caldwell	Rural Major	E	76	77	69	73	48	50	193	200	1.0000	28.975	2.353	1	Wednesday	1	51
	33	S of Caldwell	Rural Major	E	75	80	52	58	60	62	187	200	1.0000	20.215	4.800	1	Wednesday	1	25
	34	Caldwell	Urban Major	S	71	79	40	49	61	72	172	200	1.0000	138.577	2.609	2	Wednesday	1	46
	35	E. Nampa	Urban Major	W	82	86	49	53	59	61	190	200	1.0000	16.789	3.429	2	Tuesday	1	35
	36	Nampa	Urban Minor	W	90	96	43	45	56	59	189	200	1.0000	82.637	2.182	1	Tuesday	1	55
	37 38	Nampa Nampa	Urban Minor Urban Minor	E NE	74 76	76 78	62 54	65 57	58 62	59 65	194 192	200 200	1.0000	46.393 146.910	3.750 1.263	2	Tuesday Tuesday	2 2	32 95
		•									<u> </u>								
Elmore	39	Mtn. Home	Urban Minor	NW	72	80	60	65	52	55	184	200	1.0000	10.048	2.449	1	Friday	3	49
	40	Mtn. Home	Rural Major	E	73	73	58	70	63	64	194	207	1.0000	12.294	2.143	2	Saturday	1	56
	41	SW of Mtn Home	Rural Minor	N	61	77	46	61	44	64	151	202	1.0000	41.826	1.765	1	Friday	2	68
	42	Mtn. Home	Urban Major	E	58	81	32	66	41	59	131	206	1.0000	21.250	3.077	3	Saturday	1	39
	43	Mtn. Home	Urban Minor	S	50	88	30	48	51	66	131	202	1.0000	21.100	1.622	1	Saturday	1	74
	44	Mtn. Home	Urban Minor	W	44	57	21	34	32	46	97	137	1.0000	143.864	1.000	1	Friday	3	120
D	45	P	Udan Maia		72	90	CD		52		104	200	1 2250	11.520	2.440		Manda		40
Payette	45	Payette	Urban Major	S	72	80	60	65	52	55	184	200	1.3350	11.530	2.449	2	Monday	1	49
	46	Payette	Urban Minor	N N	75	79	58	66	53	55	186	200	1.3350	39.415	1.538	1 2	Monday	1	78
	47 48	Fruitland S of New Plymouth	Rural Major Rural Minor	W W	77 67	81 70	58 57	66 60	45 46	53 48	180 170	200 178	1.3350 1.3350	15.600 55.894	3.529 1.000	1	Monday Monday	2 2	34 120

County	Location	Area	Strata	Direction	Cars Using	Cars Observed	Pick-Ups Using	Pick-Ups Observed	Vans/SUV Using	Vans/SUV Observed	Total Using	Total Observed	County Weight	Road Weight	Time Weight	Lane Weight	Day of the Week	Time Period	Time Minutes
Blaine	67	S of Gannett	Rural Minor	S	6	7	11	18	17	20	34	45	1.4820	124.795	1.000	1	Tuesday	1	120
	68	Carey	Rural Major	E	49	57	15	37	39	44	103	138	1.4820	6.500	1.000	1	Tuesday	2	120
	69	S of Bellvue	Rural Major	W	2	2	11	14	10	12	23	28	1.4820	6.882	1.000	1	Monday	1	120
	70	NE Ketchum	Rural Minor	E	39	55	19	57	63	92	121	204	1.4820	18.220	1.319	1	Monday	2	91
	71	Ketchum	Rural Minor	S	41	54	25	54	87	101	153	209	1.4820	6.507	3.636	2	Monday	2	33
	72	Hailey	Rural Minor	N	37	54	28	44	91	108	156	206	1.4820	6.073	4.138	3	Monday	2	29
Cassia	49	Burley	Urban Minor	E	11	12	5	7	1	2	17	21	1.0786	43.203	1.000	2	Thursday	3	120
	50	Burley	Urban Major	E	45	84	32	62	36	59	113	205	1.0786	12.511	1.875	2	Thursday	3	64
	51	Delco	Rural Minor	S	14	21	10	36	10	12	34	69	1.0786	123.571	1.000	1	Wednesday	1	120
	52	Burley	Rural Major	E	34	47	27	35	55	63	116	145	1.0786	6.147	1.000	2	Friday	3	120
	53	S. Burley	Rural Minor	E	9	17	4	21	13	20	26	58	1.0786	86.500	1.000	1	Tuesday	3	120
	54	Burley	Urban Major	N	65	95	20	44	51	68	136	207	1.0786	8.469	3.871	2	Tuesday	3	31
											1		1						
Minidoka	55	Self Explanatory	Rural Major	W	44	47	25	28	29	32	98	107	1.5765	1.692	1.000	2	Wednesday	2	120
	56	Self Explanatory	Rural Major	E	18	20	5	10	9	9	32	39	1.5765	1.353	1.000	2	Friday	2	120
	57	S of I-84 Exit #208	Urban Major	S	77	93	33	56	49	57	159	206	1.5765	7.862	5.217	3	Wednesday	2	23
	58	Heyburn	Urban Minor	N	14	23	9	18	9	13	32	54	1.5765	207.290	1.000	1	Wednesday	2	120
	59	Rupert	Urban Major	S	63	77	38	60	57	66	158	203	1.5765	16.510	1.395	2	Thursday	2	86
	60	Paul	Rural Minor	W	34	53	13	56	20	27	67	136	1.5765	35.549	1.000	3	Thursday	3	120
											1		1				I		
Twin Falls	61	SE of Filer	Rural Minor	w	8	9	14	28	5	6	27	43	1.1720	159.915	1.000	1	Wednesday	1	120
	62	Twin Falls	Urban Major	N	81	97	35	47	46	60	162	204	1.1720	8.423	6.000	4	Wednesday	1	20
	63	Twin Falls	Urban Minor	NE	42	58	11	21	28	48	81	127	1.1720	111.779	1.000	1	Wednesday	2	120
	64	Twin Falls	Urban Minor	S	58	91	30	59	50	63	138	213	1.1720	15.170	3.429	3	Wednesday	2	35
1	65	S.E. Twin Falls	Urban Major	E	38	50	62	110	30	42	130	202	1.1720	11.486	3.000	4	Thursday	1	40
	66	S.E. Twin Falls	Urban Minor	S	45	64	65	84	47	53	157	201	1.1720	49.391	1.071	1	Thursday	1	112

District 5

County	Location	Area	Strata	Direction	Cars Using	Cars Observed	Pick-Ups Using	Pick-Ups Observed	Vans/SUV Using	Vans/SUV Observed	Total Using	Total Observed	County Weight	Road Weight	Time Weight	Lane Weight	Day of the Week	Time Period	Time Minutes
Bannock	73	Pocatello	Urban Major	SE	67	111	34	62	37	54	138	227	1.0000	70.685	2.791	3	Monday	2	43
	74	Pocatello/Chubbuck	Urban Minor	W	80	121	20	39	40	55	140	215	1.0000	91.635	2.609	1	Thursday	2	46
	75	South of Pocatello	Rural Major	S	56	61	64	81	61	66	181	208	1.0000	15.298	1.101	2	Monday	1	109
	76	Pocatello	Urban Minor	NW	66	115	19	46	54	78	139	239	1.0000	64.777	3.636	2	Monday	2	33
																	<u> </u>		
Bingham	77	Shelley	Rural Minor	E	48	72	27	61	40	67	115	200	1.0000	51.603	1.000	1	Thursday	1	120
_	78	Shelley	Rural Minor	SW	50	91	24	65	31	60	105	216	1.0000	23.383	1.600	1	Thursday	2	75
	79	Blackfoot	Urban Minor	NE	75	116	13	50	27	44	115	210	1.0000	73.404	2.143	2	Sunday	3	56
	80	SW of Blackfoot	Rural Major	NW	45	56	15	21	28	38	88	115	1.0000	6.447	1.000	1	Sunday	2	120

County	Location	Area	Strata	Direction	Cars Using	Cars Observed	Pick-Ups Using	Pick-Ups Observed	Vans/SUV Using	Vans/SUV Observed	Total Using	Total Observed	County Weight	Road Weight	Time Weight	Lane Weight	Day of the Week	Time Period	Time Minutes
Bonneville	81	Ucon	Rural Minor	E	52	69	28	50	60	81	140	200	1.0000	81.616	1.304	1	Wednesday	1	92
	82	Ammon	Urban Major	W	57	78	25	38	69	86	151	202	1.0000	20.105	7.059	1	Wednesday	2	17
	83	Idaho Falls	Urban Major	E	55	94	27	55	40	56	122	205	1.0000	24.848	5.714	3	Wednesday	2	21
	84	Idaho Falls	Urban Major	SW	53	85	38	67	38	56	129	208	1.0000	23.279	3.158	2	Wednesday	3	38
	85	Idaho Falls	Urban Minor	E	58	83	33	66	38	53	129	202	1.0000	39.262	2.353	1	Friday	1	51
	86	Idaho Falls	Urban Major	NE	65	94	34	55	38	52	137	201	1.0000	20.105	3.077	2	Friday	1	39
	87	Idaho Falls	Urban Minor	S	38	65	40	72	45	71	123	208	1.0000	52.350	4.615	2	Friday	1	26
	88	S of Idaho Falls	Rural Major	E	70	90	38	59	40	53	148	202	1.0000	153.045	2.667	1	Friday	2	45
											1								
Madison	89	Rexburg	Urban Minor	N	98	133	5	16	39	51	142	200	2.9305	40.216	4.444	1	Tuesday	3	27
	90	Rexburg	Urban Major	S	71	116	8	32	47	65	126	213	2.9305	14.600	5.000	2	Tuesday	3	24
1	91	W of Rexburg	Urban Major	S	57	80	28	65	46	56	131	201	2.9305	21.900	1.224	2	Tuesday	2	98
	92	Rexburg	Rural Minor	W	81	108	26	36	42	63	149	207	2.9305	28.066	5.217	2	Tuesday	2	23