



Buckle Up

YOU'RE WORTH EVERY CLICK.

VERMONT

2022 SAFETY BELT USE STUDY

STATEWIDE
OBSERVATION RESULTS

Vermont State
Highway Safety Office
Agency of Transportation
<https://shso.vermont.gov>
November 2022





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HIGHEST RATE REACHED BY THE STATE

90.4%

2022 Vermont
Seat Belt Use Rate



Background

This report summarizes the results of the 2022 Vermont Safety Belt Use Study. The Vermont Agency for Transportation contracted Preusser Research Group, Inc. (PRG) to collect roadside observations and prepare a final report on analyzed results for Vermont's Click It or Ticket (CIOT) seat belt campaign in 2022. This national campaign is conducted annually by the National Highway Traffic Safety Administration (NHTSA) when two weeks of heightened CIOT enforcement and media focus on CIOT surround the Memorial Day holiday. The procedures used for this study design followed Federal Register Guidelines as outlined by 23 CFR Part 1340 (Uniform Criteria for State Observational Surveys of Seat Belt Use).

The state of Vermont first participated in a multi-state pilot of CIOT in 2002. Seat belt use rate was stable at approximately 85 percent between 2009 and 2015 before dropping to 80 percent in 2016. Figure 2 shows that during the same period, the U.S. national rate increased progressively. Since 2018, Vermont's rate has been substantially higher, nearing the 90 percent use rate goal prescribed by NHTSA. Over the last three years Vermont's rate has been slightly below the rising national rate but has been slowly closing the gap (see Figure 2), reaching 90.4 percent in 2022, the highest rate ever in the State.

FIGURE 1

VERMONT STATEWIDE SEAT BELT USE 2008-2022 (WEIGHTED)

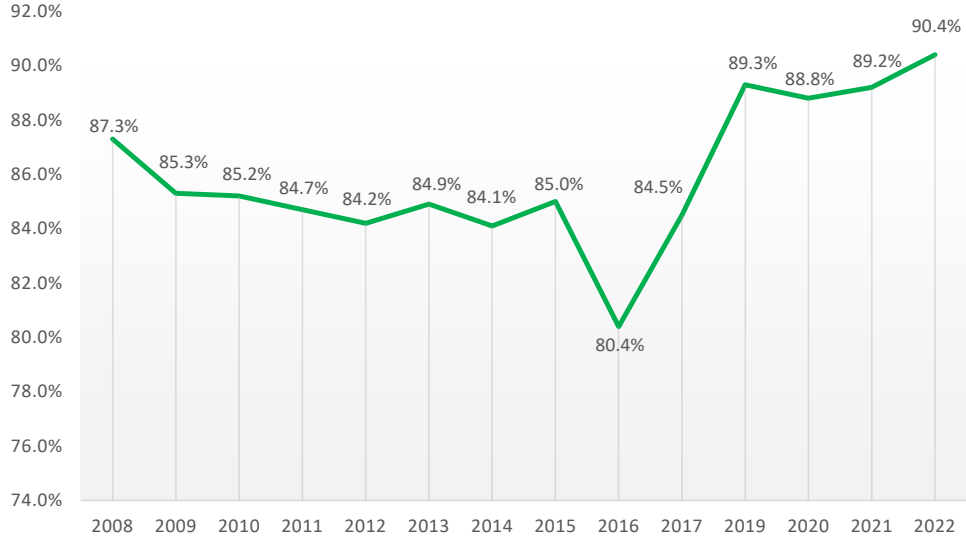
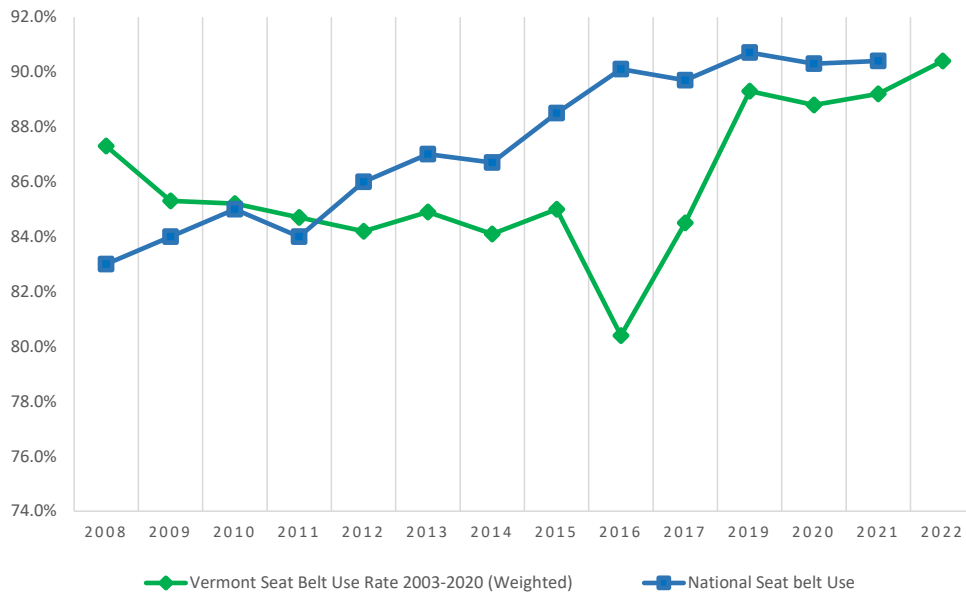


FIGURE 2

VERMONT STATEWIDE VS. NATIONAL SEAT BELT USE 2008-2022 (WEIGHTED)



Note: the 2022 national rate was unavailable at the time of this report.



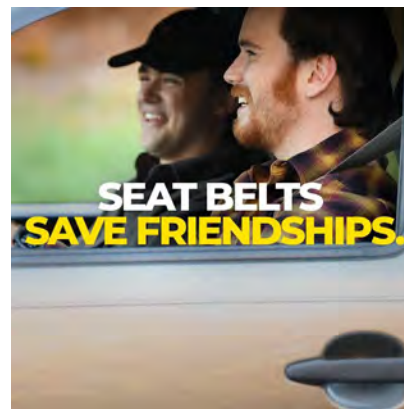
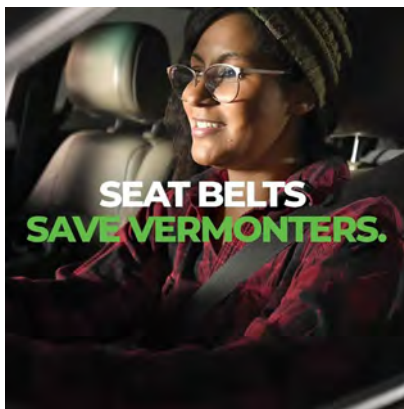
The State of Vermont uses the data from this report to direct occupant protection program efforts throughout the coming year. Vermont developed and funded a CIOT Enforcement Task Force, which is periodically deployed across the major roadways in low seat belt use areas as identified by seat belt observation results.



Program DESCRIPTION

NHTSA's high-visibility enforcement (HVE) model is a frequently used and proven strategy to change driver behavior and enhance the effect of traffic laws. With this model, program funds pay for law enforcement overtime hours, resulting in heightened levels of seat belt specific enforcement activity and an overall increase of the number of issued seat belt citations. Targeted media advertising during the campaign educates the public about laws and associated fines while also publicizing increased law enforcement efforts. This type of effort is designed to increase the public's perceived likelihood of receiving a ticket and increases their perceptions of enforcement severity, both thought to impact adherence to the law.

The program media included use of the CIOT slogan and logo. Paid media included television, radio, and online advertising as well as highway billboard signage. Seat belt observational surveys were conducted from June 6 to 16, 2022 immediately following the conclusion of the May national CIOT program.



DRIVE WELL VERMONT CAMPAIGN
<https://drivewell.vermont.gov/>



Data COLLECTION METHODS

Three PRG staff members, hired and trained by PRG, participated in the 2022 daytime observations, each with extensive seat belt observation experience in addition to field instruction and multiple training sessions. Training was conducted in the weeks leading up to the start of observations. Prior to any data collection, all observers went through a refresher course where the procedures were reviewed in a training session that included on-street practice. Training provided additional procedures to guide observers should a site be temporarily unusable (e.g., due to bad weather or temporary traffic disruption), unusable during this survey period (e.g., due to construction), or permanently unusable (unsafe or unobservable). These observers, working alone, performed all field data collection for this evaluation.

Daytime observations were conducted between 7:00 a.m. and 6:00 p.m. seven days a week. Each county's observations were conducted in four clusters, with roughly five sites scheduled for each day. The first observation site of the day was randomly selected from the cluster of sites; subsequent sites were assigned in an order which provided balance by type of site and time of day while minimizing travel distance and time. For each site, the schedule specified time of day, day of week, roadway to observe, and direction of traffic to observe. Time of day was specified as one of five time periods, 7:00 – 9:00 a.m., 9:00 – 11:00 a.m., 11:00 a.m. – 2:00 p.m., 2:00 – 4:00 p.m., and 4:00 – 6:00 p.m., with a 45-minute observation period to take place for each individual site within the timeframes noted.

Observation sites were mapped in advance by the project manager. Mapping helped to identify geographic location of sites as well as the target day for observation. Advanced mapping preparation enabled observers to plan trips well ahead of time, thereby increasing efficiency in travel and labor. Each scheduled observer used GPS to reach all site locations, then referred to individual maps for instructions on where to park and stand.

In 2018, Vermont opted to redesign their survey and this new format was used in the 2022 survey. PRG conducted the redesign and submitted all new site information to NHTSA for approval. The newest design was kept as similar as possible to the previous year, but a change was made to allow weighting and site selection to be based primarily on traffic volume. The previous design, while adequate and approved, had the disadvantage of having a small number of rural/low traffic volume sites having a relatively large influence on the overall seat belt use rate. The sites used for the 2022 observations were identical to those used in the 2021 observations. More information on statistical sampling methodology and overall sample weight calculations is available upon request.

Seat belt use was observed for 45 minutes at each site. All data were recorded on a paper form (see Appendix A for sample form), noting vehicle type, driver and passenger sex, and seat belt use. Observers recorded belt use by marking the form appropriately for each person in each vehicle.

OCCUPANTS WERE RECORDED AS:



BELTED IF THE SHOULDER BELT WAS IN FRONT OF THE PERSON'S SHOULDER;



UNBELTED IF THE SHOULDER BELT WAS NOT IN FRONT OF THE PERSON'S SHOULDER;



UNKNOWN IF IT COULD NOT REASONABLY BE DETERMINED WHETHER THE DRIVER OR RIGHT FRONT PASSENGER WAS BELTED.



All passenger vehicles (cars, pickups, vans, and SUVs) with a gross vehicle weight up to 10,000 pounds were observed in the survey including small commercial vehicles. Emergency vehicles (police, ambulance, fire department) were not observed. The target population was all drivers and right front seat passengers of vehicles traveling on public roads. Middle seat passengers and children harnessed in child safety seats were excluded from the observations.



Vehicles to be observed were selected by identifying a reference point far enough down the road so that the vehicle, but not the driver, could be identified. This procedure ensures that the next vehicle to be observed was randomly selected from the traffic stream without prior knowledge of seat belt use. Only one vehicle at a time was recorded. Once the data for the selected vehicle was recorded, the observer would start recording data from the next vehicle to pass the reference point. Traffic direction was selected based on safest observation point determined during the 2018 survey. Observations conducted for subsequent surveys (2022 included) used that same direction and location to maintain consistency.

Quality control monitors made random, unannounced visits to at least five percent of the observation sites. During these visits, the quality control monitor evaluated the observer's performance from a distance. The quality control monitor ensured that the observer arrived on time at assigned sites, stood at the designated observation location, and carried out vehicle observations of seat belt use for the required time period.

Field coordinators developed all observer schedules, provided detailed maps and site descriptions for observation locations, and served as the main points of contact during the data collection period. Field coordinators were available to address observer questions as needed regarding observation method, unexpected site issues, etc.

Completed observation forms were sent to PRG where data was entered using Microsoft Excel and/or Statistical Package for Social Science (SPSS). Data verification procedures included 10 percent entry checks to assess entry accuracy across all data entry forms, and variable frequency counts to identify erroneous entry values or outliers. Data weights were applied, and confidence interval estimations were conducted on the data using the same procedures as used in 2018. Unweighted data was used for all report results and tables. The reported analyses consisted of simple chi-square tests.



Results

Data collection was conducted between June 6 and June 16, 2022, at 89 sites across the State. See Appendix B for a Google Maps overview of pinned locations. Three observers gathered observation data from 8,929 vehicles and 11,035 occupants including 8,929 drivers and 2,106 front seat passengers. Drivers accounted for 80.9 percent of persons observed. Vermont drivers and front outboard passengers had a combined weighted seat belt use of 90.4 percent. The standard error rate was 0.815 percent, below the 2.5 percent threshold required by NHTSA. The total incidence of unknown observations was less than one percent (0.02 %) for all observations statewide, satisfying another NHTSA requirement.

Rates for 2008-2022 (all occupants, weighted) are shown in Table 1. A considerable drop in use was observed in 2016. The 2017 use rate of 84.5 percent represents a return to a rate more consistent with those prior to 2016. The 2018 rate was much higher than any previous years' rate and that trend continued through 2022. It is unclear whether the state experienced a significant increase in use or if the new sampling plan resulted in a higher measured use (or both). Non-weighted raw counts and use rates by site location are provided in **Appendix C** and **Appendix D**.

TABLE 1

ANNUAL WEIGHTED SEAT BELT USE RATES 2008-2022 [% BELTED]

2008	2009	2010	2011	2012	2013	2014
87.3%	85.3%	85.2%	84.7%	84.2%	84.9%	84.1%

2015	2016	2017	2018	2019	2020	2021	2022
85.0%	80.4%	84.5%	89.8%	89.3%	88.8%	89.2%	90.4%

Belt use rates for subcategories of driver, vehicle, and road types using raw (i.e., unweighted) data are shown in Table 2. Women has significantly higher belt use than men. This was true for both drivers and passengers. Belt use rate was 8 percentage points higher for women drivers compared to men ($X^2(1) = 135.58, p < .0001$). For passengers, women’s use rate was also 8 percentage points higher than for men ($X^2(1) = 38.21, p < .0001$). Sex differences for all occupants combined was also significant: women’s belt use rate overall was 8 percentage points higher than men’s ($X^2(1) = 182.14, p < .0001$).

Driver belt use across vehicle types revealed a 14-percentage point difference between the highest use rate (cars, at 91.4%) and lowest use (pickup trucks, at 77.5%). Differences in driver seat belt use across vehicle types was highly significant ($X^2(3) = 255.34, p < .0001$). Passenger belt use rates also showed a significant difference across vehicle type ($X^2(3) = 38.66, p < .0001$). For passengers, use rates were highest in SUVs (92.4%) and lowest in pickup trucks (81.6%).

TABLE 2

2022 STATEWIDE UNWEIGHTED SURVEY RESULTS (% BELTED)

Variable	Driver	Passenger	Total
Sex			
Male	84.4%	85.0%	84.5%
Female	92.5%	93.3%	92.7%
Vehicle Type			
Car	91.4%	92.3%	91.6%
Truck	77.5%	81.6%	78.2%
SUV	89.9%	92.4%	90.4%
Van	85.7%	89.3%	86.6%
Time of Week			
Weekday	89.0%	90.7%	89.3%
Weekend	84.3%	89.8%	85.7%

Driver belt use was significantly higher on weekdays than on weekends (89.0% and 84.3%, respectively; $X^2(1) = 33.07, p < .0001$). Passenger belt use did not show a significant difference between weekdays and weekends (90.7% and 89.8%, respectively; $X^2(1) = .52, NS$). For all occupants combined, weekday use rate was significantly higher (+4 percentage points) than weekend use ($X^2(1) = 25.83, p < .0001$).

Driver and passenger belt use rates by county are presented in Table 3. The Franklin/Grand Isle county cluster had the lowest belt use both for drivers (77.2%) and passengers (82.9%). The highest belt use for both drivers and passengers was observed in the Bennington/Addison county grouping (92.3% and 95.0%, respectively). There were significant differences in belt use by county grouping among drivers ($\chi^2(6) = 252.95, p < .0001$), and for passengers ($\chi^2(6) = 34.64, p < .0001$).

TABLE 3

2022 STATEWIDE UNWEIGHTED SURVEY RESULTS BY COUNTY GROUPINGS (% BELTED)

County Grouping	Driver Use	Passenger Use	Total Use
Bennington/Addison	92.3%	95.0%	92.9%
Chittenden	91.5%	92.4%	91.7%
Franklin/Grand Isle	77.2%	82.9%	78.1%
Caldeonia/Essex/Orleans	88.9%	93.3%	89.9%
Rutland	88.8%	88.8%	88.8%
Washington/Lamoille	88.9%	89.7%	89.9%
Windham/Orange/Windsor	91.1%	92.6%	91.4%
Statewide	87.8%	90.4%	88.3%



Discussion AND RECOMMENDATIONS

Vermont's current belt use rate of 90.4 percent is equal to the most recently available national average and just above the NHTSA-imposed target of 90 percent. Continued efforts to further raise seat belt use could include increasing enforcement, increasing awareness of driver license penalty points and fines for unbelted occupants, increasing awareness about the effectiveness of seat belt use in preventing injuries, and informing the public about the higher death rates for unbelted occupants. Populations with the lowest use rates such as males and pickup truck drivers are important target for future programming efforts.

Vermont faces several challenges in achieving seat belt use gains. The state has a largely rural population with pockets of urban areas, resulting in often large variations in use rates from county to county. In addition, several New England states contiguous to Vermont have some of the lowest use rates nationwide. New Hampshire ranked last in belt use for 2021 (75.5%) while Massachusetts ranked second-to-last (77.5%). Counties in Vermont contiguous to those states are prime targets for additional media and enforcement measures particularly for those roadways and communities that straddle state lines.

The introduction of nighttime seat belt use monitoring may shed light on additional areas of focus, as nighttime belt use is typically lower than daytime belt use. For instance, FARS data for the period 2016-2020 shows that belt use by fatally injured occupants of passenger vehicles is indeed much lower in nighttime crashes (30.3% belted) than in daytime crashes (57.9% belted) in the state of Vermont.

The 2022 use rate (90.4%) is 1.2 percentage points higher than the 2021 use rate (89.2%) and the highest rate ever reported by the State. Although the increase from 2021 to 2022 is not statistically significant, it does put Vermont above the 90 percent belt use target prescribed by NHTSA. There has been a positive trend in observed belt use since 2020 and given the progressive increase in belt use rate, it is unlikely that the gains are solely a result of the redesign. Thus, the increase belt use rate likely reflects an actual change in usage. Looking at the recent trend, the method and design currently used has been associated with more stable use rates than what was observed pre-2018.



References

Tilton, S., Sullivan, J., Dowds, J. & Sentoff, K. (2016). Vermont 2016 Annual Seat Belt Use Survey: Final Report. Published by the UVM Transportation Research Center, TRC Report No. 17-001. January 2017.

Chaudhary, N., Chaffe, R. (2017). Vermont 2017 Annual Seat Belt Use Survey: Final Report. Published by the Preusser Research Group, Inc. for the Vermont Agency of Transportation, Governor's Highway Safety Program.



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2022 SAFETY BELT USE STUDY

STATEWIDE OBSERVATION RESULTS

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Prepared for:

**VERMONT STATE HIGHWAY SAFETY OFFICE
AGENCY OF TRANSPORTATION**

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APPENDIX A

Sample Observation Data Collection Form

SITE ID NUMBER: _____ CITY: _____ OBSERVER NAME: _____
 DATE: _____ - _____ - _____ DAY OF WEEK: _____

LOCATION: _____ (Observed Street) _____ (Cross Street or other landmark)

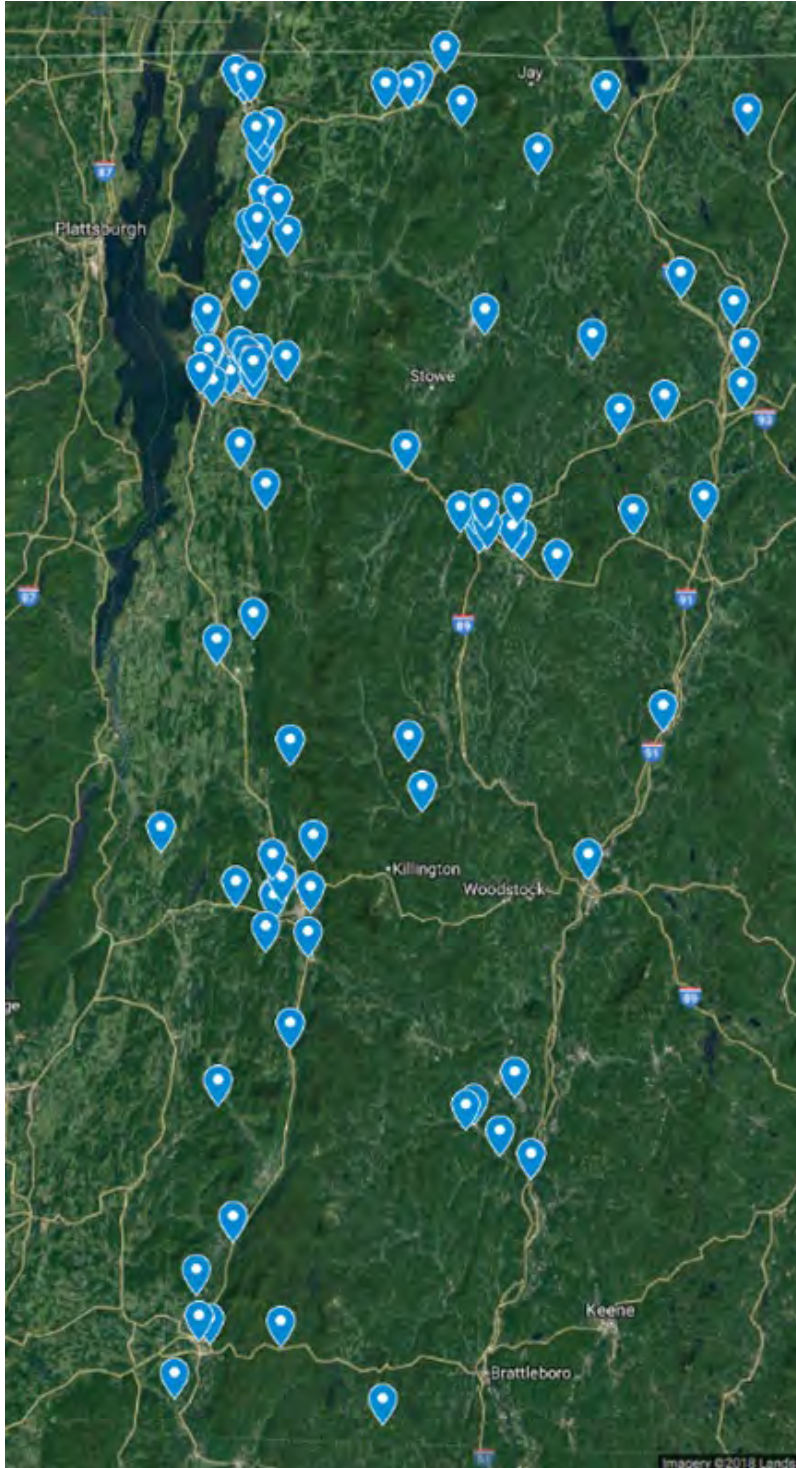
WEATHER CONDITION (circle one): 1) Clear/Sunny 2) Light Rain 3) Cloudy 4) Fog 5) Clear but wet

TRAFFIC DIRECTION: N S E W START TIME (Observation period = exactly 60 minutes): _____ AM / PM

	DRIVER			PASSENGER		DRIVER			PASSENGER	
	Vehicle Type C = Car T = Pick Up S = SUV V = Van	Sex M = Male F = Female U = Unsure	Use Y = Yes N = No	Sex M = Male F = Female U = Unsure	Use Y = Yes N = No U = Unsure	Vehicle Type C = Car T = Pick Up S = SUV V = Van	Sex M = Male F = Female U = Unsure	Use Y = Yes N = No	Sex M = Male F = Female U = Unsure	Use Y = Yes N = No U = Unsure
1						3				
2						6				
3						3				
4						7				
5						3				
6						8				
7						3				
8						9				
9						4				
10						0				
11						4				
12						1				
13						4				
14						2				
15						4				
16						3				
17						4				
18						4				
19						4				
20						5				
21						4				
22						5				
23						1				
24						5				
25						2				
26						5				
27						3				
28						5				
29						4				
30						5				
31						5				
32						6				
33						6				
34						6				
35						7				
						0				

APPENDIX B

Pinned Site Locations (Source: Google Maps)





Raw Seat Belt Use/Observed Counts

Heading Legend:

SID = Observation Site ID Number (internal to study)

TRC ID = Observation site ID for sites observed in 2022

CG = County group

FC = Functional classification of roadway

S = Site status – Primary (P) or Back-up (B)

DVMT = Daily vehicle-miles of travel represented by the road segment

SEGID = Agency of Transportation Segment ID

Route = Agency of Transportation highway designation of roadway

CntSta = Nearest continuous traffic count station

AADT = Annualized Average Daily Traffic

πifr = Probability that a segment is included in its County Group, Functional Classification group, and Segment group

City or Town = Vermont city or town where the count site was located

Date Observed = Date observations were conducted

Driver Belted = Driver was observed wearing a seat belt

Driver Not Belted = Driver was observed not wearing a seat belt

Driver Couldn't Tell = Observer could not determine if driver was wearing a seat belt

Passenger Belted = Passenger was observed wearing a seat belt

Passenger Not Belted = Passenger was observed not wearing a seat belt

Passenger Couldn't Tell = Observer could not determine if passenger was wearing a seat belt

APPENDIX C

Raw Seat Belt Use/Observed Counts

County	Date Observed	Selection Prob.	DRIVERS			PASSENGERS			ALL OCCUPANTS	
			Belted	Not Belted	Couldn't Tell	Belted	Not Belted	Couldn't Tell	Total Belted	Total Successfully Observed
Bennington	6/3/2022	0.82269	69	6	0	17	1	0	86	93
Bennington	6/3/2022	0.82269	69	6	0	17	1	0	86	93
Bennington	6/3/2022	1.00000	56	8	0	11	0	0	67	75
Bennington	6/8/2022	0.09156	56	7	0	16	0	0	72	79
Bennington	6/8/2022	0.18247	73	6	0	39	5	0	112	123
Addison	6/4/2022	0.06473	44	1	0	14	0	0	58	59
Addison	6/3/2022	0.04365	122	4	0	30	1	0	152	157
Addison	6/3/2022	0.09913	100	10	0	19	1	0	119	130
Bennington	6/9/2022	0.03500	13	1	0	1	0	0	14	15
Addison	6/5/2022	0.01828	22	1	0	4	1	0	26	28
Bennington	6/5/2022	0.07816	18	2	0	10	0	0	28	30
Bennington	6/15/2022	0.14849	28	4	0	10	0	0	38	42
Chittenden	6/3/2022	0.41162	268	6	0	27	0	0	295	301
Chittenden	6/5/2022	0.16453	263	6	0	99	1	0	362	369
Chittenden	6/14/2022	0.09144	156	3	0	54	1	0	210	214
Chittenden	6/7/2022	0.02504	93	4	0	22	1	0	115	120
Chittenden	6/3/2022	0.04928	141	9	0	32	1	0	173	183
Chittenden	6/5/2022	0.03812	183	6	0	22	0	0	205	211
Chittenden	6/6/2022	0.22430	235	62	0	80	20	0	315	397
Chittenden	6/5/2022	0.15045	93	34	0	12	3	0	105	142
Chittenden	6/9/2022	0.04220	73	2	0	11	1	0	84	87
Chittenden	6/9/2022	0.08509	114	4	0	25	3	0	139	146
Chittenden	6/7/2022	0.12689	90	29	0	15	4	0	105	138
Chittenden	6/13/2022	0.24922	114	5	0	9	0	0	123	128
Chittenden	6/15/2022	0.24963	36	9	0	6	0	0	42	51
Chittenden	6/15/2022	0.49344	105	5	0	18	1	0	123	129
Chittenden	6/4/2022	0.95838	63	4	0	11	2	0	74	80
Chittenden	6/4/2022	0.22904	26	2	0	11	0	0	37	39
Chittenden	6/15/2022	0.68649	29	3	0	6	0	0	35	38
Franklin	6/16/2022	1.00000	178	37	0	69	12	0	247	296
Franklin	6/16/2022	0.75308	165	28	0	31	5	0	196	229
Franklin	6/7/2022	0.32106	144	41	0	21	4	0	165	210
Franklin	6/8/2022	1.00000	137	22	0	21	4	0	158	184
Franklin	6/4/2022	0.07797	44	20	0	8	3	0	52	75
Franklin	6/6/2022	0.12467	77	26	0	14	2	0	91	119
Franklin	6/4/2022	0.10200	156	44	0	46	6	0	202	252
Franklin	6/6/2022	0.41447	77	37	1	17	3	0	94	134

County	Date Observed	Selection Prob.	DRIVERS			PASSENGERS			ALL OCCUPANTS	
			Belted	Not Belted	Couldn't Tell	Belted	Not Belted	Couldn't Tell	Total Belted	Total Successfully Observed
Franklin	6/6/2022	0.00772	44	23	0	15	7	0	59	89
Franklin	6/5/2022	0.10235	25	13	0	5	0	0	30	43
Franklin	6/7/2022	0.11632	117	42	0	12	4	0	129	175
Franklin	6/15/2022	1.00000	95	19	0	15	0	0	110	129
Franklin	6/3/2022	0.31046	11	9	0	1	0	0	12	21
Franklin	6/4/2022	0.26468	12	7	0	2	1	0	14	22
Franklin	6/4/2022	1.00000	57	13	0	11	4	0	68	85
Franklin	6/4/2022	0.44316	16	15	0	3	2	0	19	36
Franklin	6/16/2022	0.71965	43	18	0	10	5	0	53	76
Caledonia	6/16/2022	0.40602	80	2	0	38	0	0	118	120
Caledonia	6/3/2022	0.64583	31	3	0	10	1	0	41	45
Caledonia	6/14/2022	0.05912	80	8	0	19	0	0	99	107
Caledonia	6/7/2022	0.22106	126	8	0	32	1	0	158	167
Caledonia	6/5/2022	0.08440	57	7	0	12	1	0	69	77
Orleans	6/4/2022	0.07797	35	14	0	14	4	0	49	67
Orleans	6/3/2022	0.06939	39	13	0	27	3	0	66	82
Caledonia	6/6/2022	0.04931	28	2	0	12	0	0	40	42
Orleans	6/7/2022	0.08829	16	5	0	7	1	0	23	29
Caledonia	6/5/2022	0.04417	34	3	0	6	1	0	40	44
Caledonia	6/7/2022	0.21020	140	18	0	32	3	0	172	193
Rutland	6/16/2022	1.00000	77	8	0	14	3	0	91	102
Rutland	6/5/2022	1.00000	176	17	0	36	3	0	212	232
Rutland	6/8/2022	0.10867	77	10	0	20	2	0	97	109
Rutland	6/7/2022	0.09810	68	10	0	23	0	1	91	101
Rutland	6/7/2022	0.17903	204	28	0	49	8	0	253	289
Rutland	6/6/2022	0.34617	46	7	0	17	1	0	63	71
Rutland	6/3/2022	0.16415	75	10	0	10	0	0	85	95
Rutland	6/6/2022	0.08809	14	3	0	2	1	0	16	20
Rutland	6/6/2022	0.02501	19	1	0	7	1	0	26	28
Rutland	6/13/2022	0.20441	30	8	0	4	4	0	34	46
Rutland	6/13/2022	0.10371	54	4	0	8	1	0	62	67
Washington	6/5/2022	0.69805	168	7	0	42	1	0	210	218
Washington	6/14/2022	0.65637	278	9	0	46	1	0	324	334
Washington	6/14/2022	0.37726	48	5	0	11	1	0	59	65
Washington	6/8/2022	0.09954	91	16	0	21	2	0	112	130
Washington	6/6/2022	0.04414	153	36	0	33	14	0	186	236
Washington	6/4/2022	0.00474	155	17	0	42	2	0	197	216
Washington	6/10/2022	0.07207	80	12	0	35	3	0	115	130
Washington	6/10/2022	0.04367	75	6	0	16	0	0	91	97
Lamoille	6/10/2022	0.10782	64	26	0	7	7	0	71	104
Washington	6/13/2022	0.26307	50	4	0	8	0	0	58	62
Washington	6/14/2022	0.11694	91	3	0	10	0	0	101	104
Windsor	6/11/2022	0.06320	280	12	0	42	2	0	322	336
Orange	6/11/2022	0.12110	152	6	0	23	0	0	175	181
Windham	6/11/2022	0.07212	81	12	0	39	2	0	120	134
Windsor	6/11/2022	0.10219	115	20	0	70	4	0	185	209
Orange	6/9/2022	0.13141	74	5	0	23	0	0	97	102
Windsor	6/9/2022	0.05572	49	4	0	22	1	0	71	76
Windham	6/10/2022	0.03432	46	8	0	20	1	0	66	75
Windsor	6/11/2022	0.01248	50	14	0	19	10	0	69	93
Windham	6/10/2022	0.07422	105	15	0	29	4	0	134	153
Windsor	6/6/2022	0.01637	23	1	0	5	0	0	28	29
Windsor	6/13/2022	0.00718	28	1	0	8	0	0	36	37

APPENDIX D

Raw Seat Belt Use Rates by Site

SiteNum	SiteID	City or Town	Driver Raw Use Rate	Passenger Raw Use Rate	Raw Use Rate All Occupants
1101	101BAd	Bennington	92.0%	94.4%	92.5%
1102	102BAd	Bennington	87.5%	100.0%	89.3%
1201	201BAd	Woodford	88.9%	100.0%	91.1%
1202	202BAd	Sunderland	92.4%	88.6%	91.1%
1301	301BAd	Middlebury	97.8%	100.0%	98.3%
1302	302BAd	Middlebury	96.8%	96.8%	96.8%
1303	303BAd	Starksboro	90.9%	95.0%	91.5%
1401	401BAd	Pownal	92.9%	100.0%	93.3%
1402	402BAd	Goshen	95.7%	80.0%	92.9%
1403	403BAd	Rupert	90.0%	100.0%	93.3%
1404	404BAd	Shaftsbury	87.5%	100.0%	90.5%
2101	101CC	South Burlington	97.8%	100.0%	98.0%
2102	102CC	South Burlington	97.8%	99.0%	98.1%
2201	201CC	Williston	98.1%	98.2%	98.1%
2202	202CC	Essex	95.9%	95.7%	95.8%
2301	301CC	Burlington	94.0%	97.0%	94.5%
2302	302CC	Essex	96.8%	100.0%	97.2%
2303	303CC	Cholchester	79.1%	80.0%	79.3%
2401	401CC	Cholchester	73.2%	80.0%	73.9%
2402	402CC	Hinesburg	97.3%	91.7%	96.6%
2403	403CC	Williston	96.6%	89.3%	95.2%
2404	404CC	Cholchester	75.6%	78.9%	76.1%
2501	501CC	Essex Junction	95.8%	100.0%	96.1%
2502	502CC	Milton	80.0%	100.0%	82.4%
2503	503CC	Jericho	95.5%	94.7%	95.3%
2504	504CC	Burlington	94.0%	84.6%	92.5%
2505	505CC	South Burlington	92.9%	100.0%	94.9%
2506	506CC	Burlington	90.6%	100.0%	92.1%
3101	101FGI	Georgia	82.8%	85.2%	83.4%
3102	102FGI	Swanton	85.5%	86.1%	85.6%
3201	201FGI	Swanton	77.8%	84.0%	78.6%
3202	202FGI	Swanton	86.2%	84.0%	85.9%
3301	301FGI	Berkshire	68.8%	72.7%	69.3%
3302	302FGI	Enosburg	74.8%	87.5%	76.5%
3303	303FGI	Fairfax	78.0%	88.5%	80.2%
3401	401FGI	Fairfax	67.5%	85.0%	70.1%
3402	402FGI	St Albans City	65.7%	68.2%	66.3%
3403	403FGI	Montgomery	65.8%	100.0%	69.8%
3404	404FGI	St Albans City	73.6%	75.0%	73.7%
3501	501FGI	Milton	83.3%	100.0%	85.3%

SiteNum	SiteID	City or Town	Driver Raw Use Rate	Passenger Raw Use Rate	Raw Use Rate All Occupants
3502	502FGI	Fairfax	55.0%	100.0%	57.1%
3503	503FGI	Richford	63.2%	66.7%	63.6%
3504	504FGI	Swanton	81.4%	73.3%	80.0%
3505	505FGI	Enosburg Falls	51.6%	60.0%	52.8%
3506	506FGI	St Albans City	70.5%	66.7%	69.7%
4101	101NEK	Ryegate	97.6%	100.0%	98.3%
4102	102NEK	Ryegate	91.2%	90.9%	91.1%
4201	201NEK	St Johnsbury	90.9%	100.0%	92.5%
4203	203NEK	Danville	94.0%	97.0%	94.6%
4301	301NEK	Hardwick	89.1%	92.3%	89.6%
4302	302NEK	Newport	71.4%	77.8%	73.1%
4303	303NEK	Lowell	75.0%	90.0%	80.5%
4401	401NEK	Groton	93.3%	100.0%	95.2%
4402	402NEK	Morgan	76.2%	87.5%	79.3%
4404	404NEK	Lyndonville	91.9%	85.7%	90.9%
4405	405NEK	Lyndonville	88.6%	91.4%	89.1%
5101	101Rut	West Rutland	90.6%	82.4%	89.2%
5102	102Rut	West Rutland	91.2%	92.3%	91.4%
5201	201Rut	North Clarendon	88.5%	90.9%	89.0%
5202	202Rut	Danby	87.2%	100.0%	90.1%
5301	301Rut	Rutland City	87.9%	86.0%	87.5%
5302	302Rut	Benson	86.8%	94.4%	88.7%
5303	303Rut	Rutland Town	88.2%	100.0%	89.5%
5401	401Rut	Proctor	82.4%	66.7%	80.0%
5402	402Rut	West Rutland	95.0%	87.5%	92.9%
5403	403Rut	Castleton	78.9%	50.0%	73.9%
5404	404Rut	Rutland	93.1%	88.9%	92.5%
6101	101WL	Barre	96.0%	97.7%	96.3%
6102	102WL	Berlin	96.9%	97.9%	97.0%
6201	201WL	Cabot	90.6%	91.7%	90.8%
6202	202WL	Barre	85.0%	91.3%	86.2%
6301	301WL	Barre	81.0%	70.2%	78.8%
6302	302WL	Duxbury	90.1%	95.5%	91.2%
6303	303WL	East Montpelier	87.0%	92.1%	88.5%
6401	401WL	Berlin	92.6%	100.0%	93.8%
6402	402WL	Morristown	71.1%	50.0%	68.3%
6403	403WL	Berlin	92.6%	100.0%	93.5%
6404	404WL	Berlin	96.8%	100.0%	97.1%
7101	101WOW	White River	95.9%	95.5%	95.8%
7102	102WOW	Fairlee	96.2%	100.0%	96.7%
7201	201WOW	Chester	87.1%	95.1%	89.6%
7202	202WOW	Concord	85.2%	94.6%	88.5%
7301	301WOW	Chester	93.7%	100.0%	95.1%
7302	302WOW	Orange	92.5%	95.7%	93.4%
7303	303WOW	Stockbridge	85.2%	95.2%	88.0%
7401	401WOW	Halifax	78.1%	65.5%	74.2%
7402	402WOW	Springfield	87.5%	87.9%	87.6%
7403	403WOW	Belows Falls	95.8%	100.0%	96.6%
7404	404WOW	Chester	96.6%	100.0%	97.3%



Buckle Up

YOU'RE WORTH EVERY CLICK.

VERMONT

2022 SAFETY BELT USE STUDY

STATEWIDE
OBSERVATION RESULTS

Vermont State
Highway Safety Office

Agency of Transportation

<https://shso.vermont.gov/>

November 2022