

2017

Montanans' Views on Highway Maintenance: Winter 2016-2017



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Contents

Figures and Tables	2
Acknowledgements	
Executive Summary	
Introduction	
Purpose of the Survey	
Structure of this Report	
Survey Methods	
Respondent Demographic Characteristics	
Overall Road Maintenance	
Specific Aspects of Road Maintenance	12
Resource Priorities	
Statewide	32
MDT Districts	33
Billings	33
Glendive	34
Great Falls	3
Butte	30
Missoula	37
Vehicle Occupant Safety Restraints	38
Primary Seat Belt Law	38
Self-Assessed Seat Belt Use	40
Primary Seat Belt Law for Child Restraint in Motor Vehicles	4
Vehicle Accidents	
Most Frequent Type of Vehicle Collision	
Most Frequent Type of Fatal Crashes	
= '*	



Selected Characteristics of Montana Drivers	44
Open-Ended Feedback to MDT	47
Comparison of 2017 Results to Previous Surveys	50
Works Cited	52
The Questionnaire	53
Figures and Tables	
Figure 1: Overall Maintenance Rating	
Figure 2: Overall Maintenance Importance	
Figure 3: Montana Road Conditions Compared to Other States	
Figure 4: Montana Winter Maintenance of Interstates and State Highways	
Figure 5: Importance of Winter Maintenance of Interstate and State Highways in Montana	
Figure 6: Rating of Winter Maintenance on State Maintained Roads Compared to Other States	
Figure 7: Rating of the SURFACE of Montana's Interstates and State Highways	
Figure 8: Importance of the Smoothness Montana's Interstate and State Highway Surface	16
Figure 9: Ratings of Montana's Interstate and State Highway Roadside Management	17
Figure 10: Importance of Montana Interstate and State Highway Roadside Management	
Figure 11: Rating of the Condition of Montana's Interstate and State Highway Signs	
Figure 12: Importance of the Condition of Montana's Interstate and State Highway Signs	20
Figure 13: Rating of Debris Removal from Montana's Interstate and State Highways	21
Figure 14: Importance of Removal of Debris from Montana's Interstate and State Highways	22
Figure 15: Ratings of Maintenance of Rest Areas on Montana Interstates and State Highways	23
Figure 16: Importance of Rest Area Maintenance on Montana's Interstate and State Highways	24
Figure 17: Ratings of Rest Area Cleanliness and Maintenance in Montana with Other States	
Figure 18: Self-estimated Frequency of Rest Area Use over the Last Year	
Figure 19: Rest Area Maintenance Rating of "Excellent" by Frequency of Use	27
Figure 20: Ratings of Pavement Markings on Montana's Interstate and State Highways	28
Figure 21: Importance of Montana Interstate and State Highway Striping	29
Figure 22: Ratings of Traffic Control during Maintenance on Montana Interstates and State Highways	30
Figure 23: Importance of Traveler Information	31
Figure 24: Level of Support for a Primary Seat Belt Law in Montana	38
Figure 25: Reasons for Opposing a Primary Seat Belt Law	39
Figure 26: Self-Assessed Seat Belt Use	40
Figure 27: Support for a Primary Seat Belt Law for Child Restraint	41
Figure 28: Type of Collision that is Perceived as Most Frequent in Montana	42
Figure 29: Respondent Drives More or Less than 15,000 Miles per Year	44



Figure 30: Estimated Change in Personal Driving Frequency	45
Гable 1: The Survey Respondents	8
Гable 2: Statewide Resource Priorities for Montana Interstate and State Highway Maintenance	32
Гable 3: Billings MDT District Resource Priorities for Montana Interstate and State Highway Maintenance	33
Гable 4: Glendive MDT District Resource Priorities for Montana Interstate and State Highway Maintenance	34
Table 5: Great Falls MDT District Resource Priorities for Montana Interstate and State Highway Maintenand	ce.35
Table 6: Butte MDT District Resource Priorities for Montana Interstate and State Highway Maintenance	36
Table 7: Missoula MDT District Resource Priorities for Montana Interstate and State Highway Maintenance	37
Table 8: Perceived Most Frequent Causes of Fatal Crashes	43
Table 9: Self-reported Use of Various Measures to Mitigate Fuel Cost	46
Table 10: Respondent Suggestions to MDT	47
Table 11: MDT Maintenance Department Functions that Meet or Exceed Expectations	49
Table 12: Comparison of Mean Public Opinion Scores over Time	50



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Dr. Patrick Barkey, Director John Baldridge, Project Manager University of Montana Bureau of Business and Economic Research



Executive Summary

The purpose of the winter 2017 Montana Highway Maintenance Survey is to examine Montanans':

- Perceptions of the current condition and maintenance of the Montana highway system;
- Views about possible maintenance resource priorities for highway system in Montana; and
- Opinions about the quality of highway maintenance MDT provides to its customers.

The survey was administered by telephone and sampling was conducted randomly. The study population was adult (ages 18+) Montanans who live in a household with a working landline or cell phone. The survey was administered from January 3, 2017 through January 29, 2017. 538 Montanans participated in the survey. The sampling error for this survey is plus or minus 4.2 %.

The following bullet points present key findings of this survey:

- More than 7 of every 10 (71.7%) Montanans rated overall highway maintenance good or excellent in the winter of 2017;
- Nearly three-quarters of Montanans (74.7%) rated winter maintenance of Montana's interstates and state highways as good or excellent in 2017;
- Nine of every ten Montanans (90.1%) rated the condition of Montana's interstate and state highway signs as good (57%) or excellent (33.1%);
- Montana interstate and state highway winter maintenance was the highest priority for highway maintenance resources among all Montanans during the winter of 2016-2017, with 69.1% of Montanans rating it as a very high priority;
- More than 7 of every 10 Montanans (72.5%) said that interstate and state highway maintenance was very important to them in the winter of 2017;
- Almost all of Montanans (98.2%) rated winter maintenance of interstate and state highways as either somewhat (14%) or very important (84.2%);
- A majority of adult Montanans (54.5%) supported a primary seat belt law for Montana in the winter of 2017, while 45.5% of Montanans opposed a primary seat belt law;
- The proportion of Montanans that supported a primary seat belt law in 2017 was essentially identical to the proportion that supported a primary seat belt law in 2014 (55%).
- An overwhelming majority of Montanans (93.7%) said in winter 2017 that they support a primary seat belt law for child restraint in motor vehicles;
- The most frequently made specific suggestion for improvement, cited by 9.2% of Montanans in winter 2017, was to call for more snow removal or more snow removal equipment;
- The results of the Winter 2017 Montana Highway Maintenance Survey were remarkably stable when compared to the 2014 Maintenance Survey. Only six of twenty-two comparable measures of public opinion about Montana highway maintenance (27%) changed in 2017 when compared to 2014 results.



Introduction

Purpose of the Survey

The purpose of the winter 2017 Montana Highway Maintenance Survey is to examine Montanans':

- Perceptions of the current condition and maintenance of the Montana highway system;
- Views about possible maintenance resource priorities for highway system in Montana; and
- Opinions about the quality of highway maintenance MDT provides to its customers.

The survey is designed to help MDT policy-makers, planners, and Maintenance Division staff examine the public's opinions about Montana's highway maintenance to better meet current needs and future demands.

The telephone survey, one of several MDT public involvement processes, provides MDT policy-makers, planners, and Maintenance Division staff a scientifically representative sample of Montanans by which to gauge current public opinion. The only way to estimate the proportion of Montanans who hold a particular view about highway maintenance is to conduct a scientifically sampled and administered survey.

Structure of this Report

This report begins with an executive summary which provides a very brief overview of key survey results. After the report's introduction, the reader is provided with a description of the methods used to administer the survey. The report then presents the results of the survey. The detailed presentation of results starts by examining public opinion on overall road maintenance and then the public's views on specific aspects of road maintenance are analyzed. Public opinions about possible maintenance resource priorities for the highway system are then explored at the statewide and MDT District level. Next, several specific topics of interest to MDT and the Maintenance Division are examined, including Montanans' views on vehicle occupant safety restraints and vehicle accidents. Selected characteristics of Montana drivers are then illustrated. Public feedback provided through two open-ended survey questions is examined. The final survey results presented are comparisons of 2017 results to earlier surveys. At the end of this report readers can find a complete copy of the questionnaire used to collect the information presented here.

Within this report's detailed presentation of results each page illustrates the information produced by one survey question. Pages begin with the complete text of the question used to examine the public's opinion about the particular highway maintenance topic. Next on the page readers will find either a detailed chart or table that presents the survey results. Last on the page readers will find a discussion of the survey results presented in the graph or table.

This report presents an extensive set of charts and tables. To determine the difference between group percentages presented, t-tests were calculated. T-test results used the .05 significance level. This means that if this survey were replicated 100 times, in 95 out of 100 survey replications a difference between the group percentages would be found. Differences between group percentages are reported in the discussion section of this report only if the differences are significant at the .05 level.



Survey Methods

The winter 2017 Montana Highway Maintenance Survey is a cross-sectional analysis designed to provide a snapshot of current public opinion. The survey was administered by telephone using a Computer-Assisted Telephone Interviewing (CATI) process and sampling was conducted using a Random-Digit Dial (RDD) process. The list of randomly generated telephone numbers was purchased from Survey Samples International, Inc. (SSI). The study population was adult (ages 18+) Montanans who live in a household with a working landline or cell phone. This population differs from all Montanans as it excludes households without working telephones, the institutional population, and those absent from the state during the survey period.

The survey was administered from January 3, 2017 through January 29, 2017. Of the 2,234 eligible respondents, 538 (24.1 percent) participated in the survey. This response rate is higher than those obtained by most rigorously conducted RDD telephone surveys (Dillman, Smyth, & Christian, 2014).

BBER implemented sampling procedures to mitigate any possible under-coverage bias due to the higher proportion of adults who live in cell-only households. In particular, the survey sample included 1,497 randomly selected cellular telephone numbers and 737 randomly selected landline telephone numbers.

The approximate sampling error for this survey is plus or minus 4.2 percent, or equivalently in 95 of 100 samples a sampled percentage would be within 4.2 percent of the population percentage.

The survey sample was selected randomly and then participation within households was determined randomly using the Kish Table method. If the selected participant was not home an appointment was made to conduct the interview later. Sampled individuals who were out of state for the duration of the survey and individuals with medical conditions precluding participation were ineligible. Additionally, telephone numbers drawn by the RDD process were ineligible if they were out-of-service, fax machines, or businesses. Numbers for which there was no answer were called repeatedly during morning, evening, and weekend hours.

BBER documented case status in a manner that allows calculation and reporting of a unit response rate using the American Association for Public Opinion Research (2016) standard definition (RR3) (American Association for Public Opinion Research, 2016).

Following collection the data were inspected to ensure cleanliness and accuracy. Duplicate cases were eliminated and any interviewer miskeys were corrected. Appropriate data labels were added as well as composite variables and flags to facilitate analysis. Missing values for age, necessary for weighting to U.S. Census Bureau's 2015 5-year American Community Survey (ACS) population totals for persons ages 18+ in Montana, were imputed using the hot deck method which substitutes the responses of similar cases for missing data (U.S. Census Bureau, 2017).

Post-stratification weights were applied to the data. This is a very common data processing technique that has been shown to improve the accuracy of estimates. The data are weighted by MDT District population (ages 18+), age group, sex, and telephone type. In addition to weighting by ACS population totals, BBER used U.S. National Center for Health Statistics modeled estimates of the distribution of household telephone status by state, released in August of 2016, to weight by telephone type (Ganesh & Liu, 2016).



Respondent Demographic Characteristics

The data presented in this report are representative of the population of adult (ages 18+) Montanans who live in a household with a working landline or cell phone as of January 2017. Table 1 below summarizes the demographic characteristics of the respondents to this survey.

Table 1: The Survey Respondents

The Survey Respondents N = 538			
Characteristic		%	
MDT District	Billings	20.5%	
	Glendive	8.3%	
	Great Falls	20.5%	
	Butte	18.6%	
	Missoula	32.1%	
Sex	Female	50.1%	
	Male	49.9%	
Age	18-34	28.7%	
	35-49	22.7%	
	50-64	28.3%	
	65+	20.3%	
Phone Status	Landline only	12.4%	
	Landline mostly	12.3%	
	Dual use	16.3%	
	Cell phone mostly	12.3%	
	Cell phone only	46.6%	

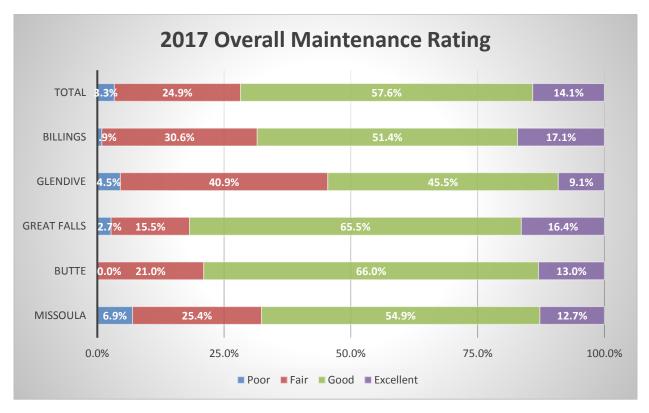
The paragraphs that follow present, in detail, the results of the winter 2017 Montana Highway Maintenance Survey. The presentation begins with an examination of Montanans' general opinions about highway maintenance overall.



Overall Road Maintenance

How would you rate overall interstate and state highway maintenance in Montana?

Figure 1: Overall Maintenance Rating

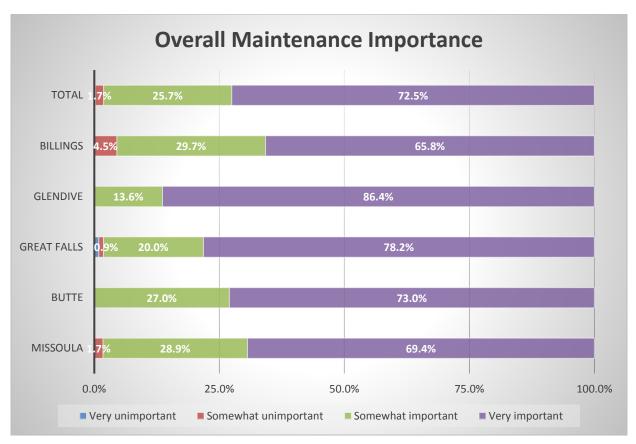


More than 7 of every 10 (71.7%) Montanans rated overall highway maintenance good or excellent in the winter of 2017 (see Figure 1). About one-quarter of Montanans (24.9%) rated it as fair, and only 3.3% gave it a poor rating. The Great Falls (81.9% positive) and Butte (79% positive) districts rated overall maintenance highest. The Glendive district rated overall maintenance lowest (54.6% positive).



And how important would you say interstate and state highway maintenance in Montana is to you?

Figure 2: Overall Maintenance Importance



More than 7 of every 10 Montanans (72.5%) said that interstate and state highway maintenance was very important to them in the winter of 2017 (see Figure 2). Just over one-quarter of Montanans (25.7%) said that maintenance was somewhat important. Very few Montanans said that maintenance was somewhat unimportant (1.7%) or very unimportant (0.2%). Residents of the Glendive district were most likely (84.6%) to say that highway maintenance was very important. Billings district residents were least likely (65.8%) to say that maintenance was very important to them.

How would you compare general roadway conditions of Montana's state maintained roadways with the general roadway conditions of state maintained roadways in other states?

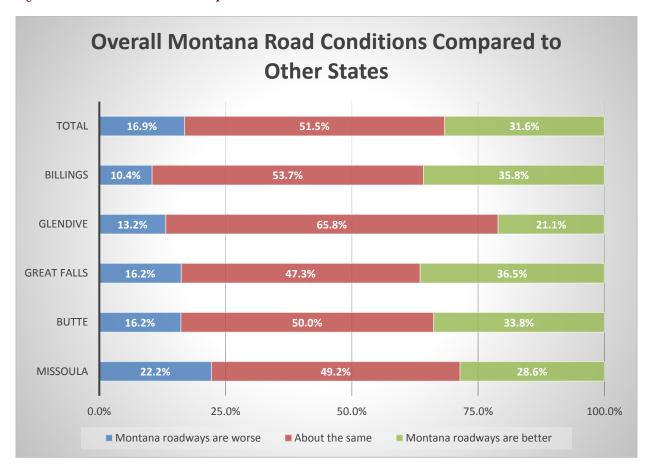


Figure 3: Montana Road Conditions Compared to Other States

About 7 of every 10 Montanans (69.9%) reported having driven in states other than Montana over the 12 months that preceded the survey. Of these Montana residents, a majority (51.5%) said that Montana's roadway conditions were about the same as that found in other states (see Figure 3). In addition, nearly one-third of Montanans (31.6%) said that roadway conditions in Montana were better than other states, while only 16.9% said that Montana conditions were worse than other states. Montana drivers that had driven on other states' roads were generally in agreement across the five districts about Montana road conditions in comparison to other states. None of the differences in comparison percentages between the districts were statistically significant.

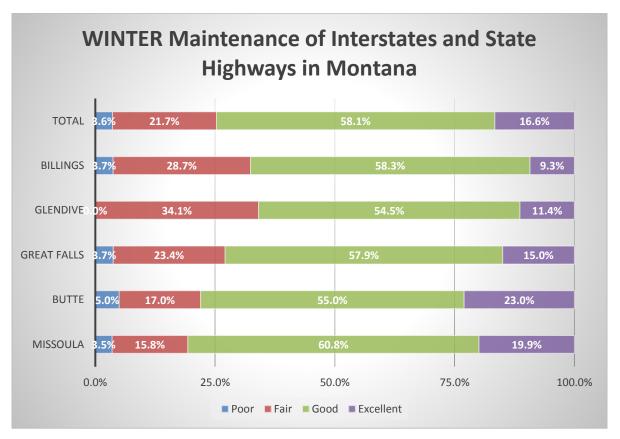
The pages that follow present Montanan's opinions about a wide range of specific aspects of highway maintenance. This presentation begins with an examination of Montanan's views on winter maintenance of interstates and state highways in Montana.



Specific Aspects of Road Maintenance

How would you rate WINTER maintenance of interstates and state highways in Montana?





Nearly three-quarters of Montanans (74.7%) rated winter maintenance of Montana's interstates and state highways as good or excellent in 2017 (see Figure 4 above). Only 21.7% of Montanans rated it as fair, and just 3.6% rated it as poor. There were no statistically significant differences when the responses of the five MDT regions were compared to each other.



And how important would you say interstate and state highway WINTER maintenance in Montana is to you?

Importance of Winter Maintenance in Montana TOTAL 1% .7% 14.0% **BILLINGS** 71.2% **GLENDIVE** 91.1% **GREAT FALLS** 91.8% 7.3% **BUTTE** 13.1% 86.9% **MISSOULA 6** 1.7% 13.4% 84.3% 0% 25% 50% 75% 100% ■ Very unimportant ■ Somewhat unimportant ■ Somewhat important ■ Very important

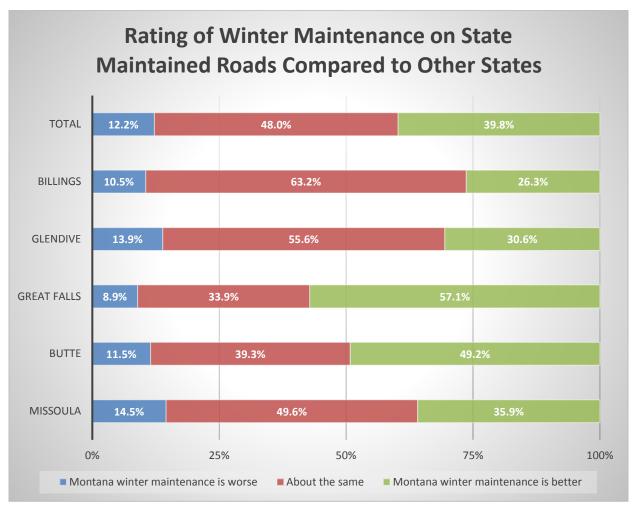
Figure 5: Importance of Winter Maintenance of Interstate and State Highways in Montana

Almost all of Montanans (98.2%) rated winter maintenance of interstate and state highways as either somewhat (14%) or very important (84.2%) to them (see Figure 5). Very few Montanans said that wither maintenance of interstate and state highways was somewhat unimportant (0.7%) or very unimportant (1.1%). Residents of the Great Falls MDT District were most likely to rate winter maintenance as very important (91.8%). In contract, residents of the Billings District were least likely to rate winter maintenance as very important (71.2%).



How would you compare winter maintenance of Montana's state maintained roadways with winter maintenance of state maintained highways in other states?

 $Figure \, 6: Rating \, of \, Winter \, Maintenance \, on \, State \, Maintained \, Roads \, Compared \, to \, Other \, States \, Annual \, Compared \, Compa$

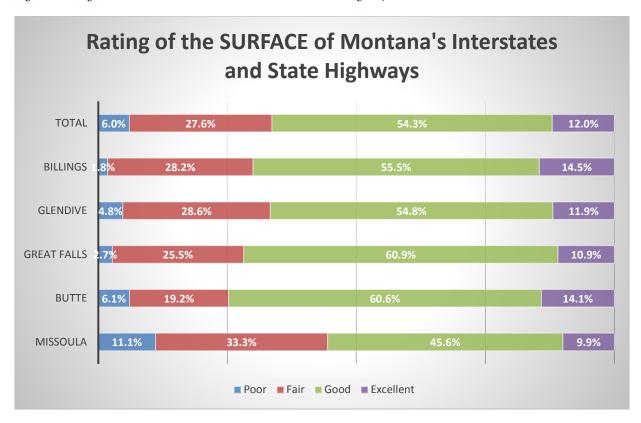


About 7 of every 10 Montanans (69.9%) reported having driven in states other than Montana over the 12 months that preceded the survey. Of these Montana residents, 39.8% rated Montana's winter maintenance as better than in other states, 48% rated it as about the same as in other states, and only 12.2% rated it as worse than in other states (see Figure 6 above). Residents of the Great Falls MDT District were more likely to rate Montana's winter maintenance as better than other states (57.1%) than were residents of the Billings MDT District (26.3%).



How would you rate the SURFACE of Montana's interstates and state highways?

Figure 7: Rating of the SURFACE of Montana's Interstates and State Highways

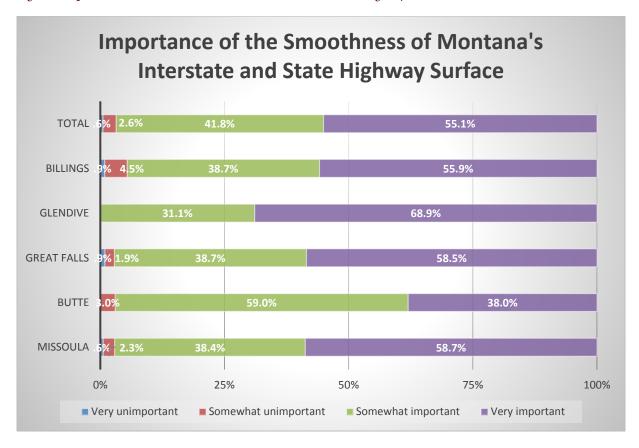


Two-thirds of Montanans (66.3%) rated the surface of Montana's interstates and state highways in 2017 as either good (54.3%) or excellent (12.0%) (see Figure 7). Just over one-quarter of Montanans (27.6%) rated the surface of Montana interstates or state highways as fair. Only 6.0% rated the surface of Montana interstates and state highways as poor. More residents of the Missoula MDT district (11.1%) rated the surface of Montana interstates as poor than did the residents of the Billings MDT district (1.8%).



How important is the SMOOTHNESS of Montana's interstate and state highways to you?

Figure 8: Importance of the Smoothness Montana's Interstate and State Highway Surface

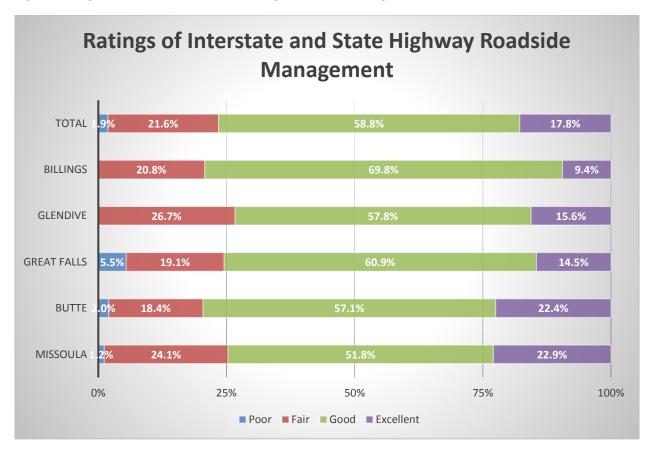


Nearly all Montanans (96.9%) said that the smoothness of the surface of Montana's interstate and state highways is somewhat (41.8%) or very important (55.1%) (see Figure 8). A majority of Montanans in every MDT District except Butte (38%) said that the smoothness of the surface of interstates and state highways is very important. In the Butte district, a majority of respondents (59%) say that the smoothness of the surface of interstate and state highways is somewhat important.



How would you rate the management of interstate and state highway ROADSIDES in Montana?

Figure 9: Ratings of Montana's Interstate and State Highway Roadside Management

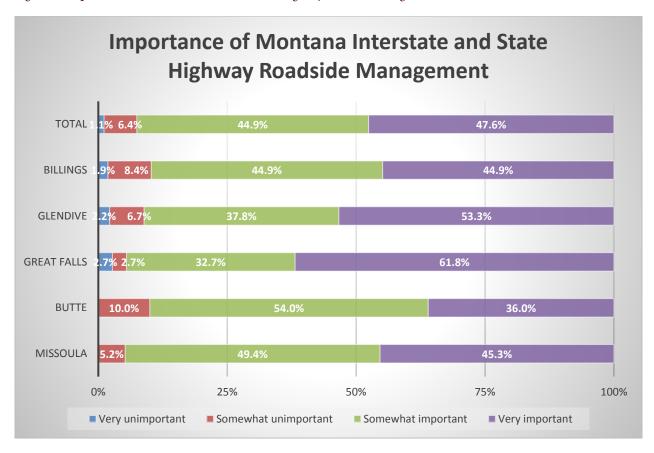


More than three-quarters of Montanans (76.6%) rated the management of Montana's interstate and state highway roadsides as good (58.8%) or excellent (17.8%) (see Figure 9). About one in five Montanans (21.6%) rated roadside management as fair, while only 1.9% rated it as poor. Residents of the Missoula MDT District were more likely (22.9%) to rate roadside management as excellent as were residents of the Billings MDT District (9.4%).



How important is interstate and state highway roadside management in Montana to you?

Figure 10: Importance of Montana Interstate and State Highway Roadside Management

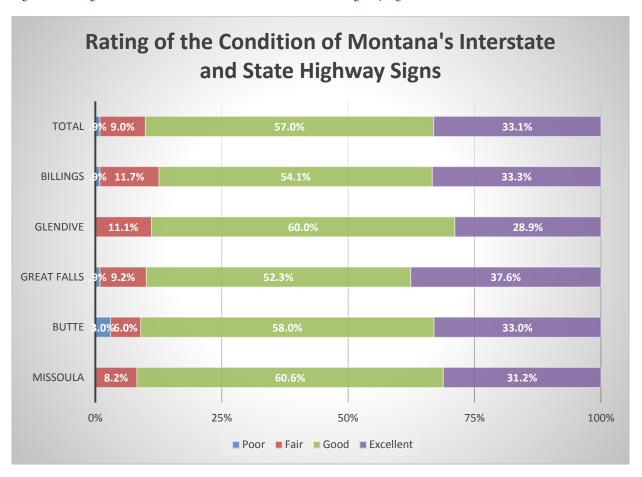


More than nine in ten Montanans (92.5%) said roadside management of Montana's interstate and state highways is somewhat important (44.9%) or very important (47.6%) (see Figure 10). There is a difference between the views of Butte MDT District residents and Great Falls MDT District residents on the importance of roadside management. While 61.8% of Great Falls MDT District residents said that roadside management is very important, only 36% of Butte MDT District residents said that it is very important.



How would you rate the condition of interstate and state highway SIGNS in Montana?

Figure 11: Rating of the Condition of Montana's Interstate and State Highway Signs

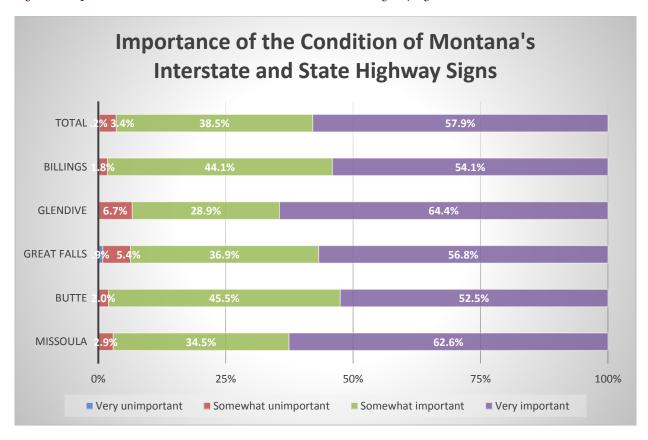


Nine of every ten Montanans (90.1%) rated the condition of Montana's interstate and state highway signs as good (57%) or excellent (33.1%) (see Figure 11). Nine percent of residents rated the condition of signs as fair, while only 0.9% rated the condition of signs as poor. There was no statistically significant difference between the ratings of the condition of signs among the residents of the five MDT districts.



How important is the CONDITION of interstate and state highway SIGNS to you?

Figure 12: Importance of the Condition of Montana's Interstate and State Highway Signs



Almost all Montanans (96.4%) viewed the condition of Montana's interstate and state highways signs as either somewhat important (38.5%) or very important (57.9%) (see Figure 12). Only 3.4% said that the condition of signs was somewhat unimportant, and only 0.2% said it was very unimportant. There was no statistically significant difference between the views on the importance of signs among the residents of the five MDT districts.



How would you rate the REMOVAL of DEBRIS such as litter, road kill, and fallen rocks on Montana's interstates and state highways?

Rating of Debris Removal from Montana's Interstate and State Highways 3.9% 21.3% 21.7% TOTAL **BILLINGS** 5.4% 24.3% 16.2% 25.6% 11.6% **GLENDIVE GREAT FALLS** 46.8% 30.3% 17.4% 22.0% 23.0% **BUTTE** MISSOULA 20.3% 54.1% 21.5% 25% 0% 50% 75% 100% ■ Poor ■ Fair ■ Good ■ Excellent

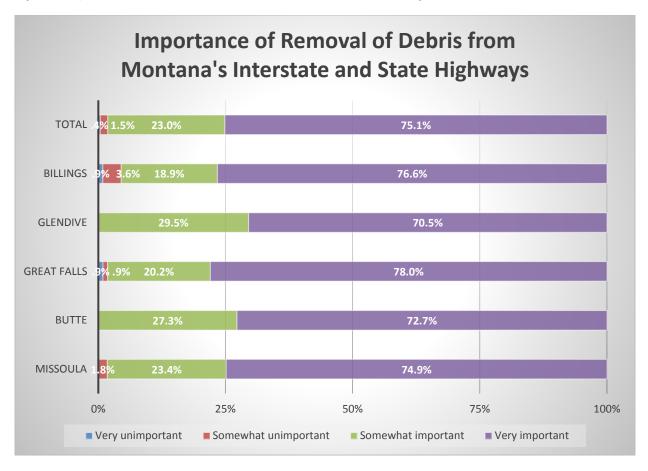
Figure 13: Rating of Debris Removal from Montana's Interstate and State Highways

Almost three-quarters of Montanans (74.8%) rated debris removal from Montana's interstate and state highways as either good (53.1%) or excellent (21.7%) (see Figure 13). Just over one in five Montanans (21.3%) rated debris removal as fair. Only 3.9% rated debris removal as poor. There was no statistically significant difference between the ratings of debris removal among the residents of the five MDT districts.



How important is the REMOVAL of DEBRIS on interstates and state highways in Montana to you?

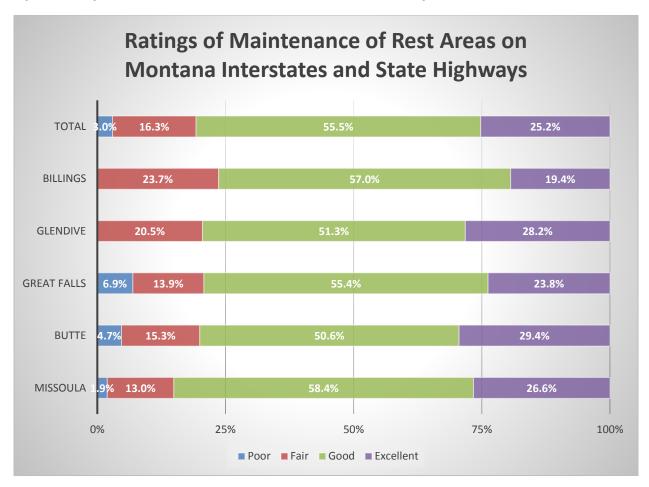
Figure 14: Importance of Removal of Debris from Montana's Interstate and State Highways



Essentially all Montanans (98.1%) view debris removal from Montana's interstate and state highways as either somewhat (23%) or very important (75.1%) (see Figure 14). There was no statistically significant difference between the views on the importance of debris removal among the residents of the five MDT districts.

How would you rate the MAINTENANCE of REST AREAS on Montana interstates and state highways?

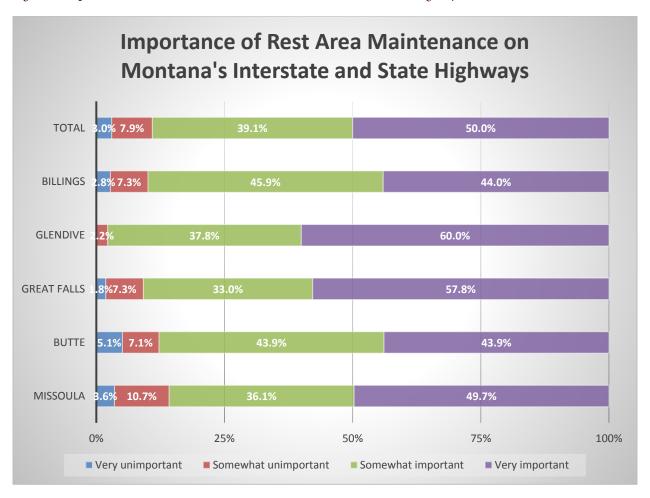
Figure 15: Ratings of Maintenance of Rest Areas on Montana Interstates and State Highways



Four of every five Montanans (80.7%) rated the maintenance of rest areas on Montana interstates and state highways as either good (55.5%) or excellent (25.2%) (see Figure 15). About 16.3% rated rest area maintenance as fair, and only 3% rated it as poor. There was no statistically significant difference between the ratings of rest area maintenance among the residents of the five MDT districts.

How important is interstate and state highway REST AREA MAINENANCE to you?

Figure 16: Importance of Rest Area Maintenance on Montana's Interstate and State Highways



Nearly nine of every ten Montanans (89.1%) view maintenance of rest areas on Montana's interstate and state highways as somewhat (39.1%) or very important (50%) (see Figure 16). Just 7.9% view maintenance of rest areas on Montana's interstate and state highways as somewhat unimportant, and only 3% view it as very unimportant. There was no statistically significant difference between the views on the importance of rest area maintenance among the residents of the five MDT districts.



How would you compare rest area cleanliness and maintenance in Montana with rest area cleanliness and maintenance in other states?

Ratings of Rest Area Cleanliness and Maintenance in Montana with Other States 11.9% TOTAL 52.2% 35.9% **BILLINGS** 7.1% 62.5% **GLENDIVE** 13.8% 55.2% **GREAT FALLS** 15.0% 48.3% 36.7% 19.3% 47.4% 33.3% **BUTTE MISSOULA** 8.2% 50.9% 0% 25% 50% 75% 100% Montana rest areas are worse ■ About the same ■ Montana rest areas are better

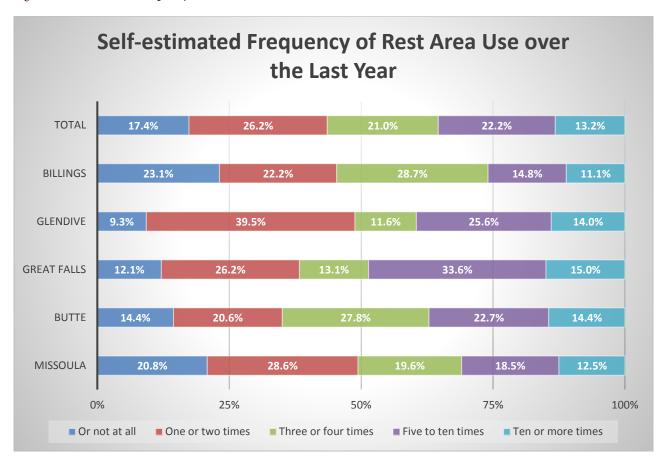
Figure 17: Ratings of Rest Area Cleanliness and Maintenance in Montana with Other States

About 7 of every 10 Montanans (69.9%) reported having driven in states other than Montana over the 12 months that preceded the survey. Of these Montana residents, 35.9% rated rest area cleanliness and maintenance as better than other states and 52.2% rated it as about the same as in other states (see Figure 17). Only 11.9% rated rest area cleanliness and maintenance in Montana as worse than in other states. There was no statistically significant difference between the views on rest area cleanliness and maintenance among the residents of the five MDT districts.



How often did you use the rest areas in Montana in the last 12 months?

Figure 18: Self-estimated Frequency of Rest Area Use over the Last Year

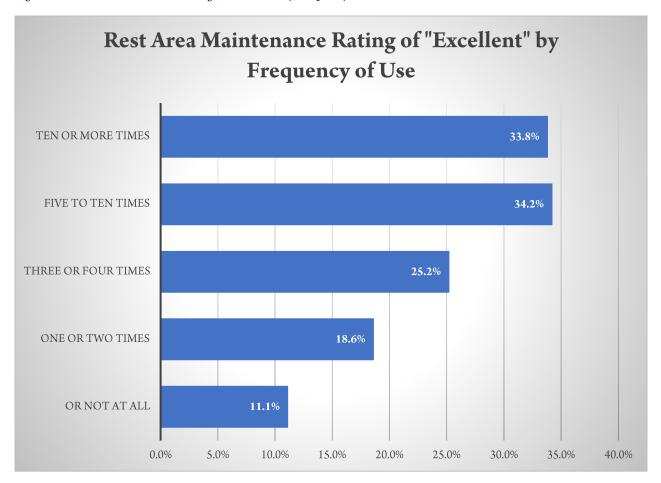


The most common, self-estimated category (26.2%) of past year rest area use reported by adult Montanans in winter 2017 was one or two times per year (see Figure 18). The median, self-estimated rest area use category was three or four times per year. Residents of the Great Falls MDT District were more likely (33.6%) to report using a rest area five to ten time a year than were residents of the Billings District (14.8%) or the Missoula District (18.5%).



In addition, the survey provides evidence that more frequent rest area users rated maintenance of Montana rest areas as better than less frequent users. More than one-third (34.2%) of Montanans who reported using rest areas five to ten times per year rated rest area maintenance as excellent, while only 11.1% of Montanans who used rest areas very little over the last year rated maintenance as excellent (see Figure 19 below).

Figure 19: Rest Area Maintenance Rating of "Excellent" by Frequency of Use



How would you rate the condition of STRIPING or PAVEMENT MARKINGS on Montana's interstates and state highways?

Ratings of Pavement Markings on Montana's Interstate and State Highways TOTAL 14.9% 18.5% **BILLINGS** 61.5% 28.4% 10.1% **GLENDIVE** 22.7% 13.0% 71.3% 11.1% **GREAT FALLS** BUTTE 21.4% 60.2% 15.3% **MISSOULA** 18.7% 56.1% 17.5% 7.6% 25% 75% 0% 50% 100% ■ Poor ■ Fair ■ Good ■ Excellent

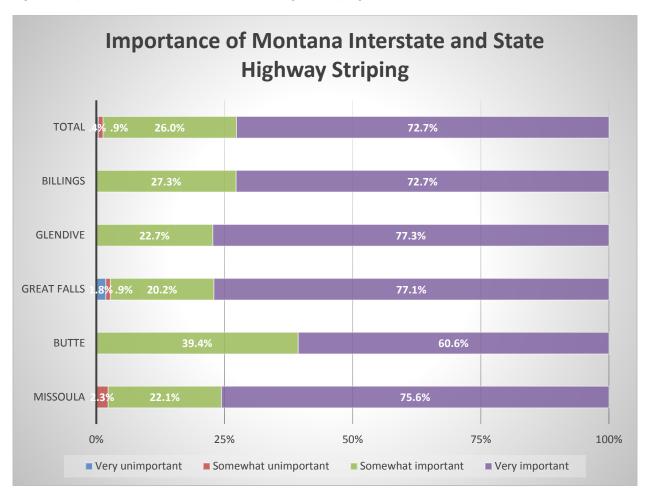
Figure 20: Ratings of Pavement Markings on Montana's Interstate and State Highways

Just over four in every five Montanans (81%) rated the condition of striping or pavement markings on Montana's interstate or state highways as either good (62.5%) or excellent (18.5%) (see Figure 20). About 14.9% rated the condition of striping or pavement markings as fair, and 4.2% rated it as poor. There are differences between the ratings of MDT District residents of the condition of striping or pavement markings on Montana's interstate or state highways. Billings MDT District residents (28.4%) were more likely than Great Falls MDT District residents (11.1%) to rate the condition of striping or pavement markings are excellent. Butte MDT District residents (21.4%) were more likely than Glendive MDT District residents (2.3%) to rate striping or pavement markings as fair. Finally, Missoula MDT District residents (7.6%) were more likely than Billings MDT District residents (0%) to rate striping or pavement markings as poor.



How important is interstate and state highway STRIPING to you?

Figure 21: Importance of Montana Interstate and State Highway Striping



Essentially all of Montanans (98.7%) view striping on Montana's interstate and state highways as either somewhat (26%) or very important (72.7%) (see Figure 21). Only 0.9% view it as somewhat unimportant, and just 0.4% view it as very unimportant. Residents of the Butte MDT District were more likely (39.4%) than either Missoula MDT District residents (22.1%) or Great Falls MDT District residents (20.2%) to view striping on interstate and state highways as somewhat important.

How would you rate the TRAFFIC CONTROL while maintenance crews are WORKING on interstates and state highways?

Ratings of Traffic Control During Maintenance on Montana Interstates and State Highways TOTAL 3.8% 19.1% 55.0% 22.1% 4.7% 15.9% 16.8% **BILLINGS GLENDIVE** 31.8% **GREAT FALLS** 20.2% 53.2% 22.9% 4.0% BUTTE 21.0% 18.0% **MISSOULA** 21.9% 50.3% 24.9% 0% 25% 50% 75% 100% ■ Poor ■ Fair ■ Good ■ Excellent

Figure 22: Ratings of Traffic Control during Maintenance on Montana Interstates and State Highways

More than three-quarters of Montanans (77.1%) rated traffic control while maintenance crews are working on Montana interstate and state highways as either good (55%) or excellent (22.1%) (see Figure 22). Almost one in every five Montanans (19.1%) rated traffic control during maintenance on Montana's interstates and state highways as fair, while 3.8% rated it as poor. There was no statistically significant difference between the ratings of traffic control during maintenance among the residents of the five MDT districts.



How important is TRAVELER INFORMATION such as road and weather condition and construction information to you?

Importance of Traveler Information .9% 6.2% 24.1% TOTAL 67.9% .8% 6.4% 21.1% 69.7% **BILLINGS** 84.4% **GLENDIVE** 65.4% **GREAT FALLS** 6.5% 8.0% 8.1% 21.2% **BUTTE** 67.7% 64.0% **MISSOULA** .3% 5.8% 25% 50% 75% 100% ■ Very unimportant ■ Somewhat unimportant ■ Somewhat important ■ Very important

Figure 23: Importance of Traveler Information

More than nine out of every ten Montanans (92%) view traveler information such as road and weather condition and construction as somewhat (24.1%) or very important (67.9%) (see Figure 23). Just 6.2% view traveler information as somewhat unimportant, and only 1.9% view it as very unimportant. There was no statistically significant difference between the views on the importance of traveler information among the residents of the five MDT districts.

The next section of this report illustrates Montanan's views on possible resource priorities for Montana highway maintenance. The section presents the opinions of Montanan statewide and at the MDT District level.



Resource Priorities

Statewide

Montana interstate and state highway winter maintenance was the highest priority for highway maintenance resources among all Montanans during the winter of 2016-2017, with 69.1% of Montanans rating it as a very high priority. Table 2 below illustrates Montanan's views on the priorities for Montana highway maintenance, in order from highest priority to lowest.

What RESOURCE PRIORITY should be placed on the following maintenance tasks in Montana?

Table 2: Statewide Resource Priorities for Montana Interstate and State Highway Maintenance

Statewide Resource Priorities for Montana Interstate and State Highway Maintenance				
Highway Maintenance Task	Very high	Somewhat high	Somewhat low	Very low
Interstate and state highway winter maintenance	69.1%	29.0%	1.6%	0.3%
Providing accurate and up to date information about the current condition of state maintained highways	53.9%	37.5%	7.4%	1.2%
Debris removal on interstates and state highways	49.0%	42.2%	8.1%	0.7%
Roadway striping on interstates and state highways	44.3%	42.9%	11.9%	0.9%
Rest area cleanliness and maintenance on interstates and state highways	34.3%	48.4%	15.3%	2.0%
Smooth pavement on interstates and state highways	32.9%	56.8%	9.9%	0.4%
Repairing and replacing signs on interstates and state highways	31.6%	47.3%	18.8%	2.3%
Interstate and state highway roadside management in Montana	22.8%	51.6%	24.1%	1.5%

Interstate and state highway roadside management was the lowest priority among all Montanans, with 22.8% rating it a very high priority. However, readers should keep in mind that all of the highway maintenance tasks studied were rated as somewhat high or very high priorities by at least 74.4% of all Montanans. That is, every task studied is a high resource priority to a large majority of Montanans.



MDT Districts

Billings

Montana interstate and state highway winter maintenance was the highest priority for highway maintenance resources among Billings MDT District residents during the winter of 2016-2017, with 60.7% of Billings District residents rating it as a very high priority. Table 3 below illustrates Billings District resident's views on the priorities for Montana highway maintenance, in order from highest priority to lowest.

What RESOURCE PRIORITY should be placed on the following maintenance tasks in Montana?

Table 3: Billings MDT District Resource Priorities for Montana Interstate and State Highway Maintenance

Billings MDT District Resource Priorities for Montana Interstate and State Highway Maintenance				
Highway Maintenance Task	Very high	Somewhat high	Somewhat low	Very low
Interstate and state highway winter maintenance	60.7%	38.5%	0.9%	0.0%
Providing accurate and up to date information about the current condition of state maintained highways	56.2%	38.0%	4.6%	1.2%
Roadway striping on interstates and state highways	47.6%	44.1%	8.3%	0.0%
Debris removal on interstates and state highways	48.0%	36.9%	15.1%	0.0%
Smooth pavement on interstates and state highways	33.6%	57.1%	9.3%	0.0%
Repairing and replacing signs on interstates and state highways	38.3%	51.9%	8.9%	0.9%
Rest area cleanliness and maintenance on interstates and state highways	34.1%	52.2%	13.1%	0.5%
Interstate and state highway roadside management	26.9%	46.2%	26.4%	0.6%

Interstate and state highway roadside management was the lowest priority among Billings District residents, with 26.9% rating it a very high priority. However, readers should keep in mind that all of the highway maintenance tasks studied were rated as somewhat high or very high priorities by at least 73.1% of all Billings District residents.



Glendive

Debris removal from Montana interstate and state highways was the highest priority for highway maintenance resources among Glendive MDT District residents during the winter of 2016-2017, with 63.4% of Glendive District residents rating it as a very high priority. Table 4 below illustrates Glendive District resident's views on the priorities for Montana highway maintenance, in order from highest priority to lowest.

What RESOURCE PRIORITY should be placed on the following maintenance tasks in Montana?

Table 4: Glendive MDT District Resource Priorities for Montana Interstate and State Highway Maintenance

Glendive MDT District Resource Priorities for Montana Interstate and State Highway Maintenance				
Highway Maintenance Task	Very high	Somewhat high	Somewhat low	Very low
Debris removal on interstates and state highways	63.4%	29.9%	4.3%	2.4%
Providing accurate and up to date information about the current condition of state maintained highways	61.0%	36.6%	2.4%	0.0%
Interstate and state highway winter maintenance	56.7%	40.1%	2.1%	1.1%
Roadway striping on interstates and state highways	46.5%	44.7%	8.7%	0.0%
Rest area cleanliness and maintenance on interstates and state	46.4%	41.5%	12.1%	0.0%
Repairing and replacing signs on interstates and state highways	37.8%	42.7%	11.4%	8.2%
Smooth pavement on interstates and state highways	34.0%	57.3%	8.8%	0.0%
Interstate and state highway roadside management	19.7%	60.6%	19.7%	0.0%

Interstate and state highway roadside management was the lowest priority among Glendive District residents, with 19.7% rating it a very high priority. However, readers should keep in mind that all of the highway maintenance tasks studied were rated as somewhat high or very high priorities by at least 80.3% of all Glendive District residents.



Great Falls

Interstate and state highway winter maintenance was the highest priority for highway maintenance resources among Great Falls MDT District residents during the winter of 2016-2017, with 73.8% of Great Falls District residents rating it as a very high priority. Table 5 below illustrates Great Falls District resident's views on the priorities for Montana highway maintenance, in order from highest priority to lowest.

What RESOURCE PRIORITY should be placed on the following maintenance tasks in Montana?

Table 5: Great Falls MDT District Resource Priorities for Montana Interstate and State Highway Maintenance

Great Falls MDT District Resource Priorities for Montana Interstate and State Highway Maintenance				
Highway Maintenance Task	Very high	Somewhat high	Somewhat low	Very low
Interstate and state highway winter maintenance	73.8%	25.0%	0.0%	1.2%
Providing accurate and up to date information about the current condition of state maintained highways	65.3%	28.4%	4.8%	1.6%
Debris removal on interstates and state highways	51.9%	38.6%	7.0%	2.6%
Roadway striping on interstates and state highways	44.5%	43.6%	11.1%	0.8%
Rest area cleanliness and maintenance on interstates and state highways	31.6%	53.7%	12.1%	2.6%
Repairing and replacing signs on interstates and state highways	31.4%	47.7%	20.1%	0.8%
Smooth pavement on interstates and state highways	30.3%	62.8%	5.7%	1.2%
Interstate and state highway roadside management	27.1%	52.4%	19.3%	1.2%

Interstate and state highway roadside management was the lowest priority among Great Falls District residents, with 27.1% rating it a very high priority. However, readers should keep in mind that all of the highway maintenance tasks studied were rated as somewhat high or very high priorities by at least 79.5% of all Great Falls District residents.



Butte

Interstate and state highway winter maintenance was the highest priority for highway maintenance resources among Butte MDT District residents during the winter of 2016-2017, with 72% of Butte District residents rating it as a very high priority. Table 6 below illustrates Butte District resident's views on the priorities for Montana highway maintenance, in order from highest priority to lowest.

What RESOURCE PRIORITY should be placed on the following maintenance tasks in Montana?

Table 6: Butte MDT District Resource Priorities for Montana Interstate and State Highway Maintenance

Butte MDT District Resource Priorities for Montana Interstate and State Highway Maintenance						
Highway Maintenance Task	Very high	Somewhat high	Somewhat low	Very low		
Interstate and state highway winter maintenance	72.0%	23.2%	4.8%	0.0%		
Providing accurate and up to date information about the current condition of state maintained highways	46.5%	40.0%	13.5%	0.0%		
Debris removal on interstates and state highways	38.7%	50.3%	11.0%	0.0%		
Roadway striping on interstates and state highways	37.8%	44.9%	14.3%	3.0%		
Repairing and replacing signs on interstates and state highways	25.8%	46.9%	22.0%	5.4%		
Smooth pavement on interstates and state highways	25.3%	60.5%	14.2%	0.0%		
Rest area cleanliness and maintenance on interstates and state highways	23.2%	50.6%	19.7%	6.5%		
Interstate and state highway roadside management	16.3%	48.9%	31.3%	3.5%		

Interstate and state highway roadside management was the lowest priority among Butte District residents, with 16.3% rating it a very high priority. However, readers should keep in mind that all of the highway maintenance tasks studied were rated as somewhat high or very high priorities by at least 65.2% of all Butte District residents.



Missoula

Interstate and state highway winter maintenance was the highest priority for highway maintenance resources among Missoula MDT District residents during the winter of 2016-2017, with 73% of Missoula District residents rating it as a very high priority. Table 7 below illustrates Missoula District resident's views on the priorities for Montana highway maintenance, in order from highest priority to lowest.

What RESOURCE PRIORITY should be placed on the following maintenance tasks in Montana?

Table 7: Missoula MDT District Resource Priorities for Montana Interstate and State Highway Maintenance

Missoula MDT District Resource Priorities for Montana Interstate and State Highway Maintenance						
Highway Maintenance Task	Very high	Somewhat high	Somewhat low	Very low		
Interstate and state highway winter maintenance	73.0%	25.9%	1.1%	0.0%		
Debris removal on interstates and state highways	50.4%	41.7%	7.9%	0.0%		
Providing accurate and up to date information about the current condition of state maintained highways	47.7%	41.7%	8.8%	1.8%		
Roadway striping on interstates and state highways	44.8%	44.7%	9.9%	0.5%		
Rest area cleanliness and maintenance on interstates and state highways	39.7%	40.1%	19.4%	0.9%		
Smooth pavement on interstates and state highways	35.4%	53.7%	10.9%	0.0%		
Repairing and replacing signs on interstates and state highways	32.0%	45.2%	21.8%	1.0%		
Interstate and state highway roadside management	22.2%	53.8%	22.6%	1.5%		

Interstate and state highway roadside management was the lowest priority among Missoula District residents, with 22.2% rating it a very high priority. However, readers should keep in mind that all of the highway maintenance tasks studied were rated as somewhat high or very high priorities by at least 76% of all Missoula District residents.

The following section of this report examines Montanan's views on vehicle occupant safety restraints. This first set of opinions explored are about a primary seat belt law.

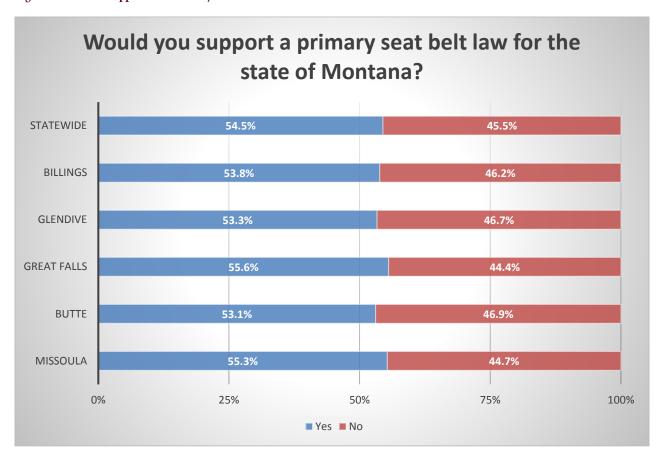


Vehicle Occupant Safety Restraints

Primary Seat Belt Law

Would you support a primary seat belt law for the state of Montana?

Figure 24: Level of Support for a Primary Seat Belt Law in Montana

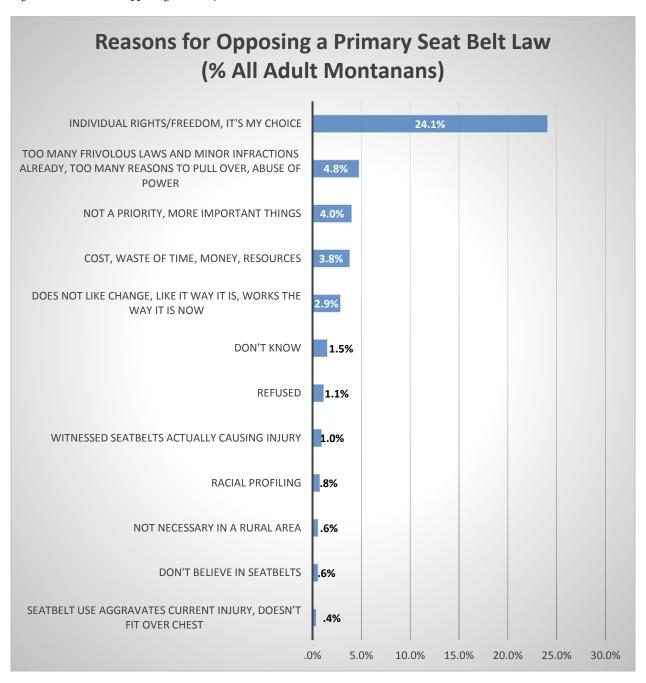


A majority of adult Montanans (54.5%) supported a primary seat belt law for Montana in the winter of 2017, while 45.5% of Montanans opposed a primary seat belt law (see Figure 24 above). In 2014 the MDT Maintenance Survey found that the proportions of support and opposition for a primary seat belt were almost identical to the 2017 proportions: 2014 Yes - 55%, 2014 No - 45%. There was no statistically significant difference in the level of support for a primary seat belt law across any of the five MDT districts.



Could you tell us why you are against a primary seat belt law?

Figure 25: Reasons for Opposing a Primary Seat Belt Law



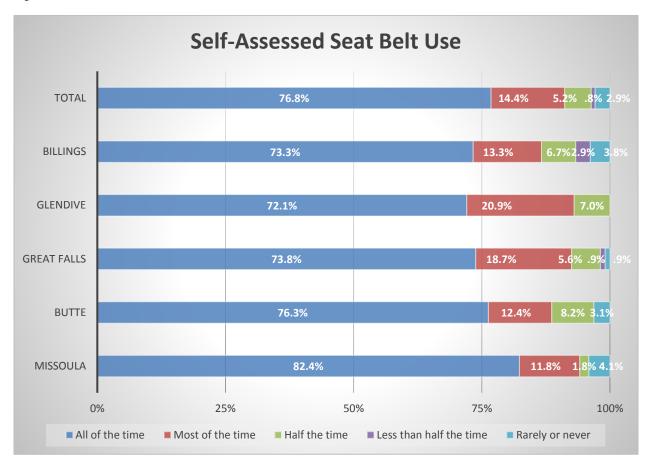
Most Montanans who opposed a primary seat belt law, consisting of 24.1% of all adult Montanans, cited their individual rights or protecting their right to choose whether or not to wear a seat belt as the reason they opposed a primary seat belt law. Figure 25 above lists the reasons cited by opponents of a primary seat belt law for their opposition.



Self-Assessed Seat Belt Use

Which best describes your use of seat belts?

Figure 26: Self-Assessed Seat Belt Use

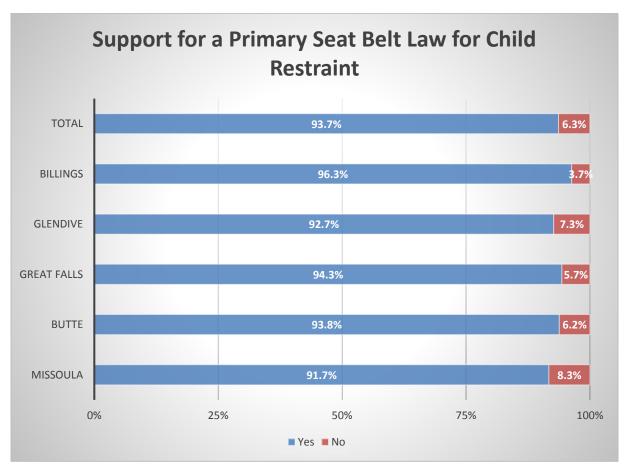


More than three-quarters of Montanans (76.8%) reported in winter 2017 that they use seat belts all of the time. About 14.4% reported that they use seat belts most of the time, while 5.2% said they use seat belts half of the time. Only 0.8% said that they use seat belts less than half of the time, and 2.9% said they rarely or never use seat belts (see Figure 26). There were no statistically significant differences in proportions of self-assessed seat belt use between the five MDT regions.

Primary Seat Belt Law for Child Restraint in Motor Vehicles

Would you support a primary seat belt law for child restraint in motor vehicles?





An overwhelming majority of Montanans (93.7%) said in winter 2017 that they support a primary seat belt law for child restraint in motor vehicles (see Figure 27). Only 6.3% of Montanans opposed a primary seat belt law for child restraint. In 2014 the MDT Maintenance Survey found that 93% of Montanans supported a primary seat belt law for child restraint and 7% opposed such a law. There were no statistically significant differences in proportions of support or opposition for a primary seat belt law for child restraint in motor vehicles between the five MDT regions.

The next section of this report examines selected aspects of Montanan's opinions about vehicle accidents in the state. This section begins by exploring views on the most frequent type of vehicle collision.

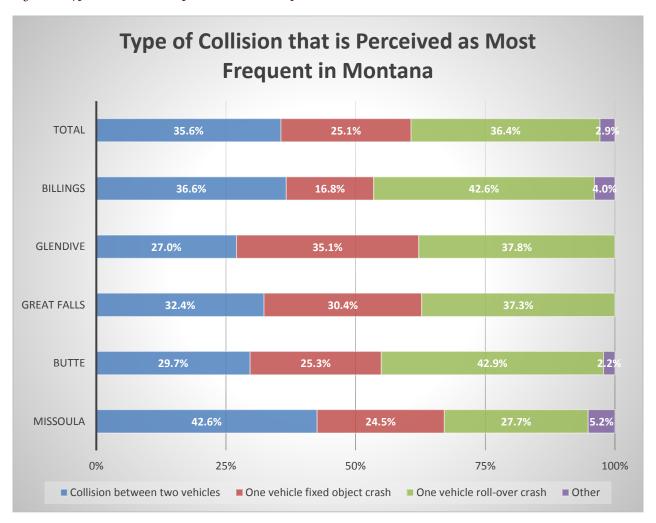


Vehicle Accidents

Most Frequent Type of Vehicle Collision

In Montana, which type of vehicle collisions do you think occur most frequently?

Figure 28: Type of Collision that is perceived as Most Frequent in Montana



Montanans said that they believe one vehicle roll-over crashes (36.4%) and collisions between two vehicles (35.6%) occur most frequently in Montana (see Figure 28). About one-quarter of Montanans (25.1%) believe that one vehicle fixed object crashes occur most frequently. All other crash types were cited by a total of 2.9% of Montanans as the most frequent crash type. There were no statistically significant differences in proportions of crash types cited between the five MDT regions.



Most Frequent Type of Fatal Crashes

I am going to mention some possible causes of fatal crashes. I would like to know which you think is the most frequent cause, the second most frequent cause, and the third most frequent cause.

Table 8: Perceived Most Frequent Causes of Fatal Crashes

Perceived Most Frequent Causes of Fatal Crashes				
Fatal Crash Cause	% of All Responses			
Driving under the influence	28.4%			
Distracted or inattentive driving generally	22.9%			
Distracted specifically by cell phone use	22.9%			
Speeding	11.4%			
Falling asleep	6.8%			
Passing	4.2%			
Road rage	1.8%			
Deer, animals on road	0.7%			
Unsafe road conditions, weather	0.5%			
Unskilled drivers, stupidity, untrained drivers	0.1%			
Seatbelt use, seatbelt non-use	0.1%			
Motorcycles	0.1%			

Driving while under the influence was cited most often by Montana adults (28.4% of all responses) as the most frequent cause of fatal crashes (see Table 8 above). However, two types of distracted driving - distracted or inattentive driving generally and distracted specifically by cell phone use – if added together received 45.8% of all responses by Montanans as the most frequent cause of fatal crashes. Speeding received 11.4% of all responses as the most frequent cause of fatal crashes.

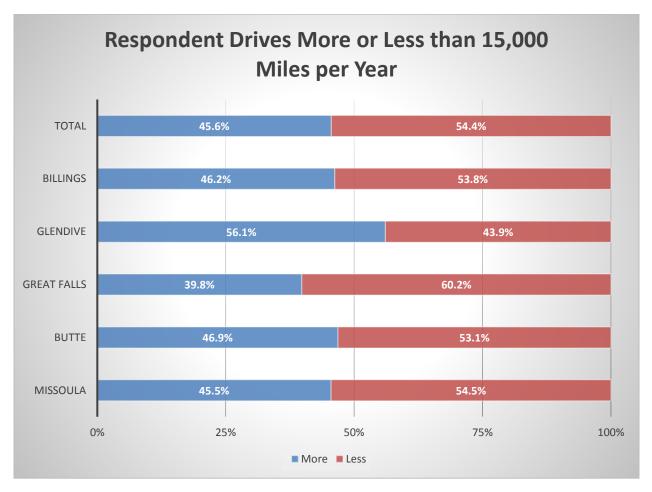
The following section presents selected characteristics of Montana drivers based on respondents' reports about themselves obtained by this survey.



Selected Characteristics of Montana Drivers

Would you say you drive more or less than 15,000 miles per year?

Figure 29: Respondent Drives More or Less than 15,000 Miles per Year

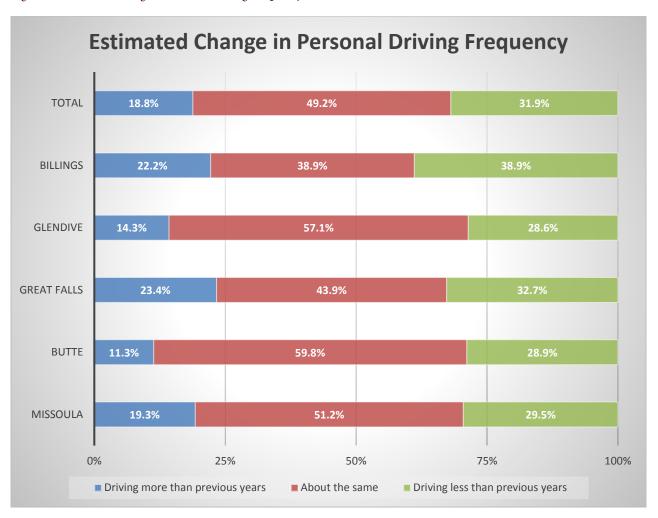


A majority of Montanans (54.4%) estimated that they drive less than 15,000 miles per year (see Figure 29). About 45.6% of Montanans estimated that they drive more than 15,000 miles per year. There was no statistically significant difference in the estimates of annual driving mileage between the five MDT districts.



Compared to previous years, in the past 12 months, would you say that you are.....?

Figure 30: Estimated Change in Personal Driving Frequency



Almost half of Montanans (49.2%) said that their driving frequency over the past year was unchanged from previous years (see Figure 30). Three in every ten Montanans (31.9%) said that they drove less over the past year when compared to previous years. Only 18.8% said they drove more over the past year when compared to previous years. Fewer residents of the Billings MDT District (38.9%) said that their driving frequency was unchanged than did residents of the Butte MDT District (59.8%). More adults aged 18-34 (24%) said they drove more frequently over the past year than did adults aged 65+ (9.4%).



Are you doing any of the following to mitigate or offset the cost of fuel?

Table 9: Self-reported Use of Various Measures to Mitigate Fuel Cost

Self-reported Use of Various Measures to Mitigate Fuel Cost (% Yes)								
	Drive a fuel efficient vehicle	Walk	Drive less	Carpool	Bicycle	Bus, dial- a-ride	Use alternate fuel	
Total	46.6%	31.3%	31.0%	22.5%	13.9%	12.2%	3.5%	
Billings	42.9%	27.3%	35.7%	17.6%	5.3%	9.5%	5.6%	
Glendive	44.0%	17.6%	23.2%	14.2%	7.7%	9.7%	7.3%	
Great Falls	56.5%	47.8%	32.6%	28.9%	12.9%	9.3%	1.2%	
Butte	40.0%	30.8%	27.3%	25.1%	17.9%	16.5%	1.2%	
Missoula	47.2%	27.2%	31.1%	22.4%	19.3%	13.9%	3.9%	

The most commonly reported measure used by Montanans to mitigate fuel cost in winter 2017 was driving a fuel efficient vehicle, used by 46.6% of Montanans. Table 9 above reports the prevalence of use in winter 2017 of various measures to mitigate fuel cost by Montanans. Walking was used by 31.3% of Montanans, while driving less was used by 31%. The least commonly reported measure used to mitigate fuel cost was using alternate fuel, used by 3.5% of Montanans. Residents of the Great Falls MDT District were more likely to report using walking to mitigate fuel cost (47.8%) than were residents of the Glendive MDT District (17.6%).

In the next section, Montanan's provide feedback to MDT on things MDT might improve and things that the MDT Maintenance Division does well.



Open-Ended Feedback to MDT

The Department of Transportation is striving to improve maintenance operations. In your opinion, what could the department do better?

Table 10: Respondent Suggestions to MDT

Respondent Suggestions to MDT	
Suggestion	Percent
General positive comment toward MDT	10.8%
More snow removal or more snow removal equipment	9.2%
Smoothing, repave more often, ongoing maintenance and surfacing, chip sealing	5.4%
Fix potholes and ruts	4.7%
General maintenance can be better (not specific to winter)	3.0%
Improve striping	2.7%
Signs, more or better, reflectors	2.5%
Pick up debris or garbage	2.1%
Rest areas open more	2.0%
Need more money or funding to do better	1.9%
Make safer, patrol, maintenance, and construction	1.9%
Need to hire more people	1.8%
Construction takes too long to fix roader be more efficient	1.8%
Rest area maintenance or cleanliness	1.6%
Roadkill removal	1.4%
Widen roads, better shoulders	1.2%
Bridge maintenance	1.1%
General winter maintenance can be better	1.1%
Improve signs for construction	1.0%
Keep gravel off roads, rocks	1.0%
Do not want roundabouts	.9%
Use more salt, use at better time	.8%
Mowing roadsides	.7%
Signs, take down when no construction or survey crew, cones too long	.7%
Inform public	.6%
Do not use liquid antifreeze	.6%
Rest areas, more of them	.6%
Get rid of rumble strip in middle of road	.6%
More courteous and cooperative and polite	.5%



Work at night or not rush hour	.5%
Reduce speed limit	.4%
More public transportation	.4%
De-ice more	.4%
Traffic flow through construction	.4%
More sanding	.4%
Enforcement of speed limits	.4%
Cameras	.3%
Fewer concurrent projects	.3%
More turn lanes	.3%
Listen to engineers or people vs politicians	.2%
Wildlife access, decrease wildlife hazards	.2%
Remove billboards	.2%
Prioritize heavier use areas	.2%
Prioritize quality bids vs low bid	.2%
Gather information about preemptively maintaining roads	.2%
Reflectors maintained and replaced	.1%
Put in midline rumble strip	.1%
Properly test materials	.1%
Other unclassifiable	.3%
Don't know	19.2%
Refused	10.9%

In the winter of 2017, when asked what Montana Department of Transportation (MDT) could do better, the most frequent response by the public (10.8% of Montanans) was to offer MDT a compliment like, "I think they are doing a good job." Table 10 above describes the full spectrum of suggestions offered by Montanans. The most frequently made specific suggestion for improvement, cited by 9.2% of Montanans in winter 2017, was to call for more snow removal or more snow removal equipment. Road surface smoothing, repaving more often, ongoing maintenance and surfacing, or chip sealing were called for by 5.4% of Montanans. Fixing potholes and ruts was specifically mentioned by 4.7% of Montanans in winter 2017.



What is the Maintenance Department doing that meets or exceeds your expectations?

Table 11: MDT Maintenance Department Functions that Meet or Exceed Expectations

MDT Maintenance Department Functions that Meet or Exceed Expect	ations
Function	Percent
Snow removal, keeping roads open in winter	26.1%
General maintenance not specific to winter	6.8%
General positive comment toward MDT	6.7%
General winter maintenance	6.3%
Litter removal or clean roads	4.9%
Nothing	4.0%
Smoothing roads, repaving, ongoing maintenance and surfacing, chip sealing	3.6%
Signs	2.6%
Mowing roadsides, roadside maintenance	2.4%
Striping	2.2%
Rest area maintenance or cleanliness	1.8%
Speed of work done or done in timely manner	1.3%
Informing public or travel information or website	1.3%
Fixing potholes and ruts	1.3%
Making roads safe	1.2%
Roadkill removal	.9%
New bridges or replacing bridges	.8%
Making construction	.5%
Equipment is maintained	.4%
General negative comment toward MDT	.3%
Traffic flow through construction	.2%
Construction zone safety	.2%
Keeping rest areas open	.1%
Other unclassifiable	.3%
Don't know	12.0%
Refused	11.9%

Table 11 above lists the MDT Maintenance Department functions cited by Montanans in winter 2017 as meeting or exceeding their expectations. The most often cited function was snow removal, mentioned by 26.1% of Montanans.

The next section of this report compares the 2017 results with those obtained in earlier surveys.



Comparison of 2017 Results to Previous Surveys

The results of the 2017 Montana Survey were remarkably stable when compared to the 2014 Maintenance Survey (Rickard & Perius, 2015). Only six of twenty-two comparable measures of public opinion about Montana highway maintenance (27%) changed in 2017 when compared to 2014 results. Table 12 illustrates this finding.

Table 12: Comparison of Mean Public Opinion Scores over Time

Avei	rage Mai	ntenan	ce Rati	ngs			2014-17 Difference
Туре	2006	2008	2010	2012	2014	2017	Significant
Signage	3.07	3.03	3.11	3.15	3.13	3.22	No
Rest Area	2.9	2.23	2.95	3.05	2.94	3.03	No
Striping	2.85	2.87	2.93	2.99	2.99	2.95	No
Debris Removal	2.76	2.77	2.86	2.87	2.87	2.92	No
Roadsides	2.8	2.7	2.87	2.83	2.93	2.92	No
Winter	2.79	2.69	2.7	2.89	2.78	2.87	No
Surface	2.61	2.67	2.7	2.67	2.71	2.72	No

Average	e Maint	enance	Impor	tance			2014-17 Difference
Туре	2006	2008	2010	2012	2014	2017	Significant
Winter	3.7	3.56	3.71	3.69	3.73	3.82	No
Debris Removal	3.47	3.44	3.42	3.49	3.47	3.73	Yes
Information	3.51	3.22	3.21	3.23		3.58	NA
Signage	3.28	3.31	3.26	3.32	3.27	3.55	Yes
Surface	3.35	3.4	3.34	3.34	3.33	3.51	Yes
Roadsides	2.99	3.01	3.01	3.02	2.95	3.4	Yes
Rest Area	3.19	2.75	3.2	3.25	3.24	3.36	No
Striping	3.58	3.49	3.52	3.52	3.51	3.71	Yes



Avera	2014-17 Difference						
Туре	2006	2008	2010	2012	2014	2017	Significant
Winter	3.66	3.56	3.68	3.72	3.57	3.67	No
Striping	3.42	3.32	3.31	3.31	3.22	3.31	No
Information	3.41	3.32	3.23	3.3	3.32	3.44	No
Debris Removal	3.28	3.23	3.19	3.29	3.29	3.4	No
Surface	3.08	3.12	3.01	3.11	3	3.22	Yes
Signage	3.09	3.03	3	3.03	2.97	3.08	No
Rest Area	3.06	2.77	3.01	3.12	3.02	3.15	No
Roadsides	2.81	2.7	2.72	2.75	2.64	2.96	Yes

None of the mean ratings for specific aspects of Montana highway maintenance in 2017 changed when compared to the mean 2014 ratings. In 2017 mean ratings for the importance of debris removal, signage, road surface smoothness, roadside management, and road striping all increased slightly when compared to 2014. The mean maintenance resource priority for road surface smoothness and roadside management increased somewhat in 2017 when compared to 2014.

It is also important to note that the 2017 proportions of support and opposition for a primary seat belt law in Montana were almost identical to those found in 2014:

	<u>Support</u>	Opposition
2017	54.5%	45.5%
2014	55%	45%

The same pattern was found when examining support and opposition for a primary seat belt law for child restraint:

	<u>Support</u>	Opposition
2017	93.7%	6.3%
2014	93%	7%



Works Cited

- American Association for Public Opinion Research. (2016). Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys. 9th edition. Oakbrook Terrace, IL: AAPOR.
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, Phone, Mail, and Mixed-Mode Surveys: The Tailored Design Method.* Hoboken, New Jersey, USA: John Wiley & Sons, Inc.
- Ganesh, N., & Liu, L. (2016, August 1). Modeled estimates (with standard errors) of the percent distribution of household telephone status for adults aged 18 and over, by state: United States, 2015. Retrieved from Wireless Substitution: Early Release of Estimates From the National Health Interview Survey, July–December 2016: http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless_state_201608.pdf
- Rickard, S., & Perius, J. (2015). *Perceptions of Montana Highway Maintenance in 2014: The Results of Two Telephone Surveys.* Billings, MT: MSU Billings Center for Applied Economic Research.
- U.S. Census Bureau. (2017, May 18). 2011-2015 American Community Survey 5-Year Estimates. Washington, D.C, USA.



The Questionnaire



LANDLINE INTRO:

Hello, my name is _______, I am calling from the University of Montana in Missoula. We are doing a survey on attitudes and opinions of highway maintenance for the Montana Department of Transportation. First, though, I need to be sure I have dialed the right number. Is this 999-9999?

In order to do the survey, I have to follow a specific selection procedure. For this survey, only persons aged 18 and older are to be interviewed. So of all the people living in your household, including yourself, how many are 18 years of age and older? ENTER NUMBER

And how many of these persons are female? ENTER NUMBER

According to the selection procedure, I need to interview _____. Is he/she available? Or is that you?

IF R NOT AVAILABLE, MAKE APPOINTMENT

CELL PHONE MODIFICATIONS INTRODUCTION:

Hello, I'm calling from The University of Montana (here) in Missoula. We are doing a survey on attitudes and opinions of highway maintenance for the Montana Department of Transportation. This is not a sales call. (IF R SAYS DRIVING/UNABLE TO TAKE CALL; thank you. We will try you another time...).

VOICE MAIL MESSAGE (LEAVE ONLY ONCE -- THE FIRST TIME A CALL GOES TO VOICEMAIL): I am calling for The University of Montana in Missoula. We are conducting a short statewide survey of cell phone users. This is NOT a sales call. We will try to reach you again.

CELL SCREENING INTERVIEW:

S1. First, I have to ask, are you at least 18 years old?

- 1 Yes CONTINUE
- 2 No THANK AND TERMINATE CALL
- 9 Don't know/Refused THANK AND TERMINATE CALL

S2. Do you currently live or stay in the state of Montana, or did you live in Montana, last year, in 2016?

- 1 Yes CONTINUE
- 2 No THAK AND TERMINATE CALL
- 9 Don't know/Refused THANK AND TERMINATE CALL

We're interested in learning more from people with cell phones. If you are now driving a car or doing any activity requiring your full attention, I need to call you back later.

IF R SAYS IT IS NOT A GOOD TIME, TRY TO ARRANGE A TIME TO CALL BACK.

ALL RESPONDENTS

Before we start, let me explain that this survey deals only with MAINTENANCE of highways, such as maintaining established roadway surface, snow and ice removal, removal of debris and litter, maintaining roadsides, repairing signs, re-painting roadway stripes and rest area maintenance. This survey does not deal with construction of new highways nor construction of new rest stops. We are not asking about city streets or county roads, just interstates and state highways. I want to assure you that this interview is completely confidential and voluntary.

AGE. Only people age 18 and older may participate in this survey. So, for eligibility	
purposes, how old were you on your last birthday?	
RESID7. How many years total have you live in Montana?	d

T1a. How would you rate overall interstate and state highway maintenance in Montana? Would you rate the OVERALL interstate and state highway MAINTENANCE poor, fair, good, or excellent?

- 1 Poor
- 2 Fair
- 3 Good
- 4 Excellent
- 98 DON'T KNOW
- 99 NO RESPONSE/REFUSED

T2a. And how important would you say interstate and state highway maintenance in Montana is to you? Would you say interstate and state highway MAINTENANCE is very unimportant, somewhat unimportant, somewhat important, or very important?

1 very unimportant, 2 somewhat unimportant, 3 somewhat important, or 4 very important 98 DON'T KNOW 99 NO RESPONSE/REFUSED

T1b. How would you rate WINTER maintenance of interstates and state highways in Montana? By winter maintenance, I mean snow and ice control including plowing, sanding, de-icing, and preventing drifting.

- 1 Poor
- 2 Fair
- 3 Good
- 4 Excellent
- 98 DON'T KNOW
- 99 NO RESPONSE/REFUSED

T2b. And how important would you say interstate and state highway WINTER maintenance in Montana is to you? Would you say highway WINTER maintenance is very unimportant, somewhat unimportant, somewhat important, or very important?

- 1 very unimportant,
- 2 somewhat unimportant,
- 3 somewhat important, or
- 4 very important
- 98 DON'T KNOW
- 99 NO RESPONSE/REFUSED

T1c. How would you rate the SURFACE of Montana's interstates and state highways? In rating this, consider ride quality which is affected by potholes, ruts, bumps, cracks, etc. Would you rate the SURFACE of Montana highways as poor, fair, good, or excellent?

- 1 Poor
- 2 Fair
- 3 Good
- 4 Excellent
- 98 DON'T KNOW
- 99 NO RESPONSE/REFUSED

T2c. How important is the SMOOTHNESS of Montana's interstate and state highways to you? Would you say highway SMOOTHNESS is very unimportant, somewhat unimportant, somewhat important, or very important?

- 1 very unimportant,
- 2 somewhat unimportant,
- 3 somewhat important, or
- 4 very important
- 98 DON'T KNOW
- 99 NO RESPONSE/REFUSED

T1d. How would you rate the management of interstate and state highway ROADSIDES in Montana? Roadside management includes mowing shoulders and eliminating unwanted vegetation. Would you rate the ROADSIDE management of Montana highways as poor, fair, good, or excellent?

- 1 Poor
- 2 Fair
- 3 Good
- 4 Excellent

98 DON'T KNOW 99 NO RESPONSE/REFUSED

T2d. How important is interstate and state highway roadside management in Montana to you? Would you say highway ROADSIDE management is very unimportant, somewhat unimportant, somewhat important, or very important?

- 1 very unimportant,
- 2 somewhat unimportant,
- 3 somewhat important, or
- 4 very important
- 98 DON'T KNOW
- 99 NO RESPONSE/REFUSED

T1e. How would you rate the condition of interstate and state highway SIGNS in Montana? Would you rate highway SIGNS as poor, fair, good, or excellent?

- 1 Poor
- 2 Fair
- 3 Good
- 4 Excellent
- 98 DON'T KNOW
- 99 NO RESPONSE/REFUSED

T2e. How important is the CONDITION of interstate and state highway SIGNS to you? Would you say the CONDITION highway SIGNS is very unimportant, somewhat unimportant, somewhat important, or very important?

- 1 very unimportant,
- 2 somewhat unimportant,
- 3 somewhat important, or
- 4 very important
- 98 DON'T KNOW
- 99 NO RESPONSE/REFUSED

T1f. How would you rate the REMOVAL of DEBRIS such as litter, road kill, and fallen rocks on Montana's interstates and state highways? Would you rate the REMOVAL of DEBRIS as poor, fair, good, or excellent?

- 1 Poor
- 2 Fair
- 3 Good
- 4 Excellent

98 DON'T KNOW 99 NO RESPONSE/REFUSED

T2f. How important is the REMOVAL of DEBRIS on interstates and state highways in Montana to you? Would you say the REMOVAL of DEBRIS is very unimportant, somewhat unimportant, somewhat important, or very important?

- 1 very unimportant,
- 2 somewhat unimportant,
- 3 somewhat important, or
- 4 very important
- 98 DON'T KNOW
- 99 NO RESPONSE/REFUSED

T1g. How would you rate the MAINTENANCE of REST AREAS on Montana interstates and state highways? Rest area maintenance includes cleaning rest areas and keeping rest areas in working order. Would you rate the MAINTENANCE of REST AREAS as poor, fair, good, or excellent?

- 1 Poor
- 2 Fair
- 3 Good
- 4 Excellent
- 98 DON'T KNOW
- 99 NO RESPONSE/REFUSED

T2g. How important is interstate and state highway REST AREA MAINENANCE to you? Would you say REST AREA MAINENANCE is very unimportant, somewhat unimportant, somewhat important, or very important?

- 1 very unimportant,
- 2 somewhat unimportant,
- 3 somewhat important, or
- 4 very important
- 98 DON'T KNOW
- 99 NO RESPONSE/REFUSED

T1h. How would you rate the condition of STRIPING or PAVEMENT MARKINGS on Montana's interstates and state highways? Striping and lines include the middle lines (solid and skip), no-passing lines (solid), left turn lane lines, and shoulder lines. Would you

rate the condition of STRIPING or PAVEMENT MARKINGS as poor, fair, good, or excellent?

- 1 Poor
- 2 Fair
- 3 Good
- 4 Excellent
- 98 DON'T KNOW
- 99 NO RESPONSE/REFUSED

T2h. How important is interstate and state highway STRIPING to you? Would you say highway STRIPING is very unimportant, somewhat unimportant, somewhat important, or very important?

- 1 very unimportant,
- 2 somewhat unimportant,
- 3 somewhat important, or
- 4 very important
- 98 DON'T KNOW
- 99 NO RESPONSE/REFUSED

T2i. How important is TRAVELER INFORMATION such as road and weather condition and construction information to you? Would you say TRAVELER INFORMATION is very unimportant, somewhat unimportant, somewhat important, or very important?

- 1 very unimportant,
- 2 somewhat unimportant,
- 3 somewhat important, or
- 4 very important
- 98 DON'T KNOW
- 99 NO RESPONSE/REFUSED

T1i. How would you rate the TRAFFIC CONTROL while maintenance crews are WORKING on interstates and state highways? Would you rate the TRAFFIC CONTROL while maintenance crews are WORKING as poor, fair, good, or excellent?

- 1 Poor
- 2 Fair
- 3 Good
- 4 Excellent
- 98 DON'T KNOW
- 99 NO RESPONSE/REFUSED

[CATI FORM 2]

Now I am going to going back through the list of maintenance activities. This time, I want you to think about ALLOCATION OF RESOURCES (labor, equipment, and materials) to each of the activities. For each activity, please tell me if you think it warrants a Very low, somewhat low, somewhat high, or Very high resource priority when deciding how state highway maintenance resources should be utilized. Remember, we are only dealing with INTERSTATES and STATE MAINTAINED roadways.

T5a. What RESOURCE PRIORITY should be placed on interstate and state highway WINTER maintenance in Montana? Should it be...?

- 1 very low,
- 2 somewhat low,
- 3 somewhat high, or
- 4 very high
- 98 DON'T KNOW
- 99 NO RESPONSE/REFUSED

T5b. What RESOURCE priority should be placed on SMOOTH PAVEMENT on interstates and state highways in Montana? Should it be...?

- 1 very low,
- 2 somewhat low,
- 3 somewhat high, or
- 4 very high
- 98 DON'T KNOW
- 99 NO RESPONSE/REFUSED

T5c. What RESOURCE priority should be placed on interstate and state highway ROADSIDE management in Montana? Should it be...?

- 1 very low,
- 2 somewhat low,
- 3 somewhat high, or
- 4 very high
- 98 DON'T KNOW
- 99 NO RESPONSE/REFUSED

T5d. What RESOURCE priority should be placed repairing and replacing SIGNS on interstates and state highways Montana? Should it be...?

- 1 very low,
- 2 somewhat low,
- 3 somewhat high, or
- 4 very high
- 98 DON'T KNOW
- 99 NO RESPONSE/REFUSED

T5e. What RESOURCE priority should be placed on DEBRIS REMOVAL on interstates and state highways Montana? Should it be...?

- 1 very low,
- 2 somewhat low,
- 3 somewhat high, or
- 4 very high
- 98 DON'T KNOW
- 99 NO RESPONSE/REFUSED

T5f. What RESOURCE priority should be placed on REST AREA cleanliness and maintenance on interstates and state highways Montana? Should it be...?

- 1 very low,
- 2 somewhat low,
- 3 somewhat high, or
- 4 very high
- 98 DON'T KNOW
- 99 NO RESPONSE/REFUSED

T5g. What RESOURCE priority should be placed on ROADWAY STRIPING on interstates and state highways Montana? Should it be...?

- 1 very low,
- 2 somewhat low,
- 3 somewhat high, or
- 4 very high
- 98 DON'T KNOW
- 99 NO RESPONSE/REFUSED

T5h. What RESOURCE priority should be placed on providing accurate and up to date INFORMATION about the current CONDITION of state maintained highways in Montana? Should it be...?

- 1 very low,
- 2 somewhat low,
- 3 somewhat high, or
- 4 very high
- 98 DON'T KNOW
- 99 NO RESPONSE/REFUSED

QUESTION T6D WILL APPEAR HERE IN HALE THE SURVEYS AND AFTER T6C IN THE OTHER HALF OF THE SURVEYS.

T6D. Which best describes your use of seat belts? Do you wear a seat belt...?

- 1 All of the time
- 2 Most of the time
- 3 About half of the time
- 4 Less than half the time, or
- 5 Rarely or never
- 8 DON'T KNOW
- 9 NO RESPONSE/REFUSED

T6A. A PRIMARY seat belt law allows a law enforcement officer to stop you and give you a ticket if you are not wearing your seat belt. A SECONDARY seat belt law allows a law enforcement officer to give you a ticket for non-seat belt use only if he has ALREADY stopped you for some other offense, such as expired license tags. Currently Montana has a secondary seat belt law.

Would you support a primary seat belt law for the state of Montana?

- 1 Yes GO TO T6C
- 0 No GO TO T6B
- 8 DON'T KNOW GO TO T6C
- 9 NO RESPONSE/REFUSED GO TO T6C

T6b. Could you tell us why you are against a primary seat belt law? DO NOT READ LIST!

- 1 DON'T BELIEVE IN SEATBELTS
- 2 INDIVIDUAL RIGHTS/FREEDOM, IT'S MY CHOICE
- 3 RACIAL PROFILING
- 4 NOT NECESSARY IN A RURAL AREA
- 6 OTHER (SPECIFY)
- 8 DON'T KNOW
- 9 NO RESPONSE/REFUSED

T6c. Would you support a primary seat belt law for child restraint in motor vehicles?

- 1 Yes
- 0 No
- 8 DON'T KNOW
- 9 NO RESPONSE/REFUSED

ALTERNATE LOCATION OF **T6D**. Which best describes your use of seat belts? You wear a seat belt...

- 1 All of the time
- 2 Most of the time
- 3 Half the time
- 4 Less than half the time
- 5 Rarely or never
- 8 DON'T KNOW
- 9 NO RESPONSE/REFUSED

[CATI FORM 3]

T7. In Montana, which type of vehicle collisions do you think occur most frequently? Do you think it is...?

- 1 Collision between two vehicles (including passenger car with a semi)
- 2 Collision between a vehicle and a motorcycle
- 3 One vehicle fixed object crash
- 4 One vehicle roll-over crash
- 5 Single motorcycle crash
- 6 Vehicle/pedestrian crash
- 8 DON'T KNOW
- 9 NO RESPONSE/REFUSED

T7a.I am going to mention some possible causes of fatal crashes. I would like to know which you think is the most frequent cause, the second most frequent cause, and the third most frequent cause.

Is the (second/third) most frequent cause?

T7A1 MOST FREQUENT	
T7a2 2ND MOST FREQUENT	
T7a3 3RD MOST FREQUENT	

INSERT NUMBER (RESPONSE NUMBERS BELOW) CORRESPONDING TO ANSWER INTO ABOVE FIELDS

1 Distracted or inattentive driving

- 2 Driving under the influence
- 3 Distracted by cell phone use (talking or texting)
- 4 Falling asleep
- 5 Speeding
- 6 Road rage
- 7 Passing

Something else (SPECIFY BRIEFLY IN SPACE PROVIDED)

- 98 DON'T KNOW
- 99 NO RESPONSE/REFUSED

T8a. Just a couple of questions about interstate and state highway maintenance. Have you driven on roadways in states other than Montana in the last 12 months?

- 1 Yes GO TO T8B
- 0 No GO TO T8E
- 8 DON'T KNOW GO TO T8E
- 9 NO RESPONSE/REFUSED GO TO T8E

T8b. How would you compare general roadway conditions of Montana's state maintained roadways with the general roadway conditions of state maintained roadways in other states? Would you say...? IF THEY SAY THEY HAVE BEEN IN MORE THAN ONE STATE, ASK FOR A GENERAL COMPARISON. IF THEY CANNOT DO THAT, HAVE THEM COMPARE WITH THE STATE THEY DROVE IN MOST RECENTLY.

- 1 Montana roadways are worse
- 2 About the same
- 3 Montana roadways are better
- 8 DON'T KNOW
- 9 NO RESPONSE/REFUSED

T8c. How would you compare winter maintenance of Montana's state maintained roadways with winter maintenance of state maintained highways in other states? Would you say...?

- 1 Montana winter maintenance is worse
- 2 About the same
- 3 Montana winter maintenance is better
- 8 DON'T KNOW
- 9 NO RESPONSE/REFUSED

T8d. How would you compare rest area cleanliness and maintenance in Montana with rest area cleanliness and maintenance in other states? Would you say...?

- 1 Montana rest areas are worse
- 2 About the same
- 3 Montana rest areas are better
- 8 DON'T KNOW
- 9 NO RESPONSE/REFUSED

T8e. How often did you use the rest areas in Montana in the last 12 months? READ OPTIONS!

- 4 Ten or more times
- 3 Five to ten times
- 2 Three or four times
- 1 One or two times
- 0 Or not at all

expectations?

- 8 DON'T KNOW
- 9 NO RESPONSE/REFUSED

S1a. The Department of Transportation is

striving to improve maintenance operations. your opinion, what could the department do better?		
S1b. What is the maintenance department doing that meets or exceeds your		

S1c. Which of the following types of trips would you say is most typical of your driving? Is it...

- 1 Commuting to and from work
- 2 Work related trips, that is trips that are made as a part of work activities
- 3 Personal and family errands or trips
- 4 Agriculture related trips
- 5 Professional driving
- 6 Or something else? And what is that? (SPECIFY)**S1COTHER**
- 8 DON'T KNOW
- 9 NO RESPONSE/REFUSED

S1d. Would you say you drive more or less than 15,000 miles per year?

- 1 More
- 2 Less
- 8 DON'T KNOW
- 9 NO RESPONSE/REFUSED

S1e. Compared to previous years, in the past 12 months, would you say that you are....?

- 1 Driving more than previous years
- 2 About the same or
- 3 Driving less than previous years
- 8 DON'T KNOW
- 9 NO RESPONSE/REFUSED

S1f. Are you doing any of the following to mitigate or offset the cost of fuel? READ LIST PAUSING FOR YES/NO AFTER EACH ITEM

S1f1 Driving less

S1f2 Driving a fuel efficient vehicle

S1f3 Carpooling

S1f4 Using alternative fuel

S1f5 Bicycling

S1f6 Walking

S1f7 Using other means of transportation (e.g. bus, dial-a-ride)

S1f8 or something else SPECIFY SIF8OTHER_____

S1f9 MADE NO CHANGES

[CATI FORM 4]

COUNTY. Now just a couple questions for classification purposes, In what Montana County do you currently live in?

EDUC. What is the highest level of education you have completed?

1 LESS THAN HIGH SCHOOL

2 HIGH SCHOOL DIPLOMA OR

EQUIVALENT

3 ASSOCIATE, TWO-YEAR, JUNIOR

COLLEGE

- 4 BACHELOR'S
- 5 MASTER'S
- 6 DOCTORATE
- 7 PROFESSIONAL (MD, CPA, DDS, LAW)

8 DON'T KNOW 9 NO RESPONSE/REFUSED

CELLPHONE. Is this a cellular telephone?

Interviewer Note: Telephone service over the internet counts as landline service (includes Vonage, Magic Jack and other home-based phone services). Read only if necessary: "By cellular (or cell) telephone we mean a telephone that is mobile and usable outside of your neighborhood."

1 Yes GO TO IFCELL
0 No GO TO PERCPHONE
8 DON'T KNOW GO TO
PERCPHONE
9 NO RESPONSE/REFUSED GO TO
PERCPHONE

PERCPHONE. Do you have a cell phone for personal use? Please include cell phones used for both business and personal use.

1 Yes GO TO CELLMOSTLY
0 No GO TO END
8 DON'T KNOW GO TO END
9 NO RESPONSE/REFUSED GO TO END

IFCELL. Do you have a LAND LINE phone at your residence?

1 Yes GO TO CELLMOSTLY
0 No GO TO END
8 DON'T KNOW GO TO END
9 NO RESPONSE/REFUSED GO TO END

CELLMOSTLY. Thinking about all the phone calls that you receive on your landline and cell phone, what percent, between 0 and 100, are received on your cell phone?

ENTER PERCENT (0 TO 100)

888 DON'T KNOW / NOT SURE

999 REFUSED

Those are all the question I have. Thank you very much for taking the time to answer these questions. Good bye.

SEX (DON'T READ) 1 MALE 2 FEMALE