



**VOLUME I
REPORT**

SUBMITTED BY
Bureau of Business
and Economic Research
The University of Montana–Missoula
September 2011

2011

TranPlan 21

Public Involvement Survey



Vigorous thanks must go to the following individuals for the effort they put forth to make this project a success:

- ✓ Sandy Waddell, Montana Department of Transportation, for her guidance and comments, and
- ✓ Douglas McBroom and Christopher Dorrington, Montana Department of Transportation, for their help with the questionnaire

Thanks also go to Janet Stevens of BBER who worked diligently to supervise the data collection of this study. Finally, we are most grateful to the BBER telephone survey supervisors and interviewers. Their dedication to careful research and persistence made this study a success.

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The purpose of the 2011 TranPlan 21 Public Involvement Survey is to examine Montanans':

- perceptions of the current condition of the transportation system;
- views about possible actions that could improve the transportation system in Montana; and
- opinions about the quality of service the Montana Department of Transportation (MDT) provides to its customers.

The Bureau of Business and Economic Research at The University of Montana interviewed 1,145 households from May 16, 2011 through July 13, 2011.

In 2011 Montanans were:

- generally satisfied with the state's transportation system;
- satisfied with the physical condition of system components except city streets;
- somewhat satisfied with the availability of most transportation services (except passenger rail service).

Montanans want more facilities, equipment, or services for:

- city streets;
- major highways other than interstates;
- rest areas; and
- pedestrian walkways.

Montanans viewed nearly all problems studied as small problems. Only one problem was viewed as moderately severe: road pavement condition.

Montanans' highest priority possible actions to improve the transportation system are:

- maintain road pavement condition;
- improve the physical condition of highways other than interstates;
- keep the public informed about transportation issues;
- take appropriate measures with roadside vegetation; and
- support preserving existing rail service.

Trends:

- Overall system satisfaction has improved.
- Satisfaction with the physical condition of all system components is the highest it has been since inception of the surveys.
- Perceived system problems continue to be rated as small or medium problems.
- Possible system improvements remain rated as medium priorities.
- MDT average performance and customer service grades declined slightly from 2009, but it is still higher than all other years.

MDT's overall customer service and performance grades are in the B to C+ range.

The public rates the following as the most important security priorities for Montana's transportation system:

- emergency response plans;
- airports; and
- border crossings.

Montanans view radio and television as the most useful general communication tools.

Montanans say maps are the most helpful communication tool for transportation planning and project information.

Indications that warrant attention:

- The MDT website is becoming a primary communication tool particularly among the young and educated.
- Using new technology like electronic message signs increased as a system improvement priority.
- Districts 1 and 5 view traffic congestion as a growing problem.
- Support for increasing or improving passenger rail service continues to broaden and is felt more intensely by supporters.

The purpose of the 2011 TranPlan 21 Public Involvement Survey is to examine Montanans':

- perceptions of the current condition of the transportation system;
- views about possible actions that could improve the transportation system in Montana; and
- opinions about the quality of service MDT provides to its customers.

The survey is designed to help MDT policy-makers and planners examine the efficiency, capacity, and flexibility of Montana's transportation system to meet current needs and future demands.

The telephone survey, one of several MDT public involvement processes, provides MDT policy-makers and planners a model of different groups of Montanans and their transportation needs and preferences. The survey explores trends in public perceptions by maintaining comparability with prior TranPlan 21 telephone surveys.

Survey Design

The 2011 TranPlan 21 Public Involvement Survey is the ninth iteration of a repeated, cross-sectional analysis,

designed to provide both a snapshot of current public opinion and trend analysis. This survey was administered by telephone using a Computer-Assisted Telephone Interviewing (CATI) process. Sampling was conducted using a Random-Digit Dial (RDD) process. The population sampled was all adult Montanans who live in a household with a working telephone. A working telephone is defined as a landline or cell phone. This population should not be confused with all Montanans, since it excludes households without working telephones, the institutional population, and Montanans absent from the state during the survey period. The approximate sampling error for this survey is plus or minus 2.9 percent. This means that using this study design, in 95 of 100 samples a sampled mean would be within 2.9 percent of the population mean. Estimates using subsets of these data will have higher sampling error rates.

In addition to the main sample, adult residents of northeastern Montana (MDT District 4) were oversampled to ensure that at least 200 completions with District 4 residents were obtained.

Survey Administration

The survey was administered from May 16, 2011, through July 13, 2011. Of the 2,699 eligible respondents contacted, 1,145 (42.2 percent) participated in the survey. This cooperation rate is considered typical for a survey of this type.¹

Respondents who lived in households with landline telephones were selected randomly within households. The person answering the telephone had the same probability of being selected as any adult member of the household. If the selected member of the household was not home, an appointment was made to interview the absent respondent. Sampled individuals who were out of state during the administration period and individuals with medical problems that precluded participation were ineligible. 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. Those numbers that still did not answer were ineligible.

Starting in 2009, BBER implemented additional sampling procedures to mitigate any possible under-coverage bias due to the high proportion of younger adults who live in wireless-only households. In 2011, BBER conducted interviews with 139 adults who use wireless telephones. This yielded 70 completed interviews with adults who live in wireless-only households. This is the number of wireless-only household completions that BBER believes is the minimum of practical statistical value. BBER purchased a list of residential, wireless telephone numbers from Survey Samples International, Inc. and randomly selected numbers sufficient to yield

¹ Groves, Robert, M. et. al. 2004. *Survey Methodology*. New York: John Wiley & Sons. pp. 184-187.

the 139 completed interviews of households using wireless telephones. Wireless telephone respondents received \$5.00 as compensation for any telephone charge imposed on them as a result of the interview.

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 (2008) standard definition (RR3).² The response rate for this survey was 51.5 percent. This response rate is excellent for rigorously conducted RDD surveys.³

Data Set Preparation

Following collection, the data was inspected to ensure no duplicate cases were included and to correct any interviewer miskeys. Appropriate data labels were added. Appropriate composite variables, post-stratification weights, and flags were also added to the data set to facilitate analysis. Missing values for age were assigned using the hot deck method to facilitate comparison with the 2010 Census. Hot deck imputation substitutes the responses of similar cases for missing data.

Post-stratification weights were applied to the data. This is a common data processing technique that has been shown to improve the accuracy of estimates. The data was weighted by age and sex. Data was not weighted to telephone type as the age and sex weights adjusted the sample so that the number of cell only households was very close to the expected number.

² American Association for Public Opinion Research. 2008. *Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys. 4th edition*. Lexana, Kansas: AAPOR.

³ Groves, Robert, M. et. al. 2004. *Survey Methodology*. New York: John Wiley & Sons. pp. 184-187.

The Respondents

The table below describes the respondents and provides benchmarks against which they may be compared. Slightly over half (51.1 percent) of respondents were female, and nearly half were male (48.9 percent). The percentage of females and males in this sample is within the sampling margin of error of the 2010 Census.⁴

Table 1.1 Comparisons of Respondents and 2010 Census

	2011 Public Involvement Survey		2010 Census
	Unweighted	Weighted *	
Males	48.9%	50.0%	49.8%
Females	51.1%	50.0%	50.2%
White and other race adults	96.1%	96.0%	94.7%
American Indian adults	3.9%	4.0%	5.3%
Median age of adults	57	49	47
Males	56	49	47
Females	59	50	48

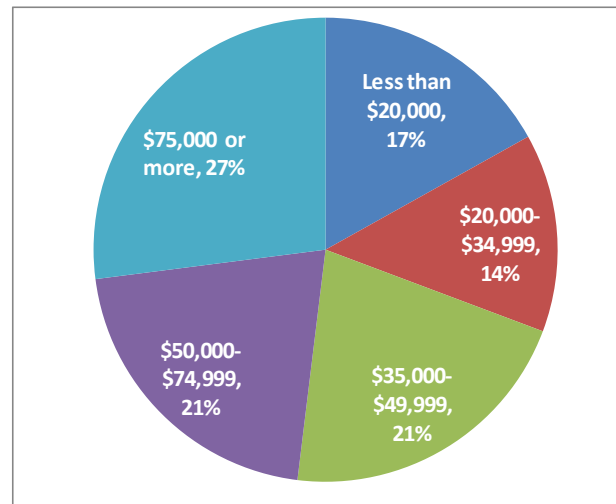
* Weighted by age, sex, MDT Region

Distribution of the sample among races also approximates Census Bureau estimates.⁵ American Indians or Alaskan Natives comprise 4 percent of respondents, while 96 percent were white and other races.

The median age of respondents per the 2010 census was 49 years, while the median age of Montanans age 18 and over in 2010 was 47.⁶ The age difference is statistically significant. It is likely that older people are easier to reach on the telephone. The respondents to the 2011 survey are older than the over-17 population of Montana. The probable effect of this difference on the data is small.

The income distribution for the respondents is shown below (Figure 1.1). Since the income data was collected in categorical variables, direct comparison with Census Bureau data is not practical. However, based on observation of the 2011 TranPlan 21 Survey income distribution, it appears that the distribution is slightly higher than the Census Bureau estimate of Montana’s median 2009 household income of \$42,322.⁷

Figure 1.1: Income Distribution of Respondents



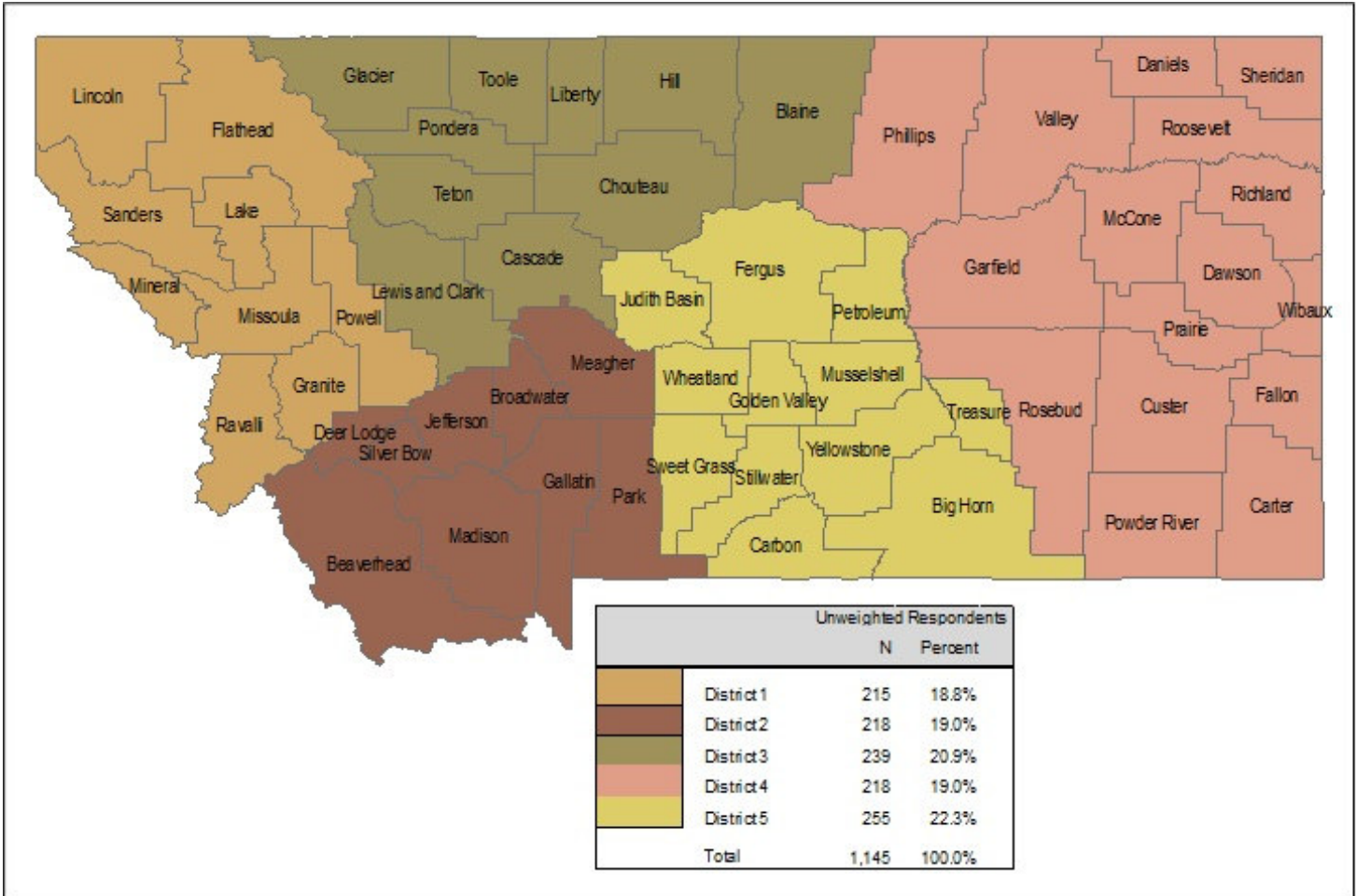
⁴ Gender estimates U.S. Census Bureau, 2010 Census, Montana Table DP-1.

⁵ Race estimates U.S. Census Bureau, 2010 Census, Montana Table DP-1, Race alone or in combination with other races.

⁶ Age estimate, U.S. Census Bureau, 2010 Census, Montana Table DP-1.

⁷ U.S. Census Bureau, American Community Survey, 2010.

Figure 1.2: MDT Districts and Unweighted Respondents



The figure above shows that 18.8 percent of respondents live in MDT District 1 (Lincoln, Flathead, Sanders, Mineral, Missoula, Ravalli, Granite, Powell, and Lake counties), 19.0 percent live in District 2 (Beaverhead, Madison, Deer Lodge, Silver Bow, Jefferson, Broadwater, Meagher, Gallatin, and Park counties), 20.9 percent live in District 3 (Glacier, Pondera, Teton, Lewis and Clark, Cascade, Toole,

Chouteau, Liberty, Hill, and Blaine counties), 19.0 percent live in District 4 (Phillips, Valley, Daniels, Sheridan, Roosevelt, Richland, McCone, Garfield, Dawson, Prairie, Rosebud, Fallon, Custer, Powder River, Carter, and Wibaux counties) and 22.3 percent live in District 5 (Big Horn, Treasure, Stillwater, Sweet Grass, Wheatland, Yellowstone, Golden Valley, Petroleum, Fergus, Musselshell, Judith Basin, and Carbon counties).

Structure of this Report

The primary purpose of Volume I of this report is to describe data collected by the 2011 TranPlan 21 Public Involvement Survey. Adequate description of this data requires presenting an extensive set of tables throughout the report. An analysis of the data is also presented. The report examines three areas. First, Montanans' attitudes about the state's transportation system are explored. Second, opinions about the customer service provided by the Montana Department of Transportation are described. Finally, trends in Montanans' attitudes about the transportation system are discussed.

Volume II contains the appendices. The text of the 2011 TranPlan 21 Public Involvement Survey may be found in Appendix A (Volume II). Tables of responses to each question are also found in Appendix B (Volume II), and can serve as a useful, quick-reference tool. Appendix C (Volume II) includes the responses to open-ended questions.

To determine differences between group means and percentages, t-tests were calculated and are reported throughout this document. T-test results reported here will use the .05 significance level unless stated otherwise. If a value is said to differ from a second value at the .05 level, in 95 out of 100 samples the value will be found to differ from the second value. When

comparing group means for this report, a Bonferroni-adjusted t-test was used. The reason for using an adjusted t-test is that when one makes many comparisons involving the same means, the probability increases that one or more comparisons will turn out to be statistically significant, even when the population means are equal.⁸ For instance, if one compares mean satisfaction scores from five income groups using an unadjusted test, the probability that at least one mean will be found significantly different is almost one in three, even if the population means are not different.

The 2011 TranPlan 21 Public Involvement Survey was designed to provide analysis of the trends in Montanan's attitudes and perceptions about their transportation system. To the extent possible, the wording of the questions was repeated exactly, so that responses from the 2011 survey can be compared to those from previous years. There were, however, several question changes in 2003. In these cases, a non-parametric statistic (mean rank) that can be used to compare questions with different metrics is provided.

The 2011 survey findings are compared in the following sections to the surveys conducted in 1997, 2003, 2007 and 2009. Several questions were added in 2003, 2005, 2007, and 2011; thus in some cases comparisons can only be made for the later years.

⁸ Norusis, Marija: Guide to Data Analysis. Englewood Cliffs, NJ: Prentice Hall, 1995, p. 291.

Overall Satisfaction

Montana's overall transportation system was ranked on a scale of one to ten, where one is "very unsatisfied" and ten is "very satisfied." The mean response was 6.52, reflecting moderate satisfaction with the overall transportation system. The psychological midpoint of the one to ten scale is five. The distance above five is a measure of the intensity of satisfaction.

Satisfaction with the Condition of System Components

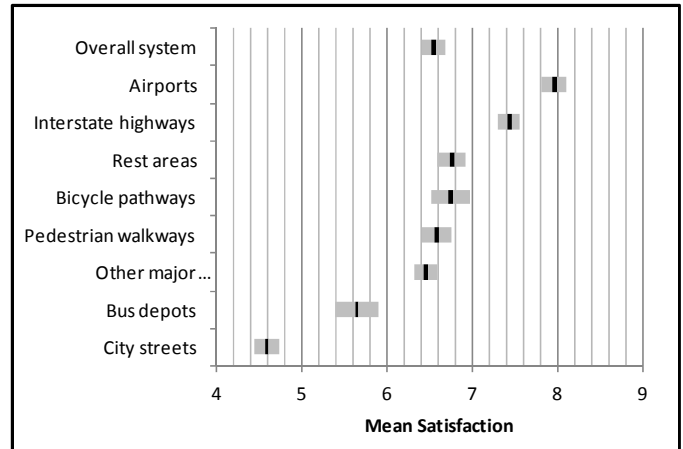
Each component of Montana's transportation system was also rated using the same one to ten scale. These ratings are presented in Table 2.1 and Figure 2.1. Figure 2.1 shows the mean for each component with an upper and lower bound. Differences in satisfaction are easily seen by looking for overlap among the bars.

Table 2.1: Satisfaction with Condition of System Components

	95% Confidence			Number of respondents
	Mean	Lower limit	Upper limit	
Overall system	6.52	6.41	6.62	1,124
Airports	7.94	7.82	8.05	841
Interstate highways	7.41	7.30	7.51	1,115
Rest areas	6.74	6.60	6.88	979
Bicycle pathways	6.72	6.53	6.92	741
Pedestrian walkways	6.56	6.42	6.71	942
Other major highways	6.43	6.32	6.55	1,109
Bus depots	5.62	5.40	5.84	426
City streets	4.56	4.43	4.69	1,123

Airports ranked highest in terms of satisfaction (7.94). People also express relatively strong satisfaction with interstate highways (7.41). Behind interstate highways is a group of four components with which Montanans are moderately satisfied: rest areas (6.74), bicycle pathways (6.72), pedestrian walkways (6.56), and other major highways (6.43).

Figure 2.1: Satisfaction with Condition of System Components



Respondents expressed a lower level of satisfaction with bus depots (5.62). Satisfaction levels for city streets (4.56) were below the psychological midpoint of 5.0. A relatively large number of respondents said they did not have enough information about bus depots.

Respondent satisfaction can also be examined by region within Montana. Table 2.2 presents mean satisfaction scores for each of the five MDT Districts.

Tests were calculated to assess the statistical significance of differences between the means presented. Overall, there is a similar level of satisfaction with overall system condition and all Districts are most satisfied with airport and interstate condition. However, a few regional differences exist. District 3 residents were less satisfied about the physical condition of bicycle pathways, while District 4 residents were less satisfied about the condition of other major highways. Respondents from District 1 were more satisfied with the condition of bus depots than the other District respondents. Finally, satisfaction was lowest with city streets condition amongst all respondents. There were little differences among MDT districts regarding the condition of airports, rest areas, pedestrian walkways, and interstate highways.

Table 2.2: Mean Satisfaction with Condition of System Components by MDT District

	MDT Transportation District				
	District 1	District 2	District 3	District 4	District 5
Overall system	6.54	6.67	6.42	6.08	6.56
Airports	8.03	8.09	7.80	7.71	7.87
Interstate highways	7.06	7.68	7.56	7.24	7.59
Rest areas	7.03	6.63	6.64	6.50	6.61
Bicycle pathways	6.97	6.69	5.96	6.97	6.93
Pedestrian walkways	6.70	6.51	6.33	6.64	6.60
Other major highways	6.31	6.81	6.41	5.63	6.56
Bus depots	6.34	5.47	5.18	5.59	5.20
City streets	4.41	4.49	4.79	4.28	4.72

In each of the nine replications of this study respondents were asked identical questions to rate their satisfaction with the physical condition of various system components. The questions utilized a one to ten scale, where one is very unsatisfied and ten is very satisfied. The surveys also asked respondents whether or not more facilities, equipment, or services are needed for certain system components.

As shown in Figure 2.2, when asked to rate their overall satisfaction with Montana's transportation system in 2011, respondents' satisfaction improved over all previous years.

Respondents' rating of the physical condition of Montana's airports has shown improvement over the years. The 2011 rating was slightly higher than all previous years. Some of this improvement may be related to the visible construction occurring at the state's major airports.

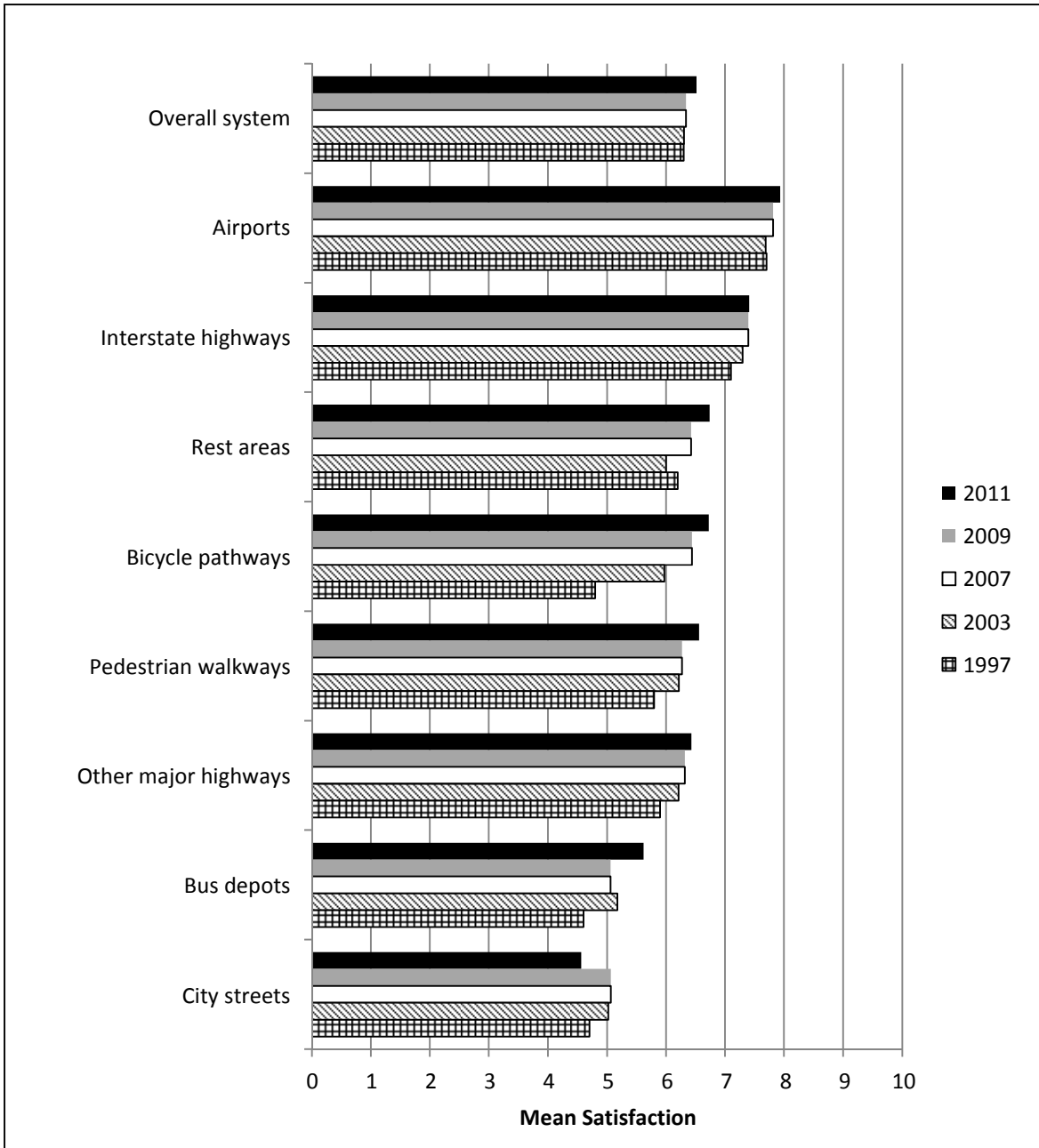
The opinion of Montana residents about the physical condition of Montana's interstate highways has not changed much over the last few years; the satisfaction rating is relatively high at 7.3.

The rating of the physical condition of rest areas and bus depots improved markedly over previous surveys. Ratings of the physical condition of bicycle pathways, pedestrian facilities, and non-interstate highways also showed some improvement, although not statistically significant.

The physical condition of city streets declined precipitously from the ratings of previous surveys. The winter months, in addition to spring flooding, were hard on city streets during 2011, so this probably affected people's opinions.

Looking over the past 14 years, satisfaction has improved with: the overall system, rest areas, bicycle pathways, pedestrian walkways, non-interstate highways, and bus depots.

Figure 2.2: Satisfaction with Condition of Transportation System Components, 1997-2011



Perceived Need for More Infrastructure

Montanans were asked whether each of eight transportation system components needed additional facilities, equipment, or services. Respondents' perceptions about the need for more infrastructure are examined below.

Table 2.3: Perceived Need for Additional Facilities, Equipment, or Services

	MDT Transportation District		Do not know	Number of respondents
	District 1	District 2		
City streets	68.2%	27.2%	4.6%	1,145
Other major highways	53.5%	39.8%	6.6%	1,145
Rest areas	49.6%	40.7%	9.7%	1,145
Pedestrian walkways	47.6%	38.3%	14.1%	1,145
Interstate highways	42.5%	49.3%	8.2%	1,145
Bicycle pathways	39.5%	37.4%	23.1%	1,145
Bus depots	29.9%	23.6%	46.5%	1,145
Airports	22.6%	54.2%	23.2%	1,145

Consistent with their satisfaction ratings, just over 68 percent of Montanans believe that more facilities, equipment, or services are needed for city streets. About one half said the same thing for other major highways and rest areas. Just less than one half of the respondents perceived a need for pedestrian walkways (47.6 percent). About two-fifths perceived a need for more interstate highways (42.5 percent) and bicycle pathways (39.5 percent).

Almost one half of the respondents say they didn't feel qualified to answer questions about bus depot infrastructure (46.5 percent). Only one in five respondents said Montana needs more airports.

A few regional differences are found when looking across MDT districts (Table 2.4). More residents of District 5 said they need more infrastructure on city streets, while District 4 respondents expressed the

lowest need for bicycle pathways. District 2 respondents perceived more need for additional pedestrian walkways and bicycle pathways, and the lowest percent need for highways than any other district.

Table 2.4: Perceived Need for Additional Facilities, Equipment, or Services in Each MDT District

	MDT Transportation District				
	District 1	District 2	District 3	District 4	District 5
City streets	63.9%	71.2%	67.2%	61.3%	75.2%
Other major highways	53.2%	43.8%	55.7%	60.5%	59.1%
Rest areas	45.0%	53.4%	55.1%	44.0%	49.6%
Pedestrian walkways	44.2%	58.0%	48.5%	39.5%	44.6%
Interstate highways	43.9%	35.2%	45.0%	39.5%	45.9%
Bicycle pathways	36.7%	53.2%	39.9%	27.6%	34.3%
Bus depots	25.9%	37.0%	31.5%	21.1%	30.9%
Airports	18.6%	25.0%	28.3%	18.4%	22.3%

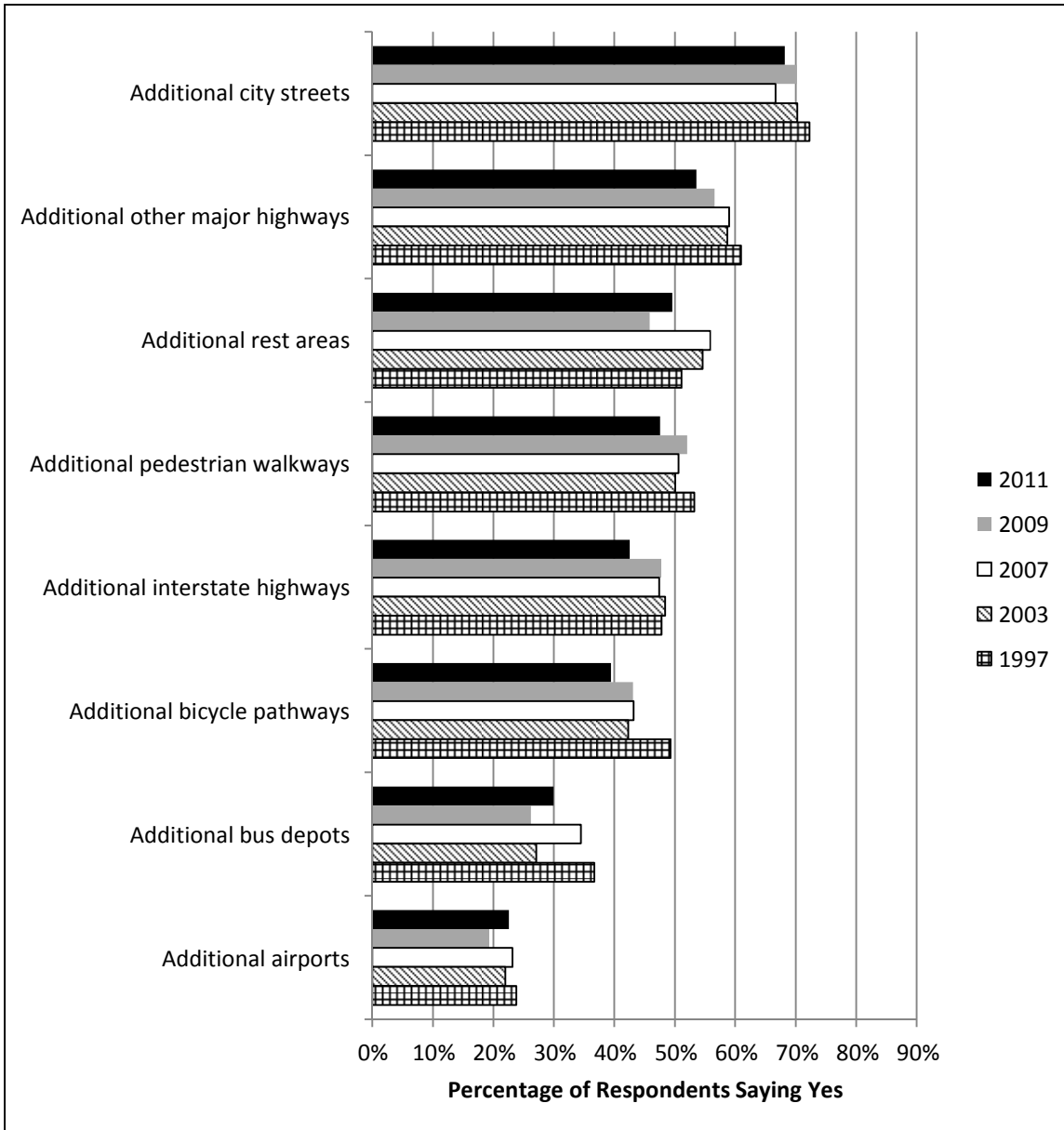
Comparisons of responses from previous surveys to perceived needs are presented in Figure 2.3.

In general, the need for new facilities, equipment, or services has declined since this surveying effort began. The ranking has remained fairly constant with minor differences occurring on a year-to-year basis.

Nearly seven of every 10 Montanans (68.2 percent) cited a need for improved city streets in 2011, making 2011 the eighth iteration of this bi-annual survey to find improved city streets as the largest perceived infrastructure improvement need. This perceived need supports the relative dissatisfaction with the condition of city streets over time.

Just over one-fifth (22.6 percent) of Montanans say more facilities, equipment, or services are needed for airports. This also represents the eighth consecutive survey to find airports as the smallest perceived infrastructure need.

Figure 2.3: Perceived Need for More Facilities, Equipment or Services, 1997-2011



Satisfaction with Service Availability

Respondents were asked to rank service availability on a scale of one to ten, where one is "very unsatisfied" and ten is "very satisfied." Respondents stated they were moderately satisfied with the availability of air transportation to destinations outside Montana (6.50), freight rail (6.35), transit for the elderly or disabled (5.98), the availability of local bus or van service (5.87), and air transportation to Montana destinations (5.58).

Montanans are neutral about the availability of intercity bus service (4.99) and the availability of taxi service (4.94), but are dissatisfied with passenger rail service (4.51).

Table 2.5: Mean Satisfaction with Service Availability

	95% Confidence			Number of respondents
	Mean	Lower limit	Upper limit	
Air transportation outside Montana	6.50	6.35	6.65	972
Freight rail	6.35	6.14	6.56	574
Transit elderly / disabled	5.98	5.81	6.15	786
Local bus or van	5.87	5.68	6.07	767
Air transportation in Montana	5.58	5.40	5.76	798
Intercity bus	4.99	4.79	5.20	635
Taxis	4.94	4.74	5.15	668
Passenger rail	4.51	4.30	4.72	770

Figure 2.4: Mean Satisfaction with Service Availability

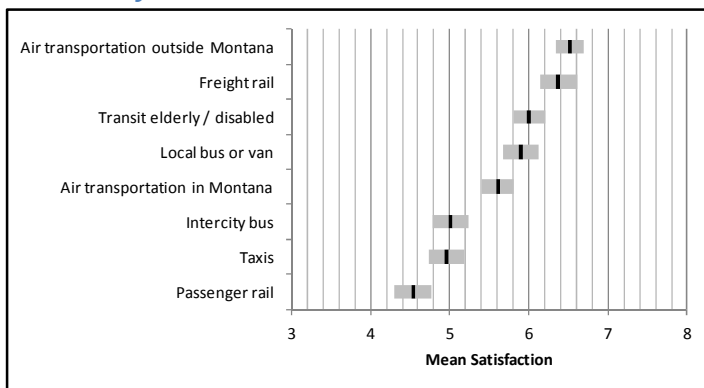


Table 2.6 shows the mean levels of satisfaction of the same eight transportation services by MDT District. In general, there are few differences among MDT Transportation Districts for the eight transportation services queried. One exception is District 4 residents are less satisfied with intercity bus service and taxi service than other districts. The availability of passenger rail service is more a concern of District 2 and 5 residents.

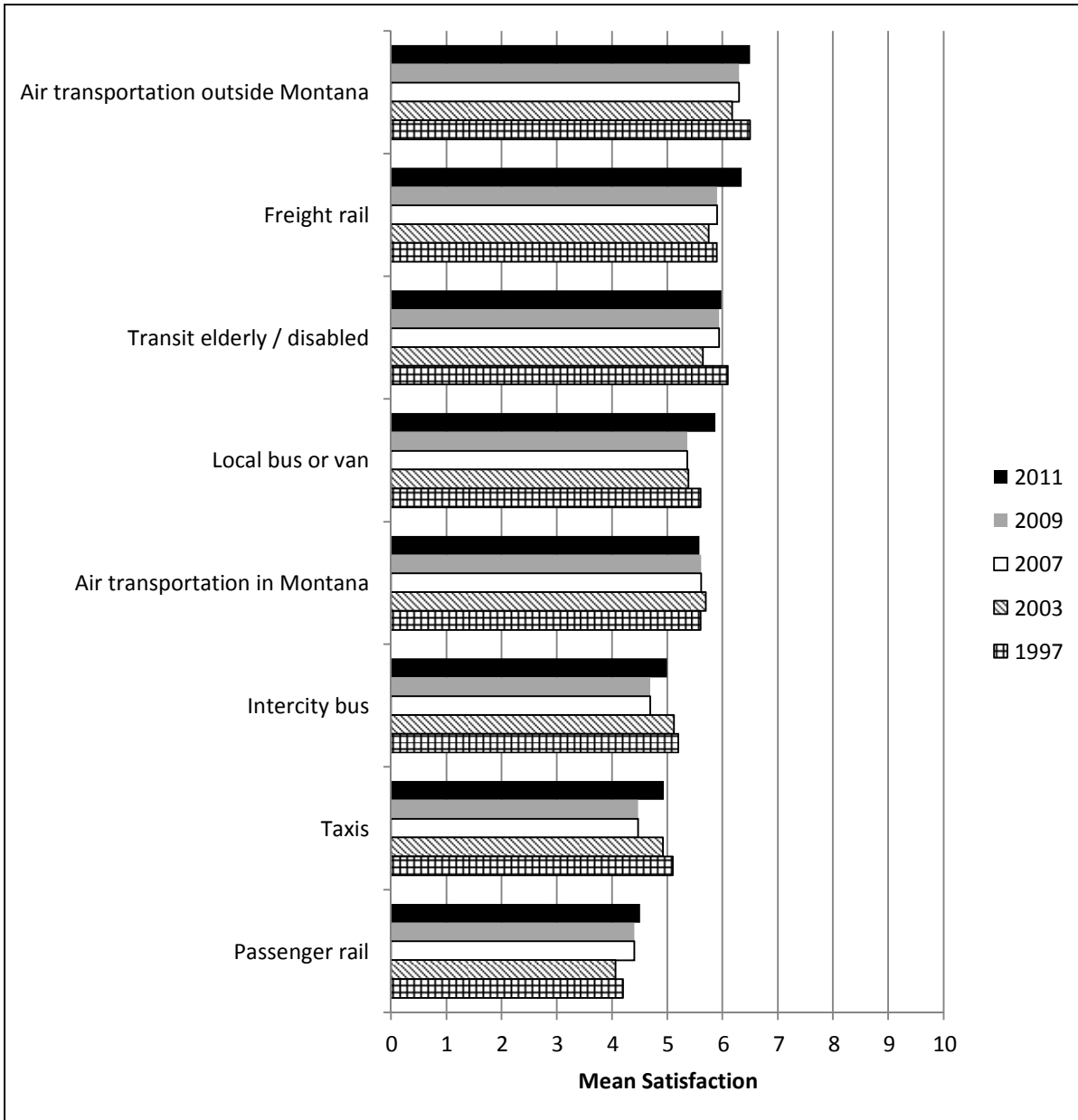
Table 2.6: Mean Satisfaction with Service Availability by MDT District

	MDT Transportation District				
	District 1	District 2	District 3	District 4	District 5
Air transportation outside Montana	6.57	6.49	6.13	5.98	6.91
Freight rail	6.45	6.00	6.30	6.15	6.61
Transit elderly / disabled	5.94	5.79	5.86	6.22	6.23
Local bus or van	6.10	5.94	5.70	5.33	5.83
Air transportation in Montana	5.89	5.30	5.42	5.35	5.68
Intercity bus	5.37	5.40	4.72	3.51	4.94
Taxis	5.01	4.63	5.01	3.59	5.50
Passenger rail	5.11	3.49	5.24	4.84	3.57

Figure 2.5 compares survey respondents' levels of satisfaction with the availability of various transportation services in Montana's transportation system. The relative ranking has remained constant over the seven iterations of the survey with the notable exception of local van and bus service changing places in 2011 with air transportation to destinations within Montana.

Satisfaction with availability of freight rail, local bus or van service, and taxis were significantly greater in 2011 over recent years. Intercity bus service showed improvement but was not significant. Passenger rail service remained the lowest ranked transportation service.

Figure 2.5: Satisfaction with Availability of Transportation Service in Montana, 1997-2011



Perceived Problems with Montana's Transportation System

Montanans rated possible problems (Table 2.7) on a scale from one to four, where one is "not a problem" and four is a "serious problem." Montanans classified only one of the eleven problems studied (road pavement condition) as meriting moderate concern, with a mean score of 2.5 or above. Nearly a third thought it was a serious problem and 40 percent thought it was a moderate problem. No other potential problem reached this level of awareness. This reinforces the positive overall level of satisfaction with the transportation system expressed by Montanans, and continued concern with pavements.

While only one significant problem emerges when examining statewide data, the conclusions are different at the district level. Table 2.8 explores the percentage of respondents in each district that say an item is a moderate or serious problem. Residents of MDT District 1 perceive more issues as moderate or serious problems than do residents of the other districts. For many of the perceived problems, the greatest differences were between respondents in District 1, containing populous western Montana, and District 4, rural eastern Montana. Traffic congestion, single occupancy vehicles and air quality are cited as issues more so in District 1 than in District 4.

Road pavement conditions were perceived as a problem for all districts; over two-thirds of respondents thought road pavement conditions were a moderate or serious problem. Some of this awareness is related to timing of the survey; spring and early summer are periods of pavement breakup as the frost goes out of the ground.

The winter of 2010-2011 was especially bad for extreme temperature variations, leading to a larger problem than usual.

Residents of District 4 were more concerned with vehicle damage than residents of District 3. Traffic congestion was a problem for a majority of District 1 residents. This percentage is significantly larger than that found in any other district. About two out of five residents of District 5 thought that traffic congestion was a problem.

The number and condition of rest areas was perceived as more of a problem for District 4 residents when compared to District 1. Single occupancy vehicles were more of a problem for District 2 respondents than for District 4 respondents. Vehicle emissions were more a problem for all districts except lightly populated District 4. Too many access points onto major roads were more of a problem for District 1 residents when compared to District 4 residents.

The survey has evolved over time, however 10 items perceived as problems with the Montana transportation system were asked in all iterations. In 2007, four additional items were added to the survey; the rankings of all 14 items are shown in Figure 2.6.

Road pavement condition has ranked the number one problem for the past three surveys. Vehicle damage from highway construction and maintenance ranked ninth in 2009 and 2007. It moved into second place for 2011. Timely resolution to safety issues continues to be ranked third and second over the last three surveys.

Table 2.7: Perceived Problems with Transportation System

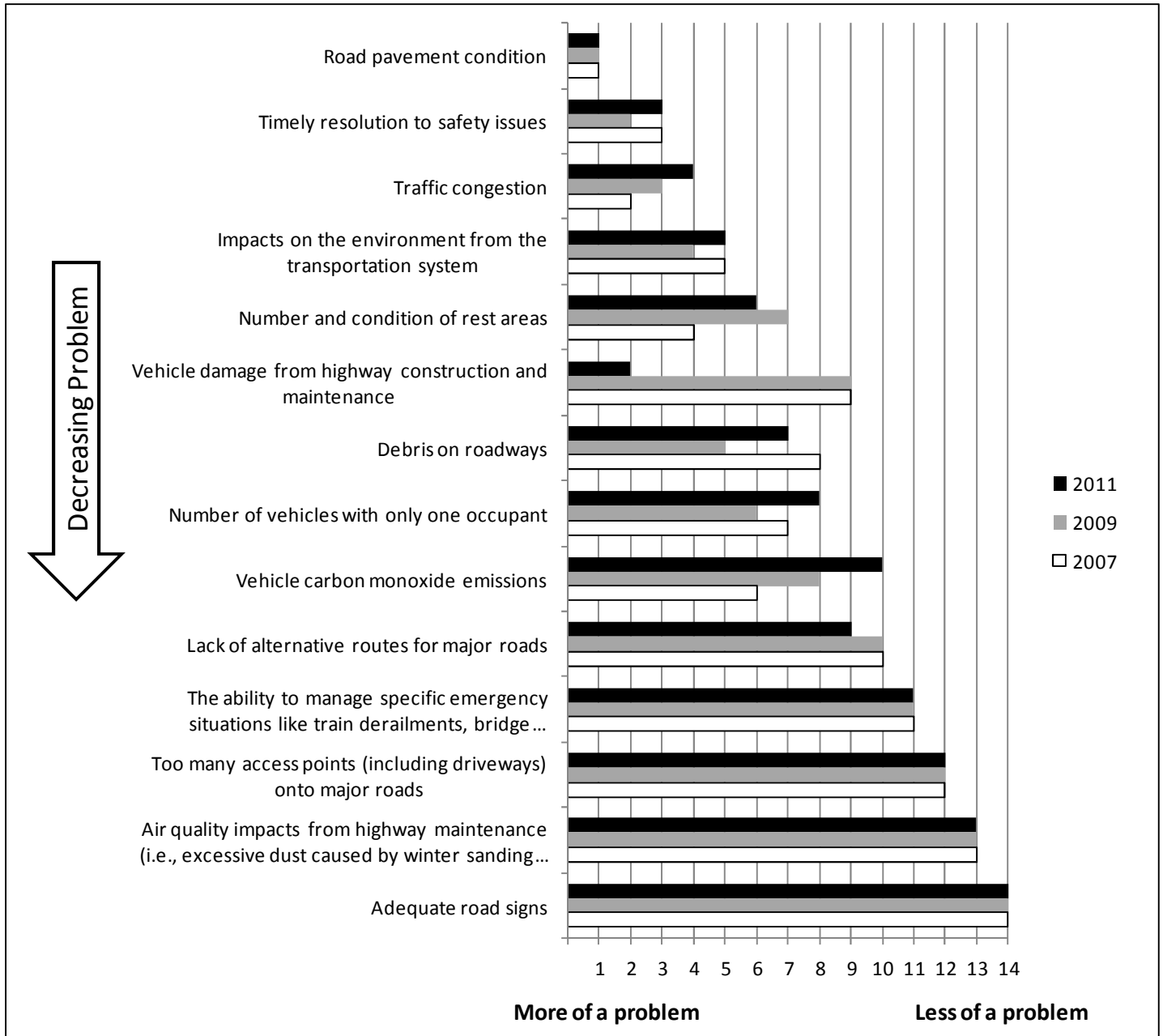
	Serious problem	Moderate problem	Small problem	Not a problem	DK	Mean	Number of respondents
Road pavement condition	30.3%	40.0%	17.1%	11.8%	0.8%	2.89	1,136
Vehicle damage from highway construction and maintenance	11.9%	27.7%	29.0%	27.7%	3.7%	2.25	1,102
Timely resolution to safety issues	8.4%	32.6%	16.5%	30.1%	12.3%	2.22	1,004
Traffic congestion	9.1%	30.0%	26.6%	32.2%	2.2%	2.16	1,120
Impacts on the environment from the transportation system	7.5%	29.2%	25.0%	33.0%	5.3%	2.12	1,084
Number and condition of rest areas	9.5%	27.4%	18.6%	37.0%	7.5%	2.10	1,059
Debris on roadways	8.4%	27.6%	27.5%	35.6%	0.9%	2.09	1,135
Number of vehicles with only one occupant	11.3%	20.9%	19.2%	39.7%	8.9%	2.04	1,044
Lack of alternative routes for major roads	8.2%	27.2%	19.2%	41.1%	4.4%	2.03	1,095
Vehicle carbon monoxide emissions	6.6%	24.9%	19.9%	42.8%	5.8%	1.95	1,079
The ability to manage specific emergency situations like train derailments, bridge failures, or major accidents	5.1%	22.4%	19.0%	41.5%	12.0%	1.90	1,008
Too many access points (including driveways) onto major roads	7.4%	19.5%	22.9%	45.9%	4.3%	1.88	1,096
Air quality impacts from highway maintenance (i.e., excessive dust caused by winter sanding materials)	2.8%	20.7%	25.8%	45.2%	5.5%	1.80	1,082
Adequate road signs	3.0%	16.1%	20.4%	58.7%	1.7%	1.63	1,125

Table 2.8: Perceived Moderate or Serious Problems with Transportation System by District

	MDT District				
	District 1	District 2	District 3	District 4	District 5
Road pavement condition	73.0%	66.2%	69.3%	68.0%	71.4%
Vehicle damage from highway construction and maintenance*	41.8%	40.6%	35.2%	48.0%	37.2%
Timely resolution to safety issues	42.3%	40.0%	41.8%	38.7%	39.8%
Traffic congestion*	50.4%	29.2%	33.3%	23.7%	40.9%
Impacts on the environment from the transportation system	37.6%	40.0%	33.6%	30.7%	37.2%
Number and condition of rest areas*	31.1%	34.9%	44.7%	39.5%	39.7%
Debris on roadways	36.2%	36.1%	33.3%	32.9%	38.8%
Number of vehicles with only one occupant*	32.2%	38.8%	29.4%	23.7%	32.0%
Lack of alternative routes for major roads*	36.4%	35.6%	35.4%	27.6%	35.7%
Vehicle carbon monoxide emissions*	32.9%	33.8%	30.1%	16.0%	33.6%
The ability to manage specific emergency situations like train derailments, bridge failures, or major accidents	25.3%	29.7%	26.9%	25.3%	30.7%
Too many access points (including driveways) onto major roads*	33.2%	25.0%	23.1%	14.5%	26.9%
Air quality impacts from highway maintenance (i.e., excessive dust caused by winter sanding materials)	24.0%	24.2%	21.4%	18.7%	25.7%
Adequate road signs	21.0%	17.3%	17.3%	17.3%	20.2%

* Difference between two or more districts significant at the .05 level.

Figure 2.6: Ranking of Fourteen Perceived Problems with Transportation System, 2007-2011



Possible Actions to Improve Transportation System

Respondents were asked to prioritize 19 possible actions to improve Montana's transportation system (Table 2.9). Respondents were given five priority categories ranging from "very low priority" to "very high priority." A value of one was assigned to the very low category, two to somewhat low priority, and so forth. As with the perceived problem items, very few respondents said they "didn't know," most felt qualified to prioritize the options presented. While Montanans view most transportation system problems as small, they believe solving those problems should take on a medium or somewhat high priority. Montanans classified, on average, 18 of the 19 possible action items as medium or somewhat high priorities.

Although there was not a clear breakpoint, five actions received somewhat high priority scores with mean scores of 3.5 or higher:

- maintaining road pavement condition,
- improving the physical condition of roads and streets,
- keeping the public informed,
- taking appropriate measures with roadside vegetation, and
- promoting existing passenger rail.

Eight actions were rated as medium priorities for possible improvement. Their scores ranged from 3.47 for improving transportation safety to 3.06 for improving rest areas.

Addressing single-occupant vehicle use (2.32), air quality (2.77), traffic congestion (2.91), regulating access (2.78), ensuring adequate bicycle facilities (2.91), and bus depots (2.86) were the lowest priorities for improvements. The two actions added to the survey in 2011, taking appropriate measures with roadside vegetation (3.62) and including wildlife crossings and barriers in roadway projects (3.41), were both assigned relatively high priorities.

Priorities for possible actions to improve the transportation system were also examined across each of the five MDT districts. The percentage of respondents in each district who said an action was a somewhat or very high priority (the top two categories) is presented in Table 2.10. On average, respondents classified almost all of the studied actions as medium priorities, and the only notable difference is that District 2 would like to ensure more adequate bicycle facilities than District 4.

Table 2.9: Priority of Possible Actions to Improve Transportation System

	Very high priority	Somewhat high priority	Medium priority	Somewhat low priority	Very low priority	DK	Mean	Number of respondents
Maintain road pavement condition	31.1%	33.3%	25.2%	6.6%	2.2%	1.5%	3.86	1,128
Improving the physical condition of other roads and streets	24.7%	34.7%	29.0%	7.3%	2.6%	1.7%	3.73	1,125
Keeping the public informed about transportation issues	23.7%	32.3%	30.0%	7.2%	5.6%	1.1%	3.62	1,133
Taking appropriate measures with roadside vegetation	26.2%	27.7%	30.3%	9.1%	5.2%	1.5%	3.62	1,128
Supporting efforts to preserve existing passenger rail service	24.7%	25.1%	22.2%	10.1%	7.3%	10.5%	3.56	1,024
Improving transportation safety	24.3%	24.0%	30.5%	11.7%	7.2%	2.3%	3.47	1,119
Using new technologies like electronic message signs, website & radio updates, remote weather information systems, coordinated signal systems	20.9%	25.5%	32.2%	9.2%	8.2%	4.0%	3.43	1,099
Including wildlife crossings and barriers in roadway projects	25.3%	23.4%	25.1%	11.3%	11.4%	3.5%	3.41	1,105
Promoting the use of local transit systems, like buses or vans	17.9%	25.2%	30.6%	11.9%	8.6%	5.8%	3.34	1,078
Ensuring adequate pedestrian facilities (i.e., sidewalks, footpaths, crossings)	18.0%	22.2%	28.8%	16.9%	11.3%	2.8%	3.19	1,113
Supporting efforts to increase the availability of scheduled airline service	14.7%	19.9%	28.8%	14.6%	8.9%	13.1%	3.19	995
Improving the physical condition of the interstates and major highways	9.6%	26.1%	35.9%	15.9%	8.8%	3.5%	3.12	1,105
Improving rest areas (i.e. maintenance, more facilities)	12.5%	21.9%	30.1%	18.4%	11.2%	5.9%	3.06	1,077
Reducing traffic congestion by increasing the capacity of the highway system	10.9%	19.4%	31.6%	17.7%	16.1%	4.3%	2.91	1,096
Ensuring adequate bicycle facilities	15.2%	16.1%	26.7%	18.5%	18.7%	4.8%	2.91	1,090
Improving the physical condition of bus depots	6.7%	12.3%	22.3%	13.4%	10.8%	34.4%	2.86	751
Regulating the number of highway approaches and driveways to preserve transportation corridors	9.1%	13.9%	32.9%	21.7%	15.3%	7.1%	2.78	1,064
Reducing the air quality impacts of roadway use	10.3%	18.1%	27.7%	18.0%	21.5%	4.3%	2.77	1,096
Attempting to reduce single occupancy vehicle use	6.8%	12.4%	20.3%	20.1%	35.2%	5.1%	2.32	1,086

Table 2.10: Possible Actions to Improve Transportation System a Somewhat or Very High Priority by MDT District

	MDT Transportation District				
	District 1	District 2	District 3	District 4	District 5
Maintain road pavement condition	66.3%	63.0%	65.0%	68.0%	61.6%
Improving the physical condition of other roads and streets	60.3%	59.1%	57.4%	64.5%	58.7%
Keeping the public informed about transportation issues	53.4%	60.3%	58.2%	56.0%	54.4%
Taking appropriate measures with roadside vegetation*	50.5%	61.4%	51.3%	55.3%	54.4%
Supporting efforts to preserve existing passenger rail service	46.9%	44.7%	56.7%	52.6%	51.5%
Improving transportation safety	45.4%	50.5%	47.0%	52.0%	50.4%
Using new technologies like electronic message signs, website & radio updates, remote weather information systems, coordinated signal systems*	37.6%	40.7%	53.4%	54.7%	55.6%
Including wildlife crossings and barriers in roadway projects*	45.0%	57.3%	48.9%	44.0%	47.9%
Promoting the use of local transit systems, like buses or vans*	38.5%	49.5%	42.0%	40.8%	45.3%
Ensuring adequate pedestrian facilities (i.e., sidewalks, footpaths, crossings)*	36.6%	51.6%	42.9%	32.0%	35.7%
Supporting efforts to increase the availability of scheduled airline service	28.6%	37.0%	38.8%	36.8%	36.9%
Improving the physical condition of the interstates and major highways*	40.8%	27.3%	36.7%	37.3%	34.3%
Improving rest areas (i.e. maintenance, more facilities)*	25.3%	44.3%	34.2%	34.2%	39.4%
Reducing traffic congestion by increasing the capacity of the highway system	33.3%	26.4%	27.7%	32.9%	31.1%
Ensuring adequate bicycle facilities*	35.2%	40.0%	29.0%	19.7%	23.2%
Improving the physical condition of bus depots	13.7%	20.9%	19.8%	17.1%	26.0%
Regulating the number of highway approaches and driveways to preserve transportation corridors	26.4%	20.5%	23.1%	18.7%	21.5%
Reducing the air quality impacts of roadway use*	25.3%	39.1%	23.2%	22.4%	30.6%
Attempting to reduce single occupancy vehicle use	19.7%	25.6%	18.5%	10.7%	15.8%

* Difference between two or more districts significant at the .05 level.

There is general agreement among all of the MDT Districts about the two highest priority actions, maintaining road pavement condition and improving the physical condition of other roads and streets. Taking appropriate measures with roadside vegetation was a higher priority for District 2 residents. Using new technologies was a lower priority for District 1 residents. Wildlife crossings, providing adequate pedestrian and bicycle facilities are higher priorities for District 2 residents than any other residents.

District 4 respondents assigned a relatively low priority to ensuring adequate bicycle facilities and reducing the air quality impact of roadway use.

In general, survey respondents expressed a high level of satisfaction with Montana's transportation system. Maintaining road pavement conditions was a perceived problem and assigned the highest priority for future action.

The TranPlan 21 questions concerning the priority of improvements in the transportation system and roadways were changed in 2003. A more detailed five-part scale was substituted for a four-part scale. Unfortunately, this change in scale invalidates comparisons of the 2003 - 2011 surveys with those

conducted earlier than 2003. Also, fewer items were asked in 2003 and 2005. An additional item was added in 2007. Two more items were added in 2011.

In an attempt to provide some information concerning trends, Figure 2.7 shows the ranking of the 17 items included in 1997, 2003, 2007, 2009, and 2011. The mean rank is a non-parametric statistic that ranks each item from 1 (highest rank) to 17 (lowest rank) for each of the five surveys. This statistic is unaffected by the change in wording.

Overall, maintaining road pavement condition ranked the highest priority. Supporting existing passenger rail is the second priority, confirming that passenger rail remains a desire for a majority of Montanans. Keeping the public informed about transportation issues is ranked third.

Single occupancy vehicles, air quality, and the number of highway approaches are not perceived as priority problems by respondents.

Satisfaction with Montana's transportation system has improved over the last decade. Keeping the public informed and maintaining the physical condition of all roadways continue to be important to Montanans.

Respondents were asked to rate the relative importance of various system components to the security of the overall transportation system. Ratings were chosen from a scale of one to five, where one equals not at all important and five equals extremely important. Overall, responses ranged from somewhat important to very important (see Table 3.1 below).

Emergency response plans were rated very or extremely important by residents of all MDT Districts. (See Table 3.2) Communication issues were slightly more important in District 5. This difference may be attributed to the flooding occurring in the district during the survey period.

Questions about security priorities and the transportation system were also asked in 2007 and 2009. Figure 3.1 compares how each item ranked over the last three iterations. Emergency response plans were the number one priority all three times these questions were asked. The only change in the priority ranks were security at border crossings and airports. Security of other major highways and at public transit facilities changed places in 2011; their priority was very low in the minds of survey respondents. There was no significant difference when individual items were compared.

Table 3.1: Security Priority of Transportation System Components

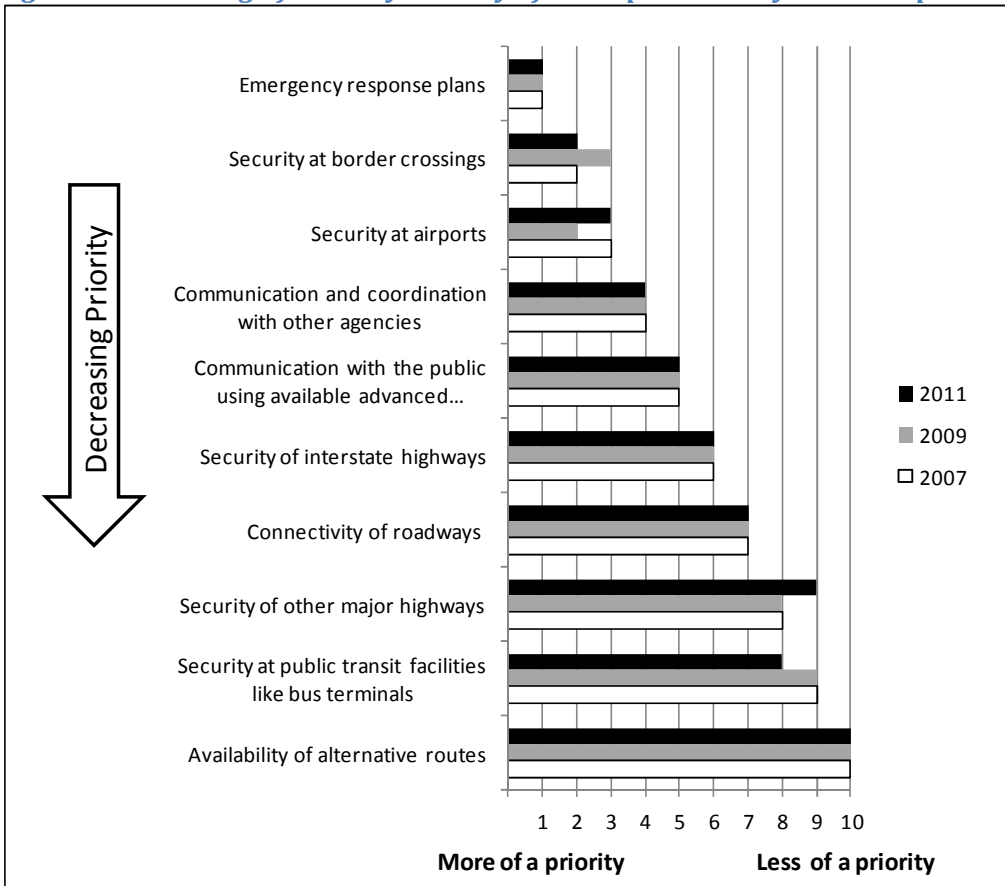
	Extremely important	Very important	Somewhat important	Not very important	Not at all important	DK	Mean	Number of respondents
Emergency response plans	23.7%	54.9%	14.6%	2.0%	1.0%	3.7%	4.02	1,093
Security at border crossings	28.4%	40.7%	16.5%	6.8%	1.4%	6.2%	3.94	1,072
Security at airports	26.3%	43.6%	18.2%	4.8%	2.2%	4.8%	3.91	1,088
Communication and coordination with other agencies	18.1%	50.2%	18.3%	4.5%	2.1%	6.8%	3.83	1,063
Communication with the public using available advanced technologies	14.6%	47.8%	28.0%	4.3%	1.8%	3.6%	3.72	1,094
Security of interstate highways	15.4%	36.6%	30.6%	8.9%	3.9%	4.5%	3.53	1,093
Connectivity of roadways	8.1%	36.8%	41.0%	5.5%	3.1%	5.5%	3.44	1,072
Security at public transit facilities like bus terminals	12.4%	30.8%	35.2%	8.1%	4.8%	8.8%	3.42	1,042
Security of other major highways	9.8%	30.7%	39.5%	10.2%	4.8%	5.0%	3.32	1,087
Availability of alternative routes	7.2%	31.8%	41.9%	10.4%	3.3%	5.4%	3.31	1,079

Table 3.2: Security Priority of Transportation System Components Rated Very Important or Extremely Important by District

	MDT Transportation District				
	District 1	District 2	District 3	District 4	District 5
Emergency response plans	77.8%	83.0%	79.2%	78.7%	75.9%
Security at border crossings	69.0%	66.2%	72.0%	71.4%	68.2%
Security at airports	60.8%	79.0%	68.6%	72.0%	76.1%
Communication and coordination with other agencies	66.7%	68.9%	64.0%	67.1%	74.7%
Communication with the public using available advanced technologies	61.4%	60.1%	63.5%	56.6%	66.9%
Security of interstate highways	52.7%	49.3%	50.2%	56.0%	53.9%
Connectivity of roadways	43.1%	41.9%	46.3%	48.1%	48.3%
Security at public transit facilities like bus terminals	42.2%	47.0%	40.0%	46.1%	43.4%
Security of other major highways	39.8%	39.7%	38.3%	46.1%	43.0%
Availability of alternative routes	41.1%	39.9%	36.6%	36.0%	38.4%

* Difference between two or more districts significant at the .05 level.

Figure 3.1: Ranking of Security Priority of Transportation System Components, 2007-2011



Montana residents were asked by MDT to rate the usefulness of selected public communication tools used by MDT. Residents rated each tool on a scale from one to five where one equaled not at all useful and five equaled extremely useful. Of the seven tools examined, people rated radio and television as most useful (see Table 4.1 below). In fact, 58.1 percent of respondents rated radio and television as either very useful or extremely useful.

The remaining tools were rated from just greater than to slightly less than somewhat useful. Respondents found special mailings including brochures, newsletters, and postcards, least useful. Only 13.2 percent of persons said brochures and newsletters are very useful or extremely useful, while over 50 percent rated these as not useful.

When examined at the MDT District level, residents from different locations within the state generally agreed on their usefulness ratings for each communication tool (Table 4.2 below). District 1 residents were less likely than others to find a website very or extremely useful. District 3 residents were less likely than others to find public meetings very or extremely useful.

The seven general communication tool questions were also asked in 2007 and 2009. Figure 4.1 shows how each tool ranked in each survey. Radio and television mediums were ranked number one in each survey. The MDT website was ranked number two in 2011, third in 2009, and fourth in 2007. Newspapers were second in 2007 but fourth in 2009 and 2011. The toll-free call in number was either second or third. Special mailings consistently ranked last.

Table 4.1: Usefulness of General Communication Tools

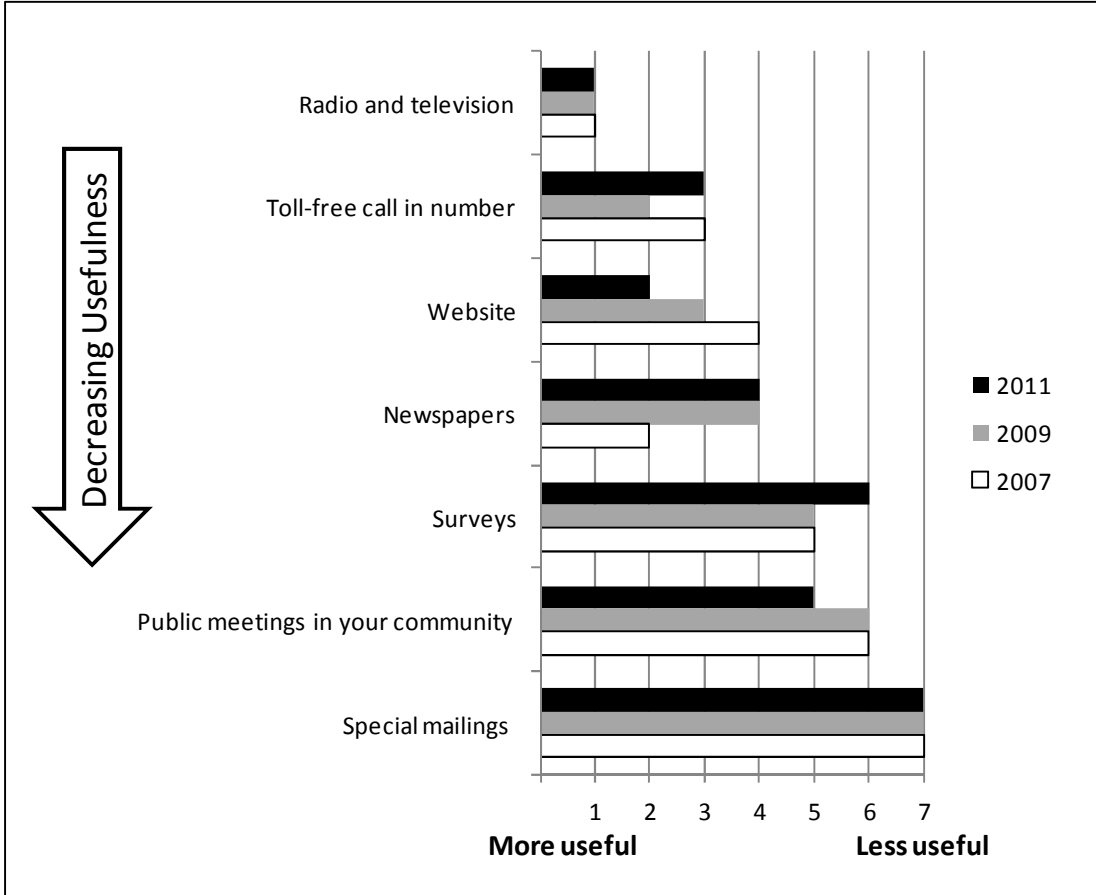
	Extremely useful	Very useful	Somewhat useful	Not very useful	Not at all useful	DK	Mean	Number of respondents
Radio and television	12.8%	45.3%	29.6%	7.5%	4.3%	0.5%	3.55	1,119
Toll-free call in number	10.3%	26.0%	32.2%	13.1%	16.2%	2.2%	3.01	1,101
Website	10.2%	34.0%	26.6%	8.4%	18.1%	2.7%	3.10	1,095
Newspapers	5.0%	24.4%	41.5%	15.0%	12.9%	1.2%	2.94	1,112
Surveys	2.6%	15.8%	43.1%	21.2%	14.0%	3.3%	2.71	1,087
Public meetings in your community	3.2%	20.2%	36.7%	18.9%	18.0%	3.1%	2.71	1,089
Special mailings	1.2%	12.0%	34.1%	25.7%	25.4%	1.6%	2.37	1,106

Table 4.2: Usefulness of Communication Tools by MDT District, Percentage Rated Extremely Useful or Very Useful

	MDT Transportation District				
	District 1	District 2	District 3	District 4	District 5
Radio and television	52.3%	66.8%	53.3%	57.3%	63.9%
Toll-free call in number	35.2%	32.3%	38.3%	40.8%	38.2%
Website *	36.4%	48.4%	45.9%	46.7%	50.0%
Newspapers	29.8%	35.2%	28.7%	25.0%	25.7%
Surveys	21.2%	20.2%	14.0%	18.4%	16.8%
Public meetings in your community *	25.0%	24.9%	16.5%	26.3%	24.9%
Special mailings	15.1%	13.5%	13.4%	12.0%	10.5%

* Difference between two or more districts significant at .05 level

Figure 4.1: Ranking of Usefulness of General Communication Tools, 2007-2011



Adult Montanans also rated tools used specifically by MDT for communicating with the public about planning or projects. They rated each tool on a scale from one to five where one is not at all helpful and five is extremely helpful. Montanans said maps are very helpful to them in the planning process, while they rated the remaining set of communication tools examined as somewhat helpful (Table 5.1).

More than half of Montanans (56.3 percent) said that maps are very helpful or extremely helpful to them in the planning process or in learning about MDT projects. Two out of five (42.7 percent) said that pictures or

graphics are very helpful or extremely helpful to them. Only 15.3 percent find newsletters very helpful or extremely helpful. In general, there was very little difference in opinions regarding communication tools among the five MDT Districts. The only exception was District 1 adults find a website less helpful than do others across the state (Table 5.2).

Maps were rated the most helpful communication tool for presenting project information in 2007, 2009, and 2011 (Figure 5.1). Pictures and graphics were ranked second. The MDT website was ranked fifth in 2007, fourth in 2009, and third in 2011. Newsletters and brochures as communication tools were not deemed especially helpful.

Table 5.1: Helpfulness of Project Information and Planning Communication Tools

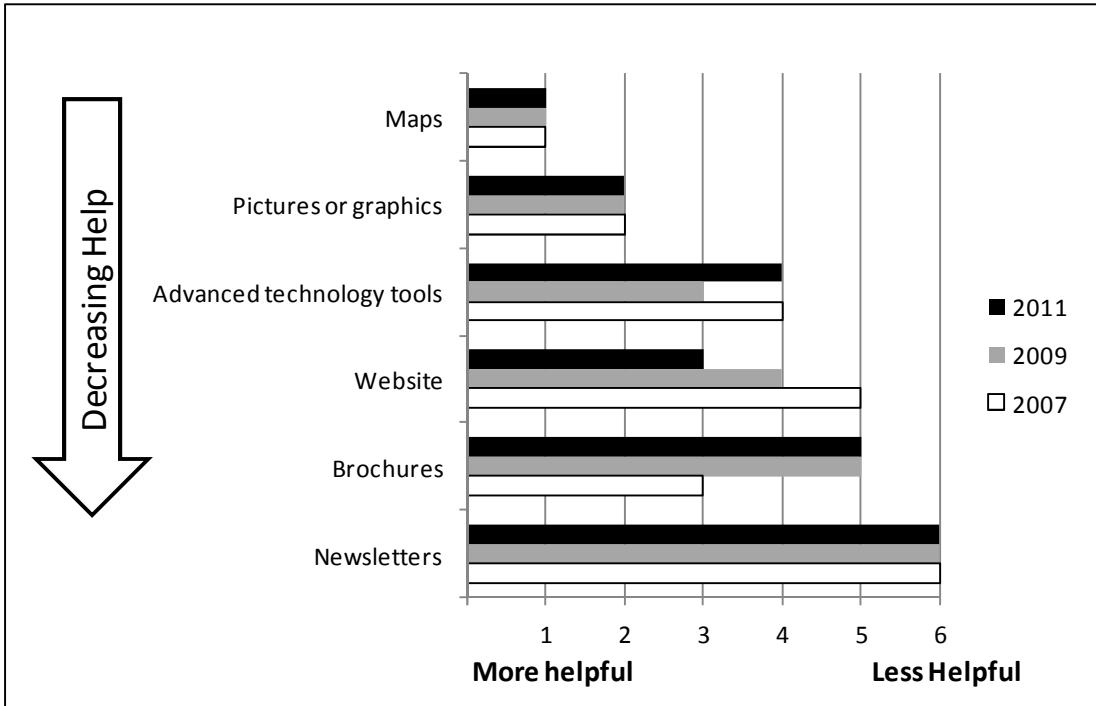
	Very helpful	Extremely helpful	Somewhat helpful	Not very helpful	Not at all helpful	DK	Mean	Number of respondents
Maps	9.5%	46.8%	30.4%	5.7%	5.6%	2.0%	3.50	1,098
Pictures or graphics	7.0%	35.7%	39.9%	8.2%	6.9%	2.3%	3.28	1,094
Website	10.3%	30.0%	26.1%	10.0%	20.3%	3.2%	3.00	1,088
Advanced technology tools	6.2%	28.0%	27.2%	13.5%	18.0%	7.1%	2.90	1,039
Brochures	2.0%	16.5%	44.1%	20.0%	15.7%	1.8%	2.69	1,099
Newsletters	1.7%	13.6%	40.4%	23.9%	18.1%	2.3%	2.56	1,092

Table 5.2: Project Planning and Information Communication Tools, % Rated Extremely or Very Helpful by District

	MDT Transportation District				
	District 1	District 2	District 3	District 4	District 5
Maps	55.4%	62.2%	52.2%	53.9%	56.5%
Pictures or graphics	45.3%	42.2%	38.9%	47.3%	41.0%
Website *	32.7%	52.3%	36.5%	40.5%	44.8%
Advanced technology tools	30.9%	35.5%	30.4%	37.3%	40.8%
Brochures	20.7%	20.0%	18.3%	16.2%	14.3%
Newsletters	16.9%	17.5%	15.8%	16.2%	10.1%

* Difference between two or more districts significant at .05 level

Figure 5.1: Helpfulness of Project Planning and Information Communication Tools, 2007-2011



Respondents were asked to prioritize eight possible actions to improve Montana’s roadways (Table 6.1). Respondents were given five choices of priority categories from “very low priority” to “very high priority.” As with the perceived problem items, a very large majority of respondents felt qualified to prioritize the action items presented.

The top three improvements, as measured by the mean score, were increased shoulder widths to accommodate motorists, increased shoulder widths to accommodate bicyclists, and more guard rails. Each of these possible improvements was rated by Montanans as a somewhat high priority.

Three items were rated as a medium priority: more pavement markings, wider roadways, and more traffic lights and left turn lanes.

Two potential actions were rated by Montana residents as just under a medium priority: more lighting of roadways and more directional/informational signs.

There are few differences between the MDT Districts in terms of the possible actions to improve roadways (Table 6.2). District 4 residents were more likely to assign a high priority to more guard rails.

Increasing shoulder widths both for motorist and bicycles are number one and two possible actions in the opinion of Montanan’s in 2007, 2009, and 2011. Signs and directional information are the least favored. Rankings of other actions are shown in Figure 6.1.

Table 6.1: Priority of Possible Actions to Improve Roadways

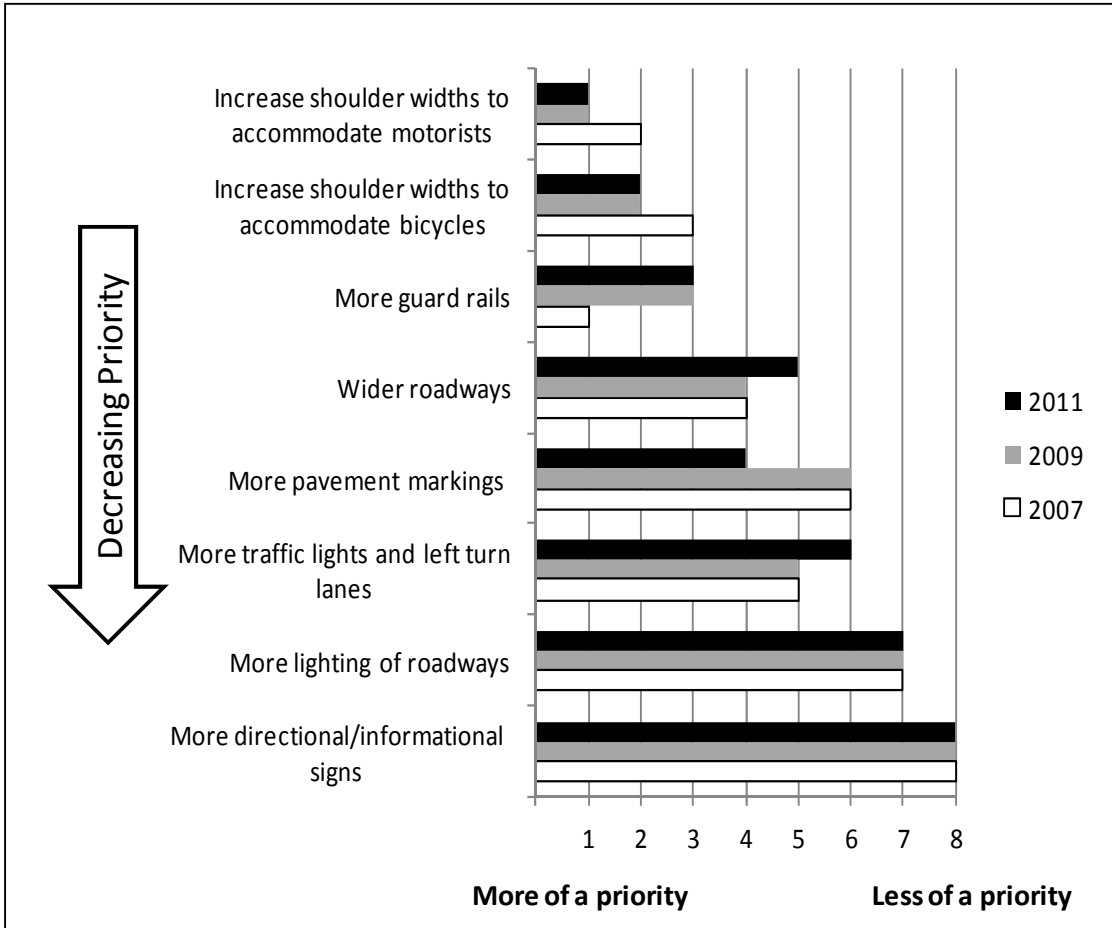
	Very high priority	Somewhat high priority	Medium priority	Somewhat low priority	Very low priority	DK	Mean	Number of respondents
Increase shoulder widths to accommodate motorists	22.1%	29.4%	27.8%	10.1%	7.4%	3.1%	3.50	1,110
Increase shoulder widths to accommodate bicyclists	23.8%	26.5%	23.0%	12.4%	11.9%	2.4%	3.39	1,118
More guard rails	21.7%	28.5%	25.3%	13.2%	10.1%	1.1%	3.39	1,133
More pavement markings	15.7%	22.1%	29.0%	18.8%	12.7%	1.7%	3.09	1,126
Wider roadways	14.2%	24.4%	27.2%	18.4%	13.3%	2.4%	3.08	1,117
More traffic lights and left turn lanes	11.4%	19.0%	30.8%	19.0%	16.8%	3.0%	2.89	1,111
More lighting of roadways	10.5%	17.3%	30.6%	22.3%	17.2%	2.0%	2.81	1,123
More directional /informational signs	8.8%	17.9%	31.8%	23.6%	17.1%	0.8%	2.78	1,136

Table 6.2: Possible Actions to Improve Roadways by MDT District, Percent Saying Somewhat or Very High Priority

	MDT Transportation District				
	District 1	District 2	District 3	District 4	District 5
Increase shoulder widths to accommodate motorists	46.5%	52.7%	55.9%	52.6%	53.9%
Increase shoulder widths to accommodate bicyclists	54.7%	52.1%	47.3%	42.1%	47.5%
More guard rails *	44.6%	40.9%	57.2%	64.0%	56.4%
More pavement markings	40.7%	33.3%	39.7%	31.6%	37.6%
Wider roadways	33.2%	42.0%	45.8%	36.8%	38.0%
More traffic lights and left turn lanes	28.6%	27.7%	32.9%	27.6%	34.0%
More lighting of roadways *	27.2%	24.1%	33.8%	19.7%	29.3%
More directional /informational signs	20.5%	27.4%	34.2%	28.0%	28.4%

* Difference between two or more districts significant at .05 level

Figure 6.1: Priority of Possible Actions to Improve Roadways, 2007-2011



The 2011 TranPlan 21 Public Involvement Survey asks a number of questions that examine public opinion regarding overall MDT performance and responsiveness to the public. The responses to those questions are summarized in this section.

Respondents were asked to grade various aspects of MDT overall performance and customer service. The responses to these questions are found in Table 7.1. In general, Montanans give MDT an above average or average (B or C+) grade for customer service and performance.

Montanans gave the highest grades to the MDT services compared with five years ago (2.96 on a four-point scale) and its sensitivity to the environment (2.93). Sensitivity to the environment was a new question for this survey. Third place went to current MDT quality of service (2.88). Fourth place was a statistical tie between seven categories: MDT overall performance in the last

year (2.74), the quality of MDT planning in the last year (2.74), MDT informing customers about construction (2.71), MDT highways and maintenance repair (2.66), MDT convenience of travel through construction areas (2.65), and MDT keeping the public informed (2.64). The lowest grade was given to MDT's responsiveness to customer ideas and concerns (2.56).

Respondent grades of MDT overall performance and customer service by MDT District are presented in Table 7.2 (below). There is widespread agreement between the MDT Districts regarding MDT overall performance and customer service grades. No individual category stands out in any MDT District.

Grades are available for 9 out of the 10 statements for the 2003, 2007, 2009, and 2011 surveys. Figure 7.1 shows the confidence intervals for these items. Grades across the board declined slightly between 2009 and 2011. The decline was not significant.

Table 7.1: Overall Performance and Customer Service Grades

	A	B	C	D	F	DK	Mean	Number of respondents
MDT's quality of service now vs five years ago	18.9%	43.1%	15.8%	2.6%	0.3%	19.3%	2.96	902
MDT's sensitivity to the environment?	22.8%	41.7%	19.6%	2.5%	1.4%	12.0%	2.93	982
MDT quality of service it provides*	17.4%	52.4%	23.3%	2.7%	0.0%	4.2%	2.88	1,071
MDT's overall performance during the past year*	10.7%	52.1%	30.2%	1.3%	0.8%	5.0%	2.74	1,063
Quality of planning to meet statewide transportation needs	13.5%	45.4%	28.5%	3.8%	0.6%	8.3%	2.74	1,024
MDT efforts to keep customers fully informed	15.0%	44.3%	26.5%	5.1%	1.7%	7.5%	2.71	1,033
MDT on its overall highway maintenance and repair*	16.2%	42.5%	30.4%	7.6%	1.4%	1.9%	2.66	1,095
Convenience of travel through construction zones	16.4%	42.4%	29.5%	6.6%	2.7%	2.5%	2.65	1,089
Public notification process about construction projects	17.0%	38.6%	28.4%	6.4%	3.1%	6.6%	2.64	1,043
Responsiveness to customer ideas and concerns	10.4%	29.7%	25.4%	5.9%	1.8%	26.8%	2.56	817

Table 7.2: Overall Performance and Customer Service Grades by MDT District, Percent A or B

	MDT Transportation Districts				
	District 1	District 2	District 3	District 4	District 5
MDT quality of service now vs five years ago	2.96	3.04	2.88	2.91	3.00
MDT's sensitivity to the environment?	2.97	3.04	2.90	2.88	2.83
MDT quality of service it provides*	2.88	3.07	2.80	2.85	2.80
MDT's overall performance during the past year*	2.68	2.86	2.74	2.70	2.74
Quality of planning to meet statewide transportation needs	2.68	2.90	2.71	2.59	2.73
MDT efforts to keep customers fully informed	2.74	2.74	2.68	2.67	2.69
MDT on its overall highway maintenance and repair*	2.59	2.92	2.60	2.54	2.63
Convenience of travel through construction zones	2.67	2.69	2.63	2.56	2.63
Public notification process about construction projects	2.55	2.79	2.68	2.57	2.64
Responsiveness to customer ideas and concerns	2.60	2.62	2.56	2.36	2.51

* Difference between two or more districts significant at the .05 level

Figure 7.1: Overall Performance and Customer Service Grades, 2003-2011



Respondents had two opportunities to tell MDT what they should do in an open-ended question format:

- Are there any other transportation-related issues that you think need to be addressed by the Montana Department of Transportation?
- Do you have any other suggestions for ways MDT can improve the function of Montana's roadways?

The responses provided by at least ten Montanans are listed in Table 8.1 and a complete listing can be found in Appendix C of Volume II.

These responses should be viewed as a rough measure of the intensity of people's feelings about these issues. It should be noted that more than two-thirds of all respondents chose not to respond to these open-ended questions. This is not uncommon. Open-ended questions generally place more burden on respondents than do questions with specific response options. Many respondents gave the same response for both questions. Duplicate responses were deleted.

Improving or increasing passenger rail service was the most commonly cited issue, followed by an unfavorable MDT comment and improving non-interstate highways. Two alternative transportation issues: increase mass transit and improve/add bike trails, were also in the top five. Comments about MDT were classified into favorable or unfavorable. An example of unfavorable is "they waste money." An example of favorable is "they do a good job."

Nine responses received ten or more responses in both 2009 and 2011. These responses were:

- Improve/increase passenger rail
- Improve/repair other numbered highways
- Improve snow-plowing/de-icing
- Increase mass-public transit
- Improve city streets
- Improve transportation planning for population growth
- Improve dirt/back-roads
- Widen two-lane highways
- Improve/add bike trails

Of the responses given by 10 or more people in 2011, three also received ten or more comments in both 2009 and 2007. These were:

- Provide more passenger rail service
- Increase mass/public transit
- Improve snow plowing/de-icing

Two of these items also received 10 or more comments in 2005. They were:

- Provide more passenger rail service
- Increase mass/public transit

Increasing or improving passenger rail service was notable for its increase in number of responses and longevity at the top of the list. This may be interpreted as an indication that the always positive feeling among some Montanans about passenger rail service is spreading to a larger segment of the population.

Table 8.1: Other Transportation Issues to Address

Coded Response	Number of responses
Improve-increase passenger rail	70
Improve-repair other numbered highways	52
Increase mass transit	48
Improve/add bike trails	48
Widen two lane highways	45
Improve snow plowing/deicing	42
Fix potholes	38
Policing/improve drivers	38
Fix roads	36
Improve city streets	33
More/improved road signs	27
Improve/modify intersections	25
Increase number/quality of rest areas	23
Improve dirt/back-roads	22
Reduce speeding/speed limits	21
Widen shoulders	21
Paint roads/reflectors/rumble strips	18
More passing lanes/turning lanes	16
Get road construction done faster	15
Reduce danger from animals on roads	15
Truck safety	14
Fix bridges	13
Senior/disables transportation	12
Improve passenger air service	10
Alternative routes	10

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25 copies of this public document were published at an estimated cost of \$0.85 per copy for a total of \$21.25 which includes printing and distribution.