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 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.

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

<table>
<thead>
<tr>
<th></th>
<th>2011 Public Involvement Survey</th>
<th>2010 Census</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unweighted</td>
<td>Weighted</td>
</tr>
<tr>
<td>Males</td>
<td>48.9%</td>
<td>50.0%</td>
</tr>
<tr>
<td>Females</td>
<td>51.1%</td>
<td>50.0%</td>
</tr>
<tr>
<td>White and other</td>
<td>96.1%</td>
<td>96.0%</td>
</tr>
<tr>
<td>American Indian</td>
<td>3.9%</td>
<td>4.0%</td>
</tr>
<tr>
<td>adults</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median age of</td>
<td>57</td>
<td>49</td>
</tr>
<tr>
<td>adults</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>56</td>
<td>49</td>
</tr>
<tr>
<td>Females</td>
<td>59</td>
<td>50</td>
</tr>
</tbody>
</table>

* 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.
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 (Bighorn, Treasure, Stillwater, Sweet Grass, Wheatland, Yellowstone, Golden Valley, Petroleum, Fergus, Musselshell, Judith Basin, and Carbon counties).
I. Introduction

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. 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.

---

2. Attitudes About Montana’s Transportation System

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

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

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.
2. Attitudes About Montana’s Transportation System

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

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

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

- Overall system
- Airports
- Interstate highways
- Rest areas
- Bicycle pathways
- Pedestrian walkways
- Other major highways
- Bus depots
- City streets

Mean Satisfaction

- ▪ 2011
- □ 2009
- □ 2007
- □ 2003
- ▪ 1997
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

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Do not know</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>City streets</td>
<td>68.2%</td>
<td>27.2%</td>
<td>4.6%</td>
<td>1,145</td>
</tr>
<tr>
<td>Other major highways</td>
<td>53.5%</td>
<td>39.8%</td>
<td>6.6%</td>
<td>1,145</td>
</tr>
<tr>
<td>Rest areas</td>
<td>49.6%</td>
<td>40.7%</td>
<td>9.7%</td>
<td>1,145</td>
</tr>
<tr>
<td>Pedestrian walkways</td>
<td>47.6%</td>
<td>38.3%</td>
<td>14.1%</td>
<td>1,145</td>
</tr>
<tr>
<td>Interstate highways</td>
<td>42.5%</td>
<td>49.3%</td>
<td>8.2%</td>
<td>1,145</td>
</tr>
<tr>
<td>Bicycle pathways</td>
<td>39.5%</td>
<td>37.4%</td>
<td>23.1%</td>
<td>1,145</td>
</tr>
<tr>
<td>Bus depots</td>
<td>29.9%</td>
<td>23.6%</td>
<td>46.5%</td>
<td>1,145</td>
</tr>
<tr>
<td>Airports</td>
<td>22.6%</td>
<td>54.2%</td>
<td>23.2%</td>
<td>1,145</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th></th>
<th>MDT Transportation District</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>District 1</td>
</tr>
<tr>
<td>City streets</td>
<td>63.9%</td>
</tr>
<tr>
<td>Other major highways</td>
<td>53.2%</td>
</tr>
<tr>
<td>Rest areas</td>
<td>45.0%</td>
</tr>
<tr>
<td>Pedestrian walkways</td>
<td>44.2%</td>
</tr>
<tr>
<td>Interstate highways</td>
<td>43.9%</td>
</tr>
<tr>
<td>Bicycle pathways</td>
<td>36.7%</td>
</tr>
<tr>
<td>Bus depots</td>
<td>25.9%</td>
</tr>
<tr>
<td>Airports</td>
<td>18.6%</td>
</tr>
</tbody>
</table>

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 2.6 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 2.5: Mean Satisfaction with Service Availability

<table>
<thead>
<tr>
<th>Service</th>
<th>Mean</th>
<th>Lower Limit</th>
<th>Upper Limit</th>
<th>Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air transportation outside Montana</td>
<td>6.50</td>
<td>6.35</td>
<td>6.65</td>
<td>972</td>
</tr>
<tr>
<td>Freight rail</td>
<td>6.35</td>
<td>6.14</td>
<td>6.56</td>
<td>574</td>
</tr>
<tr>
<td>Transit elderly / disabled</td>
<td>5.98</td>
<td>5.81</td>
<td>6.15</td>
<td>786</td>
</tr>
<tr>
<td>Local bus or van</td>
<td>5.87</td>
<td>5.68</td>
<td>6.07</td>
<td>767</td>
</tr>
<tr>
<td>Air transportation in Montana</td>
<td>5.58</td>
<td>5.40</td>
<td>5.76</td>
<td>798</td>
</tr>
<tr>
<td>Intercity bus</td>
<td>4.99</td>
<td>4.79</td>
<td>5.20</td>
<td>635</td>
</tr>
<tr>
<td>Taxis</td>
<td>4.94</td>
<td>4.74</td>
<td>5.15</td>
<td>668</td>
</tr>
<tr>
<td>Passenger rail</td>
<td>4.51</td>
<td>4.30</td>
<td>4.72</td>
<td>770</td>
</tr>
</tbody>
</table>

Table 2.6: Mean Satisfaction with Service Availability by MDT District

<table>
<thead>
<tr>
<th>MDT Transportation District</th>
<th>District 1</th>
<th>District 2</th>
<th>District 3</th>
<th>District 4</th>
<th>District 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air transportation outside Montana</td>
<td>6.57</td>
<td>6.49</td>
<td>6.13</td>
<td>5.96</td>
<td>6.91</td>
</tr>
<tr>
<td>Freight rail</td>
<td>6.45</td>
<td>6.00</td>
<td>6.30</td>
<td>6.15</td>
<td>6.61</td>
</tr>
<tr>
<td>Transit elderly / disabled</td>
<td>5.94</td>
<td>5.79</td>
<td>5.86</td>
<td>6.22</td>
<td>6.23</td>
</tr>
<tr>
<td>Local bus or van</td>
<td>6.10</td>
<td>5.94</td>
<td>5.70</td>
<td>5.33</td>
<td>5.83</td>
</tr>
<tr>
<td>Air transportation in Montana</td>
<td>5.89</td>
<td>5.30</td>
<td>5.42</td>
<td>5.36</td>
<td>5.68</td>
</tr>
<tr>
<td>Intercity bus</td>
<td>5.37</td>
<td>5.40</td>
<td>4.72</td>
<td>3.51</td>
<td>4.94</td>
</tr>
<tr>
<td>Taxis</td>
<td>5.01</td>
<td>4.63</td>
<td>5.01</td>
<td>3.59</td>
<td>5.50</td>
</tr>
<tr>
<td>Passenger rail</td>
<td>5.11</td>
<td>3.49</td>
<td>5.24</td>
<td>4.84</td>
<td>3.57</td>
</tr>
</tbody>
</table>

Figure 2.4 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
2. Attitudes About Montana’s Transportation System

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.
2. Attitudes About Montana’s Transportation System

### Table 2.7: Perceived Problems with Transportation System

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

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

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

* Difference between two or more districts significant at the .05 level.
Figure 2.6: Ranking of Fourteen Perceived Problems with Transportation System, 2007-2011

- Road pavement condition
- Timely resolution to safety issues
- Traffic congestion
- Impacts on the environment from the transportation system
- Number and condition of rest areas
- Vehicle damage from highway construction and maintenance
- Debris on roadways
- Number of vehicles with only one occupant
- Vehicle carbon monoxide emissions
- Lack of alternative routes for major roads
- The ability to manage specific emergency situations like train derailments, bridge...
- Too many access points (including driveways) onto major roads
- Air quality impacts from highway maintenance (i.e., excessive dust caused by winter sanding...)
- Adequate road signs

Decreasing Problem

More of a problem  Less of a problem

2011  2009  2007
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.
### 2. Attitudes About Montana’s Transportation System

**Table 2.9: Priority of Possible Actions to Improve Transportation System**

<table>
<thead>
<tr>
<th>Action</th>
<th>Very high priority</th>
<th>Somewhat high priority</th>
<th>Medium priority</th>
<th>Somewhat low priority</th>
<th>Very low priority</th>
<th>DK</th>
<th>Mean</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain road pavement condition</td>
<td>31.1%</td>
<td>33.3%</td>
<td>25.2%</td>
<td>6.6%</td>
<td>2.2%</td>
<td>1.5%</td>
<td>3.86</td>
<td>1,128</td>
</tr>
<tr>
<td>Improving the physical condition of other roads and streets</td>
<td>24.7%</td>
<td>34.7%</td>
<td>29.0%</td>
<td>7.3%</td>
<td>2.6%</td>
<td>1.7%</td>
<td>3.73</td>
<td>1,125</td>
</tr>
<tr>
<td>Keeping the public informed about transportation issues</td>
<td>23.7%</td>
<td>32.3%</td>
<td>30.0%</td>
<td>7.2%</td>
<td>5.6%</td>
<td>1.1%</td>
<td>3.62</td>
<td>1,133</td>
</tr>
<tr>
<td>Taking appropriate measures with roadside vegetation</td>
<td>26.2%</td>
<td>27.7%</td>
<td>30.3%</td>
<td>9.1%</td>
<td>5.2%</td>
<td>1.5%</td>
<td>3.62</td>
<td>1,128</td>
</tr>
<tr>
<td>Supporting efforts to preserve existing passenger rail service</td>
<td>24.7%</td>
<td>25.1%</td>
<td>22.2%</td>
<td>10.1%</td>
<td>7.3%</td>
<td>10.5%</td>
<td>3.56</td>
<td>1,024</td>
</tr>
<tr>
<td>Improving transportation safety</td>
<td>24.3%</td>
<td>24.0%</td>
<td>30.5%</td>
<td>11.7%</td>
<td>7.2%</td>
<td>2.3%</td>
<td>3.47</td>
<td>1,119</td>
</tr>
<tr>
<td>Using new technologies like electronic message signs, website &amp; radio updates, remote weather information systems, coordinated signal systems</td>
<td>20.9%</td>
<td>25.5%</td>
<td>32.2%</td>
<td>9.2%</td>
<td>8.2%</td>
<td>4.0%</td>
<td>3.43</td>
<td>1,099</td>
</tr>
<tr>
<td>Including wildlife crossings and barriers in roadway projects</td>
<td>25.3%</td>
<td>23.4%</td>
<td>25.1%</td>
<td>11.3%</td>
<td>11.4%</td>
<td>3.5%</td>
<td>3.41</td>
<td>1,105</td>
</tr>
<tr>
<td>Promoting the use of local transit systems, like buses or vans</td>
<td>17.9%</td>
<td>25.2%</td>
<td>30.6%</td>
<td>11.9%</td>
<td>8.6%</td>
<td>5.8%</td>
<td>3.34</td>
<td>1,078</td>
</tr>
<tr>
<td>Ensuring adequate pedestrian facilities (i.e., sidewalks, footpaths, crossings)</td>
<td>18.0%</td>
<td>22.2%</td>
<td>28.8%</td>
<td>16.9%</td>
<td>11.3%</td>
<td>2.8%</td>
<td>3.19</td>
<td>1,113</td>
</tr>
<tr>
<td>Supporting efforts to increase the availability of scheduled airline service</td>
<td>14.7%</td>
<td>19.9%</td>
<td>28.8%</td>
<td>14.6%</td>
<td>8.9%</td>
<td>13.1%</td>
<td>3.19</td>
<td>995</td>
</tr>
<tr>
<td>Improving the physical condition of the interstates and major highways</td>
<td>9.6%</td>
<td>26.1%</td>
<td>35.9%</td>
<td>15.9%</td>
<td>8.8%</td>
<td>3.5%</td>
<td>3.12</td>
<td>1,105</td>
</tr>
<tr>
<td>Improving rest areas (i.e. maintenance, more facilities)</td>
<td>12.5%</td>
<td>21.9%</td>
<td>30.1%</td>
<td>18.4%</td>
<td>11.2%</td>
<td>5.9%</td>
<td>3.06</td>
<td>1,077</td>
</tr>
<tr>
<td>Reducing traffic congestion by increasing the capacity of the highway system</td>
<td>10.9%</td>
<td>19.4%</td>
<td>31.6%</td>
<td>17.7%</td>
<td>16.1%</td>
<td>4.3%</td>
<td>2.91</td>
<td>1,096</td>
</tr>
<tr>
<td>Ensuring adequate bicycle facilities</td>
<td>15.2%</td>
<td>16.1%</td>
<td>26.7%</td>
<td>18.5%</td>
<td>18.7%</td>
<td>4.8%</td>
<td>2.91</td>
<td>1,090</td>
</tr>
<tr>
<td>Improving the physical condition of bus depots</td>
<td>6.7%</td>
<td>12.3%</td>
<td>22.3%</td>
<td>13.4%</td>
<td>10.8%</td>
<td>34.4%</td>
<td>2.86</td>
<td>751</td>
</tr>
<tr>
<td>Regulating the number of highway approaches and driveways to preserve transportation corridors</td>
<td>9.1%</td>
<td>13.9%</td>
<td>32.9%</td>
<td>21.7%</td>
<td>15.3%</td>
<td>7.1%</td>
<td>2.78</td>
<td>1,064</td>
</tr>
<tr>
<td>Reducing the air quality impacts of roadway use</td>
<td>10.3%</td>
<td>18.1%</td>
<td>27.7%</td>
<td>18.0%</td>
<td>21.5%</td>
<td>4.3%</td>
<td>2.77</td>
<td>1,096</td>
</tr>
<tr>
<td>Attempting to reduce single occupancy vehicle use</td>
<td>6.8%</td>
<td>12.4%</td>
<td>20.3%</td>
<td>20.1%</td>
<td>35.2%</td>
<td>5.1%</td>
<td>2.32</td>
<td>1,086</td>
</tr>
</tbody>
</table>
### Table 2.10: Possible Actions to Improve Transportation System a Somewhat or Very High Priority by MDT District

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

* 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.
2. Attitudes About Montana’s Transportation System

Figure 2.7: Ranking of Possible Improvements in the Transportation System and Roadways, 1997-2011

- Maintain road pavement condition*
- Supporting efforts to preserve existing passenger rail service
- Keeping the public informed about transportation issues
- Improving the physical condition of other roads and streets
- Improving transportation safety
- Using new technologies like electronic message signs, website & radio updates, remote weather...
- Promoting the use of local transit systems, like buses or vans
- Ensuring adequate pedestrian facilities (i.e., sidewalks, footpaths, crossings)
- Supporting efforts to increase the availability of scheduled airline service
- Improving rest areas (i.e., maintenance, more facilities)
- Improving the physical condition of the interstates and major highways
- Reducing traffic congestion by increasing the capacity of the highway system
- Improving the physical condition of bus depots
- Ensuring adequate bicycle facilities
- Reducing the air quality impacts of roadway use
- Regulating the number of highway approaches and driveways to preserve transportation corridors
- Attempting to reduce single occupancy vehicle use

* Question added in 2007

More of a priority
Less of a priority

Decreasing Priority
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

<table>
<thead>
<tr>
<th>Component</th>
<th>Extremely important</th>
<th>Very important</th>
<th>Somewhat important</th>
<th>Not very important</th>
<th>Not at all important</th>
<th>DK</th>
<th>Mean</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency response plans</td>
<td>23.7%</td>
<td>54.9%</td>
<td>14.6%</td>
<td>2.0%</td>
<td>1.0%</td>
<td>3.7%</td>
<td>4.02</td>
<td>1,093</td>
</tr>
<tr>
<td>Security at border crossings</td>
<td>28.4%</td>
<td>40.7%</td>
<td>16.5%</td>
<td>6.8%</td>
<td>1.4%</td>
<td>6.2%</td>
<td>3.94</td>
<td>1,072</td>
</tr>
<tr>
<td>Security at airports</td>
<td>26.3%</td>
<td>43.6%</td>
<td>18.2%</td>
<td>4.8%</td>
<td>2.2%</td>
<td>4.8%</td>
<td>3.91</td>
<td>1,088</td>
</tr>
<tr>
<td>Communication and coordination with other agencies</td>
<td>18.1%</td>
<td>50.2%</td>
<td>18.3%</td>
<td>4.5%</td>
<td>2.1%</td>
<td>6.8%</td>
<td>3.83</td>
<td>1,063</td>
</tr>
<tr>
<td>Communication with the public using available advanced technologies</td>
<td>14.6%</td>
<td>47.8%</td>
<td>28.0%</td>
<td>4.3%</td>
<td>1.8%</td>
<td>3.6%</td>
<td>3.72</td>
<td>1,094</td>
</tr>
<tr>
<td>Security of interstate highways</td>
<td>15.4%</td>
<td>36.6%</td>
<td>30.6%</td>
<td>8.9%</td>
<td>3.9%</td>
<td>4.5%</td>
<td>3.53</td>
<td>1,093</td>
</tr>
<tr>
<td>Connectivity of roadways</td>
<td>8.1%</td>
<td>36.8%</td>
<td>41.0%</td>
<td>5.5%</td>
<td>3.1%</td>
<td>5.5%</td>
<td>3.44</td>
<td>1,072</td>
</tr>
<tr>
<td>Security at public transit facilities like bus terminals</td>
<td>12.4%</td>
<td>30.8%</td>
<td>35.2%</td>
<td>8.1%</td>
<td>4.8%</td>
<td>8.8%</td>
<td>3.42</td>
<td>1,042</td>
</tr>
<tr>
<td>Security of other major highways</td>
<td>9.8%</td>
<td>30.7%</td>
<td>39.5%</td>
<td>10.2%</td>
<td>4.8%</td>
<td>5.0%</td>
<td>3.32</td>
<td>1,087</td>
</tr>
<tr>
<td>Availability of alternative routes</td>
<td>7.2%</td>
<td>31.8%</td>
<td>41.9%</td>
<td>10.4%</td>
<td>3.3%</td>
<td>5.4%</td>
<td>3.31</td>
<td>1,079</td>
</tr>
</tbody>
</table>
Table 3.2: Security Priority of Transportation System Components Rated Very Important or Extremely Important by District

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

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

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

* 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

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

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

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

* 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

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

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

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

* Difference between two or more districts significant at .05 level
Figure 6.1: Priority of Possible Actions to Improve Roadways, 2007-2011

- Increase shoulder widths to accommodate motorists
- Increase shoulder widths to accommodate bicycles
- More guard rails
- Wider roadways
- More pavement markings
- More traffic lights and left turn lanes
- More lighting of roadways
- More directional/informational signs
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

<table>
<thead>
<tr>
<th>Statement</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
<th>DK</th>
<th>Mean</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDT's quality of service now vs five years ago</td>
<td>18.9%</td>
<td>43.1%</td>
<td>15.8%</td>
<td>2.6%</td>
<td>0.3%</td>
<td>19.3%</td>
<td>2.96</td>
<td>902</td>
</tr>
<tr>
<td>MDT's sensitivity to the environment?</td>
<td>22.8%</td>
<td>41.7%</td>
<td>19.6%</td>
<td>2.5%</td>
<td>1.4%</td>
<td>12.0%</td>
<td>2.93</td>
<td>982</td>
</tr>
<tr>
<td>MDT quality of service it provides*</td>
<td>17.4%</td>
<td>52.4%</td>
<td>23.3%</td>
<td>2.7%</td>
<td>0.0%</td>
<td>4.2%</td>
<td>2.88</td>
<td>1,071</td>
</tr>
<tr>
<td>MDT's overall performance during the past year*</td>
<td>10.7%</td>
<td>52.1%</td>
<td>30.2%</td>
<td>1.3%</td>
<td>0.8%</td>
<td>5.0%</td>
<td>2.74</td>
<td>1,063</td>
</tr>
<tr>
<td>Quality of planning to meet statewide transportation needs</td>
<td>13.5%</td>
<td>45.4%</td>
<td>28.5%</td>
<td>3.8%</td>
<td>0.6%</td>
<td>8.3%</td>
<td>2.74</td>
<td>1,024</td>
</tr>
<tr>
<td>MDT efforts to keep customers fully informed</td>
<td>15.0%</td>
<td>44.3%</td>
<td>26.5%</td>
<td>5.1%</td>
<td>1.7%</td>
<td>7.5%</td>
<td>2.71</td>
<td>1,033</td>
</tr>
<tr>
<td>MDT on its overall highway maintenance and repair*</td>
<td>16.2%</td>
<td>42.5%</td>
<td>30.4%</td>
<td>7.6%</td>
<td>1.4%</td>
<td>1.9%</td>
<td>2.66</td>
<td>1,095</td>
</tr>
<tr>
<td>Convenience of travel through construction zones</td>
<td>16.4%</td>
<td>42.4%</td>
<td>29.5%</td>
<td>6.6%</td>
<td>2.7%</td>
<td>2.5%</td>
<td>2.65</td>
<td>1,089</td>
</tr>
<tr>
<td>Public notification process about construction projects</td>
<td>17.0%</td>
<td>38.6%</td>
<td>28.4%</td>
<td>6.4%</td>
<td>3.1%</td>
<td>6.6%</td>
<td>2.64</td>
<td>1,043</td>
</tr>
<tr>
<td>Responsiveness to customer ideas and concerns</td>
<td>10.4%</td>
<td>29.7%</td>
<td>25.4%</td>
<td>5.9%</td>
<td>1.8%</td>
<td>26.8%</td>
<td>2.56</td>
<td>817</td>
</tr>
</tbody>
</table>
Table 7.2: Overall Performance and Customer Service Grades by MDT District, Percent A or B

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

* 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.
8. Other Issues That MDT Should Address

**Table 8.1: Other Transportation Issues to Address**

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