## TranPlan 21 2009 Telephone Survey



Volume I Statewide Public Involvement Survey

State of Montana Department of Transportation

Bureau of Business & Economic Research University of Montana–Missoula

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#### **EXECUTIVE SUMMARY**

In 2009 Montanans are:

- generally satisfied with the state's transportation, <u>16 out of 17 components</u> increased in satisfaction from 2007 to <u>2009.</u>
- satisfied with the physical condition of system components,
- somewhat satisfied with the availability of most transportation services (except intercity bus service and passenger rail service).

Montanans want more facilities, equipment, or services for:

- city streets,
- major highways other than interstates, 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:

- support preserving existing rail service,
- maintain road pavement condition,
- keep public informed about transportation issues,
- improve the physical condition highways other than interstates,
- improve transportation safety, and
- use new technology like electronic message signs.

#### Trends:

• <u>Overall system satisfaction is improved</u> <u>over the period 1994-2009</u> Satisfaction with the physical condition system components improved slightly relative to the 2007 study.

- Perceived system problems continue to be rated as small or medium problems.
- Possible system improvements remain rated as medium priorities.
- Montana Department of Transportation (MDT) average performance and customer service grades improved in four areas over 2007 and there were no declines.

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,
- border crossings, and
- communication / coordination with other agencies.

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 bear watching:

- using new technology like electronic message signs increased as a system improvement priority,
- Districts One and Five view traffic congestion as a growing problem, and
- support for increasing or improving passenger rail service continues to broaden and is felt more intensely by supporters. It remains 1<sup>st</sup> in priority rank.

### I. INTRODUCTION

The purpose of the 2009 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 telephone survey, one of several MDT public involvement processes, provides MDT policymakers 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 the 1994, 1997, 1999, 2001, 2003, 2005, and 2007 TranPlan 21 telephone surveys. The survey is designed to help MDT policymakers and planners examine the efficiency, capacity, and flexibility of Montana's transportation system to meet current needs and future demands.

#### **Survey Design**

The 2009 TranPlan 21 Public Involvement Survey is the eighth 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. 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 3.8 percent. This means that using this study design, in 95 of 100 samples a sampled mean would be within 3.8 percent of the population mean. In addition to the main sample, adult residents of northeastern Montana (MDT District 4) were oversampled to ensure that at least 100 completions with District Four residents were obtained.

#### **Survey Administration**

The survey was administered from May 3, 2009 through June 21, 2009. Of the 2,523 eligible respondents contacted, 1,222 (48.4 percent) participated in the survey. This cooperation rate is considered typical for a survey of this type.<sup>1</sup>

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.

In 2009, the Bureau of Business and Economic Research (BBER) implemented additional sampling procedures to mitigate any possible undercoverage bias due to the high proportion of younger adults who live in wireless-only households. In particular, BBER conducted interviews with 128 adults who use wireless telephones. This yielded 63 completed interviews with adults who live in wirelessonly households. This is the number of

<sup>&</sup>lt;sup>1</sup> 1 Groves, Robert, M. et. al. 2004. *Survey Methodology*. New York: John Wiley & Sons. pp. 184-187.

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 125 completed interviews. Wireless telephone respondents received \$5.00 as compensation for any telephone charge imposed on them as a result of the interview. A randomized method of selecting one respondent within each household was not required among wireless respondents since wireless telephones are personal utilities as opposed to household utilities.

#### **The Respondents**

The table below describes the respondents and provides benchmarks against which they may be compared. Nearly half (50.3 percent) of respondents are female, and nearly half (49.7 percent) are male. The percentage of females and males in this sample is within the sampling margin of error of the 2000 Census.<sup>2</sup>

#### Table 1–Respondent Percentages

	2009	2000 Census
Male	49.7	49.3
Female	50.3	50.7
American Indian/ Alaskan Native	4.7	7.4
White	94.1	92.2
Other Race	1.2	0.9
Mean Age	47.2	46.5

Distribution of the sample among races also approximates Census Bureau estimates.<sup>3</sup>

American Indians or Alaskan Natives comprise 4.7 percent of respondents, while 94.1 percent

are White. Asian or Pacific Islanders, Blacks, and Hispanics comprise 1.2 percent of respondents. Note that due to the change in the way the race question is asked in the 2000 U.S. Census, reports of race distribution may no longer add to 100 percent and are not strictly comparable to estimates made before 2000.

The mean age of 2009 respondents is 47.2 years, while the average age of Montanans age 18 and over in 2000 was 46.5.<sup>4</sup> The age difference is statistically significant. It is likely that older people are easier to reach on the telephone. The respondents to the 2009 survey are older than the over-17 population of Montana. The probable effect of this difference on the data is small.

District	Percent	Number
District 1	19.8	242
District 2	15.6	191
District 3	28.0	342
District 4	16.1	197
District 5	20.5	250

#### **Table 2–Unweighted Responses**

The table above shows that 19.8 percent of respondents live in MDT District One (See Appendix A) (Lincoln, Flathead, Sanders, Mineral, Missoula, Ravalli, Granite, Powell, and Lake counties), 15.6 percent live in District Two (Beaverhead, Madison, Deer Lodge, Silver Bow, Jefferson, Broadwater, Meagher, Gallatin, and Park counties), 28.0 percent live in District Three (Glacier, Pondera, Teton, Lewis and Clark, Cascade, Toole, Chouteau, Liberty, Hill, and Blaine counties), 16.1 percent live in District Four (Phillips, Valley, Daniels, Sheridan, Roosevelt, Richland, McCone, Garfield, Dawson, Prairie, Rosebud, Fallon, Custer, Powder River, Carter,

<sup>&</sup>lt;sup>2</sup> Gender estimates U.S. Census Bureau, 2000 Census, Montana Table DP-1.

<sup>&</sup>lt;sup>3</sup> Race estimates U.S. Census Bureau, 2000 Census, Montana Table DP-1, Race alone or in combination with other races. Note that U.S. OMB race definition changed in 2000.

<sup>&</sup>lt;sup>4</sup> Age estimate, U.S. Census 2000 Census, Montana Table PCT12, from SF 1 Data.

and Wibaux counties) and 20.5 percent lived in District Five (Bighorn, Treasure, Stillwater, Sweet Grass, Wheatland, Yellowstone, Golden, Valley, Petroleum, Fergus, Musselshell, Judith Basin, and Carbon counties).

The income distribution for the respondents is listed below. Since the income data was collected in categorical variables, direct comparison with Census Bureau data is not practical. However, based on observation of the 2009 TranPlan 21 Survey income distribution, it would appear that the distribution is slightly higher than the Census Bureau estimate of Montana's median 2007 household income, \$42,963.<sup>5</sup>

### Table 3–2008 Household IncomeDistribution

Category	Percent
< \$20,000	12.4
\$20,000-\$34,999	14.4
\$35,000-\$49,999	20.3
\$50,000-\$74,999	25.6
\$75,000 +	27.3

#### **Structure of this Report**

The primary purpose of this report is to describe data collected by the 2009 TranPlan 21 Public Involvement Survey. Adequate description of these data requires presenting an extensive set of tables throughout the report. Analyses of the data are 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 MDT are described. Finally, trends in Montanans' attitudes about the transportation are discussed. A map of MDT Districts is located in Appendix A, found at the end of this report. Volume II contains the remaining appendices. The text of the 2009 TranPlan 21 Public Involvement Survey may be found in Appendix B (Volume II). Tables of responses to each question are also found in Appendix B (Volume II), and can serve as a useful, quickreference tool. Appendix C 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.<sup>6</sup> 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.

<sup>&</sup>lt;sup>5</sup> U.S. Census Bureau. <u>Two-Year-Average Median</u> <u>Household Income by State: 2004 to 2007</u>. Source: U.S. Census Bureau, Current Population Survey, 2005 to 2008 Annual Social and Economic Supplements.

<sup>&</sup>lt;sup>6</sup> Norusis, Marija: <u>Guide to Data Analysis</u>. Englewood Cliffs, NJ: Prentice Hall, 1995, p. 291.

## **II. 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 6.60, 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 reported in Table 4.

# Table 4–Percent Say Satisfaction with<br/>Condition of System Components (95%<br/>Confidence)

	Mean	Lower Limit	Upper Limit	No.
Airports	7.94	7.80	8.08	959
Interstate highways	7.45	7.33	7.58	1,187
Rest areas	6.69	6.54	6.84	1,057
Bicycle pathways	6.58	6.36	6.79	802
Ped walkways	6.53	6.38	6.68	1,054
Other major highways	6.49	6.36	6.62	1,183
Bus depots	5.66	5.47	5.85	486
City streets	5.11	4.97	5.26	1,203
Overall system	6.60	6.48	6.72	1,207

Airports ranked highest in terms of satisfaction (7.94). People also express relatively strong satisfaction with interstate highways (7.45). Behind interstate highways is a group of four components with which Montanans are moderately satisfied: rest areas (6.69), bicycle pathways (6.58), pedestrian walkways (6.53), and other major highways (6.49).

Respondents expressed a lower level of satisfaction with bus depots (5.66) and city streets (5.11). The city street ranking is statistically indistinguishable from 5.0, the psychological midpoint. 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 5 presents mean satisfaction scores for each of the five MDT Districts.

## Table 5-Percent Say Satisfaction withCondition of System Components by MDTDistrict

	District					
	1	2	3	4	5	
Airports	8.15	7.67	8.01	7.63	7.88	
Interstate highways	7.08	7.45	7.86	7.59	7.59	
Rest areas	6.75	6.64	6.59	6.86	6.68	
Bicycle pathways	6.99	5.92	6.81	6.33	6.23	
Ped walkways	6.64	6.43	6.53	6.32	6.51	
Other major highways	6.38	6.72	6.61	5.88	6.53	
Bus depots	6.09	5.16	5.81	4.56	5.59	
City streets	5.20	4.68	5.27	4.87	5.33	
Overall system	6.59	6.65	6.65	5.97	6.75	

Tests were calculated to assess the statistical significance of differences between the means presented. Overall, there is general agreement between respondents from the various MDT regions. However, a few regional differences exist. First, in terms of overall system satisfaction, Districts One, Two, Three and Five were more satisfied than District Four. Next. District Three residents were somewhat more satisfied with the condition of interstate highways than were District One residents. People who lived in Districts Two, Three, or Five were slightly more satisfied with the condition of other major highways than were people who lived in District Four. Adult residents of District One were more satisfied

with the physical condition of bicycle pathways than were adult residents of District Two. Finally, respondents from Districts One and Three were more satisfied with the condition of bus depots than were District Four respondents.

#### **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 6-Percent Say Perceived Need forAdditional Facilities, Equipment, or

		Don't					
	Yes	No	Know	Total			
City streets	70.2	26.7	3.0	1,221			
Other major highways	56.7	37.0	6.3	1,221			
Ped walkways	52.1	34.2	13.8	1,221			
Interstate highways	47.8	46.0	6.2	1,221			
Rest areas	45.9	39.0	15.1	1,221			
Bicycle pathways	43.1	30.5	26.4	1,221			
Bus depots	26.3	21.6	52.2	1,219			
Airports	19.3	58.3	22.4	1,221			

#### Services

Consistent with their satisfaction ratings, over half of Montanans (58.3) feel additional airport facilities are not needed. Approximately 70.2 percent of Montanans believe that more facilities, equipment, or services are needed for city streets, and 56.7 percent said the same thing for other major highways. About half of the respondents perceived a need for pedestrian walkways (52.1), interstate highways (47.8), and rest areas (45.9 percent). Just over two-fifths perceived a need for more bicycle pathways (43.1).

Half of the respondents say they didn't feel qualified to answer questions about bus depot infrastructure (52.2).

A few regional differences are found when looking across MDT districts (Table 7). More residents of District Three said they need more infrastructure on major highways than did residents of District Two. A larger percentage of District One, Three, and Five respondents cited a need for more pedestrian walkways than did District Two or Four respondents. Finally, a higher fraction of people in District Two say they need more bicycle pathways than do people in the other districts.

#### Satisfaction with Service Availability

Respondents stated they were moderately satisfied with the availability of air transportation to destinations outside Montana (6.61), freight rail (6.20), transit for the elderly or disabled (5.93), air transportation to Montana destinations (5.90), the availability of local bus or van service (5.88), and availability of taxi service (5.32).

#### Table 7–Percent Say Perceived Need for Additional Facilities, Equipment, or Services by District

	District				
	1	2	3	4	5
City streets	67.5	68.6	73.3	73.5	71.8
Other major highways	58.4	47.9	62.1	59.5	55.7
Ped walkways	53.6	47.3	53.4	47.3	54.6
Interstate highways	46.0	48.7	50.1	43.1	49.3
Rest areas	42.2	39.7	52.8	52.2	48.1
Bicycle pathways	44.1	51.7	39.4	36.7	39.8
Bus depots	23.3	26.5	29.7	26.8	27.0
Airports	18.1	21.3	20.4	20.4	18.0

Montanans are neutral about the availability of intercity bus service (5.08), but are dissatisfied with the availability of passenger rail service (4.62). See Table 8.

### Table 8-Percent Say Satisfaction withService Availability (95% Confidence)

Lower Upper Mean Limit Limit #						
Air trans outside MT	6.61	6.44	6.78	1,044		
Freight rail	6.20	5.99	6.41	583		
Transit elderly/disabled	5.93	5.73	6.13	828		
Air trans in MT	5.90	5.72	6.08	827		
Local bus or van	5.88	5.66	6.11	757		
Taxis	5.32	5.09	5.54	659		
Intercity bus	5.08	4.87	5.30	640		
Passenger rail	4.62	4.41	4.83	827		

District Four expressed significant dissatisfaction with the availability of local bus or van service (4.27), intercity bus service (3.31), and taxi service (3.68).

Three of the districts with AMTRAK service (One, Three, and Four) reported somewhat positive or neutral levels of satisfaction. District Five and Two expressed dissatisfaction with the availability of passenger rail service. See Table 9.

### Table 9-Percent Say Satisfaction with ServiceAvailability by District

		Ι	Distri	ct	
	1	2	3	4	5
Air trans outside MT	6.74	6.28	6.59	6.10	6.88
Freight rail	6.53	5.49	6.21	5.38	6.62
Transit elderly/disabled	5.72	5.95	6.17	5.64	6.14
Air trans in MT	6.15	5.66	5.64	5.22	6.20
Local bus or van	5.54	6.60	5.98	4.27	6.30
Taxis	5.23	5.27	5.53	3.68	5.88
Intercity bus	4.91	5.93	4.95	3.31	5.55
Passenger rail	5.32	3.06	5.12	4.89	4.03

### Perceived Problems with Montana's Transportation System

Montanans rated possible problems on a scale from one to four, where one is "not a problem" and four is a "serious problem." See Table 10.

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. This reinforces the positive overall level of satisfaction with the transportation system expressed by Montanans.

While only one significant problem emerges when examining statewide data, the conclusions are different at the district level. Table 11 explores the percentage of respondents in each district that say an item is a moderate or serious problem. Residents of MDT District One 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 One, containing populous western Montana, and District Four, rural eastern Montana.

Respondent views on road pavement condition, timely resolution of safety issues, and traffic congestion were emblematic of Montana's current regional differences. Traffic congestion is the greatest perceived problem in more densely populated western Montana District One, excluding road pavement condition (which may have been influenced by the timing of the administration of the survey). Timely resolution of safety issues is also rated as relatively serious by District One. In contrast, relatively few residents of the more rural District Four agree with their District One neighbors.

	Serious Problem	Moderate Problem	Small Problem	Not a Problem	Don't Know	Mean	Total
Road pavement condition	19.4	42.9	20.7	16.3	0.6	2.66	1,214
Timely resolution to safety issues	10.8	31.7	18.3	28.8	10.4	2.27	1,095
Traffic congestion	11.9	31.6	24.5	30.4	1.5	2.26	1,203
Impacts on the environment from the transportation system	10.6	25.1	27.3	31.4	5.6	2.16	1,154
Debris on roadways	11.3	23.8	32.2	31.2	1.5	2.15	1,203
Number of vehicles with only one occupant	15.1	23.0	16.2	39.0	6.7	2.15	1,139
Number and condition of rest areas	11.4	23.7	19.4	35.3	10.2	2.13	1,097
Vehicle carbon monoxide emissions	10.8	24.7	22.4	35.5	6.5	2.12	1,141
Vehicle damage from highway construction and maintenance	7.5	23.8	32.9	30.7	5.2	2.08	1,159
Lack of alternative routes for major roads	9.8	22.6	22.8	40.3	4.5	2.02	1,167
The ability to manage specific emergency situations like train derailments, bridge failures, or major accidents	6.4	19.9	23.1	37.5	13.1	1.94	1,062
Too many access points (including driveways) onto major roads	6.0	20.2	21.7	44.9	7.1	1.86	1,133
Air quality impacts from highway maintenance (i.e., excessive dust caused by winter sanding materials)	4.4	16.5	28.1	46.0	5.1	1.78	1,158
Adequate road signs	3.7	13.4	22.7	59.0	1.2	1.61	1,207

Table 10–Percent Say Perceived Problems with Montana	Transportation System
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A majority of residents in District One said timely resolution to safety issues is a moderate or serious problem.

About six in ten District One respondents said traffic congestion is a serious problem. This percentage is significantly larger than that found in any other district. Not quite half of District Five respondents also said traffic congestion is a moderate or serious problem.

The number of one-occupant vehicles, too many access points onto major highways, vehicle carbon monoxide emissions, impacts on the environment from the transportation system in general, and the impact on air quality of road maintenance are considered a moderate or serious problem by more respondents in District One than in District Four.

Road pavement condition was considered a moderate or serious problem by a majority of residents across the state. This is likely due to administering the survey during the spring thaw when pot holes are most prevalent.

	District						
	1	2	3	4	5		
Road pavement condition*	72.5	51.0	59.3	63.2	59.5		
Timely resolution to safety issues*	51.8	30.8	40.0	34.8	44.2		
Traffic congestion*	57.4	31.4	37.6	24.8	46.3		
Impacts on the environment from the transportation system*	42.3	32.3	32.6	26.7	35.0		
Debris on roadways*	41.1	28.6	30.4	33.7	36.7		
Number of vehicles with only one occupant*	44.9	30.8	33.9	29.1	42.0		
Number and condition of rest areas	33.7	30.7	39.8	35.1	36.8		
Vehicle carbon monoxide emissions*	42.1	31.2	34.5	17.8	36.7		
Vehicle damage from highway construction and maintenance	34.8	23.7	32.9	36.3	29.3		
Lack of alternative routes for major roads*	40.0	20.4	28.2	32.0	35.8		
The ability to manage specific emergency situations like train derailments, bridge failures, or major accidents	31.9	21.6	24.2	23.6	25.0		
Too many access points (including driveways) onto major roads*	38.4	20.0	19.3	18.1	22.9		
Air quality impacts from highway maintenance (i.e., excessive dust caused by winter sanding materials)*	28.6	16.2	18.1	16.4	17.3		
Adequate road signs	15.8	15.0	16.3	15.8	22.4		

### Table 11–Percent Say Perceived Moderate or Serious Problems with Montana Transportation System by District

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

### Possible Actions to Improve Transportation System

Respondents were asked to prioritize 17 possible actions to improve Montana's transportation system. See Table 12. 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, sixteen of the seventeen possible action items as medium or somewhat high priorities.

Although there was not a clear breakpoint, six actions received somewhat high priority scores with mean scores of 3.5 or higher: promoting existing passenger rail, maintaining road pavement condition, improving the physical condition of roads, keeping the public informed, improving the physical condition of major roads and streets, improving transportation safety, and using new technologies.

	Very High Priority	Some- what High Priority	Medium Priority	Some- what Low Priority	Very Low Priority	Don't Know	Mean	Total
Supporting efforts to preserve existing passenger rail service	34.8	21.4	23.4	6.1	6.1	8.2	3.79	1,121
Maintain road pavement condition	29.3	28.2	31.0	5.7	4.6	1.1	3.73	1,208
Keeping the public informed about transportation issues	31.5	23.8	31.6	7.1	5.0	0.9	3.70	1,211
Improving the physical condition of other roads and streets	24.1	29.7	32.8	8.7	3.5	1.2	3.63	1,207
Improving transportation safety	32.8	20.1	28.1	7.7	9.7	1.6	3.60	1,202
Using new technologies like electronic message signs, website & radio updates, remote weather information systems, coordinated signal systems	25.0	25.2	29.8	6.4	9.7	4.0	3.52	1,173
Promoting the use of local transit systems, like buses or vans	22.4	24.3	29.3	7.9	10.6	5.4	3.42	1,155
Ensuring adequate pedestrian facilities (i.e., sidewalks, footpaths, crossings)	20.2	22.3	30.0	12.4	11.8	3.5	3.28	1,180
Supporting efforts to increase availability of scheduled airline service	19.9	16.3	33.2	10.4	11.6	8.5	3.24	1,118
Improving rest areas (i.e. maintenance, more facilities)	15.8	16.6	31.3	16.6	10.6	9.0	3.11	1,112
Improving physical condition of interstates and major highways	12.3	19.8	40.1	15.3	9.7	2.8	3.10	1,187
Ensuring adequate bicycle facilities	16.0	17.1	30.9	14.1	16.1	5.8	3.03	1,149
Improving the physical condition of bus depots	11.6	10.5	21.9	10.4	10.8	34.9	3.03	792
Reducing traffic congestion by increasing the capacity of the highway system	15.3	17.1	32.6	15.7	16.4	2.9	2.99	1,186
Reducing air quality impacts of roadway use	17.8	12.9	30.3	13.2	21.8	4.0	2.91	1,171
Regulating the number of highway approaches and driveways to preserve transportation corridors	10.8	14.2	37.1	13.1	18.9	6.0	2.84	1,147
Attempt to reduce single occupancy vehicle use	10.4	11.2	21.7	14.0	37.7	5.0	2.39	1,160

#### Table 12-Percent Say Priority of Possible Actions to Improve Transportation System

Ten actions were rated as medium priorities for possible improvement. Their scores ranged from 3.42 for promoting local transit systems to 2.84 for regulating the number of highway approaches and driveways.

Attempting to reduce one-occupant vehicle use (2.39) was rated by respondents as somewhat low priority and it was the lowest priority examined.

Priorities for possible actions to improve the transportation system were also examined across each of the five MDT regions. 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 13. Since, on average, respondents classified almost all of the studied actions as medium priorities, the differences between districts largely focus on the relative magnitude of response.

		Ι	District		
	1	2	3	4	5
Supporting efforts to preserve existing passenger rail service	59.9	53.4	57.4	60.6	50.3
Maintain road pavement condition	58.8	55.8	59.6	63.0	53.3
Keeping the public informed about transportation issues	53.2	54.5	61.8	54.8	53.2
Improving the physical condition of other roads and streets	53.9	55.1	54.8	63.2	48.2
Improving transportation safety	55.5	47.0	52.6	45.8	57.2
Using new technologies like electronic message signs, website & radio updates, remote weather information systems, coordinated signal systems	50.4	45.3	52.5	46.2	53.8
Promoting use of local transit systems, like buses or vans	48.3	45.0	45.8	36.0	50.8
Ensuring adequate pedestrian facilities (i.e., sidewalks, footpaths, crossings)	44.6	37.9	45.1	31.5	44.6
Supporting efforts to increase the availability of scheduled airline service*	31.8	41.9	42.8	35.4	31.4
Improving rest areas (i.e. maintenance, more facilities)	27.8	31.4	40.9	30.4	33.0
Improving the physical condition of the interstates and major highways*	38.2	28.1	30.7	35.4	26.5
Ensuring adequate bicycle facilities	34.6	35.0	29.6	26.5	35.1
Improving the physical condition of bus depots	16.4	25.4	22.5	19.1	28.7
Reducing traffic congestion by increasing the capacity of the highway system*	39.2	24.5	33.0	26.4	30.7
Reducing the air quality impacts of roadway use	36.1	31.7	24.8	22.2	30.4
Regulating the number of highway approaches and driveways to preserve transportation corridors	25.9	25.2	20.2	18.2	30.7
Attempting to reduce single occupancy vehicle use*	26.0	13.1	19.4	13.4	27.7

### Table 13–Percent in Each MDT District Say Possible Actions to Improve Transportation System a Somewhat or Very High Priority

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

There is general agreement among all of the MDT Districts about the six highest priority actions. See Table 13.

Districts Two (41.9 percent) and Three (42.8 percent) rated supporting efforts to increase the availability of scheduled air service a higher priority than did Districts One (31.8 percent) and Five (31.4 percent). District One residents (38.2 percent) were more likely than District Two (28.1 percent) or Five residents (26.5 percent) to rate improving the physical condition of interstates and major highways a somewhat or very high priority.

Two-fifths of District One residents (39.2 percent) say reducing traffic congestion by increasing the capacity of the highway system is a somewhat or very high priority. Only 24.5 percent of District Two residents and only 26.4 percent of District Four residents agree.

More than one-quarter of District One (26.0 percent) and District Five respondents (27.7 percent) say it is a somewhat or very high priority to reduce single occupant vehicle use, but only 13.4 percent of District Four respondents concur with this assertion.

#### **III. TRENDS IN MONTANA'S TRANSPORTATION SYSTEM**

The 2009 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 2009 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 2009 survey findings are compared in the following sections to the surveys conducted in 1994, 1997, 1999, 2001, 2003, 2005, and 2007. Several questions were added in 1997, 2003, 2005, and 2007, thus in some cases comparisons can only be made for the later years.

As explained in Chapter I of this report, comparisons here are made using t-tests and other statistical tests. Items are reported only if the differences are significant at the .05 level. The values reported in the Figures 1 to 3 were rounded and some of the values were deleted in the interest of clarity.

#### Satisfaction with the Transportation System

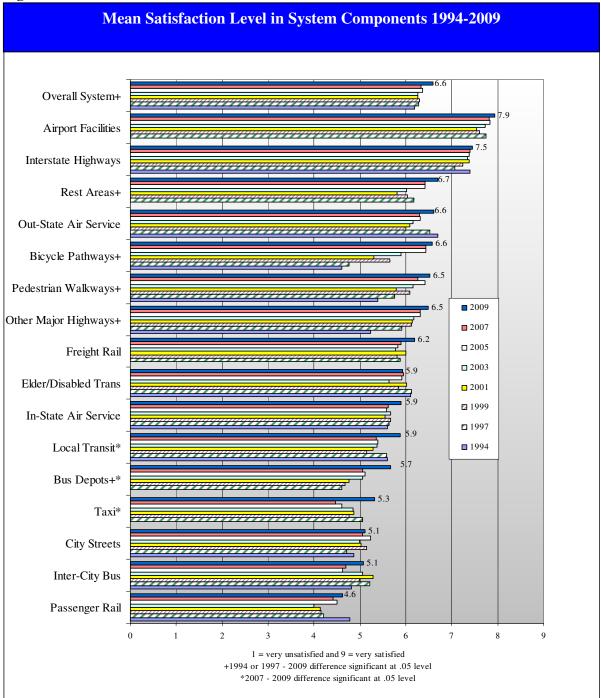
In each of the eight replications of this study respondents were asked identical questions to rate their satisfaction with the physical condition of various system components. The questions utilized a one to ten scale, where one is very unsatisfied and ten is very satisfied. The surveys also asked respondents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

As shown in Figure 1, when asked to rate their overall satisfaction with Montana's transportation system in 2009 respondents' satisfaction improved (6.60) over 1994 (6.20), 1997 (6.28), 1999 (6.30), 2001 (6.26), and 2003 (6.27). The 2009 level was not improved at a statistically significant level over that found in 2005 (6.37) or 2007 (6.34).

Relative to 2007, satisfaction with the physical condition of system components stayed the same in 2009 with the exception of bus depots. Satisfaction with the physical condition of bus depots improved from 5.06 in 2007 to 5.66 in 2009.

Similar to their ratings of the physical condition of system components, Montanans rate their satisfaction with availability of transportation services in 2009 the same as 2007 respondents. None of the eight services studied in 2009 were rated higher or lower than in 2007. Looking over the past twelve years, satisfaction has improved with: the overall system, rest areas, bicycle pathways, pedestrian walkways, non-interstate highways, and bus depots. Over the past two years, satisfaction has improved in 16 out of the 17 components.

#### Figure 1



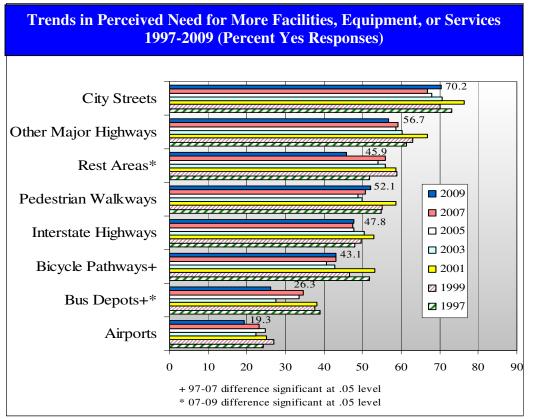
#### Perceived Need for More Facilities, Equipment, or Services

In 1997, 1999, 2001, 2003, 2005, 2007, and 2009 respondents were asked whether they perceived a need for certain other additional facilities, equipment, or services. These responses are presented in Figure 2.

The 2009 findings demonstrate a decline in the perceived need for rest areas (45.9 percent) and bus depot facilities (26.3 percent) when compared to 2007 (51.9 percent and 38.9 percent respectively). The perceived need for bicycle pathways in 2009 (43.1 percent) has

decreased since 1997 (51.8 percent), but is unchanged from its 2007 level (43.2 percent). Seven of every ten Montanans (70.2 percent) cited a need for improved city streets in 2009, making 2009 the seventh iteration of this biannual survey to find improved city streets as the largest perceived infrastructure improvement need. Less than one-fifth (19.3 percent) of Montanans say more facilities, equipment, or services are needed for airports. This also represents the seventh consecutive survey to find airports as the smallest perceived infrastructure need.

#### Figure 2

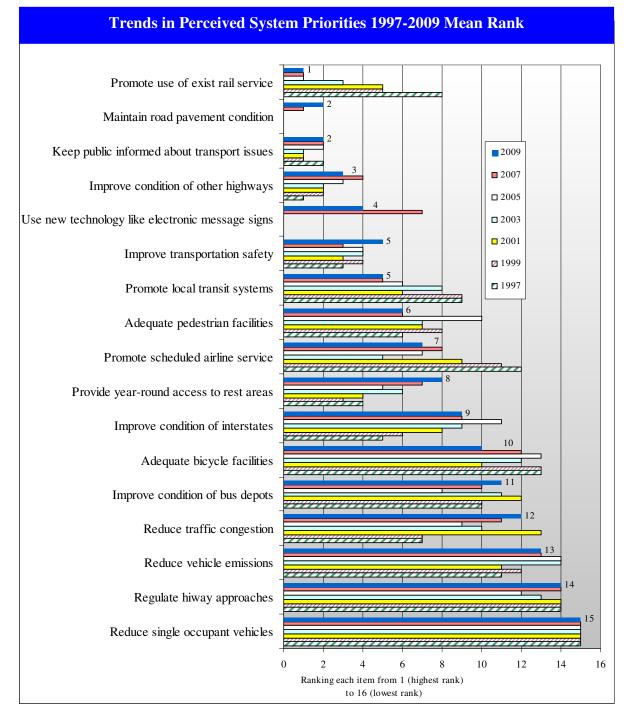


#### Possible Improvements in the Transportation System and Roadways

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 2003-2009 surveys with those conducted earlier than 2003.

In an attempt to provide some information concerning trends, Figure 3 presents the mean rank for each of the items from the 1997, 1999, 2001, 2003, 2005, 2007, and 2009 surveys. The mean rank is a non-parametric statistic that ranks each item from 1 (highest rank) to 15 (lowest rank) for each of the six surveys. This statistic is unaffected by the change in wording. Over the last 12 years the largest change in the rank of priority scores has been associated with promoting use of existing passenger rail service. This item has increased its ranking from 8<sup>th</sup> in 1997 to 1st today. Two other items made relatively large changes in ranking from 1997 to 2009: promoting scheduled airline service increased in priority ranking from 12<sup>th</sup> to 7<sup>th</sup>, and reducing traffic congestion by increasing highway system capacity dropped in priority ranking from 7<sup>th</sup> to 12<sup>th</sup>. MDT added two items in 2007. The 1<sup>st</sup>, maintaining road pavement condition, scored 3.73 and ranked  $2^{nd}$  this year. The second, using new technologies like electronic message signs, scored 3.46 and ranked 4<sup>th</sup>.

#### Figure 3



#### IV. SECURITY PRIORITIES OF SYSTEM COMPONENTS

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 1 to 5, where 1 equals not at all important and 5 equals extremely important. Overall, responses ranged from somewhat important to very important. See Table 14.

Five elements of the transportation system were rated greater than or equal to very important for the security of the system: emergency response plans (4.27), airports (4.16), border crossings (4.12), communication / coordination with other agencies (4.10), and communication with the public using available advanced technologies (3.94). The lowest rated aspect of the system was availability of alternative routes (3.47).

District Five respondents (80.4 percent) more often sited airport security as very or extremely important than did District Four respondents (71.8 percent). District 2 residents (77.3 percent) more often said communication with the public with advanced technologies is very or extremely important than did District 4 residents (58.4 percent). District One adults (51.0 percent) were more likely to say security at public transit facilities as very or extremely important than were District Five adults (44.6 percent). See Table 15.

	Extremely important	Very important	Somewhat important	Not very important	Not at all important		Mean	No.
Emergency response plans	42.5	39.8	10.6	1.4	1.1	4.7	4.27	1,163
Homeland security airports	39.6	36.0	15.0	3.1	1.0	5.3	4.16	1,157
Homeland security border crossings	39.1	33.7	13.2	4.9	1.7	7.4	4.12	1,130
Communication and coordination with other agencies	35.3	36.9	18.0	1.9	1.4	6.4	4.10	1,142
Communication with the public using available advanced technologies	27.7	39.5	24.0	2.9	1.1	4.8	3.94	1,162
Homeland security interstate highways	27.3	35.0	25.2	5.3	3.7	3.6	3.80	1,176
Connectivity of roadways	15.9	35.0	34.6	5.1	2.0	7.3	3.62	1,131
Homeland security other major highways	18.9	32.8	33.6	7.1	3.7	3.8	3.58	1,175
Homeland security public transit facilities like bus terminals	18.7	27.2	34.3	7.7	3.4	8.7	3.55	1,114
Availability of alternative routes	16.6	28.8	34.7	9.5	4.1	6.3	3.47	1,143

#### Table 14–Overall Percent Say Security Priority of Transportation System Components

### Table 15–Percent Rated Very \*Important or Extremely Important Regarding Security Priority of Transportation System Components by District

	District					
	1	2	3	4	5	
Emergency response plans	84.3	78.6	83.2	75.5	84.1	
Homeland security airports*	77.7	62.1	81.7	76.4	78.4	
Homeland security border crossings*	68.2	66.2	78.9	80.4	77.1	
Communication and coordination with other agencies	75.5	67.9	74.5	69.0	69.8	
Communication with public using available advanced technologies*	60.8	71.0	68.3	65.0	73.7	
Homeland security interstate highways	66.5	56.1	60.0	58.0	65.2	
Connectivity of roadways	53.6	47.6	51.7	44.9	51.6	
Homeland security other major highways	49.0	49.3	53.6	55.4	55.1	
Homeland security public transit facilities like bus terminals*	45.0	36.6	50.8	52.3	48.7	
Availability of alternative routes	43.5	46.8	45.5	49.1	45.6	

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

#### V. USEFULNESS OF COMMUNICATION TOOLS

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 1 to 5 where 1 equaled not at all useful and 5 equaled extremely useful. Of the seven tools examined, people rated one set – radio and television – as very useful. See Table 16. In fact, 59.3 percent of respondents rated radio and television as either very important or extremely important.

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 13.0 percent of persons said brochures and newsletters are very useful or extremely 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. See Table 17. District One residents were less likely than others to find a website very or extremely useful. District Two residents were less likely than others to find public meetings very or extremely useful.

	Extremely useful	Very useful	Some what useful	Not very useful	Not at all useful	DK	Mean	Total
Radio and television	19.2	40.1	29.0	5.2	5.0	1.5	3.64	1,202
Toll-free call in number	14.3	21.3	33.0	11.4	16.6	3.4	3.06	1,179
Website	13.3	26.7	26.4	7.3	20.6	5.7	3.05	1,151
Newspapers	8.6	24.1	40.9	10.8	14.0	1.6	3.03	1,201
Surveys	3.6	16.2	42.8	14.5	18.7	4.2	2.70	1,170
Public meetings in your community	4.6	15.2	32.2	19.7	25.1	3.2	2.53	1,182
Special mailings (brochures, newsletters, postcards, etc)	2.9	10.1	35.3	21.8	26.5	3.3	2.39	1,180

#### Table 16-Percent in each District Say Usefulness of General MDT Communication Tools

### Table 17–Percent Rated Extremely Useful or Very Useful in Each District Regarding Usefulness of MDT Communication Tools

	District						
	1	2	3	4	5		
Radio and television	58.1	54.7	60.9	59.7	63.8		
Toll-free call in number	33.3	34.1	37.8	39.7	37.0		
Website*	30.7	45.6	43.2	41.7	45.9		
Newspapers	31.5	29.8	37.8	29.7	33.7		
Surveys	18.7	17.0	21.5	23.6	21.1		
Public meetings in your community*	21.6	12.0	23.2	24.0	19.2		
Special mailings (brochures, newsletters, postcards, etc)	12.7	12.9	13.7	11.8	13.5		

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

#### VI. COMMUNICATION TOOLS FOR PLANNING AND PROJECTS

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 1 to 5 where 1 is not at all helpful and 5 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. See Table 18.

Almost half of Montanans (48.7 percent) said that maps are very helpful or extremely helpful

to them in the planning process or in learning about MDT projects. Over one-third (38.9 percent) said that pictures or graphics are very helpful or extremely helpful to them. Only 19.3 percent find newsletters very helpful or extremely helpful.

District Three residents are more likely than others to say that advanced technology tools are very or extremely helpful. See Table 19. District One adults find a website less helpful than do others across the state. In contrast, District One respondents are more likely than their neighbors to say that newsletters are very or extremely useful.

### Table 18–Overall Percent Rated Regarding Helpfulness of MDT Communication Tools in the Planning Process or for Project Information

	Extremely helpful	Very helpful	Some what helpful	Not very helpful	Not at all helpful	DK	Mean	Total
Maps	12.3	36.4	34.7	4.8	7.7	4.1	3.43	1,170
Pictures or graphics	8.8	30.1	42.1	6.5	7.1	5.5	3.28	1,153
Advanced technology tools	8.3	25.4	30.6	10.8	16.6	8.3	2.98	1,117
Website	10.1	20.0	30.2	10.7	21.3	7.7	2.86	1,126
Brochures	3.5	16.2	42.5	15.0	17.1	5.7	2.73	1,152
Newsletters	2.9	16.4	37.8	16.8	21.2	4.9	2.61	1,160

### Table 19–Percent Rated Extremely or Very Helpful by District Regarding MDT Communication Tools in the Planning Process or for Project Information

			District		
	1	2	3	4	5
Maps	46.1	45.6	50.1	49.6	54.2
Pictures or graphics*	32.8	35.8	44.1	38.9	46.1
Advanced technology tools*	27.5	33.3	40.3	28.8	38.7
Website*	22.1	36.8	32.4	34.5	32.7
Brochures	18.7	20.0	17.5	18.1	24.2
Newsletters*	26.5	9.5	17.1	19.5	19.1

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

#### VII. ACTIONS TO IMPROVE ROADWAYS

For the fourth time in this series of crosssectional surveys, respondents were asked to prioritize seven possible actions to improve Montana's roadways. See Table 20. 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: wider roadways, more traffic lights and left turn lanes, and more pavement markings.

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

	Very High Priority	Somewhat High Priority	Medium Priority	Somewhat Low Priority	Very Low Priority	DK	Mean	Total
Increase shoulder widths to accommodate motorists	29.6	25.1	27.8	6.4	9.5	1.6	3.60	1,203
Increase shoulder widths to accommodate bicyclists	31.3	21.4	24.0	8.2	12.9	2.3	3.51	1,194
More guard rails	25.9	24.4	28.0	12.3	8.6	.7	3.47	1,213
Wider roadways	19.5	20.2	30.8	13.3	13.9	2.4	3.18	1,192
More traffic lights and left turn lanes	17.6	19.6	33.8	12.1	14.7	2.2	3.14	1,194
More pavement markings	15.9	19.0	34.7	13.2	15.4	1.7	3.07	1,201
More lighting of roadways	14.9	16.2	26.7	21.3	18.8	2.1	2.87	1,197
More directional /informational signs	12.6	15.4	33.8	18.7	18.6	.8	2.85	1,211

#### Table 20–Percent Say Priority of Possible Actions to Improve Roadways

There are few differences between the MDT Districts in terms of the possible actions to improve roadways (see Table 21).

District Two residents were less likely than other residents to say more guard rails are a somewhat or very high priority. Residents of Districts One, Three, and Five (which correspond to the Missoula, Great Falls, and Billings areas) were more likely than residents of Districts Two and Four to say that more traffic lights and left turn lanes were a somewhat or very high priority. In 2009 one item changed in mean priority score from its 2007 level. More guard rails decreased to 3.50 in 2009 from 3.72 in 2007. While this change was statistically significant, it had little practical significance. In addition, the 2009 priority level for more guard rails actually converged to the 2005 level of 3.49. This indicates that the 2007 level may have been a one-time fluctuation and not indicative of a trend.

### Table 21–Percent in Each MDT District Say Possible Actions to Improve Roadways a Somewhat or Very High Priority

		District			
	1	2	3	4	5
Increase shoulder widths to accommodate motorists	54.9	53.2	53.5	58.7	55.8
Increase shoulder widths to accommodate bicyclists	54.4	53.0	50.8	43.4	55.1
More guard rails*	53.6	32.8	56.6	57.1	52.6
Wider roadways	44.0	38.8	39.7	36.7	34.4
More traffic lights and left turn lanes*	39.9	28.5	37.6	28.4	44.0
More pavement markings	35.3	32.0	38.9	29.2	35.1
More lighting of roadways	32.8	24.4	33.7	33.0	31.4
More directional /informational signs	24.4	27.8	31.5	23.4	32.2

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

#### VIII. OVERALL MDT CUSTOMER SERVICE AND PERFORMANCE

The 2009 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 22. In general, Montanans give MDT an average or above average (B or C+) grade for customer service and performance. Montanans gave the highest grade to the MDT services compared with five years ago (3.00 on a four-point scale). Second place went to current MDT quality of service (2.87). Third place was a statistical tie between seven categories: MDT overall performance in the last year (2.79), the quality of MDT planning in the last year (2.72), MDT informing customers about construction (2.72), MDT convenience of travel through construction areas (2.69), MDT highways and maintenance repair (2.69), and MDT keeping the public informed (2.66). The lowest grade was given to MDT's responsiveness to customer ideas and concerns (2.52).

#### Α B С D F DK Mean Total Overall, how would you grade the current quality of service provided by MDT compared with the quality 19.4 45.2 16.4 1.5 0.2 17.3 3.00 1,006 of service five years ago, in 2004? What grade would you give MDT on the quality of 14.5 55.6 22.4 1.9 .2 1,152 5.5 2.87 service it provides? How would you grade MDT's overall performance 54.7 2.2 0.1 1,172 11.6 27.6 3.9 2.79 during the past year, since April 2008? What grade would you give MDT on overall quality 13.6 43.4 28.0 3.9 0.8 10.2 2.72 1.094 of planning to meet statewide transportation needs? What grade would you give MDT on its public 5.7 notification process about construction projects in 39.0 1.7 18.8 28.5 6.2 2.72 1.143 your area? Overall, what grade would you give MDT on the convenience of travel through construction zones 14.7 46.4 29.5 4.3 2.1 3.0 2.69 1,182 and maintenance projects? What grade would you give MDT on its overall 12.6 47.8 31.9 4.6 0.7 2.3 2.69 1.191 highway maintenance and repair? What grade would you give MDT on its efforts to keep customers fully informed of all relevant 13.7 42.0 29.6 4.6 2.0 8.1 2.66 1,121 information and upcoming decisions related to the transportation system? What grade would you give Montana Department of Transportation for its responsiveness to customer 7.0 31.5 27.2 3.8 2.3 2.52 28.2 871 ideas and concerns?

#### Table 22–Percent of MDT Overall Performance and Customer Service Grades

Respondent grades of MDT overall performance and customer service by MDT District are presented in Table 23. For the most part, there is widespread agreement between the MDT Districts regarding MDT overall performance and customer service grades.

District One and Four residents gave MDT lower grades than other districts in all four of the areas where significant differences between districts were observed: Overall quality of service now compared with five years ago, overall past year performance, quality of planning, and overall highway maintenance and repair. 2009 MDT performance and customer service grades improved somewhat in four areas when compared to 2007, and there were no declines. The areas where MDT's grades improved were:

- overall quality of planning,
- public notification about construction projects,
- convenience of travel through construction areas, and
- responsiveness to customer ideas and concerns.

### Table 23–Percent A or B Grades for MDT Overall Performance and Customer Service in Each MDT District

		District			
	1	2	3	4	5
Overall, how would you grade the current quality of service provided by MDT compared with the quality of service five years ago, in 2004?*	56.7	68.3	66.8	61.2	73.0
What grade would you give MDT on the quality of service it provides?	64.4	70.0	73.0	68.9	76.6
How would you grade MDT's overall performance during the past year, since April 2008?*	60.2	70.8	68.4	60.2	71.8
What grade would you give MDT on overall quality of planning to meet statewide transportation needs?*	50.3	61.7	58.1	53.1	63.7
What grade would you give MDT on its public notification process about construction projects in your area?	56.3	55.3	63.3	48.7	60.7
Overall, what grade would you give MDT on the convenience of travel through construction zones and maintenance projects?	57.9	61.6	66.6	61.5	59.9
What grade would you give MDT on its overall highway maintenance and repair?*	54.2	66.5	60.8	49.1	68.7
What grade would you give MDT on its efforts to keep customers fully informed of all relevant information and upcoming decisions related to the transportation system?	56.0	54.9	58.5	48.9	55.6
What grade would you give Montana Department of Transportation for its responsiveness to customer ideas and concerns?	38.0	33.6	42.0	31.8	43.1

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

#### IX. OTHER ISSUES THAT MDT SHOULD ADDRESS

Respondents were asked what other transportation issues should be addressed by MDT in an open-ended question format. The responses provided by at least five Montanans are listed in Table 24.

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 this open-ended question. This is not uncommon. Open-ended questions generally place more burden on respondents than do questions with specific response options.

Improving or increasing passenger rail service was the most commonly cited issue, followed by improving non-interstate highways and improving snow plowing. It is likely that conducting the survey earlier in 2009 made some road repair items more prominent than they were in past surveys.

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

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

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

- 1. Provide more passenger rail service
- 2. Increase mass/ public transit

Increasing or improving passenger rail service was notable for its increase in number of responses. 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. A complete list of these responses may be found in Appendix C.

### Table 24–Other Transportation Issues thatMDT Should Address.

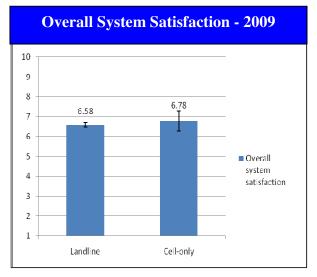
Response	No.
Improve-increase passenger rail	67
Improve/repair other numbered highway	27
Improve snow-plowing/de-icing	22
Increase mass-public transit	15
Improve city streets	15
Improve transportation planning for population growth	14
Improve dirt/back-roads	13
Widen two-lane highways	12
Improve/add bike trails	11
Fix potholes	8
More/improved road signs	8
Fix roads	8
Add public transportation to specific place	8
Reduce speeding/speed limits	8
Get road construction done faster	7
Improve passenger air service	7
Reduce danger from animals on roads	6
Increase number/quality of rest stops	5
Encourage alternative fuel vehicles	5

#### X. IMPACT OF WIRELESS TELEPHONE MODULE

The addition of a cellular telephone sample module to the 2009 Public Involvement Telephone Survey had a small impact on the findings. Of the 95 substantive (as opposed to demographic) variables observed, 7 (7.4 percent) were found to have values that were different for respondents who live in a cellonly household when compared to other respondents.

The overall system satisfaction improvement found in 2009 when compared to the 1994-2003 period was not due to the addition of the cellular telephone sample. As Figure 4 below demonstrates, there is no statistically significant difference between the overall system satisfaction of cell-only respondents and all others.

#### Figure 4



2009 also found four performance and customer service grades that were improved over 2007. These improvements were <u>not</u> due to the addition of the wireless telephone sampling module. The differences between the grades reported by cell-only respondents and all others were not statistically significant.

Cell-phone only Montanans did express somewhat different desires for improvement in transportation infrastructure or facilities. While 71.5 percent of landline residents want improved city streets, only 55.4 percent of cellonly residents agreed. In contrast, 60.6 percent of cell-only adults want more or improved pedestrian walkways, but only 51.3 percent of landline adults want more or improved pedestrian walkways.

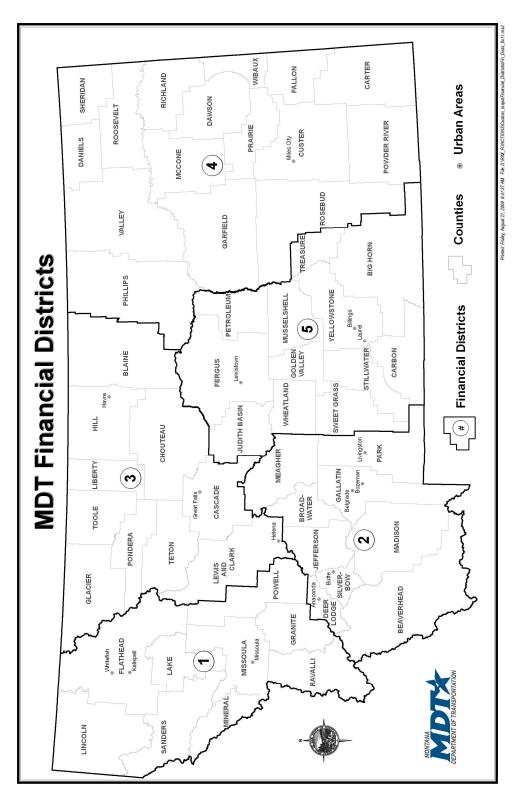
Wireless-only respondents were more satisfied with the availability of air travel to out-of-state destinations (7.38 out of 10) than were landline respondents (6.54 out of 10).

Cell-only adults rated traffic congestion as a moderate problem (2.59 out of 4) while landline adults rated traffic congestion as a small problem (2.23 out of 4). Similarly, cellonly adults said reducing traffic congestion by increasing system capacity is a higher priority (3.38 out of 5) than did landline adults (2.96 out of 5).

Wireless-only residents rated supporting efforts to preserve existing passenger rail a moderate priority (3.16 out of 5) while landline residents rated it a somewhat high priority (3.85 out of 5).

Perhaps not surprisingly, cell-only adults rated using advanced technology tools to communicate with customers about projects and plans as more helpful (3.44 out of 5) than did landline adults (2.93 out of 5).

#### **APPENDIX A:**



#### MONTANA DEPARTMENT OF TRANSPORTATION DISTRICT MAP