**Organizational Results Research Report** 

January 2011 OR11.011

# Assessing MoDOT's Efforts to Provide the Right Transportation Solution

Prepared by Heartland Market Research LLC and Missouri Department of Transportation

### Assessing MoDOT's Efforts to Provide the Right Transportation Solution

**TRACKER Measure 9i** 

For Fiscal Year 2011

Project Number: RD09-034





#### January 2011

The opinions, findings, and conclusions documented in this report are those of the principal investigator. They are not necessarily those of the Missouri Department of Transportation, the United States Department of Transportation, nor the Federal Highway Administration. This publication does not constitute a standard or regulation.

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### **Executive Summary**

The Missouri Department of Transportation (MoDOT) has developed the Tracker system to assess performance with tangible results to help MoDOT "provide a worldclass transportation system that delights our customers." The Tracker system includes the concept of "Fast projects that are of great value," and an important aspect of this measure is whether Missourians view MoDOT projects as the right transportation solution. To assess customer satisfaction with MoDOT projects, a mail survey was conducted in late 2010 by Heartland Market Research LLC. 2,234 respondents returned a valid survey questionnaire so the general margin of error for the analysis is plus or minus 2.12 percent. These results are similar to that of the two previous years.

The basic research design for the project was to sample opinions on a variety of projects spread across the state as was done in the previous fiscal year. A small, medium, and large project from each of the ten MoDOT districts was selected by a regional manager for the project for a total of 30 projects. Then Heartland drew a sample of residents from one or more ZIP code areas as appropriate for each project which was reviewed by the appropriate MoDOT district. The sample included 400 addresses per project area for a total of 12,000 Missouri addresses being mailed a copy of the survey. Despite this effort to keep the number of addresses even across the districts and projects, the response rate varied by project area.

Each survey was focused on one of 30 individual projects, which was briefly described on the survey, and the majority of survey questions related to the recently completed project, such as determining if the completion of the project increased safety, convenience, and made it easier to drive. In addition, questions were asked about the overall value of the particular project and the respondents were given the opportunity to provide comments regarding the project.

		Familiar				Easier		Right
		with		More	Less	to	Better	Transportation
District	Project	Roadway	Safer	Convenient	Congested	Travel	Marked	Solution
	D1L	94.7%	93.9%	90.5%	66.7%	94.1%	97.8%	94.0%
1	D1M	78.9%	91.7%	79.1%	54.3%	88.9%	91.1%	92.0%
1	D1S	86.4%	90.7%	90.0%	47.2%	96.0%	91.1%	94.6%
	Total	86.7%	92.1%	86.4%	55.4%	93.2%	93.4%	93.6%
	D2L	91.1%	92.6%	89.4%	89.8%	92.4%	84.7%	95.5%
2	D2M	91.7%	100.0%	98.6%	92.1%	98.6%	92.3%	95.1%
2	D2S	87.8%	94.8%	93.5%	91.0%	97.5%	96.1%	95.0%
	Total	90.2%	95.5%	93.3%	90.8%	95.7%	90.4%	95.2%
	D3L	80.5%	100.0%	97.3%	98.6%	96.0%	97.3%	96.1%
2	D3M	93.1%	94.4%	90.2%	62.5%	88.2%	93.5%	94.2%
3	D3S	88.2%	97.1%	94.1%	60.0%	93.0%	100.0%	90.9%
	Total	86.6%	97.6%	94.6%	80.6%	92.9%	96.9%	94.2%
	D4L	88.7%	90.9%	98.1%	73.1%	86.0%	84.3%	85.7%
	D4M	82.6%	94.6%	95.1%	93.1%	96.4%	98.2%	91.9%
4	D4S	96.0%	80.6%	72.5%	58.7%	65.2%	71.6%	67.6%
	Total	89.3%	88.0%	87.5%	74.6%	81.3%	83.8%	81.0%
	D5L	95.2%	95.9%	91.7%	96.9%	98.0%	80.9%	97.1%
F	D5M	96.2%	95.8%	87.2%	48.6%	95.7%	94.0%	94.6%
5	D5S	90.0%	77.7%	78.4%	78.6%	76.3%	79.3%	74.5%
	Total	93.7%	89.9%	85.6%	77.2%	90.2%	84.6%	88.6%
	D6L	96.3%	91.5%	94.2%	78.3%	92.1%	94.2%	91.1%
6	D6M	89.3%	98.1%	100.0%	84.6%	98.1%	96.2%	96.2%
0	D6S	81.0%	91.4%	72.7%	58.6%	83.9%	90.9%	90.6%
	Total	90.4%	93.7%	91.4%	76.7%	92.5%	94.2%	92.7%
	D7L	95.6%	93.4%	91.0%	84.1%	89.2%	85.5%	91.9%
7	D7M	81.7%	98.6%	94.5%	83.3%	98.6%	94.7%	100.0%
· '	D7S	91.5%	95.5%	91.5%	91.2%	87.5%	91.4%	94.2%
	Total	89.1%	96.0%	92.3%	86.4%	91.9%	90.4%	95.5%
	D8L	95.9%	97.9%	96.7%	91.9%	97.9%	92.2%	100.0%
0	D8M	78.1%	83.7%	83.9%	92.9%	75.9%	64.8%	85.5%
0	D8S	90.4%	75.8%	87.5%	87.0%	85.5%	78.0%	84.7%
	Total	89.3%	87.7%	90.4%	90.5%	88.2%	80.8%	91.4%
	D9L	94.4%	94.3%	92.5%	93.7%	96.3%	88.0%	95.5%
0	D9M	87.7%	96.2%	98.0%	93.3%	100.0%	94.0%	96.4%
9	D9S	92.6%	87.0%	82.8%	45.1%	94.7%	95.7%	94.8%
	Total	92.1%	92.3%	90.8%	79.4%	96.7%	92.3%	95.5%
	D10L	89.5%	93.7%	95.1%	98.4%	95.0%	87.7%	98.6%
10	D10M	26.1%	91.7%	100.0%	100.0%	91.7%	88.9%	90.9%
10	D10S	84.7%	96.4%	93.8%	95.6%	89.6%	79.6%	94.7%
	Total	78.5%	94.7%	95.0%	97.4%	92.5%	84.3%	96.4%
All Proj	ects:	89.2%	92.6%	90.5%	81.8%	91.5%	88.8%	92.2%

 Table 1: Summary of Key Indicators by Project and District

As part of the questionnaire, each respondent had the opportunity to provide comments about why their local project was – or was not – the right transportation solution. Each and every comment that was provided has been transcribed so MoDOT stakeholders can review them. These comments are available in ten supplemental reports, one for each district.

For the third year in a row, the belief that another project should have taken priority over the local project appears to have made a significant impact on the overall results. Only 61.7% of the respondents who thought another project should have been given priority thought their local project was the right transportation solution compared to 97.1% of those who did not believe another project should have been given priority. This is a very strong statistical difference and supports MoDOT's hypothesis that a respondent's belief that another project should have been commissioned first is a significant factor in their evaluation. However, it is important to note that this study cannot test casualty.

This year there was also an inverse relationship between project size and the response to the priority question. As the scope of the project increased in size, respondents were much less likely to believe another project should have been given a higher priority. 24.3% of the respondents from small projects thought another project should have been given priority compared to 11.2% of respondents from medium projects and just 8.2% of respondents from large projects.

All of the key measures were statistically similar to last year's high ratings. The overall results show that most Missourians are very satisfied with their local project and generally believe that MoDOT provides the right transportation solution. 89.2% of the respondents were either "very" or "fairly" familiar with the project roadway. 73.8% of the respondents were regular users of the affected roadway (defined as using it at least once per week). The majority of respondents thought that the project made the roadway safer (92.6%), more convenient (90.5%), less congested (81.8%), easier to drive (91.5%), better marked (88.8%), and was the right transportation solution (92.2%).

### **Background and Methodology**

MoDOT's mission is to "provide a world-class transportation system that delights our customers." The public's perception of MoDOT's performance is crucial to the long-term success of the agency, and an important aspect of the Tracker measure is whether Missouri citizens view MoDOT projects as the right transportation solution. The Tracker system assesses tangible results related to MoDOT's mission, and one of the tangible results is the concept of "Fast projects that are of great value." An element of this measure is an assessment of customer satisfaction with these projects.

In the fall of 2006, MoDOT commissioned the Institute of Public Policy at the University of Missouri Columbia to design and implement a new survey to measure and capture this measure. This was done and a report was provided to MoDOT in January 2007. The introduction to this section is from that report. In the fall of 2007, MoDOT commissioned Heartland Market Research LLC to implement the same survey with a new set of projects. The intention was to model the FY08's survey and methodology on the previous experience, and also make incremental improvements where feasible.

In FY09, the survey was significantly revised based on the experience from the previous year. The key questions were kept, but many of the auxiliary questions (such as *Approximately how many miles do you drive per year?*) were dropped as they had not proved to be key factors in respondent satisfaction. This survey space was reclaimed for three new survey questions, including a request of respondents to comment directly. The new questionnaire worked well, so the same questions were used in FY10. In FY11, some additional questions were added to the questionnaire.

A new format that used optical image scanning, opposed to the traditional optical mark scanning, was also tried to allow a larger and slightly more legible font. It was hoped that a slightly larger font size might increase the overall response rate for the project. The optical image scanning format turned out to be less robust than the traditional optical mark scanning format. While both formats performed ideally in test runs, the optical image scanning format did not reliably handle the abuse received by many surveys in real world conditions (e.g., actual surveys are returned with many folds, coffee mug stains, comments written on the forms in non-comment areas). This caused the scanning process to be unreliable. To overcome this problem, data entry experts were hired to enter each form into the computer. Then two people verified each electronic record against the physical form. In this verification procedure, 16 errors were identified out of the 2,234 original entries, an error rate of just 0.72%. All sixteen errors were corrected. Since the optical image format did not increase the overall response rate and the related scanning software is currently not as robust as that for the optical mark format, it is highly recommended that future surveys utilize the traditional optical mark format until the scanning software for optical image scanning equals or exceeds the current benchmarks for the optical mark format.

Respondent comments are available in ten supplemental reports, one for each district. Following the methodology used in previous years, it was determined to mail 400 surveys for each of the 30 projects for a total of 12,000 surveys. The sample of 400 people per project was initially selected by Heartland Market Research based upon geographical assumptions about which people would be likely to be most familiar with the project. The zip code recommendations were then reviewed by each of the ten MoDOT districts for input. In several cases the zip code selections were then revised based upon input from the districts.

### **Project Descriptions and Locations**

The descriptions listed in the table below were printed on the appropriate surveys for each project. These descriptions were initially provided by MoDOT, sometimes adjusted by the PI if it was thought that the respondents might have questions, and then the descriptions were reviewed, and sometimes adjusted, by the appropriate district contact. The surveys were sent to one or more zip codes as was thought appropriate for each project.

A large, medium, and small project was selected by MoDOT for each district. Large projects were defined as either having a major route listed and/or being funded through major project dollars. Medium projects were defined as having district-wide importance while small projects where defined as being of only local significance. Each project description is preceded by an internal MoDOT identification code that begins with a J.

District	Large	Medium	Small
1	J1P1036	J3S2009C	J1L1000E
	US Route 36 in DeKalb County. Resurfacing the westbound lanes from Route 33 to east of Route 31 N. The project was completed in late August 2009.	US Route 169 in DeKalb and Andrews Counties. Resurfacing and shoulder improvements from I-29 to Route 31. The project was completed in December 2009.	Route DD in Daviess County. Resurfacing from US Route 69 to Route 6. The project was completed in October 2009.
	Zip code(s) for surveying: 64490, 64474, 64430	Zip code(s): 64436, 64485, 64459, 64494, 64505, 64506, 64507	Zip code(s): 64670 and 64640

#### Table 2: Project Descriptions

District	Large	Medium	Small
2	J2P0482	J2P0793	J2P0428
-	Route 36 in Macon and Shelby Counties. This project extended dual lanes from east of Macon to Shelbina, and was completed in July 2010.	Route 240 in Howard/Saline Counties. This project replaced the Missouri River bridge at Glasgow. The project was completed in September 2009.	Route 5 in Howard County. This project improved the viaduct over the KATY Trail just north of Route 40 in New Franklin. The project was completed in April 2010.
	surveying: 63431, 63450, 63437, 63468, 63552 (Macon)	(Slater)	65330 (Gilliam).
3	J3P2146 & J3P2146B	J3P2009E	J3M0049
	Project constructed an interchange at the junction of US Route 61 and Route U in Lincoln. The project is to be completed by September, 2010.	24.6 miles of Route 15 from Route 154 north junction in Paris to 1.1 miles north of Route 22 in Mexico were resurfaced and improved. The project was completed in December 2009.	Business Route 61 in Marion County. Approximately three miles were resurfaced from north of Route BB to just north of Route 24/61 in Palmyra. The project was completed in summer 2010.
	Zip code(s) for surveying: 63379	Zip code(s): 65275, 65285, and 65265	Zip code(s): 63461
4	J4I1641D	J4P1708	J4P2265
	I-470/US 50/Route 350 in Jackson County. Construction of a new half-diamond interchange at Blue Parkway. The project was completed and opened to traffic in Summer 2010.	Route 71 and North Cass Parkway interchange in Cass County. This project constructed a new interchange and was completed in July 2010.	Route 169 in Clay County. Sidewalks were improved in Smithville from Route 92 to Route KK. The project was completed in Fall 2009.
	Zip code(s) for surveying: 64081, 64086, 64139, 64134	Zip code(s): 64012, 64083, 64078	Zip code(s): 64089

District	Large	Medium	Small
5	J5P0631A	J5P0922 & J5P0925	J5S2178
US Route 50 in Moniteau County. This project built a new four- lane divided highway and a two-lane expressway around California. The project was completed in July 2010.		Route 52 in Benton/Morgan Counties. This project widened and resurfaced Route 52 from Route 5 to US Route 65. The project is scheduled to be completed in September 2010.	Pettis Co. Route Y – This project constructed a new roundabout at the intersection of Route Y and Winchester Road in Sedalia. The project was completed in June 2010.
	Zip code(s) for surveying: 65018	Zip code(s): 65325, 65078, 65084	Zip code(s): 65301
6	J6I0978	J6U0672C	J6S1905
	The New I-64 in St. Louis City and County. This project reconstructed 10 miles of interstate. Construction began in March 2007 and all lanes were open to traffic one year early – in December 2009.	Upgrade of Route 40 in St. Charles County to I-64. The project was completed in October 2009, and Routes 40/61 will be renamed I-64 when approved by the Federal Highway Administration. Zip code(s): 63368, 63367	Route E in Jefferson County. This project repaired a bridge over Joachim Creek near DeSoto. The project was completed in July 2010. Zip code(s): 63020
	Zip code(s) for surveying: 63005, 63017, 63141, 63368, 63304		

District	Large Medium		Small
7	J7I0599	J7S0789	J7S0770
	This project reconstructed the I-44 interchange at Route 39 in Mt. Vernon, and resurfaced Loop 44 through Mt. Vernon to add a center turn lane. The project opened to traffic in November 2009. Zip code(s) for	Route 245 in Dade County. This project replaced the deck on a bridge over Stockton Lake, just south of the Cedar/Dade county line. The project was completed in July 2010. Zip code(s): 65635, 65649, and 65601	This project reconstructed the intersection of 32 <sup>nd</sup> Street (Route FF) and Main Street in Joplin, to add turning lanes and upgrade traffic signals. The project was completed in October 2009. Zip code(s): 64804, 64801
	surveying: 65712		
8	J8P0596 & J8P0597	J8P0791	J8S0853
	Route 13 in Polk/Greene Counties. This project constructed 13 miles of new northbound lanes for Route 13 in northern Greene and southern Polk Counties. The project was completed in July 2010.	The project built Springfield's second diverging diamond interchange at the intersection of the James River Freeway and National Avenue. The project was completed in August 2010.	Route 73 in Dallas County. This project provided a realignment of Route 73 around downtown Buffalo, and was completed in September 2009. Zip code(s): 65622
	Zip code(s) for surveying: 65617, 65710, 65803, 65613	Zip code(s): 65807, 65804, 65809, 65806, 65810	

District	Large	Medium	Small
9	J9P0359B & J9P0381D	J9P0468	J9S0610
	Route 60 in Shannon and Carter Counties. The improvement project extended from 0.5 miles east of Route 17 north in Mountain View to 3.5 miles east of Route J in Carter County. The project was completed in July 2010.	Route 17 in Pulaski County. This project, north of Waynesville, replaced the bridge over the Gasconade River and two overflow structures. The project length was 1.8 miles and it was open to traffic in November 2009.	Route CC in Howell/Ozark Counties. This project resurfaced 20.4 miles of Route CC from its intersection with Route 181 to US Route 63 in West Plains. The project was completed in June 2010.
		Zip code(s): 65452, 65583, 65584, 65473	Zip code(s): 65775, 65637
	Zip code(s) for surveying: 65438, 65588, 63941, 63965, 65548		
10	J0P0930	J0P0952	J0P0921B
	Route 67 in Wayne County. This project is the second part of the corridor initiative to construct two additional lanes from north of Poplar Bluff to Fredericktown in Madison County. This project was completed in late summer 2010.	Route 72 in Cape Girardeau County. This project replaced bridges over the Whitewater River and Byrd Creek. The project was completed in August 2010. Zip code(s): 63740	Route 25 in Cape Girardeau County. This project in Jackson provided intersection improvements and installed traffic signals. It is anticipated to be completed in September 2010. Zip code(s): 63755
	Zip code(s) for surveying: 63964, 63956, and 63755		

#### Respondents

400 unique people were mailed a survey for each one of thirty unique projects for a total of 12,000 mailed surveys. 2,234 surveys were returned via US mail, for a gross response rate of 18.6%. These rates are similar to the previous two years (20.5% and 20.4%).

				Gross Response
District	Project	Mailed	Responses	Rate
	D1L	400	59	14.8%
1	D1M	400	57	14.3%
1	D1S	400	70	17.5%
	Total	1,200	186	15.5%
	D2L	400	114	28.5%
2	D2M	400	85	21.3%
2	D2S	400	90	22.5%
	Total	1,200	289	24.1%
	D3L	400	79	19.8%
2	D3M	400	58	14.5%
3	D3S	400	51	12.8%
	Total	1,200	188	15.7%
	D4L	400	63	15.8%
	D4M	400	69	17.3%
4	D4S	400	76	19.0%
	Total	1,200	208	17.3%
	D5L	400	105	26.3%
F	D5M	400	104	26.0%
5	D5S	400	111	27.8%
	Total	1,200	320	26.7%
	D6L	400	80	20.0%
6	D6M	400	56	14.0%
0	D6S	400	43	10.8%
	Total	1,200	179	14.9%
	D7L	400	69	17.3%
7	D7M	400	87	21.8%
/	D7S	400	73	18.3%
	Total	1,200	229	<u>1</u> 9.1%

Table 3.	Gross Response	Rate by Pro	iect and District
Lable J.	GIUSS KESPUISE	Nate by 110	Jeel and District

District	Project	Mailed	Responses	Gross Response Rate
	D8L	400	100	25.0%
0	D8M	400	65	16.3%
0	D8S	400	75	18.8%
	Total	1,200	240	20.0%
	D9L	400	91	22.8%
0	D9M	400	58	14.5%
9	D9S	400	82	20.5%
	Total	1,200	231	19.3%
	D10L	400	78	19.5%
10	D10M	400	25	6.3%
10	D10S	400	61	15.3%
	Total	1,200	164	13.7%
Grand Total:		12,000	2,234	18.6%

Eight projects had gross response rates outside of the norm (the standard deviation was +/- 4.8%). Projects D3S, D6S, and D10M had gross response rates at least one standard deviation below the norm of 18.6%. Projects D2L, D5L, D5M, D5S, and D8L had gross response rates at least one standard deviation above the norm. All in all, the district response rates were very consistent with the lowest number of responses coming from District 10's three projects (representing 7.3% of all mailed responses) and the highest number coming from District 5 (representing 14.3% of all mailed responses), close to the ideal of 10% coming from each district.

#### **Project Assessment**

The survey was designed to obtain detailed information about various aspects of a project so that MoDOT could evaluate whether or not Missourians were pleased with all aspects of a project such as safety, convenience, congestion reduction, drivability, and markings. Obviously MoDOT desires to score highly on all of these aspects, but variance among these dimensions can provide constructive input on areas of potential improvement. In addition, two questions were asked to measure Missourians' assessment of the overall appropriateness of the local project.

Providing the concrete example of a particular project for citizen assessment offers a number of benefits. First, we know which project the citizen is considering as they make an assessment. If a particular project was not named, different citizens could be considering different local projects. Second, the specific example makes it less likely that a single frustration in the distant past with another project will influence the citizen's assessment of current performance. Third, it makes it less likely that the survey respondent will confuse a MoDOT project with a city or county project in the area.

One of the most important factors, if not the single most important factor, in making the survey meaningful, is in ensuring that the respondents may provide knowledgeable input. Since most Missourians are likely to be familiar with only a small portion of the roads maintained by MoDOT, it is vital to ask respondents about a local project that is probably familiar to the respondent. The vast majority of the respondents were both familiar with the roadway and regular users of the affected roadway (details under the discussion of questions three and four). Using a specific project example provides additional research benefits. We know which project was being evaluated by each respondent, thus MoDOT can better understand and apply the feedback obtained by the survey. In addition, the use of a specific project both reduces the chance of the respondents confusing MoDOT's efforts with that of a city or county project while also differentiating the respondents' general attitude toward MoDOT from their evaluation of a particular project. In other words, based upon the survey design and the respondents' familiarity and frequency of use of the affected roadways, we can have confidence in the information provided in this research by the citizens of Missouri.

In order to facilitate better comparisons of changes from year to year, the statistics used in the project assessment usually do not include the "not sure" percentages. This eliminates a major source of random variability and allows a more accurate observation of change over time. In addition, this methodology is consistent with how MoDOT calculates similar Tracker measures. The fiscal year 2007 data discussed in this report was recalculated in the fiscal year 2008 report with this methodology to enable readers to see changes from year to another. Thus, no recalculations were required this fiscal year, all historical data was taken directly from last year's report.

#### Safer

One of MoDOT's primary goals is to make Missouri's roads safer. The overwhelming majority of Missourians agree that the local project achieved this goal. Results were similar to the previous four years with a total of 92.6% of respondents agreeing that the project made the road safer.





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District	Proiect	Strongly Agree		Agree		Disagree		Strongly Disagree		Total
21011101	D1L	 17	34.7%	29	59.2%	1	2.0%	2	4.1%	49
	D1M	22	45.8%	22	45.8%	3	6.3%	1	2.1%	48
1	D1S	23	42.6%	26	48.1%	2	3.7%	3	5.6%	54
-	Total	62	41.1%	77	51.0%	6	4.0%	6	4.0%	151

District	Project	Stro	ongly	А	aree	Di	sagree	; r	Strongly Disagree	Total
District	D2L	66	61.1%	34	31.5%	4	3.7%	4	3.7%	108
	D2M	45	55.6%	36	44.4%	0	0.0%	0	0.0%	81
2	D2S	60	77.9%	13	16.9%	1	1.3%	3	3.9%	77
	Total	171	64.3%	83	31.2%	5	1.9%	7	2.6%	266
	D3L	68	87.2%	10	12.8%	0	0.0%	0	0.0%	78
	D3M	28	51.9%	23	42.6%	1	1.9%	2	3.7%	54
3	D3S	12	35.3%	21	61.8%	1	2.9%	0	0.0%	34
	Total	108	65.1%	54	32.5%	2	1.2%	2	1.2%	166
	D4L	26	47.3%	24	43.6%	4	7.3%	1	1.8%	55
	D4M	19	33.9%	34	60.7%	3	5.4%	0	0.0%	56
4	D4S	31	43.1%	27	37.5%	7	9.7%	7	9.7%	72
	Total	76	41.5%	85	46.4%	14	7.7%	8	4.4%	183
	D5L	65	67.0%	28	28.9%	1	1.0%	3	3.1%	97
_	D5M	42	43.8%	50	52.1%	4	4.2%	0	0.0%	96
5	D5S	35	37.2%	38	40.4%	16	17.0%	5	5.3%	94
	Total	142	49.5%	116	40.4%	21	7.3%	8	2.8%	287
	D6L	39	54.9%	26	36.6%	5	7.0%	1	1.4%	71
0	D6M	33	62.3%	19	35.8%	1	1.9%	0	0.0%	53
6	D6S	14	40.0%	18	51.4%	2	5.7%	1	2.9%	35
	Total	86	54.1%	63	39.6%	8	5.0%	2	1.3%	159
	D7L	30	49.2%	27	44.3%	2	3.3%	2	3.3%	61
-	D7M	51	71.8%	19	26.8%	0	0.0%	1	1.4%	71
1	D7S	38	56.7%	26	38.8%	2	3.0%	1	1.5%	67
	Total	119	59.8%	72	36.2%	4	2.0%	4	2.0%	199
	D8L	84	86.6%	11	11.3%	1	1.0%	1	1.0%	97
0	D8M	12	24.5%	29	59.2%	5	10.2%	3	6.1%	49
8	D8S	30	45.5%	20	30.3%	5	7.6%	11	16.7%	66
	Total	126	59.4%	60	28.3%	11	5.2%	15	7.1%	212
	D9L	56	64.4%	26	29.9%	2	2.3%	3	3.4%	87
0	D9M	36	67.9%	15	28.3%	2	3.8%	0	0.0%	53
9	D9S	30	43.5%	30	43.5%	7	10.1%	2	2.9%	69
	Total	122	58.4%	71	34.0%	11	5.3%	5	2.4%	209
	D10L	38	60.3%	21	33.3%	3	4.8%	1	1.6%	63
10	D10M	6	50.0%	5	41.7%	1	8.3%	0	0.0%	12
	D10S	30	53.6%	24	42.9%	2	3.6%	0	0.0%	56
	Total	74	56.5%	50	38.2%	6	4.6%	1	0.8%	131
Grand T	otal:	1,086	55.3%	731	37.2%	88	4.5%	58	3.0%	1,963

#### Improving Traffic Flow in the Area

Another goal of MoDOT is to improve traffic flow. Two questions were asked to help capture this information. Respondents were asked if the project resulted in the road being "more convenient" and "less congested".

#### **More Convenient**

90.5% of Missourians agreed that the project resulted in a more convenient roadway. This is comparable to the results from the previous four years.



#### Figure 2: Convenience – Historical Comparison

		St	rongly					:	Strongly	
District	Project	а	gree	A	gree	Dis	agree	(	disagree	Total
	D1L	11	26.2%	27	64.3%	3	7.1%	1	2.4%	42
1	D1M	16	37.2%	18	41.9%	8	18.6%	1	2.3%	43
	D1S	12	30.0%	24	60.0%	4	10.0%	0	0.0%	40
	Total	39	31.2%	69	55.2%	15	12.0%	2	1.6%	125
	D2L	53	51.0%	40	38.5%	5	4.8%	6	5.8%	104
2	D2M	30	41.1%	42	57.5%	0	0.0%	1	1.4%	73
2	D2S	51	66.2%	21	27.3%	4	5.2%	1	1.3%	77
	Total	134	52.8%	103	40.6%	9	3.5%	8	3.1%	254
	D3L	58	79.5%	13	17.8%	2	2.7%	0	0.0%	73
2	D3M	9	22.0%	28	68.3%	2	4.9%	2	4.9%	41
3	D3S	10	29.4%	22	64.7%	2	5.9%	0	0.0%	34
	Total	77	52.0%	63	42.6%	6	4.1%	2	1.4%	148
	D4L	32	59.3%	21	38.9%	0	0.0%	1	1.9%	54
4	D4M	36	59.0%	22	36.1%	1	1.6%	2	3.3%	61
4	D4S	22	31.9%	28	40.6%	11	15.9%	8	11.6%	69
	Total	90	48.9%	71	38.6%	12	6.5%	11	6.0%	184
	D5L	66	68.8%	22	22.9%	5	5.2%	3	3.1%	96
_	D5M	21	26.9%	47	60.3%	10	12.8%	0	0.0%	78
5	D5S	34	35.1%	42	43.3%	17	17.5%	4	4.1%	97
	Total	121	44.6%	111	41.0%	32	11.8%	7	2.6%	271
	D6L	35	50.7%	30	43.5%	1	1.4%	3	4.3%	69
6	D6M	28	56.0%	22	44.0%	0	0.0%	0	0.0%	50
6	D6S	7	21.2%	17	51.5%	8	24.2%	1	3.0%	33
	Total	70	46.1%	69	45.4%	9	5.9%	4	2.6%	152
	D7L	33	49.3%	28	41.8%	3	4.5%	3	4.5%	67
7	D7M	32	58.2%	20	36.4%	2	3.6%	1	1.8%	55
1	D7S	35	59.3%	19	32.2%	3	5.1%	2	3.4%	59
	Total	100	55.2%	67	37.0%	8	4.4%	6	3.3%	181
	D8L	73	80.2%	15	16.5%	2	2.2%	1	1.1%	91
0	D8M	23	41.1%	24	42.9%	5	8.9%	4	7.1%	56
8	D8S	35	48.6%	28	38.9%	6	8.3%	3	4.2%	72
	Total	131	59.8%	67	30.6%	13	5.9%	8	3.7%	219
	D9L	51	63.8%	23	28.8%	3	3.8%	3	3.8%	80
	D9M	26	51.0%	24	47.1%	1	2.0%	0	0.0%	51
9	D9S	23	35.9%	30	46.9%	10	15.6%	1	1.6%	64
	Total	100	51.3%	77	39.5%	14	7.2%	4	2.1%	195

 Table 5: Convenience Feedback by Project and District

		Strongly						;	Strongly	
District	Project	agree		Agree		Disagree		disagree		Total
	D10L	42	68.9%	16	26.2%	3	4.9%	0	0.0%	61
10	D10M	5	50.0%	5	50.0%	0	0.0%	0	0.0%	10
10	D10S	21	43.8%	24	50.0%	2	4.2%	1	2.1%	48
	Total	68	57.1%	45	37.8%	5	4.2%	1	0.8%	119
Grand Total:		930	50.3%	742	40.2%	123	6.7%	53	2.9%	1,848

#### Less Congested

Congestion is one aspect where MoDOT has much less control over the end result compared with other aspects such as safety. In many cases projects are undertaken in areas experience population growth – with populations that continue to grow while the project is under construction, so congestion may not be perceived to be improved even if the roadway is now handling more traffic than it did previously. In addition, many of the projects focused on safety improvements, such as correcting a curve, that may not affect congestion. Nevertheless, 81.8% of Missourians agreed that the project resulted in a less congested roadway, similar to findings from the previous four years.



#### Figure 3: Congestion – Historical Comparison

Table 6:	Congestion	Feedback	by Pro	iect and ]	District
I able of	Congestion	I coubacit	<i>v</i> , <b>1</b> , <i>v</i> ,	jeet ana i	

		St	rongly					:	Strongly	
District	Project	а	igree	Agree		Disagree		(	Total	
	D1L	6	20.0%	14	46.7%	7	23.3%	3	10.0%	30
1	D1M	10	28.6%	9	25.7%	14	40.0%	2	5.7%	35
I	D1S	5	13.9%	12	33.3%	17	47.2%	2	5.6%	36
	Total	21	20.8%	35	34.7%	38	37.6%	7	6.9%	101
	D2L	52	48.1%	45	41.7%	8	7.4%	3	2.8%	108
2	D2M	27	42.9%	31	49.2%	4	6.3%	1	1.6%	63
2	D2S	35	52.2%	26	38.8%	4	6.0%	2	3.0%	67
	Total	114	47.9%	102	42.9%	16	6.7%	6	2.5%	238
	D3L	56	75.7%	17	23.0%	1	1.4%	0	0.0%	74
2	D3M	5	12.5%	20	50.0%	13	32.5%	2	5.0%	40
3	D3S	6	20.0%	12	40.0%	12	40.0%	0	0.0%	30
-	Total	67	46.5%	49	34.0%	26	18.1%	2	1.4%	144

District	Droject	St	rongly	Δ	aroo	Die	ograa		Strongly	Total
District		27	51 0%	A 11	9166 21.2%		17 3%	5		10iai 52
		20	50.0%	25	/3.1%	<u>э</u> Л	6.0%	0	9.0%	58
4	D4S	14	22.2%	23	36.5%	16	25.4%	10	15.9%	63
	Total	70	10.5%	50	3/ 1%	20	16.8%	15	8.7%	173
	D5I	68	70.1%	26	26.8%	20	3.1%	0	0.1%	97
	D5M	14	19.4%	21	20.0%	35	48.6%	2	2.8%	72
5	D5S	34	34.7%	43	43.9%	17	17.3%	<u> </u>	<u> </u>	98
	Total	116	43.4%	90	33.7%	55	20.6%	6	2.2%	267
	D6I	20	40.470	25	36.2%	12	17 /%	о 3	1 3%	69
		23	42.070	20	12 3%	5	0.6%	3		52
6	D6S	22	42.3%	22	42.370	11	37.0%	3 1	3.0%	20
	Total	50	27.070	56	37.3%	28	18 7%	7	0.47%	150
	D7I	20	16.0%	24	38 1%	20	11 10/	7	4.7 /0	63
		29 18	40.0%	17	10 5%	7	16.7%	0	4.0%	42
7	D78	20	42.9%	22	40.5%	/ /	7.0%	1	1.8%	42 57
	Total	29 76	16.0%	23 64	40.4 /0	1Q	11 10/	1	2.5%	162
		55	40.970 64.0%	24	27 0%	5	5.8%	+ 2	2.3%	86
		30	53.6%	24	27.970	3	5.0%	2 1	2.3%	56
8		31	14 0%	22	12 0%	6	9.4 /0 9.7%	2	1.0%	
	Total	116	44.9 <i>%</i>	29 75	42.070	14	6.6%	5 6	4.3%	211
		52	67 10/	21	26.6%	14	0.0%	0	2.0/0	211
		21	07.170 46.70/	21	20.0%	2	2.5%	0	0.0%	19
9		21 7	40.7%	16	40.7%	21	0.7%	7	12 7%	40 51
	Total	/ 	10.7%	58	31.4%	21	41.2%	10	5 7%	175
		38	40.3 %	23	37.1%	20	0.0%	10	1.6%	62
		30 3	33.3%	23	66 7%	0	0.0%	0	0.0%	<u>02</u>
10	D10S	17	37.8%	26	57.8%	2	4.4%	0	0.0%	45
	Total	58	50.0%	55	47.4%	2	1.7%	1	0.9%	116
Grand T	otal:	778	44.8%	643	37.0%	252	14.5%	64	3.7%	1,737

#### **Driving Environment**

Another goal of the MoDOT improvement projects was to improve the driving environment of the roadways by making them easier to navigate and easier to understand. Two questions were asked to help capture this information. Respondents were asked if the project resulted in the road being "easier to travel" and "better marked". At the request of MoDOT, the phrasing of these questions was slightly adjusted in FY08 and again in FY11 to help respondents better understand the survey. While this had the potential for making it more difficult to make comparisons from year to year, fine-tuning the Tracker measure was given a higher priority to ensure that this and future surveys capture the most accurate information possible. In practice, even with the improved wording, the results thereafter were quite comparable to that of previous years.

#### **Easier to Travel**

91.5% of Missourians agreed that the project resulted in a roadway that was easier to travel. This is comparable to the respondents in the previous four years who stated that their local project resulted in a roadway that was easier to drive or navigate.







District	Project	Stro ag	Strongly agree		Agree		Disagree		Strongly disagree	
	D1L	20	39.2%	28	54.9%	2	3.9%	1	2.0%	51
1	D1M	18	40.0%	22	48.9%	4	8.9%	1	2.2%	45
I	D1S	23	46.0%	25	50.0%	2	4.0%	0	0.0%	50
	Total	61	41.8%	75	51.4%	8	5.5%	2	1.4%	146

District	Draigat	Stro	ongly		~~~~	Dia			Strongly	Total
District		ag	100 50 10/	26	gree			(		10121
		41	56.1%	21	34.370 40.50/	4	3.0 /0	4	0.0%	70
2		41	30.2%	31	42.5%	1	1.4%	0	0.0%	73
	D23	02	77.5%	10	20.0%		1.3%	 	1.3%	00
		164	63.6%	83	32.2%	6	2.3%	5	1.9%	258
	DOL	56	14.7%	16	21.3%	3	4.0%	0	0.0%	/5
3		25	49.0%	20	39.2%	4	7.8%	2	3.9%	51
	D35	20	46.5%	20	46.5%	3	7.0%	0	0.0%	43
	Total	101	59.8%	56	33.1%	10	5.9%	2	1.2%	169
	D4L	28	49.1%	21	36.8%	6	10.5%	2	3.5%	57
4	D4M	32	57.1%	22	39.3%	1	1.8%	1	1.8%	56
-	D4S	19	27.5%	26	37.7%	12	17.4%	12	17.4%	69
	Total	79	43.4%	69	37.9%	19	10.4%	15	8.2%	182
	D5L	74	74.0%	24	24.0%	0	0.0%	2	2.0%	100
5	D5M	38	40.4%	52	55.3%	4	4.3%	0	0.0%	94
5	D5S	33	35.5%	38	40.9%	17	18.3%	5	5.4%	93
	Total	145	50.5%	114	39.7%	21	7.3%	7	2.4%	287
	D6L	41	53.9%	29	38.2%	5	6.6%	1	1.3%	76
6	D6M	27	50.0%	26	48.1%	1	1.9%	0	0.0%	54
0	D6S	8	25.8%	18	58.1%	3	9.7%	2	6.5%	31
	Total	76	47.2%	73	45.3%	9	5.6%	3	1.9%	161
	D7L	29	44.6%	29	44.6%	5	7.7%	2	3.1%	65
-	D7M	52	75.4%	16	23.2%	0	0.0%	1	1.4%	69
1	D7S	31	48.4%	25	39.1%	7	10.9%	1	1.6%	64
	Total	112	56.6%	70	35.4%	12	6.1%	4	2.0%	198
	D8L	79	84.0%	13	13.8%	1	1.1%	1	1.1%	94
	D8M	22	37.9%	22	37.9%	8	13.8%	6	10.3%	58
8	D8S	29	42.0%	30	43.5%	3	4.3%	7	10.1%	69
	Total	130	58.8%	65	29.4%	12	5.4%	14	6.3%	221
	D9L	58	72.5%	19	23.8%	0	0.0%	3	3.8%	80
	D9M	32	59.3%	22	40.7%	0	0.0%	0	0.0%	54
9	D9S	44	57.9%	28	36.8%	3	3.9%	1	1.3%	76
	Total	134	63.8%	69	32.9%	3	1.4%	4	1.9%	210
	D10L	40	66.7%	17	28.3%	3	5.0%	0	0.0%	60
4.0	D10M	7	58.3%	4	33.3%	1	8.3%	0	0.0%	12
10	D10S	20	41.7%	23	47.9%	4	8.3%	1	2.1%	48
	Total	67	55.8%	44	36.7%	8	6.7%	1	0.8%	120
Grand T	otal:	1,069	54.8%	718	36.8%	108	5.5%	57	2.9%	1,952

#### **Better Marked**

88.8% of Missourians agreed that the project resulted in a roadway that was better marked. This is similar to the results from the last four annual surveys.





Thinking of this same project after MoDOT completed work on it... Is the road now better marked (well marked in FY07)?

#### Table 8: Better Marked Feedback by Project and District

		St	rongly							
District	Project	а	igree	A	gree	Dis	agree	(	disagree	Total
	D1L	15	32.6%	30	65.2%	1	2.2%	0	0.0%	46
1	D1M	22	48.9%	19	42.2%	2	4.4%	2	4.4%	45
I	D1S	12	26.7%	29	64.4%	3	6.7%	1	2.2%	45
	Total	49	36.0%	78	57.4%	6	4.4%	3	2.2%	136
	D2L	42	42.9%	41	41.8%	13	13.3%	2	2.0%	98
2	D2M	26	40.0%	34	52.3%	4	6.2%	1	1.5%	65
2	D2S	57	75.0%	16	21.1%	0	0.0%	3	3.9%	76
	Total	125	52.3%	91	38.1%	17	7.1%	6	2.5%	239

District	Project	St	rongly	Λ	aroo	Die	agraa		Strongly	Total
DISTINCT		م ۸۵	66 2%	23	9166 31.1%	2	2 7%	0		101ai 74
	D3M	18	39.1%	25	54.3%	1	2.7%	2	4 3%	46
3	D3S	15	38.5%	20	61.5%	0	0.0%	0	0.0%	39
	Total	82	51.6%	72	45.3%	3	1.9%	2	1.3%	159
	D4L	16	31.4%	27	52.9%	7	13.7%	1	2.0%	51
	D4M	19	34.5%	35	63.6%	1	1.8%	0	0.0%	55
4	D4S	24	35.8%	24	35.8%	10	14.9%	9	13.4%	67
	Total	59	34.1%	86	49.7%	18	10.4%	10	5.8%	173
	D5L	41	46.1%	31	34.8%	11	12.4%	6	6.7%	89
	D5M	39	46.4%	40	47.6%	4	4.8%	1	1.2%	84
5	D5S	25	28.7%	44	50.6%	13	14.9%	5	5.7%	87
	Total	105	40.4%	115	44.2%	28	10.8%	12	4.6%	260
	D6L	33	47.8%	32	46.4%	2	2.9%	2	2.9%	69
	D6M	23	44.2%	27	51.9%	1	1.9%	1	1.9%	52
6	D6S	10	30.3%	20	60.6%	2	6.1%	1	3.0%	33
	Total	66	42.9%	79	51.3%	5	3.2%	4	2.6%	154
	D7L	29	46.8%	24	38.7%	7	11.3%	2	3.2%	62
-	D7M	37	64.9%	17	29.8%	1	1.8%	2	3.5%	57
1	D7S	32	55.2%	21	36.2%	4	6.9%	1	1.7%	58
	Total	98	55.4%	62	35.0%	12	6.8%	5	2.8%	177
	D8L	61	67.8%	22	24.4%	6	6.7%	1	1.1%	90
0	D8M	13	24.1%	22	40.7%	15	27.8%	4	7.4%	54
ð	D8S	23	39.0%	23	39.0%	7	11.9%	6	10.2%	59
	Total	97	47.8%	67	33.0%	28	13.8%	11	5.4%	203
	D9L	44	58.7%	22	29.3%	6	8.0%	3	4.0%	75
0	D9M	27	54.0%	20	40.0%	3	6.0%	0	0.0%	50
9	D9S	32	45.7%	35	50.0%	2	2.9%	1	1.4%	70
	Total	103	52.8%	77	39.5%	11	5.6%	4	2.1%	195
	D10L	30	52.6%	20	35.1%	6	10.5%	1	1.8%	57
10	D10M	3	33.3%	5	55.6%	1	11.1%	0	0.0%	9
	D10S	16	32.7%	23	46.9%	5	10.2%	5	10.2%	49
	Total	49	42.6%	48	41.7%	12	10.4%	6	5.2%	115
Grand T	otal:	833	46.0%	775	42.8%	140	7.7%	63	3.5%	1,811

### Familiarity with Roadway

These two questions help measure the respondent's familiarity with the affected roadway. The vast majority (89.2%) of the respondents were familiar with the local project used in the study. Approximately two-thirds of the respondents said they were very familiar with the affected roadway (67.2%) while most of the others said they were somewhat or fairly familiar with the roadway. Only 2.6% stated that they were not familiar with the affected roadway.



Figure 6: Road Familiarity – Historical Comparison

The following table summarizes the responses and percentages by both individual

projects and districts.

					J					
District	Project	No	ot at all	Son	newhat	Faiı	rly well	Very	/ well	Total
	D1L	1	1.8%	2	3.5%	15	26.3%	39	68.4%	57
1	D1M	5	8.8%	7	12.3%	12	21.1%	33	57.9%	57
	D1S	4	6.1%	5	7.6%	21	31.8%	36	54.5%	66

 Table 9: Familiarity with Roadway by District and Project

District	Project	No	ot at all	Son	newhat	Fai	rly well	Very	/ well	Total
	Total	10	5.6%	14	7.8%	48	26.7%	108	60.0%	180
	D2L	0	0.0%	10	8.9%	15	13.4%	87	77.7%	112
0	D2M	1	1.2%	6	7.1%	14	16.7%	63	75.0%	84
2	D2S	5	5.6%	6	6.7%	9	10.0%	70	77.8%	90
	Total	6	2.1%	22	7.7%	38	13.3%	220	76.9%	286
	D3L	1	1.3%	14	18.2%	17	22.1%	45	58.4%	77
0	D3M	1	1.7%	3	5.2%	22	37.9%	32	55.2%	58
3	D3S	1	2.0%	5	9.8%	16	31.4%	29	56.9%	51
	Total	3	1.6%	22	11.8%	55	29.6%	106	57.0%	186
	D4L	0	0.0%	7	11.3%	19	30.6%	36	58.1%	62
	D4M	3	4.3%	9	13.0%	14	20.3%	43	62.3%	69
4	D4S	0	0.0%	3	4.0%	5	6.7%	67	89.3%	75
	Total	3	1.5%	19	9.2%	38	18.4%	146	70.9%	206
	D5L	0	0.0%	5	4.8%	29	27.9%	70	67.3%	104
F	D5M	0	0.0%	4	3.8%	20	19.2%	80	76.9%	104
5	D5S	0	0.0%	11	10.0%	16	14.5%	83	75.5%	110
	Total	0	0.0%	20	6.3%	65	20.4%	233	73.3%	318
	D6L	0	0.0%	3	3.8%	25	31.3%	52	65.0%	80
6	D6M	0	0.0%	6	10.7%	13	23.2%	37	66.1%	56
0	D6S	3	7.1%	5	11.9%	13	31.0%	21	50.0%	42
	Total	3	1.7%	14	7.9%	51	28.7%	110	61.8%	178
	D7L	0	0.0%	3	4.4%	19	27.9%	46	67.6%	68
7	D7M	11	13.4%	4	4.9%	14	17.1%	53	64.6%	82
1	D7S	1	1.4%	5	7.0%	23	32.4%	42	59.2%	71
	Total	12	5.4%	12	5.4%	56	25.3%	141	63.8%	221
	D8L	0	0.0%	4	4.1%	16	16.5%	77	79.4%	97
8	D8M	1	1.6%	13	20.3%	22	34.4%	28	43.8%	64
	D8S	1	1.4%	6	8.2%	20	27.4%	46	63.0%	73
	Total	2	0.9%	23	9.8%	58	24.8%	151	64.5%	234
	D9L	0	0.0%	5	5.6%	22	24.4%	63	70.0%	90
9	D9M	0	0.0%	7	12.3%	18	31.6%	32	56.1%	57
Ū	D9S	3	3.7%	3	3.7%	7	8.6%	68	84.0%	81
	Total	3	1.3%	15	6.6%	47	20.6%	163	71.5%	228
	D10L	3	3.9%	5	6.6%	12	15.8%	56	73.7%	76
10	D10M	10	43.5%	7	30.4%	2	8.7%	4	17.4%	23
	D10S	1	1.7%	8	13.6%	13	22.0%	37	62.7%	59
	Total	14	8.9%	20	12.7%	27	17.1%	97	61.4%	158
Grand T	otal:	56	2.6%	181	8.2%	483	22.0%	1,475	67.2%	2,195

The respondents of four projects (D1S, D6S, D8M, and D10M) were statistically much less familiar with their project roadway than the other respondents. The respondents for projects D4S and D9S were statistically more familiar with their project than other respondents.

Respondents were also asked to indicate how often they had used the specified section of the road in the past month (see Figure 7). 41.8% of the respondents were very frequent users of the affected road (defined as those who used the affected section of the road almost every day or most weekdays). 73.8% of the respondents were regular users of the affected roadway. Only 4.5% of the respondents indicated that they had not used the affected section of the roadway in the last month.





The following table summarizes the responses and percentages by both individual projects and districts. There was a wide variety of average frequency of use among the thirty projects. The respondents of six projects (D2M, D3M, D6S, D7M, D8M, and D10M) were statistically less frequent users of their project roadway than the other respondents. The respondents of another four projects (D1M, D2S, D4S and D5M) were statistically more frequent users of their project roadway than the other respondents.

					Once a		Tv	vice a	Most		Almost every			
District	Project	N	ever	A fev	v times	W	/eek	v	veek	wee	kdays	C	day	Total
	D1L	1	1.7%	11	19.0%	8	13.8%	14	24.1%	1	1.7%	23	39.7%	58
1	D1M	6	10.9%	4	7.3%	1	1.8%	11	20.0%	6	10.9%	27	49.1%	55
	D1S	7	10.9%	15	23.4%	13	20.3%	10	15.6%	3	4.7%	16	25.0%	64
	Total	14	7.9%	30	16.9%	22	12.4%	35	19.8%	10	5.6%	66	37.3%	177
	D2L	3	2.7%	21	18.6%	10	8.8%	24	21.2%	11	9.7%	44	38.9%	113
2	D2M	3	3.6%	38	45.8%	14	16.9%	19	22.9%	4	4.8%	5	6.0%	83
2	D2S	6	6.8%	13	14.8%	1	1.1%	7	8.0%	7	8.0%	54	61.4%	88
	Total	12	4.2%	72	25.4%	25	8.8%	50	17.6%	22	7.7%	103	36.3%	284
	D3L	3	3.8%	28	35.4%	10	12.7%	15	19.0%	8	10.1%	15	19.0%	79
2	D3M	1	1.7%	24	41.4%	6	10.3%	13	22.4%	7	12.1%	7	12.1%	58
3	D3S	2	3.9%	11	21.6%	4	7.8%	8	15.7%	5	9.8%	21	41.2%	51
	Total	6	3.2%	63	33.5%	20	10.6%	36	19.1%	20	10.6%	43	22.9%	188
	D4L	4	6.3%	12	19.0%	9	14.3%	13	20.6%	7	11.1%	18	28.6%	63
4	D4M	7	10.1%	15	21.7%	10	14.5%	16	23.2%	8	11.6%	13	18.8%	69
4	D4S	1	1.3%	4	5.3%	3	4.0%	10	13.3%	12	16.0%	45	60.0%	75
	Total	12	5.8%	31	15.0%	22	10.6%	39	18.8%	27	13.0%	76	36.7%	207
	D5L	0	0.0%	18	17.3%	11	10.6%	25	24.0%	10	9.6%	40	38.5%	104
F	D5M	0	0.0%	14	13.6%	7	6.8%	15	14.6%	13	12.6%	54	52.4%	103
5	D5S	2	1.8%	18	16.2%	16	14.4%	33	29.7%	16	14.4%	26	23.4%	111
	Total	2	0.6%	50	15.7%	34	10.7%	73	23.0%	39	12.3%	120	37.7%	318
	D6L	0	0.0%	17	21.3%	16	20.0%	18	22.5%	8	10.0%	21	26.3%	80
6	D6M	0	0.0%	12	21.4%	7	12.5%	14	25.0%	4	7.1%	19	33.9%	56
0	D6S	4	9.5%	14	33.3%	2	4.8%	12	28.6%	2	4.8%	8	19.0%	42
	Total	4	2.2%	43	24.2%	25	14.0%	44	24.7%	14	7.9%	48	27.0%	178
	D7L	0	0.0%	8	11.6%	6	8.7%	19	27.5%	10	14.5%	26	37.7%	69
7	D7M	13	15.9%	21	25.6%	12	14.6%	20	24.4%	5	6.1%	11	13.4%	82
	D7S	2	2.8%	11	15.5%	12	16.9%	19	26.8%	12	16.9%	15	21.1%	71
	Total	15	6.8%	40	18.0%	30	13.5%	58	26.1%	27	12.2%	52	23.4%	222
	D8L	2	2.0%	14	14.3%	11	11.2%	19	19.4%	12	12.2%	40	40.8%	98
8	D8M	2	3.1%	23	35.4%	8	12.3%	14	21.5%	6	9.2%	12	18.5%	65
0	D8S	3	4.0%	32	42.7%	3	4.0%	11	14.7%	8	10.7%	18	24.0%	75
	Total	7	2.9%	69	29.0%	22	9.2%	44	18.5%	26	10.9%	70	29.4%	238
	D9L	1	1.1%	14	15.6%	10	11.1%	21	23.3%	10	11.1%	34	37.8%	90
Q	D9M	3	5.2%	16	27.6%	12	20.7%	9	15.5%	8	13.8%	10	17.2%	58
5	D9S	5	6.2%	6	7.4%	19	23.5%	18	22.2%	11	13.6%	22	27.2%	81
	Total	9	3.9%	36	15.7%	41	17.9%	48	21.0%	29	12.7%	66	28.8%	229
	D10L	5	6.7%	20	26.7%	4	5.3%	9	12.0%	5	6.7%	32	42.7%	75
10	D10M	11	47.8%	7	30.4%	1	4.3%	2	8.7%	1	4.3%	1	4.3%	23
10	D10S	2	3.3%	17	28.3%	5	8.3%	14	23.3%	7	11.7%	15	25.0%	60
	Total	18	11.4%	44	27.8%	10	6.3%	25	15.8%	13	8.2%	48	30.4%	158
Grand To	otal:	99	4.5%	478	21.7%	251	11.4%	452	20.6%	227	10.3%	692	31.5%	2,199

 Table 10: Frequency of Roadway Use by District and Project

### The Right Transportation Solution

Overall, Missourians had a very positive perception of the projects in this survey with 92.2% of the respondents stating that their local project was the right transportation solution. This was similar to the previous findings of the last four surveys.







The standard deviation was 12.1% with three projects falling more than one standard deviation below the norm. The respondents for projects D4S, D5S, and D8S were significantly less likely to think their project was the right transportation solution than the respondents for the other projects. However, even the lowest scoring project (D4S) was considered to be the right transportation solution by approximately two out of three respondents (67.6%).

The overall score of 92.2% was so high that it was impossible for any project to score significantly above the mean since a score of 100% fell within the standard deviation. 100% of the respondents for two projects (D7M and D8L) thought their project was the right transportation solution.

District	Project	No	ot at all	No	t really	Son	newhat	Very	much	Total
	D1L	1	2.0%	2	4.0%	15	30.0%	32	64.0%	50
1	D1M	0	0.0%	4	8.0%	14	28.0%	32	64.0%	50
	D1S	1	1.8%	2	3.6%	17	30.4%	36	64.3%	56
	Total	2	1.3%	8	5.1%	46	29.5%	100	64.1%	156
	D2L	2	1.8%	3	2.7%	15	13.6%	90	81.8%	110
2	D2M	2	2.5%	2	2.5%	20	24.7%	57	70.4%	81
2	D2S	3	3.8%	1	1.3%	8	10.0%	68	85.0%	80
	Total	7	2.6%	6	2.2%	43	15.9%	215	79.3%	271
	D3L	2	2.6%	1	1.3%	3	3.9%	70	92.1%	76
2	D3M	1	1.9%	2	3.8%	13	25.0%	36	69.2%	52
3	D3S	0	0.0%	4	9.1%	15	34.1%	25	56.8%	44
	Total	3	1.7%	7	4.1%	31	18.0%	131	76.2%	172
	D4L	3	5.4%	5	8.9%	10	17.9%	38	67.9%	56
1	D4M	1	1.6%	4	6.5%	5	8.1%	52	83.9%	62
4	D4S	12	16.9%	11	15.5%	14	19.7%	34	47.9%	71
	Total	16	8.5%	20	10.6%	29	15.3%	124	65.6%	189
	D5L	1	1.0%	2	1.9%	18	17.5%	82	79.6%	103
5	D5M	0	0.0%	5	5.4%	33	35.9%	54	58.7%	92
5	D5S	13	12.7%	13	12.7%	26	25.5%	50	49.0%	102
	Total	14	4.7%	20	6.7%	77	25.9%	186	62.6%	297
	D6L	2	2.5%	5	6.3%	16	20.3%	56	70.9%	79
6	D6M	2	3.8%	0	0.0%	8	15.1%	43	81.1%	53
0	D6S	2	6.3%	1	3.1%	14	43.8%	15	46.9%	32
	Total	6	3.7%	6	3.7%	38	23.2%	114	69.5%	164
	D7L	2	3.2%	3	4.8%	14	22.6%	43	69.4%	62
-	D7M	0	0.0%	0	0.0%	3	4.3%	66	95.7%	69
1	D7S	3	4.3%	1	1.4%	12	17.4%	53	76.8%	69
	Total	5	2.5%	4	2.0%	29	14.5%	162	81.0%	200
	D8L	0	0.0%	0	0.0%	4	4.3%	90	95.7%	94
	D8M	2	3.6%	6	10.9%	11	20.0%	36	65.5%	55
ð	D8S	4	5.6%	7	9.7%	13	18.1%	48	66.7%	72
3 4 5 6 7 8	Total	6	2.7%	13	5.9%	28	12.7%	174	78.7%	221

 Table 11: Right Transportation Solution by Project and District

District	Project	Nc	ot at all	No	t really	Son	newhat	Very	much	Total
	D9L	3	3.4%	1	1.1%	7	7.9%	78	87.6%	89
0	D9M	0	0.0%	2	3.6%	10	18.2%	43	78.2%	55
9	D9S	3	3.9%	1	1.3%	19	24.7%	54	70.1%	77
	Total	6	2.7%	4	1.8%	36	16.3%	175	79.2%	221
	D10L	0	0.0%	1	1.4%	10	14.3%	59	84.3%	70
10	D10M	1	9.1%	0	0.0%	4	36.4%	6	54.5%	11
10	D10S	0	0.0%	3	5.3%	14	24.6%	40	70.2%	57
	Total	1	0.7%	4	2.9%	28	20.3%	105	76.1%	138
Grand T	otal:	66	3.3%	92	4.5%	385	19.0%	1,486 73.2%		2,029

Interestingly, the project size had a significant effect on the overall measure. As shown in the following table, the larger the project, the more likely respondents were to agree that the project was the right transportation solution.

Overall, do you think this project was the right transportation solution?										
		Not	Not		Very	Total				
		at all	really	Somewhat	much	Total				
Large		16	23	112	638	789				
	Large	2.0%	2.9%	14.2%	80.9%	100%				
	Modium	9	25	121	425	580				
Project	Medium	1.6%	4.3%	20.9%	73.3%	100%				
Size	Small	41	44	152	423	660				
	Smail	6.2%	6.7%	23.0%	64.1%	100%				
	Total	66	92	385	1,486	2,029				
	TOTAL	3.3%	4.5%	19.0%	73.2%	100%				

 Table 12: Right Transportation Solution by Project Size

### **Respondent Property Loss**

In Fiscal Year 2009, MoDOT requested that a new question be added to the survey. MoDOT wanted to investigate the possibility that people who lost property to construction projects were significantly negatively impacting the survey results. Since the same methodology was employed for each survey, these results may be generalized to previous years as well.



Figure 9: Property Loss – Historical Comparison

Less than two percent of the respondents had lost property to build the project in their area. Even these small numbers were not evenly distributed. Some projects, such as bridge repair, are not likely to require any additional property. Therefore it is not surprising that some districts had zero respondents who lost property to the projects under review. The following table provides the actual numbers and percentages for each project.

District	Project	<u>ا</u> د	′es		No	Total
	D1Ĺ	1	1.8%	55	98.2%	56
1	D1M	0	0.0%	55	100.0%	55
I	D1S	0	0.0%	63	100.0%	63
	Total	1	0.6%	173	99.4%	174
	D2L	7	6.2%	106	93.8%	113
2	D2M	1	1.2%	81	98.8%	82
2	D2S	0	0.0%	86	100.0%	86
	Total	8	2.8%	273	97.2%	281
	D3L	0	0.0%	77	100.0%	77
2	D3M	0	0.0%	57	100.0%	57
3	D3S	0	0.0%	51	100.0%	51
	Total	0	0.0%	185	100.0%	185
	D4L	0	0.0%	60	100.0%	60
1	D4M	0	0.0%	67	100.0%	67
4	D4S	3	4.1%	71	95.9%	74
	Total	3	1.5%	198	98.5%	201
	D5L	3	2.9%	101	97.1%	104
5	D5M	0	0.0%	102	100.0%	102
5	D5S	2	1.8%	107	98.2%	109
	Total	5	1.6%	310	98.4%	315
	D6L	1	1.3%	79	98.8%	80
6	D6M	1	1.9%	53	98.1%	54
0	D6S	0	0.0%	41	100.0%	41
	Total	2	1.1%	173	98.9%	175
	D7L	0	0.0%	68	100.0%	68
7	D7M	1	1.3%	75	98.7%	76
1	D7S	0	0.0%	71	100.0%	71
	Total	1	0.5%	214	99.5%	215
	D8L	2	2.0%	97	98.0%	99
0	D8M	0	0.0%	64	100.0%	64
0	D8S	1	1.4%	71	98.6%	72
	Total	3	1.3%	232	98.7%	235
	D9L	6	6.9%	81	93.1%	87
Q	D9M	0	0.0%	58	100.0%	58
3	D9S	0	0.0%	80	100.0%	80
	Total	6	2.7%	219	97.3%	225

Table 13: Frequency of Respondents Who Lost Property to Project by District and Project

District	Project	Y	′es	I	No	Total
10	D10L	4	5.4%	70	94.6%	74
	D10M	2	9.5%	19	90.5%	21
10	D10S	1	1.7%	57	98.3%	58
	Total	7	4.6%	146	95.4%	153
Grand Total:		36	1.7%	2,123	98.3%	2,159

The previous figures show that such a small percentage of people lost property to their local project that they could not have significantly affected the survey results if losing property was a factor in their evaluation. However, unlike the results from the previous two years, this year there was a noticeable difference between those who lost property and those who had not.

Table 14:	<b>Cross Reference of Righ</b>	t Transportation Solu	ution and Property Loss
-----------	--------------------------------	-----------------------	-------------------------

			Overall	as the right				
							Don't	
			Not	Not		Very	know / not	
			at all	really	Somewhat	much	sure	Total
	Yes	Did you lose property	5	1	6	22	2	36
Did you lose property		to build the project?	13.9%	2.8%	16.7%	61.1%	5.6%	100.0%
to build the project?	No	Did you lose property	56	91	375	1,443	127	2,092
		to build the project?	2.7%	4.3%	17.9%	69.0%	6.1%	100.0%
Total		Did you lose property	61	92	381	1,465	129	2,128
TOLAT		to build the project?	2.9%	4.3%	17.9%	68.8%	6.1%	100.0%

Given the small number of people who lost property, the difference between this group and the overall population is not statistically significant. However, on a project by project basis, there was a statistically significant difference between those who lost property and those who did not for projects D4S and D5S. While we are dealing with small numbers on this level, where one or two responses may make a big difference, people who lost property on these two projects were statistically more likely to disagree with this tracker measure than those who did not lose property.

### **The Right Priority**

At MoDOT's request, a new question was added to the survey in Fiscal Year 2009 to help investigate a potential reason why some respondents did not believe their project to be the right transportation solution. This year, 14.3% of the respondents felt another project should have been commissioned before their particular project. This is similar to the two previous years.



Figure 10: Priority – Historical Comparison

These responses were not evenly distributed across the state. The respondents from six projects were statistically more likely to fall at least one standard deviation (10.6%) from the normal range. People from five projects (D1S, D3S, D4S, D5S, and D6S) were much more likely to think another project should have been given priority over their local project. For example, 43.8% of the D6S respondents thought another project should have been given priority. At the other extreme, people responding to project D8L were statistically less likely than the norm to say another project should have been given priority. Only 2.2% of these respondents thought another project should have had a higher priority.

District	Project	Yes		N	Total	
	D1L	4	8.7%	42	91.3%	46
1	D1M	11	23.9%	35	76.1%	46
	D1S	14	25.0%	42	75.0%	56
	Total	29	19.6%	119	80.4%	148
	D2L	7	6.9%	94	93.1%	101
2	D2M	4	5.6%	67	94.4%	71
2	D2S	8	10.1%	71	89.9%	79
	Total	19	7.6%	232	92.4%	251
	D3L	9	12.3%	64	87.7%	73
3	D3M	5	10.6%	42	89.4%	47
5	D3S	16	38.1%	26	61.9%	42
	Total	30	18.5%	132	81.5%	162
	D4L	10	18.9%	43	81.1%	53
1	D4M	7	11.5%	54	88.5%	61
4	D4S	27	43.5%	35	56.5%	62
	Total	44	25.0%	132	75.0%	176
	D5L	6	6.5%	87	93.5%	93
5	D5M	9	9.9%	82	90.1%	91
5	D5S	33	34.7%	62	65.3%	95
	Total	48	17.2%	231	82.8%	279
	D6L	13	18.3%	58	81.7%	71
6	D6M	3	6.1%	46	93.9%	49
0	D6S	14	43.8%	18	56.3%	32
	Total	30	19.7%	122	80.3%	152

Figure 11: Priority Feedback by Project and District

District	Project	γ	′es	Ν	Total	
	D7L	3	5.1%	56	94.9%	59
7	D7M	4	5.7%	66	94.3%	70
1	D7S	6	10.0%	54	90.0%	60
	Total	13	6.9%	176	93.1%	189
	D8L	2	2.2%	89	97.8%	91
0	D8M	8	14.8%	46	85.2%	54
8	D8S	15	24.2%	47	75.8%	62
	Total	25	12.1%	182	87.9%	207
	D9L	4	4.6%	83	95.4%	87
0	D9M	9	16.7%	45	83.3%	54
9	D9S	13	18.1%	59	81.9%	72
	Total	26	12.2%	187	87.8%	213
	D10L	3	4.5%	63	95.5%	66
10	D10M	2	15.4%	11	84.6%	13
10	D10S	3	5.8%	49	94.2%	52
	Total	8	6.1%	123	93.9%	131
Grand Total:		272	14.3%	1,636	85.7%	1,908

For the third year in a row, the belief that another project should have taken priority over the local project appears to have made a significant impact on the overall results. The following table provides the actual numbers and percentages for both groups.

Overall, do you think this project was the right transportation solution?								
			Not		Very			
		Not at all	really	Somewhat	much	Total		
Should another project have had	Yes	47 19.6%	45 18.8%	81 33.8%	67 27.9%	240 100.0%		
	No	11 .7%	34 2.2%	244 15.6%	1,278 81.6%	1,567 100.0%		
higher priority?	Total	58 3.2%	79 4.4%	325 18.0%	1,345 74.4%	1,807 100.0%		

 Table 15: Cross Reference of Priority by Right Transportation Solution

Only 61.7% of the respondents who thought another project should have been given priority thought their local project was the right transportation solution compared to 97.1% of those who did not believe another project should have been given priority.<sup>1</sup> This is a very strong statistical difference and supports MoDOT's hypothesis that a respondent's belief that another project should have been commissioned first is a significant factor in their evaluation. However, it is important to note that this study cannot test casualty. There is clearly a strong link between these two factors. However, it is possible that the respondent's disagreement that a project was the right transportation solution is influencing their opinion on whether or not another project should have had a higher priority.

It can be very difficult to determine causality, and if this is important to MoDOT, they should commission a research study focused on this subject. However, no matter which factor is the dependent factor, MoDOT can help address this issue by publicizing the reasons why the projects that are selected are a priority.

Assuming the respondent's belief that another project should have had a higher priority affects the respondent's belief that their project was the right transportation solution, a regression analysis indicates that this effect would be responsible for 16% of the variance in beliefs that a project was the right transportation solution. 16% is a very strong effect as this is independent of the project itself given the assumption that the right transportation solution score is the dependent variable. A similar effect (15%) was found last fiscal year.

<sup>&</sup>lt;sup>1</sup> These percentages were calculated by following standard practice for the Tracker measures. The respondents who answered "Don't know / not sure" were not included in these calculations to facilitate comparisons across multiple years. The total of the Priority/RTS table shows 92.4% of the respondents thought the project was the Right Transportation Solution which differs from the 92.2% used elsewhere in the report. This is not a mistake, some people omitted the priority question and thus these responses were not used in the Priority/RTS table.

This year there was also an inverse relationship between project size and the response to the priority question. As the scope of the project increased in size, respondents were much less likely to believe another project should have been given a higher priority. 24.3% of the respondents from small projects thought another project should have been given priority compared to 11.2% of respondents from medium projects and just 8.2% of respondents from large projects.

Should another project have had higher priority?						
		Yes	No	Total		
Project Size	Large	61 8.2%	679 91.8%	740 100.0%		
	Medium	62 11.2%	494 88.8%	556 100.0%		
	Small	149 24.3%	463 75.7%	612 100.0%		
	Total	272 14.3%	1,636 85.7%	1,908 100.0%		

Table 16:	<b>Cross Reference</b>	of Priority	by Project Size

### Gender

Added in FY09, this question captured the respondent's gender.

![](_page_48_Figure_3.jpeg)

Figure 12: Respondent Gender – Historical Comparison

A slight majority of the respondents were women, representing 53.1% of the overall respondents. These results were similar to last year. The percentage of men and women varied more widely from project to project as shown in the following table.

District	Project	Male		Female		Total
	D1L	27	50.9%	26	49.1%	53
1	D1M	30	57.7%	22	42.3%	52
1	D1S	33	55.0%	27	45.0%	60
	Total	90	54.5%	75	45.5%	165

Table 17:	Respondent	Gender by	Project and	District

District	Project	Μ	lale	Fer	nale	Total
	D2L	45	43.7%	58	56.3%	103
2	D2M	23	31.1%	51	68.9%	74
	D2S	36	43.9%	46	56.1%	82
	Total	104	40.2%	155	59.8%	259
	D3L	30	41.1%	43	58.9%	73
2	D3M	26	51.0%	25	49.0%	51
3	D3S	19	38.0%	31	62.0%	50
	Total	75	43.1%	99	56.9%	174
	D4L	29	51.8%	27	48.2%	56
1	D4M	26	44.8%	32	55.2%	58
4	D4S	30	42.9%	40	57.1%	70
	Total	85	46.2%	99	53.8%	184
	D5L	46	47.9%	50	52.1%	96
5	D5M	46	51.1%	44	48.9%	90
5	D5S	49	48.5%	52	51.5%	101
	Total	141	49.1%	146	50.9%	287
	D6L	45	60.8%	29	39.2%	74
6	D6M	28	57.1%	21	42.9%	49
0	D6S	14	37.8%	23	62.2%	37
	Total	87	54.4%	73	45.6%	160
	D7L	25	39.1%	39	60.9%	64
7	D7M	31	41.3%	44	58.7%	75
/	D7S	39	56.5%	30	43.5%	69
	Total	95	45.7%	113	54.3%	208
	D8L	43	47.8%	47	52.2%	90
Q	D8M	24	41.4%	34	58.6%	58
0	D8S	30	43.5%	39	56.5%	69
	Total	97	44.7%	120	55.3%	217
	D9L	46	58.2%	33	41.8%	79
0	D9M	19	35.2%	35	64.8%	54
9	D9S	37	49.3%	38	50.7%	75
	Total	102	49.0%	106	51.0%	208
	D10L	39	54.9%	32	45.1%	71
10	D10M	9	39.1%	14	60.9%	23
10	D10S	19	35.8%	34	64.2%	53
	Total	67	45.6%	80	54.4%	147
Grand Total:		943	46.9%	1,066	53.1%	2,009

There was no significant impact of gender on Tracker Measure 9i. 91.4% of men and 93.8% of women thought their project was the right transportation solution.<sup>2</sup>

Overall, do you think this project was the right transportation solution?								
		Not at all Not really Somewhat		Very much	Total			
	Female	25	35	173	731	964		
		2.6%	3.6%	17.9%	75.8%	100%		
Gender	Male	31 3.6%	44 5.1%	170 19.6%	623 71.8%	868 100%		
	Total	56 3.1%	79 4.3%	343 18.7%	1,354 73.9%	1,832 100%		

 Table 18: Cross Reference of Gender and Right Transportation Solution

<sup>&</sup>lt;sup>2</sup> These percentages were calculated by following standard practice for the Tracker measures. The respondents who answered "Don't know / not sure" were not included in these calculations to facilitate comparisons across multiple years. The total of the Gender/RTS table shows 92.6% of the respondents thought the project was the Right Transportation Solution which differs from the 92.2% used elsewhere in the report. This is not a mistake, some people omitted the gender question and thus these responses were not used in the Gender/RTS table.

### Ethnicity

Added in FY11, this question captured the respondent's ethnicity to help measure MoDOT's compliance with Title Six as it pertains to surveying constituents. Out of those answering this question, 91.4% of the respondents were Caucasian with the rest consisting of African Americans (0.7%), American Indian or Alaskan Natives (1.6%), Asian or Pacific Islanders (0.5%), Hispanic or Latino (1.0%), or Other (4.8%).

![](_page_51_Figure_3.jpeg)

Figure 13: Respondent Ethnicity

There was some variance in ethnic responses to the right transportation solution, but given the small numbers involved these differences were not significantly significant. The fact that that different ethnic groups scored slightly above and below the mean also supports the hypothesis that this variance is random variation. 85.7% of the lowest scoring ethnic group thought their project was the right transportation solution and 95.0% of the highest scoring ethnic group thought their project was the right transportation solution. Overall, it appears that all groups, regardless of ethnicity, share a highly favorable opinion about their local projects.

Overall, do you think this project was the right transportation solution?									
	Not at all	Not really	Somewhat	Very much	Total				
	-	2	2	10	14				
African American	0.0%	14.3%	14.3%	71.4%	100.0%				
American Indian or	1	1	6	22	30				
Alaskan Native	3.3%	3.3%	20.0%	73.3%	100.0%				
Asian or Pacific	-	1	1	5	7				
Islander	0.0%	14.3%	14.3%	71.4%	100.0%				
Caucacian	51	74	323	1,237	1,685				
Caucasian	3.0%	4.4%	19.2%	73.4%	100.0%				
Hispanic or Latino	-	1	6	13	20				
Thispanic of Latino	0.0%	5.0%	30.0%	65.0%	100.0%				
Othor	2	6	19	56	83				
Other	2.4%	7.2%	22.9%	67.5%	100.0%				
Total	54	85	357	1,343	1,839				
Total	2.9%	4.6%	19.4%	73.0%	100.0%				

#### Table 19: Ethnicity by Right Transportation Solution

### Summary

The overall results show that most Missourians are very satisfied with their local project and generally believe that MoDOT provides the right transportation solution. Results were statistically similar to last year's high scores. 89.2% of the respondents were either "very" or "fairly" familiar with the project roadway. 73.8% of the respondents were regular users of the affected roadway (defined as using it at least once per week). The majority of respondents thought that the project made the roadway safer (92.6%), more convenient (90.5%), less congested (81.8%), easier to drive (91.5%), better marked (88.8%), and was the right transportation solution (92.2%).

### Appendix A. Survey Instrument

The next three pages show the front and back side of the survey instrument. Two questionnaires were developed, one for projects with accommodations for bicyclists and pedestrians and one for projects without such accommodations. Two examples are provided on the following pages, one of each type of questionnaire.

On the front page of each survey, a unique project description was printed for each of the thirty projects. All of the actual descriptions are available under Project Descriptions and Locations starting on page 6. The back page of each survey was identical for each questionnaire and provided respondents with an opportunity to express their opinions and to capture Title Six demographic information in accordance with federal guidelines.

### 2010 MoDOT Project Survey

![](_page_55_Picture_2.jpeg)

Please use a pencil or a blue or a black pen to complete the survey.

187	
	Answer Selection: Correct = $\bullet$ Incorrect = $\bigotimes & & \Theta \\ \bullet$
the second second second	

The questions on this survey refer to MoDOT project D2S: Route 5 in Howard County. This project improved the viaduct over the KATY Trail just north of Route 40 in New Franklin. The project was completed in April 2010.

Thinking of this project after MoDOT completed work on it, how would you rate each of the following?

1, 1	The road is now	Agree	Agree	Disagree	Strongly Disagree	Not Sure	
	safer	0	0	ο	0	0	
	more convenient	0	0	0	0	0	
	less congested	0	0	0	0	0	
	easier to travel	0	0	0	0	0	
	better marked	0	0	0	0	0	

2. The bike/pedestrian accommodation on this project...

	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Sure
meets your needs	о	0	о	ο	0
is safe	0	0	0	0	0
is easy to use	0	0	0	0	0

3. How familiar are youwith this roadway?4. How often have you used this section of the road in the month?5. Overall, do you think this project was the right transportation solution?

0	Not at all	0	Never			ua	isponation solution:
0	Somewhat	0	A few	times		0	Not at all
0	Fairly well	0	Once	a week	5	0	Not really
0	Very well	0	Twice	a wee	k	0	Somewhat
		0	Most	weekda	ays	0	Very much
6. Did you lose property to build the project?		0	Almos	st ever	y day	0	Don't know / not sure
		7.	Should	anothe	r projec	t have had hig	ther priority?
0	Yes O No	0	Yes	0	No	Additional	questions on other side

### 2010 MoDOT Project Survey

![](_page_56_Picture_2.jpeg)

Please use a pencil or a blue or a black pen to complete the survey.

101	- OR	OR	
	Answer Selection: Correct = ●	Incorrect = 🗙 𝒴 ↔	

The questions on this survey refer to MoDOT project D2L: Route 36 in Macon and Shelby Counties. This project extended dual lanes from east of Macon to Shelbina, and was completed in July 2010.

Thinking of this project after MoDOT completed work on it, how would you rate each of the following?

1. The road is now	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Sure	
safer	0	0	0	0	0	
more convenient	0	0	0	0	0	
less congested	0	0	0	0	0	
easier to travel	0	0	0	0	0	
better marked	0	0	0	0	0	

2. This project did not have a bike/pedestrian component. I believe ...

	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Sure	
this was the right decision	0	ο	0	o	0	
pedestrians will use this road	0	0	0	0	0	
bicyclists will use this road	0	0	0	0	0	

3. How familiar are youwith this roadway?4. How often have you used this section of the road in the month?5. Overall, do you think this project was the right transportation solution?

0	Not at all		0	Never				. ui	isportation solution.
0	Somewhat		0	A few	times		C	С	Not at all
0	Fairly well		0	Once a	a week	5	C	С	Not really
0	Very well		0	Twice	a wee	k	C	С	Somewhat
			0	Most	weekda	ays	C	С	Very much
6.	Did you lose p	roperty	0	Almos	t ever	y day	C	С	Don't know / not sure
to	build the project	t?		4					
			7.	Should a	anothe	r projec	t have had h	nig	her priority?
0	Yes O	No	0	Yes	0	No	Additiona	al c	questions on other side

### 2010 MoDOT Project Survey

After completing the other side, please finish this side and return this survey

8. Please provide any comments you may have about why you feel this project was, or was not, the right transportation solution. Keep all comments within the thick red lines.

![](_page_57_Picture_4.jpeg)

Questions 9 and 10 are asked on behalf of the Federal Government. Feel free to skip any question if you do not feel comfortable answering it.

- 9. What is your gender?
  - O Female O Male

10. What is your ethnicity? Select all that apply.

- O African American
- O American Indian or Alaskan Native
- O Asian or Pacific Islander
- O Caucasian
- O Hispanic or Latino
- O Other

### Appendix B: Right Transportation Solution by Project

The results from the right transportation solution question have been graphically provided for each project. Readers should use caution when using the information provided to compare projects. Statistically, it is very safe to compare overall results from fiscal year 2011 to previous fiscal years. The margin of error for all years has been approximately 2%. Since the margin of error can go either way (e.g., low in one year and high in another), the margins of error are cumulative. Therefore, we can be 95% confident that differences between years are truly real changes if the overall difference is at least 4%.

However, the margin of error increases as the sample size decreases. The general margin of error for the results presented in this appendix range from a low of 9.5% for Project D2L (n=110) to a high of 30.2% for Project D10M (n=11). However, despite these statistical concerns, these graphs do provide some useful information. For example, many projects were overwhelmingly the right transportation solution in the eyes of the respondents. The question that can be raised by these graphs is why do a few projects have much lower levels of support than other projects?

![](_page_59_Figure_1.jpeg)

#### Figure 14: District 1

\*total n excludes respondents answering "Don't know / not sure" to this question

Figure 15: District 2

![](_page_59_Figure_4.jpeg)

### Overall, do you think this project was

\*total n excludes respondents answering "Don't know / not sure" to this question

Page 54 of 54

![](_page_60_Figure_1.jpeg)

#### Figure 16: District 3

\*total n excludes respondents answering "Don't know / not sure" to this question

![](_page_60_Figure_4.jpeg)

![](_page_60_Figure_5.jpeg)

# Overall, do you think this project was the right transportation solution?

![](_page_61_Figure_1.jpeg)

#### Figure 18: District 5

\*total n excludes respondents answering "Don't know / not sure" to this question

![](_page_61_Figure_4.jpeg)

#### Figure 19: District 6 Overall, do you think this project was

the right transportation solution?

![](_page_62_Figure_1.jpeg)

![](_page_62_Figure_2.jpeg)

\*total n excludes respondents answering "Don't know / not sure" to this question

Figure 21: District 8

![](_page_62_Figure_4.jpeg)

### Overall, do you think this project was

![](_page_63_Figure_1.jpeg)

#### Figure 22: District 9

\*total n excludes respondents answering "Don't know / not sure" to this question

Figure 23: District 10

![](_page_63_Figure_4.jpeg)

## Overall, do you think this project was the right transportation solution?

. . . . . . . . . . . .

![](_page_64_Picture_1.jpeg)

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