Greetings from MoDOT

The Missouri Department of Transportation is committed to being open and transparent. We want you to know what we do well, what we don’t do so well and what we are doing to get better. That is why we created the Tracker.

This document is your window into MoDOT – warts and all. It invites you to hold us accountable for exceeding your expectations. You expect MoDOT to get the best value out of every dollar spent. You expect us to make highways smoother and safer, soon. You expect us to fix bad bridges, be responsive and to proactively give you the information you need. You expect us to provide a world-class transportation experience.

We share your expectations and have built 18 tangible results around them. These results guide us everyday as we go about the business of delighting our customers. In the Tracker, you will see that we have established measures to gauge our progress and we are comparing ourselves to the best organizations in the country.

You can use the Tracker to see how we are measuring up. We make it available in a printed format and on our website at www.modot.org. Missouri’s transportation system will not improve unless we all work together. The Tracker is one of the many ways you can help. Please look it over and let us know how we are doing.

Sincerely,

Pete K. Rahn, Director
Missouri Department of Transportation

Mission

Our mission is to provide a world-class transportation experience that delights our customers and promotes a prosperous Missouri.
### Uninterrupted Traffic Flow – Don Hillis (Page 1)

<table>
<thead>
<tr>
<th>Metric</th>
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</thead>
<tbody>
<tr>
<td>Average speeds on selected roadway sections</td>
<td>Eileen Rackers</td>
<td>1a</td>
</tr>
<tr>
<td>Average time to clear traffic incident</td>
<td>Dan Bruno</td>
<td>1b</td>
</tr>
<tr>
<td>Average time to clear traffic backup from incident</td>
<td>Dan Bruno</td>
<td>1c</td>
</tr>
<tr>
<td>Number of customers assisted by the Motorist Assist program</td>
<td>Dan Bruno</td>
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<tr>
<td>Percent of work zones meeting expectations for traffic flow</td>
<td>Scott Stotlemeyer</td>
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</tr>
<tr>
<td>Percent of retimed signals</td>
<td>Julie Stotlemeyer</td>
<td>1f</td>
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<tr>
<td>Percent of Motorist Assist customers who are satisfied with the service</td>
<td>Dan Bruno</td>
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<tr>
<td>Percent of signals observed</td>
<td>Julie Stotlemeyer</td>
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<tr>
<td>Time to meet winter storm event performance objectives on major &amp; minor highways – UNDER DEVELOPMENT</td>
<td>Tim Jackson</td>
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</table>

### Smooth and Unrestricted Roads and Bridges – Kevin Keith (Page 2)

<table>
<thead>
<tr>
<th>Metric</th>
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<tbody>
<tr>
<td>Percent of major highways that are in good condition</td>
<td>Jay Bledsoe</td>
<td>2a</td>
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<tr>
<td>Percent of minor highways that are in good condition</td>
<td>Jay Bledsoe</td>
<td>2b</td>
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<tr>
<td>Percent of deficient bridges on major highways</td>
<td>Jay Bledsoe</td>
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</tr>
<tr>
<td>Percent of deficient bridges on minor highways</td>
<td>Jay Bledsoe</td>
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<tr>
<td>Number of deficient bridges on the state system (major &amp; minor highways)</td>
<td>Jay Bledsoe</td>
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<tr>
<td>Number of miles completed through the Smooth Roads Initiative</td>
<td>Machelle Watkins</td>
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### Safe Transportation System – Don Hillis (Page 3)

<table>
<thead>
<tr>
<th>Metric</th>
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<tbody>
<tr>
<td>Number of fatalities and injuries year to date</td>
<td>Leanna Depue</td>
<td>3a</td>
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<tr>
<td>Number of impaired driver-related fatalities and injuries year to date</td>
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<td>Rate of annual fatalities and injuries</td>
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<tr>
<td>Percent of safety belt/passenger vehicle restraint use</td>
<td>Leanna Depue</td>
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<tr>
<td>Number of bicycle and pedestrian fatalities and injuries</td>
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<td>Number of motorcycle fatalities and injuries</td>
<td>Leanna Depue</td>
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<tr>
<td>Number of commercial motor vehicle crashes resulting in fatalities</td>
<td>Chuck Gohring</td>
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<tr>
<td>Number of commercial motor vehicle crashes resulting in injuries</td>
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<tr>
<td>Number of fatalities and injuries in work zones</td>
<td>Scott Stotlemeyer</td>
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<tr>
<td>Number of highway-rail crossing fatalities and collisions</td>
<td>Rod Massman</td>
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### Roadway Visibility – Don Hillis (Page 4)

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Rate of nighttime crashes</td>
<td>Mike Curtit</td>
<td>4a</td>
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<tr>
<td>Percent of signs that meet customers’ expectations</td>
<td>Jim Brocksmith</td>
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<tr>
<td>Percent of stripes that meet customers’ expectations</td>
<td>Jim Brocksmith</td>
<td>4c</td>
</tr>
<tr>
<td>Percent of work zones meeting expectations for visibility</td>
<td>Scott Stotlemeyer</td>
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</table>

### Personal, Fast, Courteous and Understandable Response to Customer Requests (Inbound) – Shane Peck (Page 5)

<table>
<thead>
<tr>
<th>Metric</th>
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<tbody>
<tr>
<td>Percent of overall customer satisfaction</td>
<td>DeAnne Bonnot</td>
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<tr>
<td>Percent of customers who contacted MoDOT that felt they were responded to quickly</td>
<td>DeAnne Bonnot</td>
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<tr>
<td>Percent of customers who contacted MoDOT that felt they were responded to in a personal and courteous manner</td>
<td>DeAnne Bonnot</td>
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<tr>
<td>Percent of customers who contacted MoDOT that understood the response given</td>
<td>DeAnne Bonnot</td>
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<tr>
<td>Number of customer contacts</td>
<td>Marisa Brown</td>
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<tr>
<td>Percent of documented customer requests completed within 24 hours</td>
<td>Marisa Brown</td>
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<tr>
<td>Average response time to customers requiring follow up</td>
<td>Marisa Brown</td>
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### Partner With Others to Deliver Transportation Services – Kevin Keith (Page 6)

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<thead>
<tr>
<th>Metric</th>
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<tr>
<td>Number of dollars of discretionary funds allocated to Missouri</td>
<td>Todd Grosvenor</td>
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<tr>
<td>Percent of earmarked dollars that represent MoDOT’s high priority projects</td>
<td>Todd Grosvenor</td>
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<td>Number of dollars generated through cost-sharing and other partnering agreements</td>
<td>Kirk Boyer</td>
<td>6c</td>
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### Leverage Transportation to Advance Economic Development – Roberta Broeker (Page 7)

<table>
<thead>
<tr>
<th>Metric</th>
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<tbody>
<tr>
<td>Miles of new 4-lane corridors completed</td>
<td>Jay Bledsoe</td>
<td>7a</td>
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<tr>
<td>Percent utilization of SIB &amp; STAR loan programs</td>
<td>Raye Ann Lecure</td>
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<tr>
<td>Rate of economic return from transportation investment</td>
<td>Ernie Perry</td>
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### Innovative Transportation Solutions – Mara Campbell (Page 8)

<table>
<thead>
<tr>
<th>Metric</th>
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<tbody>
<tr>
<td>Percent of innovative transportation solutions implemented</td>
<td>Patty Lemongelli</td>
<td>8a</td>
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<tr>
<td>Benefits of implementing innovative transportation solutions</td>
<td>Patty Lemongelli</td>
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<tr>
<td>Annual dollar amount saved by implementing value engineering</td>
<td>Kathy Harvey</td>
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<tr>
<td>Annual dollar amount saved by implementing practical design</td>
<td>Kathy Harvey</td>
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<tr>
<td>Number of external awards received</td>
<td>Rebecca Geyer</td>
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<thead>
<tr>
<th>Metric</th>
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<tr>
<td>Percent of estimated project cost as compared to final project cost</td>
<td>Machelle Watkins</td>
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<tr>
<td>Number of calendar days it takes to go from the programmed commitment on the Statewide Transportation Improvement Program to construction completion</td>
<td>Machelle Watkins</td>
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<tr>
<td>Percent of projects completed within programmed amount</td>
<td>Dave Ahlvers</td>
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<tr>
<td>Percent of projects completed on time</td>
<td>Dave Ahlvers</td>
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<tr>
<td>Percent of change for finalized contracts</td>
<td>Dave Ahlvers</td>
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<tr>
<td>Average construction cost per day by contract type</td>
<td>Dave Ahlvers</td>
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<tr>
<td>Percent of customers that feel completed projects are the right transportation solutions</td>
<td>Ernie Perry</td>
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<tr>
<td>Percent of project timeliness as compared to other state DOTs</td>
<td>Kathy Harvey</td>
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<td>Percent of projects that represent great value</td>
<td>Kathy Harvey</td>
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### Environmentally Responsible – Dave Nichols (Page 10)

<table>
<thead>
<tr>
<th>Metric</th>
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<tbody>
<tr>
<td>Percent of projects completed without environmental violation</td>
<td>Kathy Harvey</td>
<td>10a</td>
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<tr>
<td>Number of projects on which MoDOT protects or restores sensitive species or habitat</td>
<td>Kathy Harvey</td>
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<tr>
<td>Percent of air quality days that meet Environmental Protection Agency standards by metropolitan area</td>
<td>Machelle Watkins</td>
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<tr>
<td>Percent of alternative fuel consumed</td>
<td>Dave DeWitt</td>
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<tr>
<td>Number of historic resources avoided or protected as compared to those mitigated</td>
<td>Bob Reeder</td>
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<tr>
<td>Ratio of acres of wetlands created compared to the number of acres of wetlands impacted</td>
<td>Gayle Unruh</td>
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<tr>
<td>Number of trees planted compared to number of acres cleared</td>
<td>Jerry Hirtz</td>
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<tr>
<td>Number of tons of recycled/waste materials used in construction projects</td>
<td>Joe Schroer</td>
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### Efficient Movement of Goods – Dave DeWitt (Page 11)

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<thead>
<tr>
<th>Metric</th>
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<tbody>
<tr>
<td>Freight tonnage by mode</td>
<td>Brian Weiler</td>
<td>11a</td>
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<tr>
<td>Average travel times for trucks on selected roadway sections</td>
<td>Michelle Teel</td>
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<td>Percent of trucks using advanced technology at Missouri weigh stations</td>
<td>Barb Hague</td>
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<tr>
<td>Interstate motor carrier mileage</td>
<td>Joy Prenger</td>
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<tr>
<td>Percent of satisfied motor carriers</td>
<td>Mary Jo Pointer</td>
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<tr>
<td>Average wait time spent by customers obtaining over-dimension/over-weight permits</td>
<td>Mary Jo Pointer</td>
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### Easily Accessible Modal Choices – Brian Weiler (Page 12)

<table>
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<tr>
<th>Metric</th>
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<tbody>
<tr>
<td>Number of airline passengers</td>
<td>Joe Pestka</td>
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<tr>
<td>Number of rail passengers</td>
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<tr>
<td>Number of transit passengers</td>
<td>Steve Billings</td>
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<tr>
<td>Number of passengers and vehicles transported by ferryboat</td>
<td>Sherrie Martin</td>
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<tr>
<td>Number of days the river is navigable</td>
<td>Sherrie Martin</td>
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<td>Number of business capable airports</td>
<td>Joe Pestka</td>
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<td>Number of daily scheduled airline flights</td>
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<td>Average days per week rural transit service is available</td>
<td>Steve Billings</td>
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<td>Number of active transit vehicles</td>
<td>Steve Billings</td>
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<tr>
<td>Number of inter-city bus stops</td>
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<tr>
<td>Percent of customers satisfied with transportation options</td>
<td>Ernie Perry</td>
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### Customer Involvement in Transportation Decision-Making – Dave Nichols (Page 13)

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<tr>
<td>Number of customers who attend transportation-related meetings</td>
<td>Bob Brendel</td>
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<td>Percent of customers who are satisfied with feedback they receive from MoDOT after offering comments</td>
<td>Bob Brendel</td>
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<tr>
<td>Percent of customers who feel MoDOT includes them in transportation decision-making</td>
<td>Machelle Watkins</td>
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<tr>
<td>Percent of positive feedback responses received from planning partners regarding involvement in transportation decision-making</td>
<td>Bill Stone</td>
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### Convenient, Clean & Safe Roadside Accommodations – Don Hillis (Page 14)

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<tr>
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<tbody>
<tr>
<td>Percent of customers satisfied with rest areas’ convenience, cleanliness and safety</td>
<td>Jim Carney</td>
<td>14a</td>
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<tr>
<td>Percent of commuter lots that meet customers’ convenience, cleanliness and safety expectations</td>
<td>Jim Carney</td>
<td>14b</td>
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<tr>
<td>Number of users of rest areas</td>
<td>Stacy Armstrong</td>
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<tr>
<td>Number of users of commuter parking lots</td>
<td>Tim Jackson</td>
<td>14d</td>
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<tr>
<td>Number of truck customers that utilize rest areas</td>
<td>Tim Jackson</td>
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<tr>
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<tr>
<td>Best Value for Every Dollar Spent – Roberta Broeker (Page 15)</td>
<td></td>
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<tr>
<td>Number of MoDOT employees (in salaried positions)</td>
<td>Micki Knudsen</td>
<td>15a</td>
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<tr>
<td>Percent of work capacity based on average hours worked</td>
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<td>Rate of employee turnover</td>
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<td>Percent of satisfied employees</td>
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<td>Number of lost work days per year</td>
<td>Beth Ring</td>
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<td>Fleet expenditures per salaried position</td>
<td>Mike Miller</td>
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<tr>
<td>Building expenditures per salaried position</td>
<td>Jeannie Wilson</td>
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<tr>
<td>Utility expenditures per square foot of occupied space</td>
<td>Chris DeVore</td>
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<tr>
<td>Dollars expended on non-design related consultants</td>
<td>Debbie Rickard</td>
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<tr>
<td>Percent of vendor invoices paid on time</td>
<td>Debbie Rickard</td>
<td>15j</td>
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<tr>
<td>Percent of actual state highway user revenue vs. projections</td>
<td>Todd Grosvenor</td>
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<td>MoDOT national ranking in revenue per mile</td>
<td>Todd Grosvenor</td>
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<td>Average salary of outsourced contract design and bridge engineer vs. full-time employee</td>
<td>Jim Deresinski</td>
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<td>Distribution of expenditures</td>
<td>Jim Deresinski</td>
<td>15n</td>
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<tr>
<td>Number of lane miles per MoDOT employee as compared to neighboring states</td>
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<tr>
<td>Number of lane miles per MoDOT employee as compared to the ten best states</td>
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| Attractive Roadsides – Don Hills (Page 16)                   |                               |      |
| Percent of roadsides that meet customers’ expectations      | Jim Carney                    | 16a  |
| Number of hours of litter pickup by MoDOT staff and incarcerated crews | Stacy Armstrong              | 16b  |
| Number of miles in Adopt-A-Highway program                 | Stacy Armstrong               | 16c  |
| Total mowing and herbicide cost                            | Stacy Armstrong               | 16d  |

| Advocate for Transportation Issues – Pete Rahn (Page 17)     |                               |      |
| Percent of minorities and females employed                  | Brenda Treadwell-Martin       | 17a  |
| Percent of transportation-related pieces of legislation directly impacted by MoDOT | Pam Harlan                   | 17b  |
| Percent of federal roadway earmarked projects on the state highway system | Kent Van Landuyt              | 17c  |
| Percent of customers who view MoDOT as Missouri’s transportation expert | Jay Wunderlich               | 17d  |

| Accurate, Timely, Understandable and Proactive Transportation Information (Outbound) – Shane Peck (Page 18) |     |
| Number of public appearances                                | DeAnne Bonnot                 | 18a  |
| Percent of customers who feel MoDOT provides timely information | DeAnne Bonnot                 | 18b  |
| Percent of customers who feel MoDOT provides accurate information | DeAnne Bonnot                 | 18c  |
| Percent of customers who feel MoDOT provides understandable information | DeAnne Bonnot                 | 18d  |
| Number of contacts initiated by MoDOT to media              | Jeff Briggs                   | 18e  |
| Percent of MoDOT information that meets the media’s expectations | Jeff Briggs                   | 18f  |
| Percent of positive newspaper editorials                     | Jeff Briggs                   | 18g  |
| Number of repeat visitors to MoDOT’s web site               | Matt Hiebert                  | 18h  |

**Please Note:** Tangible Results are listed in reverse alphabetical order, not by importance.
Tangible Results

- Uninterrupted Traffic Flow
- Smooth and Unrestricted Roads and Bridges
- Safe Transportation System
- Roadway Visibility
- Personal, Fast, Courteous and Understandable Response to Customer Requests (Inbound)
- Partner With Others to Deliver Transportation Services
- Leverage Transportation to Advance Economic Development
- Innovative Transportation Solutions
- Fast Projects That Are of Great Value
- Environmentally Responsible
- Efficient Movement of Goods
- Easily Accessible Modal Choices
- Customer Involvement in Transportation Decision-Making
- Convenient, Clean and Safe Roadside Accommodations
- Best Value for Every Dollar Spent
- Attractive Roadside
- Advocate for Transportation Issues
- Accurate, Timely, Understandable and Proactive Transportation Information (Outbound)

Value Statements

MoDOT will -

- support and develop employees because we believe they are the key to our success.
- be flexible because we believe one size does not fit all.
- honor our commitments because we believe in integrity.
- encourage risk and accept failure because we believe in getting better.
- be responsive and courteous because we believe in delighting our customers.
- empower employees because we trust them to make timely and innovative decisions.
- not compromise safety because we believe in the well-being of employees and customers.
- provide the best value for every dollar spent because we’re taxpayers too.
- value diversity because we believe in the power of our differences.
- be one team because we all share the same mission.
- use teamwork because it produces the best results.
- foster an enjoyable workplace because we care about each other and our mission.
- be open and honest because we must be trustworthy.
- listen and seek to understand because we value everyone’s opinion.
- treat everyone with respect because we value their dignity.
- seek out and welcome any idea that increases our options because we don’t have all the answers.
- always strive to do our job better, faster, and cheaper because we want to meet more of Missouri’s needs.
Missouri drivers expect to get to their destinations on time, without delays. Traffic, changes in weather, work zones and highway incidents can all impact their travel. MoDOT works to ensure that motorists travel as efficiently as possible on the state system by better managing work zones, snow removal and highway incidents, and by using the latest technology to inform motorists of possible delays and available options. Better traffic flow means fewer crashes.
Uninterrupted Traffic Flow

Average speeds on selected roadway sections

Result Driver: Don Hillis, Director of System Management
Measurement Driver: Eileen Rackers, State Traffic Engineer

Purpose of the Measure:
This measure tracks average speeds on various roadway sections. Monitoring speeds is a tool for improving transportation system performance.

Measurement and Data Collection:
Data from this reporting period was provided through our partnership with Traffic.com. They have installed traffic sensors along five routes in the St. Louis metropolitan area, to help monitor traffic conditions. Currently, MoDOT is negotiating a contract for statewide traffic data services. These services will provide traffic data, such as speed and travel time, on up to 5,500 roadway miles. Additional data collection procedures are also being explored for the future, such as determining speeds and travel times through Advanced Transportation Management System software at the Transportation Management Centers in the St. Louis, Kansas City and Springfield areas.

Improvement Status:
To help improve average speeds, live traffic data for three Missouri metro areas is available on MoDOT’s website at www.modot.gov in the Services Section under Traveler Services. Kansas City Scout provides traffic information for Kansas City, Gateway Guide provides traffic information for St. Louis, and Ozarks Traffic provides traffic information for Springfield. Currently, archived speeds are only available for a limited number of roadway segments. Future availability of additional travel time and speed data will allow a more comprehensive approach to improving average speeds, and efforts will be focused on roadways with average speeds lower than the posted speed limit. The desired trend is to have the average speed approach the posted speed limit.

Average Speeds on Selected Roadway Sections
St. Louis Area

<table>
<thead>
<tr>
<th>Route</th>
<th>Average Speed (mph)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-170</td>
<td>57.03</td>
</tr>
<tr>
<td>MO-370</td>
<td>62.46</td>
</tr>
<tr>
<td>I-44</td>
<td>57.46</td>
</tr>
<tr>
<td>I-64</td>
<td>56.27</td>
</tr>
<tr>
<td>I-55</td>
<td>57.79</td>
</tr>
</tbody>
</table>

Desired Trend: N/A
* Any parties wishing to use this data commercially should contact Traffic.com.
Average time to clear traffic incident

**Result Driver:** Don Hillis, Director of System Management  
**Measurement Driver:** Dan Bruno, Traffic Studies and Corrections Engineer

**Purpose of the Measure:**  
This measure is used to determine what deficiencies or efficiencies exist in the clearance of incidents on the state highway system. A traffic incident is an unplanned event that creates a temporary reduction in the number of vehicles that can travel on the road.

**Measurement and Data Collection:**  
Collection of data began March 1, 2005. “Time of arrival” and the time for “all lanes cleared” are being recorded by Motorist Assist operators and Traffic Management Center staff. Average time to clear traffic incidents is calculated from these recorded times.

**Improvement Status:**  
This data shows that overall, the incident clearance times on urban freeways in Missouri is higher during the third quarter of 2005 as compared to the second quarter of 2005. With the third quarter including the majority of the peak travel and road construction seasons, clearance times may be negatively affected in the metro areas; but with no historical data, we will have to monitor this trend in the coming months. While the presence or absence of several large incidents can significantly impact the data on any given month, the overall trend should decrease due to deployment of incident management strategies. Regional working groups comprised of emergency responders and partners across I-44 and I-70 corridors are providing venues for discussion, training and expanded cooperative efforts for rapid incident clearance. Working groups are now forming and meeting in Joplin, Springfield, Rolla, St. Louis, Montgomery City, Columbia and Kansas City. Quick clearance workshops were held in late October 2005 in Joplin, Springfield, Columbia and Kansas City.
Uninterrupted Traffic Flow

Average time to clear traffic backup from incident

Result Driver: Don Hillis, Director of System Management
Measurement Driver: Dan Bruno, Traffic Studies and Corrections Engineer

Purpose of the Measure:
This measure tracks the amount of time it takes to return traffic flow back to normal after a traffic incident. A traffic incident is any unplanned event that creates a temporary reduction in the number of vehicles that can travel on the road.

Measurement and Data Collection:
“Lanes cleared” times and “clear backup” times are being recorded by the Traffic Management Center operators using automated detection systems. District 4 (Kansas City) has devices already deployed with data being gathered along portions of I-435 and I-70. District 6 (St. Louis) will begin collecting data as advanced transportation management system devices and software come online over the next 3 to 6 months. Average time to clear traffic backup are calculated from these recorded times.

Improvement Status:
This data shows that congestion clearance times experienced a moderate increase in the third quarter of 2005. The presence or absence of large incidents in any single time period can cause significant fluctuations for a small data set. Additionally, the time of day that incidents are occurring will also directly affect the amount of traffic stuck in the queue, and therefore, the amount of time to clear that congestion. The third quarter included the majority of the peak travel and construction season. This normal increase in traffic demand may also have contributed to the amount of time required to clear an incident. According to the FHWA, each minute of daytime lane blockage in urban areas can result in 4 minutes of residual congestion on average. Quick clearance activities that are currently being promoted statewide will provide for reduced overall delay to motorists, particularly for incidents during peak travel times and peak construction seasons.

Average Time to Clear Traffic Incident Backups

*Note St. Louis will begin collecting data as advanced transportation management system devices and software come online over the next 3 to 6 months.
Uninterrupted Traffic Flow

Number of customers assisted by the Motorist Assist program

Result Driver: Don Hillis, Director of System Management
Measurement Driver: Dan Bruno, Traffic Studies and Corrections Engineer

Purpose of the Measure:
This measure is used to gauge the use of the Motorist Assist programs. Incidents impact Missouri’s transportation system capacity. An incident is any unplanned event that creates a temporary reduction in roadway capacity that impedes normal traffic flow. The sooner an incident is removed, the sooner the highway system returns to normal capacity. Therefore, responding to and quickly addressing the incidents (crashes, flat tires, stalled vehicles, etc.) improves system performance.

Measurement and Data Collection:
Collection of monthly data began in January 2005. The Motorist Assist operators record each assist and then prepare a monthly summary. St. Louis operators patrol approximately 160 freeway miles, while Kansas City operators patrol approximately 60 freeway miles.

Improvement Status:
This data demonstrates that the Motorist Assist program in both St. Louis and Kansas City is experiencing a routine increase in assists due to increased weather temperatures and roadway volumes. The sharp increase in assists in the St. Louis area is attributable to a spike in temperature and a period of recurring severe weather resulting in increased breakdowns and collisions. This data also demonstrates a typical pattern of increased assists during peak travel season, followed by a decrease in services in late summer and early fall.

Motorist Assist Use

Desired Trend: N/A

<table>
<thead>
<tr>
<th>Calendar Month</th>
<th>Kansas City</th>
<th>St. Louis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan-05</td>
<td>2731</td>
<td>695</td>
</tr>
<tr>
<td>Feb-05</td>
<td>2808</td>
<td>684</td>
</tr>
<tr>
<td>Mar-05</td>
<td>3164</td>
<td>1051</td>
</tr>
<tr>
<td>Apr-05</td>
<td>3217</td>
<td>1136</td>
</tr>
<tr>
<td>May-05</td>
<td>3164</td>
<td>1068</td>
</tr>
<tr>
<td>Jun-05</td>
<td>4199</td>
<td>1174</td>
</tr>
<tr>
<td>Jul-05</td>
<td>4208</td>
<td>1148</td>
</tr>
<tr>
<td>Aug-05</td>
<td>4396</td>
<td>1262</td>
</tr>
<tr>
<td>Sep-05</td>
<td>4208</td>
<td>837</td>
</tr>
</tbody>
</table>
Percent of work zones meeting expectations for traffic flow

Result Driver: Don Hillis, Director of System Management  
Measurement Driver: Scott Stotlemeyer, Technical Support Engineer

Purpose of the Measure:
An important factor in evaluating the department’s performance in temporary traffic control design, deployment, operation, and maintenance is the measurement of our work zones affect on the mobility of highway users. This measure tracks how well the department meets its customer expectations of work zones on state highways.

Measurement and Data Collection:
Using a formal inspection worksheet, staff from Construction and Materials, Maintenance, Traffic and the districts evaluate mobility in construction, MoDOT, and permit work zones across the state. Each evaluation consists of a subjective assessment of engineered and operational factors that affect traffic flow. The evaluator assigns a pass, fail, or n/a rating to each of these individual factors and a pass or fail rating for their overall perception the work zone. The overall perception ratings are compiled quarterly and reported via this measurement. Note: This inspection program began in June 2005. A total of 402 inspections (122 in June and 280 in first quarter FY 2006) have been completed since its inception.

Improvement Status:
The percent of work zones meeting traffic flow expectations decreased slightly (-1.1 percent) this past quarter. The lower percentage does not reflect a relaxation in MoDOT’s desire to provide exemplary work zones. Rather, it provides the department with a better baseline of where we are now and identifies opportunity for improvement. Department staff continues to enhance work zone mobility guidance and convey those expectations to contractors, employees and permittees. As this information becomes part of the culture for those who design, build, and maintain the state’s highway system, we expect the percentage reported in this measure to increase.
Uninterrupted Traffic Flow

Percent of retimed signals

Result Driver: Don Hillis, Director of System Management
Measurement Driver: Julie Stotlemeyer, Signal and Lighting Engineer

Purpose of the Measure:
This measure tracks how well the department is adjusting the timing of the signal system to improve traffic flow.

Measurement and Data Collection:
Traffic engineers document retimed signal data on a timing sheet. The date of the retiming is recorded in the Transportation Management System database. Data is collected from the TMS database to generate the report. Signals usually operate under several timing plans. Only one portion of the timing plan may have been changed and captured as a retiming. The retiming could have been completed as a result of a customer complaint or a signal observation. Retiming signals for efficient operation should involve quite an in-depth study and this may not be reflected in this measure.

Improvement Status:
For first quarter of fiscal year 2005 we retimed six percent of our signals. Hence, we are performing at or about the same rate as last year. Not every signal may need to be retimed, so we would not expect 100 percent of all signals to be retimed every year. But in order to maintain uninterrupted traffic flow, signals should be retimed at a minimum of every three years. Based on this, we could expect about eight percent to be retimed each quarter. Therefore, we are just about on target. In July and August of 2005, a signal-timing course was offered to engineers to further develop their signal timing skills. A quality assurance plan for signal timing has been developed and a quality assurance review of two districts has been completed.

Desired Trend:
Uninterrupted Traffic Flow

**Percent of Motorist Assist customers who are satisfied with the service**

**Result Driver:** Don Hillis, Director of System Management  
**Measurement Driver:** Dan Bruno, Traffic Studies and Corrections Engineer

**Purpose of the Measure:**
This measure helps evaluate services provided through MoDOT’s Motorist Assist Program, specifically whether the customers who use the program are satisfied with the service. Information received provides direction on how to better serve our customers and keep traffic moving safely and efficiently.

**Measurement and Data Collection:**
Motorist Assist operators began distributing a survey card to customers on June 1 to collect data. Data is compiled and tabulated by the Missouri Transportation Institute. Surveys with selections identifying that the service was “probably” or “definitely” valuable were tabulated as “satisfied” for this measure.

**Improvement Status:**
The data for this measure included responses from 120 pre-printed survey forms in the second quarter and 204 pre-printed forms in the third quarter that were returned to MoDOT by motorists who used the Motorist Assist service in the Kansas City and St. Louis metro areas. This initial data concurs with the comments that have been historically provided by customers on prior comment forms. The change to 99 percent from the second quarter to the third quarter represents a single respondent out of 204 surveys who selected that they were neither satisfied nor dissatisfied with the service. Based on a question in these surveys, 99 percent of respondents selected that they definitely believed that MoDOT should continue to provide this service.

**Percent of Satisfied Motorist Assist Customers**

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd Qtr 2005</td>
<td>100</td>
</tr>
<tr>
<td>3rd Qtr 2005</td>
<td>99</td>
</tr>
</tbody>
</table>

**Desired Trend:**

October 2005 TRACKER – Page 1g
Uninterrupted Traffic Flow

**Percent of signals observed**

**Result Driver:**  Don Hillis, Director of System Management  
**Measurement Driver:** Julie Stotlemeyer, Signal and Lighting Engineer

**Purpose of the Measure:**  
This measure tracks how well the department is monitoring the signal system to improve traffic flow.

**Measurement and Data Collection:**  
Traffic engineers document observed signal data on an observation sheet. The date of the signal observation will be recorded in the Transportation Management System database. Data is collected from the TMS database to generate the report. A complete signal observation requires personnel to monitor the signal during four different times of day: AM peak, Noon peak, PM peak and off peak.

**Improvement Status:**  
For the first quarter of fiscal year 2006 we observed eleven percent of our signals, an increase of three percent from first quarter fiscal year 2005. However, to complete observations on all signals, we should observe approximately 25 percent of signals per quarter. All signals should be observed each year with adjustments made to the timing, if necessary, to improve uninterrupted traffic flow. Guidance on how to conduct signal observations has been developed as well as a quality assurance plan for signal observations. A quality assurance review of two districts has been completed.

![Percent of Signals Observed](image)

Desired Trend:
Uninterrupted Traffic Flow

Time to meet winter storm event performance objectives on major and minor highways

Result Driver: Don Hillis, Director of System Management
Measurement Driver: Tim Jackson, Technical Support Engineer

Purpose of the Measure:
This measure tracks the amount of time needed to meet the performance objectives in MoDOT’s snow and ice removal efforts.

Measurement and Data Collection:
This data is collected in the Lotus Notes Winter Event database. This measurement will track the actual time involved in this process so improvements can be made. After each winter event, such as a snow or ice storm, area maintenance personnel submit a report indicating how much time it took to clear snow from the major and minor highways. Data collection will begin after the first snowfall this winter for inclusion in the January 2006 Tracker. The objectives are to restore the major highways to a wet or dry condition as soon as possible after a storm’s end; to restore the higher volume (greater than 1,000 average daily traffic) minor highways to a wet or dry condition as soon as possible after a storm’s end; and to have the lower volume (less than or equal to 1,000 average daily traffic) minor highways open to two-way traffic and treated with salt and/or abrasives at all critical areas such as intersections, hills and curves, as soon as possible after a storm’s end.

Improvement Status:

Measure is Being Developed
MoDOT’s customers have said they want smooth roads. Smoother roads mean less wear on vehicles, safer travel and greater opportunity for economic development. MoDOT will delight its customers by providing smooth and unrestricted roads and bridges. MoDOT recognizes that road projects built and maintained to a high standard of smoothness will be more efficient. MoDOT must provide customers with smooth roads – because everyone riding on a road can feel whether it is smooth or not!
Smooth and Unrestricted Roads and Bridges

Percent of major highways that are in good condition

**Result Driver:** Kevin Keith, Chief Engineer  
**Measurement Driver:** Jay Bledsoe, Transportation System Analysis Engineer

**Purpose of the Measure:**
This measure tracks the condition of Missouri’s major highway road surfaces. The public has indicated the condition of Missouri’s existing roadway system should be one of the state’s highest priorities. MoDOT places a high priority on improving the condition of highways in the state system.

**Measurement and Data Collection:**
The major highway system is defined as all routes functionally classified as principal arterials. By definition, the principal arterial system provides for statewide or interstate movement of traffic. Examples include the Interstate system or most US routes such as US 63, US 54 or US 36.

In urban areas, principal arterials carry traffic entering or leaving the urban area and serve movement of vehicles between central business districts and suburban residential areas. Examples include Business 50 (Missouri Blvd.) in Jefferson City, MO 740 (Stadium Blvd.) in Columbia and Route D (Page Ave.) in St. Louis.

The major roads in Missouri total approximately 5,400 centerline miles. Good condition is defined using a combination of criteria. On high-speed routes (speed limits greater than 50 mph) the International Roughness Index (IRI) is used. For lower-speed routes (mostly urban areas) where smoothness is less critical, a Present Serviceability Rating (PSR) is used. While smoothness is a factor in PSR, physical condition is also a factor.

Direct comparison to other states is difficult because of differences in measurement methodologies. However, a general order-of-magnitude comparison is possible given certain assumptions. For example, there are five states that report mileage for major highways within 10 percent of that maintained by MoDOT. Of these five, Georgia, with 5,708 miles, currently has the highest percentage of these highways classified in good condition based on smoothness only. The Missouri definition of good uses smoothness as one factor, but it also includes other condition factors such as physical distress to determine quality. While the comparison is not exact, it does indicate the level of performance possible on a system of Missouri’s size.

**Improvement Status:**
In the past two years, there has been a slight improvement in pavement condition. Currently, 47.4 percent of the major highways are in good condition. More than $430 million per year is dedicated to taking care of the existing highway system. An additional $359 million available from Amendment 3 (approved by Missouri voters in Nov. 2004) will be added to this sum over the next three years as part of MoDOT’s Smooth Road Initiative. In the next few years, the number of major highway miles of pavement in good condition will substantially increase due to additional funding.
Percent of Major Highways That Are In Good Condition

<table>
<thead>
<tr>
<th>Year</th>
<th>Georgia</th>
<th>Missouri</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>95.4</td>
<td>41.7</td>
</tr>
<tr>
<td>2001</td>
<td>95.0</td>
<td>40.5</td>
</tr>
<tr>
<td>2002</td>
<td>95.0</td>
<td>44.8</td>
</tr>
<tr>
<td>2003</td>
<td>89.9</td>
<td>44.5</td>
</tr>
<tr>
<td>2004</td>
<td>87.5</td>
<td>47.4</td>
</tr>
</tbody>
</table>

Desired Trend:

* Source data for Georgia is “Highway Statistics 2003” published by FHWA. It is based only on pavement smoothness (IRI) submitted as part of the Highway Performance Monitoring System.
Percent of minor highways that are in good condition

Result Driver: Kevin Keith, Chief Engineer
Measurement Driver: Jay Bledsoe, Transportation System Analysis Engineer

Purpose of the Measure:
This measure tracks the condition of Missouri’s minor highway road surfaces. The public has indicated the condition of the existing state roadway system should be one of Missouri’s highest priorities. MoDOT places a high priority on improving the condition of highways in the state system.

Measurement and Data Collection:
The minor highway system consists of all routes functionally classified as minor arterials or collectors. These routes mainly serve local transportation needs and include highways commonly referred to as lettered routes, such as Route A, Route C and Route DD. The public sometimes refers to these routes as farm-to-market roads. The minor roads in Missouri total approximately 27,000 centerline miles.

Good condition is defined using a combination of criteria. Where available, on high-speed routes (speed limits greater than 50 mph) the International Roughness Index (IRI) is used. For lower speed routes where smoothness is less critical, a Present Serviceability Rating (PRS) is used. While smoothness is a factor in PSR, physical condition is also a factor.

Direct comparison to other states is difficult because of differences in measurement methodologies. However, a general order-of-magnitude comparison is possible given certain assumptions. For example, there are six states that report mileage for minor highways within 10 percent of that maintained by MoDOT. Of these six, Georgia, with 24,315 miles, currently has the highest percentage of these highways classified in good condition. The ratings reported by states as part of the Highway Performance Monitoring System for roads classified as minor more closely relate to Missouri’s rating system.

Improvement Status:
Pavement conditions on minor highways have shown a slight decrease in the last five years currently to 61.7 percent. However, the condition of pavement on minor highways already exceeds that of the major highway system. More attention and extra money from the passage of Amendment 3 (approved by Missouri voters in Nov. 2004) will be focused on improving the major highways. Funding for minor highways should result in conditions at or near current levels.

Federal Highway Administration allows conditions on collectors to be reported on either IRI or PSR. PSR includes an assessment of physical distress similar to Missouri’s definition. The Missouri definition of good uses smoothness as one factor, but it also includes other condition factors such as physical distress to determine quality. While the comparison is not exact, it does indicate the level of performance possible on a system of Missouri’s size.

2004 results are based on approximately 11,000 miles rated using a combination of automated methods and MoDOT district manual ratings. Prior years are based only on manual district ratings. A process to transition to centralized rating is being developed. The 2005 data expected for the Jan. 2006 Tracker will be composed of more that 50 percent ratings by Transportation Planning (TP) personnel. TP staff using methods comparable with those used on major highways will conduct all ratings during calendar year 2006.
Percent of Minor Highways That Are in Good Condition

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Percent</th>
<th>Georgia</th>
<th>Missouri</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>80.6</td>
<td>87.0</td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>78.4</td>
<td>87.7</td>
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</tr>
<tr>
<td>2002</td>
<td>76.4</td>
<td>88.4</td>
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<tr>
<td>2003</td>
<td>71.9</td>
<td>85.2</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>61.7</td>
<td>85.0</td>
<td></td>
</tr>
</tbody>
</table>

* Source data for Georgia is “Highway Statistics 2003” published by the Federal Highway Administration. Data is based on a combination of pavement smoothness – IRI or PSR – as submitted as part of the Highway Performance Monitoring System.
**Smooth and Unrestricted Roads and Bridges**

**Percent of deficient bridges on major highways**

**Result Driver:** Kevin Keith, Chief Engineer  
**Measurement Driver:** Jay Bledsoe, Transportation System Analysis Engineer

**Purpose of the Measure:**  
This measure tracks progress toward improving the condition of Missouri’s bridges on major highways. The public has indicated the condition of Missouri’s existing roadway system should be one of the state’s highest priorities. MoDOT places a high priority on increasing the quality of bridges on the state system.

**Measurement and Data Collection:**  
The major highway system is defined as all routes functionally classified as principal arterials. By definition, the principal arterial system provides for statewide or interstate movement of traffic. Examples include the Interstate system or most US routes such as US 63, US 54 or US 36.

In urban areas, principal arterials carry traffic entering or leaving the urban area and serve movement of vehicles between central business districts and suburban residential areas. Examples include Business 50 (Missouri Blvd.) in Jefferson City, MO 740 (Stadium Blvd.) in Columbia and Route D (Page Ave.) in St. Louis.

A bridge is considered deficient if it is either structurally deficient (SD) or functionally obsolete (FO) as defined using Federal Highway Administration criteria. A SD bridge is in poor condition or has insufficient load capacity when compared to modern design standards. A FO bridge has poor roadway alignment or has clearance or width restrictions that no longer meet the usual criteria for the system it serves. MoDOT staff inspects all state-owned bridges annually. There are currently 3,282 bridges on major highways.

**Improvement Status:**  
Bridge conditions on major highways have shown a moderate improvement. The percent of deficient bridges is down by 18.4 percent over the last five years as a result of increasing funds directed to taking care of the existing highway system. A minimum of $10 million per year has been dedicated to bridge preventive maintenance activities to slow the number of bridges falling into the deficient category.

![Percent of Deficient Bridges on Major Highways](image-url)
Percent of deficient bridges on minor highways

Result Driver: Kevin Keith, Chief Engineer
Measurement Driver: Jay Bledsoe, Transportation System Analysis Engineer

Purpose of the Measure:
This measure tracks progress toward improving the condition of Missouri’s minor highway bridges. The public has indicated the condition of Missouri’s existing roadway system should be one of the state’s highest priorities. MoDOT places a high priority on increasing the quality of bridges on the state system.

Measurement and Data Collection:
The minor highway system consists of all routes functionally classified as minor arterials or collectors. These routes serve more local transportation needs and include highways commonly referred to as lettered routes, such as Route A, Route C and Route DD. The public sometimes refers to these routes as farm-to-market roads.

A bridge is considered deficient if it is either structurally deficient (SD) or functionally obsolete (FO) as defined using Federal Highway Administration criteria. A SD bridge is in poor condition or has insufficient load capacity when compared to modern design standards. A FO bridge has poor roadway alignment, or has clearance or width restrictions that no longer meet the usual criteria for the system it serves. MoDOT staff inspects all state-owned bridges annually. There are currently 6,901 bridges on minor highways.

Improvement Status:
Bridge conditions on minor highways have shown a moderate improvement. The percent of deficient bridges is down by 33.4 percent over the last five years as a result of increasing funds directed to taking care of the existing highway system. A minimum of $10 million per year has been dedicated to bridge preventive maintenance activities to slow the number of structures falling into the deficient category.
**Number of deficient bridges on the state system (major & minor highways)**

**Result Driver:** Kevin Keith, Chief Engineer  
**Measurement Driver:** Jay Bledsoe, Transportation System Analysis Engineer

**Purpose of the Measure:**  
This measure tracks progress toward improving the condition of Missouri’s bridges. The public has indicated the condition of Missouri’s existing roadway system should be one of the state’s highest priorities. MoDOT places a high priority on increasing the quality of bridges on the state system.

**Measurement and Data Collection:**  
A bridge is considered deficient if it is either structurally deficient (SD) or functionally obsolete (FO) as defined using Federal Highway Administration criteria. A SD bridge is in poor condition or has insufficient load capacity when compared to modern design standards. A FO bridge has poor roadway alignment, or has clearance or width restrictions that no longer meet the usual criteria for the system it serves. MoDOT staff inspects all state-owned bridges annually. There are currently a total of 10,183 bridges on the state highway system.

**Improvement Status:**  
Bridge conditions on Missouri highways have shown a moderate improvement in the last five years as a result of increasing funds directed to taking care of the existing highway system. Currently, 2,907 bridges are considered deficient on the state highway system. A minimum of $10 million per year has recently been dedicated to preventive maintenance activities on bridges to slow the number of bridges falling into the deficient category. The number of deficient bridges has been reduced by about 50 each year since 2000.

Smooth and Unrestricted Roads and Bridges

**Number of miles completed through the Smooth Roads Initiative**

**Result Driver:** Kevin Keith, Chief Engineer  
**Measurement Driver:** Machelle Watkins, Transportation Planning Director

**Purpose of the Measure:**  
This measure will determine how many centerline miles of roadway have been improved as a result of the Amendment 3 Smooth Roads Initiative.

**Measurement and Data Collection:**  
The first set of Smooth Roads Initiative projects were awarded in February 2005. Data collection on this measure began on May 1, 2005 with the first reporting in the July 2005 Tracker. Data will be collected and reported on a statewide basis. All of the Smooth Roads Initiative projects should be completed within three years.

**Improvement Status:**  
Statewide, by September 30, 2005 2 SRI projects have been completed totaling 17 miles and 52% of all statewide SRI project miles have been awarded.

![Smooth Roads Initiative Progress Graph](image)

**Smooth Roads Initiative Progress**  
**September 30, 2005**

- **Miles Programmed:** 2192 miles
- **Miles Under Contract:** 1141 miles
- **Miles Completed:** 17 miles

**Desired Objective:**  
2192 miles
MoDOT works closely with other safety advocates to make our roads and work zones safer. The department supports educational programs which encourage safe driving practices and enforcement efforts which increase adherence to traffic laws. MoDOT will not compromise safety because it believes in the well-being of its employees and customers.
Number of fatalities and injuries year to date

Result Driver: Don Hillis, Director of System Management
Measurement Driver: Leanna Depue, Highway Safety Director

Purpose of the Measure:
This measure tracks annual trends in fatalities and injuries resulting from Missouri motor vehicle crashes. It will help drive the Missouri Highway Safety Plan, which supports the Blueprint for Safer Roadways, toward efforts that reduce fatalities and injuries on all Missouri roads.

Measurement and Data Collection:
Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT’s traffic management system. Reports on crash data are available to law enforcement and traffic safety advocates for crash analysis through both databases. Fatality data is not final until each fatal crash has been validated and the investigation is closed. Some crashes occurring in 2005 are under investigation, therefore, quarterly crash data is not in final form. Missouri is compared to the states of Wisconsin and Virginia, as they are demographically similar to Missouri. Each state’s data is derived from their traffic crash fact sheets.

Improvement Status:
Fatalities decreased by 8 percent from 2003 to 2004 after a significant increase over the past three years. Injuries continued a downward trend. Fatalities in the first two quarters of calendar year 2005 were higher than the three previous years due to non-use of safety belts, speeding, alcohol- and drug-impaired driving, and a higher number of pedestrian fatalities. Although multiple fatalities are occurring more frequently in 2005, holiday weekend crash fatalities are significantly lower. Injuries were lower in the first two quarters of 2005 than in the previous three years, partially due to increased safety belt use. Safety advocates, organizations and agencies across Missouri have joined together to create Missouri’s Blueprint for Safer Roadways. The Blueprint outlines strategies to reduce fatal and serious injuries on our roadways with a goal of 1,000 or fewer fatalities by 2008.
**Number of impaired driver-related fatalities and injuries year to date**

**Result Driver:** Don Hillis, Director of System Management  
**Measurement Driver:** Leanna Depue, Highway Safety Director

**Purpose of the Measure:**
This measure tracks annual trends in fatalities and injuries resulting from motor vehicle crashes involving drivers who are impaired by alcohol and/or drugs. It will help drive the Missouri Highway Safety Plan, which supports the *Blueprint for Safer Roadways*, toward efforts that reduce fatalities and injuries on Missouri’s roadways.

**Measurement and Data Collection:**
Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT’s traffic management system. Reports on crash data are available to law enforcement and traffic safety advocates for crash analysis through both databases. Fatality data is not final until each fatal crash has been validated and the investigation is closed. Some crashes occurring in 2005 are under investigation, therefore, quarterly crash data is not in final form. Missouri is compared to the states of Wisconsin and Virginia, as they are demographically similar to Missouri. Each state’s data is derived from their traffic crash fact sheets.

**Improvement Status:**
Alcohol- and drug-related fatalities and injuries show downward trends for the past two years, due to sustained law enforcement in targeted high crash corridors. Fatalities in the first two quarters of calendar year 2005 were higher than the three previous years, due to an increase in head-on and rural area crashes along with non-use of safety belts. Injuries were slightly lower in the first two quarters of 2005 than in the previous three years. In addition to Missouri participating in the annual “You Drink and Drive, You Lose.” campaign, Missouri joined 14 other states with high alcohol-related crashes as a Strategic Evaluation State. Missouri agreed to increase law enforcement activity through June 2006 in areas that represent 65 percent of the states’ high alcohol-related crashes. Safety advocates, organizations and agencies across Missouri have joined together to create *Missouri’s Blueprint for Safer Roadways*. The Blueprint outlines strategies to reduce fatal and serious injuries on our roadways with a goal of 1,000 or fewer fatalities by 2008.
Rate of annual fatalities and injuries

Result Driver: Don Hillis, Director of System Management
Measurement Driver: Leanna Depue, Highway Safety Director

Purpose of the Measure:
This measure tracks annual fatality and injury rates per one hundred million vehicle miles traveled (VMT) in Missouri. It will help drive the Missouri Highway Safety Plan, which supports the Blueprint for Safer Roadways, toward efforts that reduce fatalities and injuries on Missouri’s roadways.

Measurement and Data Collection:
Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT’s traffic management system. Reports on crash data are available to law enforcement and traffic safety advocates for crash analysis through both databases. Rates cannot be calculated until the VMT is calculated in July of the following calendar year. Missouri is compared to the states of Wisconsin and Virginia, as they are demographically similar to Missouri.

Improvement Status:
The fatality rate decreased to 1.7 in 2004 after reaching 1.81 in 2003. The decrease is significant considering there were more vehicles registered and more miles traveled than in any previous year. Targeted law enforcement efforts, engineering safety projects and increased public awareness all contribute to the decrease.

Desired Trend:

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Fatality Rate</th>
<th>Injury Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>1.62</td>
<td>68.7</td>
</tr>
<tr>
<td>2002</td>
<td>1.08</td>
<td>67.5</td>
</tr>
<tr>
<td>2003</td>
<td>1.47</td>
<td>73.3</td>
</tr>
<tr>
<td>2004</td>
<td>1.81</td>
<td>66.1</td>
</tr>
</tbody>
</table>

Desired Trend:

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Fatality Rate</th>
<th>Injury Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>1.33</td>
<td>62.7</td>
</tr>
<tr>
<td>2002</td>
<td>1.79</td>
<td>71.6</td>
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<tr>
<td>2003</td>
<td>1.81</td>
<td>66.1</td>
</tr>
<tr>
<td>2004</td>
<td>1.79</td>
<td>70.0</td>
</tr>
</tbody>
</table>
Percent of safety belt/passenger vehicle restraint use

Result Driver: Don Hillis, Director of System Management
Measurement Driver: Leanna Depue, Highway Safety Director

Purpose of the Measure:
This measure tracks annual trends in safety belt usage by persons in passenger vehicles. This measure will help drive the Missouri Highway Safety Plan, which supports the *Blueprint for Safer Roadways*, toward efforts that reduce the number of fatalities and injuries on all Missouri roads.

Measurement and Data Collection:
An annual statewide survey is conducted each June at 480 pre-selected locations in 20 counties. The data collected at these sites is calculated into a rate by use of a formula approved by the National Highway Traffic Safety Administration. The safety belt usage survey enables data collection from locations representative of 85 percent of the state’s population. The data collection plan is the same each year for consistency and compliance with national transportation guidelines. Missouri is compared to the states of Wisconsin and Virginia, as they are demographically similar to Missouri.

Improvement Status:
Safety belt use has increased 8 percent in the past four years, due to increased public awareness and law enforcement participation in the National “Click it or Ticket” campaign. A pilot program focused on teen usage also proved to be successful in increasing use among teenagers.

![Safety Belt Use Chart](chart.png)
**Safe Transportation System**

**Number of bicycle and pedestrian fatalities and injuries**

**Result Driver:** Don Hillis, Director of System Management  
**Measurement Driver:** Leanna Depue, Highway Safety Director

**Purpose of the Measure:**  
This measure tracks annual trends in fatalities and injuries resulting from motor vehicle crashes with bicycles and pedestrians in Missouri. It will help drive the Missouri Highway Safety Plan, which supports the *Blueprint for Safer Roadways*, toward efforts that reduce fatalities and injuries on all Missouri roads.

**Measurement and Data Collection:**  
Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT’s traffic management system. Final crash data for each year is not available until approximately June of the following year. This data reflects the number of fatalities and injuries occurring when a motor vehicle is involved in a crash with a bicycle or pedestrian. Missouri is compared to the states of Wisconsin and Virginia, as they are demographically similar to Missouri.

**Improvement Status:**  
There has been a downward trend in bicycle fatalities and injuries over the past three years, due to more dedicated bicycle lanes and riding areas. Pedestrian fatalities and injuries also are on a downward trend, due to improved cross walks and signaling. Funds have been dedicated to the St. Louis and Kansas City regions in support of pedestrian safety under the *Blueprint for Safer Roadways* initiative.

![Bicycle Fatalities Chart]

- **2001:** MO 6, WI 9, VA 2
- **2002:** MO 9, WI 12, VA 6
- **2003:** MO 12, WI 9, VA 9
- **2004:** MO 14, WI 9, VA 2

**Desired Trend:**
Bicycle Injuries

Pedestrian Fatalities

Pedestrian Injuries

October 2005 TRACKER – Page 3e (2)
Number of motorcycle fatalities and injuries

Result Driver: Don Hillis, Director of System Management
Measurement Driver: Leanna Depue, Highway Safety Director

Purpose of the Measure:
This measure tracks annual trends in fatalities and injuries resulting from motorcycle crashes in Missouri. It will help drive the Missouri Highway Safety Plan, which supports the Blueprint for Safer Roadways, toward efforts that reduce fatalities and injuries on Missouri’s roadways. The rates are calculated per hundred million vehicle miles traveled. HMVT cannot be established for motorcyclists alone.

Measurement and Data Collection:
Crash data is collected by the Missouri State Highway Patrol and entered into a traffic accident record system. The record system automatically updates MoDOT’s traffic management system. Reports on crash data are available to law enforcement and traffic safety advocates for crash analysis through both databases. Missouri is compared to the states of Wisconsin and Virginia, as they are demographically similar to Missouri.

Improvement Status:
Fatalities have shown an upward trend over the period from 2001 to 2003, due to a significant increase in the number of licensed motorcyclists. Fatality totals returned to the established trend in 2004 after a significant spike in 2003. The spike is attributed to the significant increase in licensed inexperienced riders. Missouri continues to see an increase in the number of registered motorcycles and riders. Rider education classes are offered throughout Missouri so that no one must drive more than one hour to a site. Injuries also continue an upward trend, due to an increased number of riders. Missouri’s trends are consistent with our comparison states that also have an increased number of riders. More than 4,000 riders at 28 sites are trained each year. Twenty-four new instructors are also trained each year. This year we are attempting to transition at least one mobile site into a permanent site.
Motorcycle Fatality Rate

<table>
<thead>
<tr>
<th>Year</th>
<th>MO</th>
<th>WI</th>
<th>VA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>1.68</td>
<td>1.79</td>
<td>1.69</td>
</tr>
<tr>
<td>2002</td>
<td>1.68</td>
<td>1.65</td>
<td>2.11</td>
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<tr>
<td>2003</td>
<td>2.23</td>
<td>2.53</td>
<td>2.12</td>
</tr>
<tr>
<td>2004</td>
<td>1.56</td>
<td>1.89</td>
<td>2.3</td>
</tr>
</tbody>
</table>

Rate (Per 10,000 Licensed Motorcyclists)

Motorcycle Injury Rate

<table>
<thead>
<tr>
<th>Year</th>
<th>MO</th>
<th>WI</th>
<th>VA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>37.75</td>
<td>37.27</td>
<td>43.46</td>
</tr>
<tr>
<td>2002</td>
<td>49.44</td>
<td>57.55</td>
<td>50.16</td>
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<td>2003</td>
<td>43.46</td>
<td>55.60</td>
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</tr>
<tr>
<td>2004</td>
<td>47.85</td>
<td>58.46</td>
<td>67.1</td>
</tr>
</tbody>
</table>

Rate (Per 10,000 Licensed Motorcyclists)

Desired Trend:
**Safe Transportation System**

**Number of commercial motor vehicle crashes resulting in fatalities**

**Result Driver:** Don Hillis, Director of Systems Management  
**Measurement Driver:** Charles Gohring, Motor Carrier Services Program Manager

**Purpose of the Measure:**  
This measure tracks the annual number of commercial motor vehicles involved in fatality accidents. The measure assists MoDOT in targeting educational and enforcement opportunities in an effort to decrease commercial vehicle related fatalities.

**Measurement and Data Collection:**  
Crash statistics are derived from each of the states accident databases. The data reflects the number of commercial motor vehicles involved in crashes where one or more persons dies within 30 days of the crash. The fatality does not have to occur at the scene of the crash. It includes any person involved in the crash, including pedestrians and bicyclists, as well as occupants of the passenger cars, trucks, and buses. Missouri is compared to the states of Virginia and Wisconsin, as they are demographically similar to Missouri.

**Improvement Status:**  
During the period from 2000 to 2004, the numbers of Missouri CMV fatal crashes have decreased. The five-year trend indicates the number of fatal CMV crashes have slowly dropped from 164 in 2000 to 153 in 2004, due to coordinated CMV safety efforts by MoDOT, Missouri State Highway Patrol, Kansas City and St. Louis Police Departments, and Federal Motor Carrier Safety Administration Missouri Division. MoDOT efforts include the installation of larger highway signs, highly reflective pavement markings, cable guardrails, roundabout intersections, incident management alert signs, roadside rumble strips, and intelligent transportation systems at scales. MoDOT also conducts education, training, compliance reviews, safety audits, and truck inspections all designed to reduce accidents. Education is offered to the public and motor carriers through the Highway Watch, Share the Road, and seatbelt usage programs. Outreach training sessions designed to assist motor carriers attain compliance with the safety and hazardous materials regulations are also offered. Truck inspections at motor carrier destinations and terminals to ensure drivers and vehicles are in a safe operating condition. Compliance Reviews are conducted on motor carriers with poor safety performances involving drivers, vehicles, and accidents. Safety Audits are conducted on new motor carriers in an effort to ensure they begin operations in a safe manner. The Missouri State Highway Patrol, St. Louis and Kansas City Police Departments also conduct commercial vehicle roadside inspections to remove unsafe drivers and vehicles from the road.

![Number Of Commercial Motor Vehicle Crashes Resulting in Fatalities](chart)

Desired Trend:

<table>
<thead>
<tr>
<th>Year</th>
<th>Missouri</th>
<th>Virginia</th>
<th>Wisconsin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>164</td>
<td>124</td>
<td>104</td>
</tr>
<tr>
<td>2001</td>
<td>122</td>
<td>123</td>
<td>112</td>
</tr>
<tr>
<td>2002</td>
<td>94</td>
<td>127</td>
<td>102</td>
</tr>
<tr>
<td>2003</td>
<td>117</td>
<td>117</td>
<td>111</td>
</tr>
<tr>
<td>2004</td>
<td>104</td>
<td>108</td>
<td>111</td>
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</table>
Safe Transportation System

Number of commercial motor vehicle crashes resulting in injuries

Result Driver: Don Hillis, Director of Systems Management
Measurement Driver: Charles Gohring, Motor Carrier Services Program Manager

Purpose of the Measure:
This measure tracks annual number of commercial motor vehicles involved in injury accidents. The measure assists MoDOT in targeting educational and enforcement opportunities in an effort to decrease commercial vehicle related injuries.

Measurement and Data Collection:
Crash statistics are derived from each of the states accident databases. The data reflects the number of commercial motor vehicles involved in crashes where one or more persons are injured in the crash. It includes any person involved in the crash, including pedestrians and bicyclists, as well as occupants of the passenger cars, trucks, and buses. Missouri is compared to the states of Virginia and Wisconsin, as they are demographically similar to Missouri.

Improvement Status:
During a five-year period from 2000 to 2004, the number of CMV crashes resulting in injuries has continuously decreased. The improvement is due to coordinated CMV safety efforts by MoDOT, Missouri State Highway Patrol, Kansas City and St. Louis Police Departments, and the Federal Motor Carrier Safety Administration Missouri Division. MoDOT efforts include the installation of larger highway signs, highly reflective pavement markings, cable guardrails, roundabout intersections, incident management alert signs, roadside rumble strips, and intelligent transportation systems at scales. MoDOT also conducts education, training, compliance reviews, safety audits, and truck inspections all designed to reduce accidents. Education is offered to the public and motor carriers through the Highway Watch, Share the Road, and seatbelt usage programs. Outreach training sessions designed to assist motor carriers attain compliance with the safety and hazardous materials regulations are also offered. Truck inspections are conducted at motor carrier destinations and terminals to ensure drivers and vehicles are in a safe operating conditions. Compliance Reviews are conducted on motor carriers with a poor safety performance linking drivers, vehicles, and accidents. Safety Audits are conducted on new motor carriers in an effort to ensure they begin operations in a safe manner. The Missouri State Highway Patrol, St. Louis and Kansas City Police Departments also conduct commercial vehicle roadside inspections to remove unsafe drivers and vehicles from the road.

Number Of Commercial Motor Vehicle Crashes Resulting in Injuries

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Missouri</th>
<th>Virginia</th>
<th>Wisconsin</th>
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<tbody>
<tr>
<td>2000</td>
<td>3,271</td>
<td>3,781</td>
<td>3,075</td>
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<td>2001</td>
<td>3,270</td>
<td>3,074</td>
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<td>2002</td>
<td>2,866</td>
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<td>2,758</td>
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</tr>
<tr>
<td>2004</td>
<td>2,619</td>
<td>3,325</td>
<td>3,042</td>
</tr>
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</table>

Desired Trend:
Number of fatalities and injuries in work zones

Result Driver: Don Hillis, Director of System Management
Measurement Driver: Scott Stotlemeyer, Technical Support Engineer

Purpose of the Measure:
An important factor in evaluating the safety of Missouri’s transportation system is determining the safety of work zones located on the state’s public roads. This measure tracks the number of injuries and fatalities occurring as a result of a traffic crash in a work zone on any of these facilities.

Measurement and Data Collection:
Law enforcement agencies in Missouri are required to report vehicular crashes via submittal of a standardized vehicle accident report form to the Missouri State Highway Patrol. MSHP personnel enter these reports into a statewide crash database. MoDOT staff queries this data to identify injuries and fatalities associated with work zones.

Improvement Status:
Since 2002, the year Missouri traffic safety representatives reformatted the accident report form and MSHP conducted extensive training to emphasize work zones, the number of work zone-related crashes, disabling injuries, injuries, and fatalities on the state’s roadways has generally decreased over consecutive years. This reduction, despite increasing traffic demand on the transportation system and a growing state highway construction program, results from the department’s proactive approach to raising work zone awareness and minimizing impacts on the traveling public over the same timeframe.

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Number</th>
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</thead>
<tbody>
<tr>
<td>2000</td>
<td>838</td>
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<tr>
<td>2001</td>
<td>1,057</td>
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<tr>
<td>2002</td>
<td>1,851</td>
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<tr>
<td>2003</td>
<td>1,560</td>
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<tr>
<td>2004</td>
<td>1,171</td>
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<tr>
<td>Thu 9/30/05</td>
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<table>
<thead>
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<td>25</td>
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<td>2002</td>
<td>28</td>
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<td>2003</td>
<td>23</td>
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<td>2004</td>
<td>28</td>
</tr>
<tr>
<td>Thu 9/30/05</td>
<td>11</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Calendar Year</th>
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<tbody>
<tr>
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<tr>
<td>2001</td>
<td>168</td>
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<tr>
<td>2002</td>
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<td>2004</td>
<td>121</td>
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<td>Thu 9/30/05</td>
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<table>
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<tr>
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<td>3,305</td>
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<td>2002</td>
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<td>2003</td>
<td>4,492</td>
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<tr>
<td>2004</td>
<td>3,483</td>
</tr>
<tr>
<td>Thu 9/30/05</td>
<td>2,280</td>
</tr>
</tbody>
</table>
Number of highway-rail crossing fatalities and collisions

Results Driver: Don Hillis, Director of System Management
Measurement Driver: Rod Massman, Administrator of Railroads

Purpose of the Measure:
This measure tracks annual trends in fatalities and collisions resulting from train-vehicle crashes at railroad crossings in Missouri. It will help drive the Highway Safety plan, which supports the Blueprint for Roadway Safety, toward efforts that reduce the number of fatalities, collisions and injuries at Missouri’s highway-rail crossings.

Measurement and Data Collection:
Crash data is collected at the Multimodal Operations Division, Railroad Section and is entered into a railroad safety information system (RSIS). The record system is used to update MoDOT’s traffic management system. This figure does not include fatalities from those trespassing on railroad property at areas other than at railroad crossings, which are tabulated separately. Missouri is compared to the states of Virginia and Wisconsin, as their populations and amount of rail traffic are similar to Missouri, and Virginia has a very low fatality/collision rate for its population.

Improvement Status:
The Railroad Section continues to coordinate its railroad crossing projects in the areas of greatest need, using a safety exposure index, in addition to focusing on crossings with a history of accidents or very limited sight distance. In addition, the use of railroad corridors allows limited funds to be used over a wider area and allows for financial participation by the railroads, thereby increasing the number of overall projects completed in specific areas of the state. Other improvements include an increased emphasis on, and MoDOT employee participation in, public outreach presentations on rail safety in conjunction with Operation Lifesaver, Inc., and further exploration of public-private partnerships to install gates and lights at crossings or install grade separations at former crossings where public funds alone would not be enough to complete the project.
Number of Highway-Rail Crossing Collisions

Calendar Year

Missouri  Virginia  Wisconsin

2000  34  66
2001  34  55
2002  24  55
2003  40  53
2004  39  69
2005 YTD  29  44

Desired Trend:
Roadway Visibility
*Tangible Result Driver – Don Hillis, Director of System Management*

Good roadway visibility in all weather and light conditions is critical to safe and efficient travel. MoDOT will delight its customers by using top-quality and highly visible stripes and signs.
Roadway Visibility

Rate of nighttime crashes

**Result Driver:** Don Hillis, Director of System Management
**Measurement Driver:** Michael Curtit, Assistant State Traffic Engineer

**Purpose of the Measure:**
This measure tracks the types of crashes where visibility of stripes and signs may be a contributing factor.

**Measurement and Data Collection:**
Data is collected from the statewide crash database. This data is filtered to identify crashes that occur during night conditions. Further filtering of the data divides these night crashes by major and minor roadways. Major roadways are those that are used generally for statewide or interstate travel. Minor roadways are those used typically for local traffic needs. Crash rates are calculated using the Average Annual Daily Traffic counts and are expressed in the unit, per 100 million vehicle miles (HMVM), which is the national standard for expressing crash rates.

**Improvement Status:**
Three crash types (run off road, cross median, and head on/sideswipe) had a slight decrease from the previous year’s rate. Major roads had a slightly decreasing trend over the previous five years. Minor roads had virtually a flat trend. There has been a decline in night – run off road crashes since 2002, which corresponds to the time frame where edgeline striping was installed on additional lower-volume roads.

The fourth crash type, nighttime wet crashes, has increased for both major and minor roads. In 2005, MoDOT implemented a new pavement marking system to improve the visibility during nighttime, wet conditions. On major roads this new system includes highly reflective pavement marking tape, edgeline rumble stripes, and delineation of guardcable and guardrail.

![Rate of Nighttime Crashes - Run off Road](chart.png)

Desired Trend:
Rate of Nighttime Crashes - Cross Median
Major Roads

Rate of Nighttime Crashes - Head On and Sideswipe

Rate of Nighttime Crashes - Wet Crashes

Desired Trend:

October 2005 TRACKER – Page 4a (2)
**Percent of signs that meet customers’ expectations**

**Result Driver:** Don Hillis, Director of System Management  
**Measurement Driver:** Jim Brocksmith, Technical Support Engineer

**Purpose of the Measure:**  
This measure will track whether the department’s sign policy and the design standards, and sign replacement policy is resulting in visible signs that meet customers’ expectations.

**Measurement and Data Collection:**  
Sign-quality attributes that define user expectations have been developed based on an industry-wide literature review. The attributes selected for this measure are those that can be captured during a night sign log. A night sign log is conducted by MoDOT employees driving a road at night, recording the location and condition of the signs, particularly how visible the signs are with normal headlights. Data for this measure is collected by doing night sign logs on randomly generated road segments. The data collection is done annually in the fall by MoDOT employees.

**Improvement Status:**  
The data shows that almost 70 percent of the signs on the major highways and 65 percent on the minor highways are meeting customer expectations. The majority of sign problems indicate that they need to be replaced with new signs that are visible at night. The Smooth Roads Initiative is replacing many of the signs on the major roads. This effort is continuing and should lead to an improvement in the results on the major highways. On the minor roads, MoDOT will need to make greater efforts to maintain signs. With the 10-year replacement program that MoDOT has proposed, this will improve the results on both the major and minor roads.

![Percent of Signs that Meet Customers' Expectations](image)
Roadway Visibility

**Percent of stripes that meet customers’ expectations**

**Result Driver:** Don Hillis, Director of System Management  
**Measurement Driver:** Jim Brocksmith, Technical Support Engineer

**Purpose of the Measure:**  
This measure tracks whether MoDOT’s striping policy, processes and materials used are resulting in visible stripes that meet customers’ expectations.

**Measurement and Data Collection:**  
Striping quality attributes that define user expectations have been developed based on an industry-wide literature review. The attribute selected for this measure is the retroreflectivity of the striping that measures the functionality of the striping at night. Retroreflectivity is a measurement of the amount of the vehicle headlights that is being returned to the driver, making the striping visible at night. Data for this measure is collected by taking retroreflectivity readings on randomly generated road segments. MoDOT has a contractor collecting this data. The data will be collected in the fall and spring of each year. This will tell us how our striping is performing going in to the winter and how it is performing after the winter.

**Improvement Status:**  
The data collected from the contractor was analyzed in respect to the benchmarks MoDOT set as the minimum acceptable level of retroreflectivity, which measures the night visibility of the striping. These readings were taken before all striping for the 2005 striping season was completed, therefore the final results going in to the winter should be slightly higher than what is indicated. For the majority of our roads, the striping is in good shape heading into winter, which is the hardest time for wear on striping.

MoDOT has implemented a new plan for striping to improve visibility. This plan increases the width of striping on major roads to six inches wide, the use of highly retroreflective tape on the skips of major divided highways and the use of longer-lasting materials, which will improve the life and appearance of the striping. When the plan is fully implemented, the results indicated in the chart will improve.

---

**Percent of Stripes that Meet Customers' Expectations**

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Major Highways</th>
<th>Minor Highways</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2005</td>
<td>92.86</td>
<td>88.48</td>
</tr>
</tbody>
</table>

**Desired Trend:**

- **Major Highways**
- **Minor Highways**
**Roadway Visibility**

*Percent of work zones meeting expectations for visibility*

**Result Driver:** Don Hillis, Director of System Management  
**Measurement Driver:** Scott Stotlemeyer, Technical Support Engineer

**Purpose of the Measure:**
An important factor in evaluating the department’s performance in temporary traffic-control design, deployment, operation, and maintenance is the measurement of the effectiveness of the visual guidance provided to the highway user traveling through our work zones. This measure tracks how well the department meets its customer expectations of visibility in work zones on state highways.

**Measurement and Data Collection:**
Using a formal inspection worksheet, staff from Construction and Materials, Maintenance, Traffic and the districts evaluate visibility of construction, MoDOT, and permit work zones across the state. Each evaluation consists of a subjective assessment of engineered and operational factors that affect visibility. The evaluator assigns a pass, fail, or n/a rating to each of these individual factors and a pass or fail rating for their overall perception of visibility of the work zone. The overall perception ratings are compiled quarterly and reported via this measurement. Note: The inspection program began June 2005. A total of 402 inspections (122 in June 2005 and 280 in first quarter FY 2006) have been completed since its inception.

**Improvement Status:**
The percent of work zones meeting visibility expectations decreased slightly (-1.5 percent) this past quarter. The lower percentage does not reflect a relaxation in MoDOT’s desire to provide exemplary work zones. Rather, it provides the department with a better baseline of where we are now and identifies opportunity for improvement. Department staff continue to enhance work zone visibility guidance and convey those expectations to contractors, employees and permittees. As this information becomes part of the culture for those who design, build, and maintain the state’s highway system, we expect the percentage reported in this measure to increase.

---

**Percent of Work Zones Meeting Expectations for Visibility**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Percent</th>
<th>Desired Trend:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>89%</td>
<td></td>
</tr>
<tr>
<td>1st Qtr. 2006</td>
<td>88%</td>
<td></td>
</tr>
</tbody>
</table>
Personal, Fast, Courteous and Understandable Response to Customer Requests (Inbound)

*Tangible Result Driver – Shane Peck, Community Relations Director*

Responding to customers in a courteous, personal and understandable way is important. MoDOT listens and seeks to understand, because it values everyone’s opinion. MoDOT’s goal is to delight them with its customer service.
Percent of overall customer satisfaction

**Result Driver:** Shane Peck, Community Relations Director  
**Measurement Driver:** DeAnne Bonnot, Community Relations Coordinator

**Purpose of the Measure:**
This measure tracks MoDOT’s progress toward the mission of delighting its customers.

**Measurement and Data Collection:**
Information for this performance measure was collected from Missouri citizens and MoDOT customers in three surveys conducted separately in 1999, 2003 and 2005. Each survey was conducted by telephone interview with randomly selected Missourians. The most recent information comes from a study conducted as part of MoDOT’s Missouri Advance Planning initiative. An independent study completed by Missouri State University in July and August, 2005, found that 75 percent of those surveyed were satisfied with the services MoDOT provides. Of this number, 19 percent were very satisfied. Though the MSU study provides supporting data, only MoDOT sponsored data collection efforts are used to report the department’s progress in this measure. New data will be collected in Spring 2006.

**Improvement Status:**
Overall customer satisfaction results remained within four percentage points of the current 67% in the last three MoDOT survey periods, however, the percentage of those who are “very satisfied” has increased. The MSU study and conversations with MoDOT customers indicate that the department’s Smooth Roads Initiative, project acceleration and selection of new major projects made possible by the passage of Amendment 3, greatly influence the positive trend in customer satisfaction.

**Percent of Overall Customer Satisfaction**

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Satisfied</th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>54.0%</td>
<td>10.3%</td>
</tr>
<tr>
<td>2003</td>
<td>62.6%</td>
<td>5.1%</td>
</tr>
<tr>
<td>2005</td>
<td>54.0%</td>
<td>13.0%</td>
</tr>
</tbody>
</table>

**Desired Trend:**

October 2005 TRACKER – Page 5a
Personal, Fast, Courteous and Understandable Response to Customer Requests (Inbound)

**Percent of customers who contacted MoDOT that felt they were responded to quickly**

**Result Driver:** Shane Peck, Community Relations Director  
**Measurement Driver:** DeAnne Bonnot, Community Relations Coordinator

**Purpose of the Measure:**  
This measure indicates whether customers are comfortable with MoDOT customer service’s speed of response to their inquiries.

**Measurement and Data Collection:**  
Customers who contact MoDOT Customer Service Centers are asked to complete a short telephone survey when their business with the customer service representative is complete. Data collection started August 1, 2005. In the first month, 115 surveys were completed. In September, 80 surveys were taken. Only one negative response was received in each month. The survey results are limited in a number of ways. The performance of only one segment of MoDOT’s employee base was evaluated with very few surveys completed. While the telephone survey continues, a “secret shopper” program, like those used by retail and other businesses, will gather further information.

**Improvement Status:**  
Nearly all customers surveyed, 99 percent overall, felt Customer Service responded to their calls promptly. While pleased with the results, MoDOT knows improvements can be made in regard to this measure. A statewide customer service team is researching system tools that, when implemented, help customer service representatives know when and how many customers are holding in a queue. This information will also help employees schedule breaks and meetings for normally slower periods.

![Percent of Customers Who Contacted MoDOT That Felt They Were Responded to Quickly](image)

October 2005 TRACKER – Page 5b
Personal, Fast, Courteous and Understandable Response to Customer Requests (Inbound)

**Percent of customers who contacted MoDOT that felt they were responded to in a personal and courteous manner**

**Result Driver:** Shane Peck, Community Relations Director  
**Measurement Driver:** DeAnne Bonnot, Community Relations Coordinator

**Purpose of the Measure:**  
This measure tracks citizens’ impressions of MoDOT customer service’s basic courtesy when responding to their inquiries.

**Measurement and Data Collection:**  
Customers who contact MoDOT Customer Service Centers are asked to complete a short telephone survey when their business with the customer service representative is complete. Data collection started August 1, 2005. In the first month, 115 surveys were completed. In September, 80 surveys were taken. The survey results are limited in a number of ways. The performance of only one segment of MoDOT’s employee base was evaluated with very few surveys completed. While the telephone survey continues, a “secret shopper” program, like those used by retail and other businesses, will gather further information.

**Improvement Status:**  
Every customer surveyed thought MoDOT Customer Services provided personal, courteous service. MoDOT plans to maintain this level of satisfaction. A statewide customer service team was formed to address a number of issues, including training and system tools to help customer service representatives provide personal and courteous responses.

![Graph: Percent of Customers Who Contacted MoDOT That Felt They Were Responded To In a Personal and Courteous Manner]

- **August ’05:** 100%  
- **September ’05:** 100%

**Calendar Year**

**Desired Trend:**

October 2005 TRACKER – Page 5c
Personal, Fast, Courteous and Understandable Response to Customer Requests (Inbound)

Percent of customers who contacted MoDOT that understood the response given

Result Driver: Shane Peck, Community Relations Director
Measurement Driver: DeAnne Bonnot, Community Relations Coordinator

Purpose of the Measure:
This measure tracks citizens’ impressions of the clarity of MoDOT customer service’s response to their inquiries.

Measurement and Data Collection:
Customers who contact MoDOT Customer Service Centers are asked to complete a short telephone survey when their business with the customer service representative is complete. Data collection started August 1, 2005. In the first month, 115 surveys were completed. In September, 80 surveys were taken. The survey results are limited in a number of ways. The performance of only one segment of MoDOT’s employee base was evaluated with very few surveys completed. While the telephone survey continues, a “secret shopper” program, like those used by retail and other businesses, will gather further information.

Improvement Status:
MoDOT customers gave Customer Service a perfect rating for this measure. In an effort to exceed expectations, a statewide customer service team updated training materials for customer service representatives and those that provide backup assistance. These materials and other training opportunities give employees techniques they can use to communicate effectively with individual customers.

Desired Trend:
Number of customer contacts

Result Driver: Shane Peck, Community Relations Director
Measurement Driver: Marisa Brown, NE District Public Information Manager

Purpose of the Measure:
This measure tracks the number of customers who contact MoDOT. A customer contact is defined as any customer who contacts MoDOT via email, telephone, or letter through the customer service centers, highway safety, human resources, and motor carriers.

Measurement and Data Collection:
Each quarter (July 1, October 1, January 1, April 1), the district offices, Highway Safety, Motor Carriers and Human Resources submit the number of customers who contacted their respective offices. Highway Safety and Human Resources is based only from their toll-free number.

Improvement Status:
MoDOT has 70 employees whose primary responsibility is to interact with customers through the telephone, email, letter, or in person. Many activities influence the reasons people contact MoDOT. The increased number of highway maintenance and construction projects across the state is the primary reason the number has increased this quarter.

![Number of Customer Contacts](image-url)

Desired Trend: N/A

October 2005 TRACKER – Page 5e
Personal, Fast, Courteous and Understandable Response to Customer Requests (Inbound)

**Percent of documented customer requests completed within 24 hours**

**Result Driver:** Shane Peck, Community Relations Director  
**Measurement Driver:** Marisa Brown, NE District Public Information Manager

**Purpose of the Measure:**  
This measure tracks how quickly MoDOT completes tasks requested by its customers through the customer service centers. This gauges if MoDOT’s customer service delights its customers.

**Measurement and Data Collection:**  
This information is reported from the customer service database where customer requests are documented from the time the call comes in until the time the request is completed. This may include requests for signs, traffic signal review, pothole patching, work zone congestion, etc. The purpose of documenting these is to allow MoDOT to report on the types of calls it is receiving from its customers, use this data for support in decision making, and share this data with its planning partners so they can use it for support in decision making.

**Improvement Status:**  
This measure was changed to reflect more accurately fast responses to our customer requests. About 90% of our total customer contacts are completed within 24 hours. These are simple phone call transfers, questions, or requests for general information. The other 10% of our customer contacts are documented in a database that tracks the request. We are still refining the processes for documentation of this measure. A statewide team was formed to help facilitate quicker responses. The team is exploring new phone technologies to allow for more timely customer service. Training for customer service representative and other employees is also being developed that will stress the importance of promptly addressing customer requests.

---

**Percent of Documented Customer Requests Completed Within 24 Hours**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>4th Qtr 2005</td>
<td>82.53</td>
</tr>
<tr>
<td>1st Qtr 2006</td>
<td>79.45</td>
</tr>
</tbody>
</table>

**Desired Trend:**

---

October 2005 TRACKER – Page 5f
Personal, Fast, Courteous and Understandable Response to Customer Requests (Inbound)

Average response time to customers requiring follow up

Result Driver: Shane Peck, Community Relations Director
Measurement Driver: Marisa Brown, NE District Public Information Manager

Purpose of the Measure:
This measure tracks MoDOT’s responsiveness and follow up on customers’ inquiries that are received through the customer service centers and documented in the database. This measure tracks all contacts that are not responded to within 24 hours and that require further follow up.

Measurement and Data Collection:
This information is generated through the customer service center database that has been revised to provide additional measurement information. Customers who contact MoDOT through the customer service center with an issue that is documented in the database as a call report and requires a response time of more than 24 hours is tracked for average response time.

Improvement Status:
The fact that MoDOT is tracking this information, and that we now have a database in place to accurately track it, is probably the main reason for the improvement this quarter over last quarter. Training is being developed through a statewide customer service team to help employees communicate in a more clear and understandable way.

Average Response Time on Requests Requiring Follow-up

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Number of Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>4th Qtr 2005</td>
<td>12.34</td>
</tr>
<tr>
<td>1st Qtr 2006</td>
<td>7.28</td>
</tr>
</tbody>
</table>

Desired Trend:

October 2005 TRACKER – Page 5g
To be an effective leader in transportation, MoDOT must work with agencies and branches of government, including state, county, private industry and municipalities to deliver a quality transportation system that meets the needs of everyone. A coordinated transportation system requires partnerships to ensure compatible decisions are made. Partnering builds trust and ensures quality results.
Number of dollars of discretionary funds allocated to Missouri

Result Driver: Kevin Keith, Chief Engineer
Measurement Driver: Todd Grosvenor, Finance Manager

Purpose of the Measure:
This measure shows the number of dollars of discretionary funds allocated to Missouri.

Measurement and Data Collection:
The federal government allocates discretionary funds to states for specific highway and multimodal projects. Multimodal projects include waterway, aviation and transit activities. These funds are distributed administratively for programs that do not have statutory distribution formulas. States compete for these funds, which are above the formula apportionments. Resource Management collects this information from the Federal Highway Administration, Federal Transit Administration and Federal Aviation Administration.

Improvement Status:
Highways:
The number of dollars of discretionary funds allocated to Missouri for highway projects declined in 2004 due to the delay in the passage of a multi-year federal highway act. Missouri’s share of the total funds allocated nationwide over the last five years is 3.11 percent.

Multimodal:
The number of dollars of discretionary funds allocated to Missouri for multimodal projects has remained relatively constant over the last three years. Missouri’s share of the total funds allocated nationwide over the last five years is 1.96 percent.

Governmental Relations along with senior management continue to work very closely with Missouri’s Congressional delegates to identify specific transportation projects that are good candidates for discretionary funds.

Number of Dollars of Discretionary Funds Allocated to Missouri - Highways

<table>
<thead>
<tr>
<th>Federal Fiscal Year</th>
<th>Millions of Dollars</th>
<th>5-Year Average:</th>
<th>Share of Total Nationwide</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>$10</td>
<td>2.13%</td>
<td>0%</td>
</tr>
<tr>
<td>2001</td>
<td>$46</td>
<td>2.89%</td>
<td>1%</td>
</tr>
<tr>
<td>2002</td>
<td>$54</td>
<td>4.44%</td>
<td>2%</td>
</tr>
<tr>
<td>2003</td>
<td>$44</td>
<td>3.61%</td>
<td>3%</td>
</tr>
<tr>
<td>2004</td>
<td>$33</td>
<td>2.16%</td>
<td>4%</td>
</tr>
</tbody>
</table>

5-Year Average: $37 million, 3.11%

Desired Trend:
Number of Dollars of Discretionary Funds Allocated to Missouri - Multimodal

Federal Fiscal Year

Millions of Dollars

0% 1% 2% 3% 4% 5% 6%

Share of Total Nationwide

5-Year Average: $88 million, 1.96%

Desired Trend:
Partner With Others to Deliver Transportation Services

Percent of earmarked dollars that represent MoDOT’s high priority projects

Result Driver: Kevin Keith, Chief Engineer
Measurement Driver: Todd Grosvenor, Finance Manager

Purpose of the Measure:
This measure shows the percent of earmarked dollars that represent MoDOT’s high priority projects.

Measurement and Data Collection:
Earmarked dollars are federal funds allocated to states for specific transportation projects*. These funds are distributed administratively for programs that do not have statutory distribution formulas. States compete for these funds, which are above the formula apportionments. Resource Management collects this information from the Federal Highway Administration.

MoDOT’s high priority projects are identified in the Federal Priorities list that is prepared by Governmental Relations. This list is provided to Missouri’s Congressional delegates.

Improvement Status:
Missouri’s earmarked dollars for specific transportation projects* declined in 2004 due to the delay in the passage of a multi-year federal highway act. Also declining was the percent of earmarked dollars that represent MoDOT’s high priority projects. Over the last five years, 84% of the earmarked dollars was allocated for MoDOT’s high priority projects.

Governmental Relations along with senior management continue to work very closely with Missouri’s Congressional delegates to identify MoDOT’s high priority projects that are good candidates for earmarked funds.

\[
\begin{array}{c|c|c|c|c}
\text{Federal Fiscal Year} & 2000 & 2001 & 2002 & 2003 \\
\hline
\text{MoDOT's High Priority Projects} & 95.7\% & 97.2\% & 73.2\% & 92.6\% \\
\text{Other Projects} & 4.3\% & 2.8\% & 26.8\% & 6.4\% \\
\end{array}
\]

Desired Trend:

* Does not include Multimodal projects such as waterway, aviation and transit activities.
Partner With Others to Deliver Transportation Services

**Number of dollars generated through cost-sharing and other partnering agreements**

**Result Driver:** Kevin Keith, Chief Engineer  
**Measurement Driver:** Kirk Boyer, Resource Management Director

**Purpose of the Measure:**
This measure monitors the effectiveness of MoDOT’s cost-sharing and partnering programs. It shows the funds invested in highway construction by cities, counties, transportation corporations, and transportation development districts as a result of funds being made available for local construction by MoDOT.

**Measurement and Data Collection:**
The data comes from various sources, both inside and outside of MoDOT. The sources include transportation corporations, transportation development districts, MoDOT districts and programs with responsibility for monitoring partnering agreements and permits.

**Improvement Status:**
The data is counted in the fiscal year in which the agreement was entered into or during which the permit was issued. The decrease in FY 2004 is due to projects that were added to the STIP in FY 2004 while the agreements were signed in FY 2005, which also explains the increase in FY 2005. In the future, all approved projects will have an executed agreement prior to being added to the STIP.

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![Graph showing the number of dollars generated through cost-sharing and other partnering agreements from 2000 to 2005. The data is as follows:

- **2000:** $18,336
- **2001:** $23,159
- **2002:** $27,015
- **2003:** $22,329
- **2004:** $22,329
- **2005:** $65,489

The graph illustrates the increase in funds generated from partnering agreements over the years, with a particularly significant increase in FY 2005.]
Leverage Transportation to Advance Economic Development

*Tangible Result Driver – Roberta Broeker, Chief Financial and Administrative Officer*

Transportation is essential to Missouri’s economic well-being. It plays a critical role in creating jobs and stimulating lasting growth for Missouri. In addition, focusing on ways to advance economic development helps MoDOT achieve its mission of promoting a prosperous Missouri.
Miles of new 4-lane corridors completed

Result Driver: Roberta Broeker, Chief Financial & Administrative Officer  
Measurement Driver: Jay Bledsoe, Transportation System Analysis Engineer

Purpose of the Measure:
This measure tracks the miles of additional divided highways available to the public. Access to a divided highway system supports economic development in Missouri. One of MoDOT’s recent priorities has been completion of four-lane corridors in order to connect segments of highway where gaps exist.

Measurement and Data Collection:
Projects that create or complete sections of dual-divided highways will be identified and tracked. Completion will be defined as the date the project is opened to traffic.

Improvement Status:
The increase of 101.8 miles in 2001 is primarily due to bond-financed projects approved in 2000 by the Missouri Legislature. Without these additional funds, progress for 2005 and 2006 is expected to be much lower, probably less than 20 miles. However, the number of miles of new four-lane corridors constructed will increase in 2007 and beyond from Amendment 3 bond funds approved by Missouri voters in November 2004.

As part of a partnership with the Department of Economic Development, MoDOT is initiating a study to track the creation and location of businesses along newly established four-lane corridors. This information, along with data on business size and employment, will help determine the true economic value of this type of transportation improvement.
Percent utilization of SIB & STAR loan programs

Result Driver:  Roberta Broeker, Chief Financial & Administrative Officer
Measurement Driver:  Raye Ann Lecure, Economic/Operations Analysis Manager

Purpose of Measure:
This measure shows the percent utilization of MoDOT’s revolving loan programs, the Missouri’s State Infrastructure Bank (SIB) and the State Transportation Assistance Revolving (STAR) program. It demonstrates how well utilized these funds are by showing a ratio of how much of the funds are currently on loan versus the amount available to be loaned.

The Missouri Transportation Finance Corporation (MTFC), a not for profit corporation, is Missouri’s SIB. The SIB program was created by federal law in 1995. The SIB’s purpose is twofold: (1) to provide a means to encourage additional investment in transportation projects and (2) to accelerate transportation improvements. The SIB finances both highway and non-highway projects.

The STAR program finances non-highway projects such as air, water, rail, or mass transit facility construction, mass transit vehicles, and vehicles for elderly or handicapped persons.

Measurement and Data Collection:
The data used to calculate the amounts of funds currently on loan is collected through a database used to track the SIB and STAR loans. Amounts available to be loaned are obtained from financial reports. The utilization rates calculated from the data for each of the programs are not comparable due to the vast difference in the size of the programs nor are they predictors of future performance.

Improvement Status:
MoDOT strives to improve these measurements by increasing the volume of loans issued through the marketing process. In FY 2005 MTFC representatives attended the Transportation Finance Conference, the Missouri Association of Counties Conference, and made presentations in all ten MoDOT districts to increase awareness of the loan programs.

The SIB is in the process of finalizing a loan to the Highway 36/I-72 Corridor Transportation Development District and has 3 other requests pending. The STAR has 3 approved loans pending notice to proceed. At September 30, 2005, the SIB and STAR loan fund balances were $32.3 million and $688,000, respectively.

We are currently trying to identify the criteria that should be used to compare our data to that of other similar programs.
Leverage Transportation to Advance Economic Development

Rate of economic return from transportation investment

**Result Driver:** Roberta Broeker, Chief Financial & Administrative Officer  
**Measurement Driver:** Ernie Perry, Organizational Performance Administrator

**Purpose of the Measure:**  
This measure monitors the economic return from the State’s roadway transportation investment through the number of jobs created, changes in personal income, and value-added GSP (Gross State Product).

**Measurement and Data Collection:**  
MoDOT partners with the Department of Economic Development to complete economic modeling of the state's transportation investments. The REMI Inc economic model is used for this analysis. Through these efforts, the department is able to provide regional level estimates to demonstrate employment, income and state benefits related to specific projects, corridors and program expenditures.

**Improvement Status:**  
MoDOT has entered into a Memorandum of Understanding with the Department of Economic Development to model and provide benefit estimates for 20 transportation projects or program expenditures per year using the REMI Inc economic model. This information will be used in the planning framework for project prioritization and communication, for identification of economic impacts related to the environmental clearance process, and for general communications regarding the benefits of the transportation system to Missouri citizens and businesses. The information generated through the use of the REMI model demonstrates that there is a strong link between transportation investment and economic development. In the average year, the Smooth Roads Initiative and the Rt 67 project, respectively create 1,770 and 1,406 jobs each. There is an expected increase in annual average personal income of over $58 million for the SRI 2005 jobs, and an expected benefit of over $50 million for the Rt 67 corridor development. In terms of Gross State Product – value added, The 2005 SRI jobs contribute over $97 million per year and the Rt 67 corridor contributes over $75 million annually to the State’s gross product. We will continue to work with the Department of Economic Development to understand this relationship in order to maximize the benefits to the state and it’s citizens from transportation investments.

**Annual Employment Benefit**

<table>
<thead>
<tr>
<th>Project</th>
<th>Number of Jobs Created</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smooth Roads Initiative</td>
<td>1,770</td>
</tr>
<tr>
<td>Route 67 Corridor</td>
<td>1,406</td>
</tr>
</tbody>
</table>

Desired Trend:
Annual Personal Income Benefit

Number of Dollars (in millions)

Smooth Roads Initiative | Route 67 Corridor

| FY 2005 | $58.671 | $50.007 |

Desired Trend:

Annual Value-Added Gross State Product

Number of Dollars (in millions)

Smooth Roads Initiative | Route 67 Corridor

| FY 2005 | $97.380 | $75.082 |

Desired Trend:
Innovative Transportation Solutions

Tangible Result Driver – Mara Campbell, Organizational Results Director

MoDOT values innovation. The department empowers employees to generate innovative ideas. They are the ones that make concepts come to life so that MoDOT can serve its customers better, faster and at less expense to the taxpayer.
Innovative Transportation Solutions

Percent of innovative transportation solutions implemented

Result Driver: Mara Campbell, Organizational Results Director
Measurement Driver: Patty Lemongelli, Organizational Performance Administrator

Purpose of the Measure:
This measure tracks the percentage of new and innovative ideas, methods, or tools MoDOT accepts into practice as a result of its research program. MoDOT realizes the importance of supporting an aggressive research program driven to provide the department with the latest ideas, technologies, and solutions needed to deliver the most efficient, safe, and economical transportation system.

Measurement and Data Collection:
Innovative transportation solutions are recognized to be any new ideas, methods, policies, processes, standards, equipment, tools, etc. introduced for the purpose of improving the department’s operation, services, or products. Such solutions are likely introduced as a result of a research project, study, or initiative managed through MoDOT’s research program. “Solutions implemented” refers to the decision by MoDOT to use or apply into practice a new idea, method, policy, process, standard, equipment, tool, etc. for the purpose of improvement. Percent of solutions implemented is determined by dividing the number of research projects having results implemented by the total number of research projects completed during a six month time period. While many ideas and technologies are pursued through research and related efforts, not all produce solutions, which can be implemented by MoDOT. However, MoDOT’s elevated emphasis on implementing new ideas and technologies should result in better and more economical transportation products and services delivered.

Improvement Status:
MoDOT continues to market new ideas and technologies, which are focused on addressing pertinent department needs or problems. The 22 percent increase from the beginning of calendar year 2005 for innovative transportation solutions implemented demonstrates MoDOT’s aggressive pursuit to promote great solutions proven through research. While it’s known that all research does not produce results or solutions that can be implemented, MoDOT’s research program recognizes the importance of getting innovative transportation solutions “off the shelf and on the street”. MoDOT Organizational Results is focusing on research that is more closely tied to the 18 Tangible Results, which will lead to more usable solutions in the end.

![Graph showing percent of innovative transportation solutions implemented by quarter for Calendar Year 2005]

Desired Trend:
Innovative Transportation Solutions

Benefits of implementing innovative transportation solutions

Result Driver: Mara Campbell, Organizational Results Director
Measurement Driver: Patty Lemongelli, Organizational Performance Administrator

Purpose of the Measure:
This measure tracks the benefits of MoDOT’s acceptance into practice new and innovative ideas, methods, or tools introduced through the department’s research program. MoDOT maintains an active research program, which aggressively works to provide the department with the latest ideas, technologies, and solutions needed to deliver the most efficient, safe, and economical transportation system. Measuring the benefits realized through the implementation of new ideas and innovative solutions demonstrates MoDOT’s continued efforts to deliver improved and more economical transportation products and services.

Measurement and Data Collection:
Innovative transportation solutions are recognized to be any new ideas, methods, policies, processes, standards, equipment, tools, etc. introduced through MoDOT’s research program for the purpose of improving department operation, services, or products. Implementation refers to the decision by MoDOT to use or apply into practice an innovative transportation solution. The benefits to Missouri as a result of implementing innovative transportation solutions can be realized economically (time/labor savings, operations cost savings, construction/materials cost savings, user-cost savings, safety-related cost savings) or qualitatively (increased knowledge, quality of life, management and policy, environmental, lives saved). Benefits of implementing transportation solutions should be determined for each research project carried out by MoDOT. While the economical benefits are sometimes much easier to determine than qualitative benefits, MoDOT currently has no formal method for routinely calculating the benefits of implementation. A recent project initiated with the Missouri Transportation Institute should result in a model, which MoDOT researchers will use to identify and quantify the various benefits experienced by MoDOT and the State of Missouri as a result of implementing innovative transportation solutions.

Improvement Status:
There are numerous transportation research projects underway which will ultimately bring considerable benefits to Missouri, once their results are implemented. One project, Slope Stabilization with Recycled Plastic Pins, introduces a cost-effective and environmentally friendly method of stabilizing shallow sliding surfaces and providing the long-term resistance needed to maintain slope stability. Developed by researchers at the University of Missouri at Columbia this technology, when implemented, will save MoDOT over $400,000 annually by reducing costs for maintenance and repair of “nuisance” slides along Missouri’s roadways.

Typical shallow or “nuisance” slide along Missouri roadway.
Illustration of recycled plastic pin technology.
**Innovative Transportation Solutions**

**Annual dollar amount saved by implementing value engineering**

**Result Driver:** Mara Campbell, Organizational Results Director  
**Measurement Driver:** Kathy Harvey, State Design Engineer

**Purpose of the Measure:**  
This measure tracks the amount of money MoDOT saves by implementing innovative engineering methods.

**Measurement and Data Collection:**  
Value engineering (VE), which has saved MoDOT over $230 million since 1988, is a valuable tool to use in the implementation of Practical Design. VE can achieve savings at the design phase and can also identify construction program savings. VE is the systematic application of known recognized techniques by multi-disciplined teams that identify the function of a product or service and identify cost effective alternatives using creative approaches to improve a project’s quality and efficiency. VE savings are reported annually, based on the Federal Fiscal Year, due to reporting requirements to the Federal Highway Administration.

**Improvement Status:**  
A recent emphasis on “Concept Stage” VE studies (CSVE) has proven to be successful at defining project scope and identifying basic functions of what the project must achieve. The focus has been to look at many concepts early in the project development process so that when a preferred concept is selected the design may continue with fewer challenges. By covering all the options early in the process, the design team gets answers sooner which saves on design time. Including external stakeholders on VE teams will continue to prove valuable at building consent.

![Value Engineering Savings Graph](image-url)

**Desired Trend:** N/A
Innovative Transportation Solutions

Annual dollar amount saved by implementing practical design

Result Driver: Mara Campbell, Organizational Results Director
Measurement Driver: Kathy Harvey, State Design Engineer

Purpose of the Measure:
This measure tracks the amount of money MoDOT saves by implementing innovative engineering methods.

Measurement and Data Collection:
At the project level, significant innovations that should result in cost savings can be realized through design modifications. These are variations from standards to fit the individual characteristics of a specific project. In MoDOT’s new design environment, “Practical Design” is the umbrella for a more widespread application of this process.

Improvement Status:
With the advent of Practical Design in late 2004/early 2005, nearly $400 million in savings has been realized (as reported to the Missouri Highways and Transportation Commission in June). MoDOT’s 10 districts examined projects that were already included in the 2005-09 STIP to see if they could reach an aggregate goal of 10 percent savings. The eventual total of $205,076,000 represented a savings of 13.8 percent. Practical Design was also applied to the major projects that were considered within Element 3 of the Smoother, Safer Sooner program, which utilized funds made available by last year’s passage of Amendment 3. The cost of 21 projects was reduced by 11.7 percent – or $189,987,000 – that enabled the reprogramming of an additional five projects.

Additional Practical Design savings for projects that were already included in the 2005-09 STIP will be captured in June 2006, during the next programming cycle. For projects beyond 2009, it is expected that they will be designed and delivered with an application of Practical Design from the very beginning of the project development process. The new Engineering Policy Group, formed this summer, is working toward an early ‘06 rollout of formal practical design guidance that will affect change in MoDOT’s design culture and create an environment for significant future project economies.
Number of external awards received

Result Driver: Mara Campbell, Organizational Results Director
Measurement Driver: Rebecca Geyer, Senior Performance Analyst/Facilitator

Purpose of the Measure:
This measure tracks the number of external awards received by the department. Many of these awards relate to quality and therefore display the department’s dedication to efficiency, innovation and quality throughout the organization.

Measurement and Data Collection:
Each district and division office tracks the awards presented to the department by external organizations, to include all awards presented to individuals, teams, districts, divisions and MoDOT as a whole. This data enables the department to measure progress and encourage further participation in award programs. It also provides opportunities for the department to increase public awareness of department activities. Data collection began for this measure on January 1, 2005.

Improvement Status:
Awards received in the first quarter of FY06 display an increase of three awards from the previous quarter. Significant awards won in this timeframe were: three Governor’s Awards for Quality and Productivity in the categories of Technology in Government, Process Improvement, and Efficiency; two “People Saving People” awards sponsored by the Law Enforcement Traffic Safety Advisory Council for Missouri’s work on the Blueprint For Safer Highways and District Three’s “Highway Survivor” Program; and two awards from the National Transportation Public Affairs Workshop honoring the Kansas City Scout’s technology advancements and a Work Zone Safety campaign featuring Director Pete Rahn’s desk in a work zone.

![Number of External Awards Received](image)

Desired Trend:

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MoDOT customers expect that transportation projects be completed quickly and provide major improvements for travelers. MoDOT will honor project commitments because it believes in integrity.
Fast Projects That Are of Great Value

Percent of estimated project cost as compared to final project cost

Result Driver:  Dave Nichols, Director of Program Delivery  
Measurement Driver:  Machelle Watkins, Transportation Planning Director

Purpose of the Measure:  
This measure determines how close MoDOT’s total program completion costs are to the estimated costs.

Measurement and Data Collection:  
The department determines the completed project costs and compares them to the estimated costs. The completed project costs are reported during the state fiscal year in which the project is completed.

Project costs include design, right of way purchases, utilities, construction, inspection and other miscellaneous costs. The estimated cost is based on the amount included in the most recently approved Statewide Transportation Improvement Program. Completed costs include actual expenditures. Litigation filed on projects after a project has been completed will not be tracked by this method of data collection. However, this is a rare occurrence. Positive numbers indicate the final (completed) cost was higher than the estimated cost.

Improvement Status:  
The cost trend through FY 2004 reflects the higher number of projects resulting from bonding in FY 2001, 2002 and 2003. The decrease in 2005 reflects the reduced number of projects without bonding. The ideal status is no deviation in the estimated vs. final project cost, or 0%.

Positive numbers indicate the final (completed) cost was higher than the estimated cost.
Fast Projects That Are of Great Value

**Number of calendar days it takes to go from the programmed commitment on the Statewide Transportation Improvement Program to construction completion**

**Result Driver:** Dave Nichols, Director of Program Delivery  
**Measurement Driver:** Machelle Watkins, Transportation Planning Director

**Purpose of the Measure:**  
This measure determines how quickly projects go from the programmed commitment to construction completion. Customers perceive this time as ‘project wait-time.’

**Measurement and Data Collection:**  
MoDOT compares how long it takes from when the project is added to the Statewide Transportation Improvement Program to when the construction work is finished, and the public is using the new transportation improvement. Data is categorized by the type of work, and distinguishes between design and construction stages.

**Improvement Status:**  
Of the projects completed in 2004, the quickest projects were resurfacing projects, which were completed in less than two years. The projects that took the longest time to complete are major bridge projects, which took about seven years. The construction phase (in blue) ranged from under one year for resurfacing projects to two years for new or expanded highways and major bridges. The design phase (in purple) generally took more time than construction, ranging from just over one year for resurfacing projects to just over five years for major bridges. Major bridges required much more time because of the complexity of the design work, the increased amount of public and other governmental agency involvement, the amount of environmental and cultural work required, the purchasing of right-of-way, and sometimes, the coordination with neighboring states.

**Number of Calendar Days it Takes to Go from Programmed Commitment on the STIP to Construction Completion For Projects Completed by Work Type**

<table>
<thead>
<tr>
<th>Work Type</th>
<th>Average Days from Award Date to Construction Completion</th>
<th>Average Days from Programmed Commitment to Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resurfacing</td>
<td>282</td>
<td>396</td>
</tr>
<tr>
<td>Safety</td>
<td>272</td>
<td>515</td>
</tr>
<tr>
<td>New/Improved Bridge</td>
<td>1050</td>
<td>394</td>
</tr>
<tr>
<td>New/Expanded Highways</td>
<td>1164</td>
<td>739</td>
</tr>
<tr>
<td>Major Bridge</td>
<td>1892</td>
<td>677</td>
</tr>
</tbody>
</table>

Calendar Year 2004

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**Percent of projects completed within programmed amount**

**Results Driver:** Dave Nichols, Director of Project Delivery  
**Measurement Driver:** Dave Ahlvers, State Construction Engineer

**Purpose of Measure:**  
The measure tracks the percentage of projects completed within the programmed amount. The cost includes such items as engineering, right of way and contract payments.

**Measurement and Data Collection:**  
The completed project cost is compared to the estimated cost for each project. The percentage of projects completed within the estimated cost is gathered from across the state.

Project costs include design, right of way purchases, utilities, construction payments, inspection and other miscellaneous cost.

**Improvement Status:**  
MoDOT would like to see all projects completed within the programmed amount. The goal is to deliver projects at the programmed amount allowing the greatest number of projects to be built with the funding available. Our data indicates that there is a great deal of deviation among individual projects with half over and half under budget. Continued emphasis is being placed on scoping projects and developing estimates that represent the true cost of delivering the projects.

![Percent of Projects Completed Within Programmed Amount](image_url)

**Desired Trend:** Fast Projects That Are Of Great Value
Percent of projects completed on time

Results Driver: Dave Nichols, Director of Project Delivery  
Measurement Driver: Dave Ahlvers, State Construction Engineer

Purpose of the Measure:  
This measure tracks the percentage of projects completed by the commitment date established in the contract. It will indicate MoDOT’s ability to complete projects by the agreed upon date.

Measurement and Data Collection:  
The project manager will establish project completion dates for each project. This will be documented in MoDOT’s SiteManager and STIP databases. It will be part of the Plans, Specifications & Estimates submittal. The actual completion date will be documented by the Resident Engineer and placed in MoDOT’s Management System.

Improvement Status:  
The results indicate a small decrease from previous years in the percent of projects completed on time. MoDOT has focused on reducing the number of days available for construction in order to reduce congestion and inconvenience to the traveling public, while stressing the importance of completing projects on time. An emphasis has been placed on reviewing construction schedules and assessment of liquidated damages, which will lead to improvements in timely completion.

![Percent of Projects Delivered On Time Graph](image-url)
Fast Projects That Are Of Great Value

Percent of change for finalized contracts

**Results Driver:** Dave Nichols, Director of Project Delivery  
**Measurement Driver:** Dave Ahlvers, State Construction Engineer

**Purpose of the Measure:**  
The measure tracks the percentage difference of total construction payouts to the original contract award amounts. This indicates how many changes are made on projects after they are awarded to the contractor.

**Measurement and Data Collection:**  
Contractor payments are generated through MoDOT’s SiteManager database and processed in the financial management system for payment. Change orders document the underrun/overrun of the original contract.

**Improvements Status:**  
MoDOT’s performance on this item has improved significantly since 2004. In FY05 there was savings of $15 million. MoDOT has saved an additional $4,830,000 through the first quarter of fiscal 2006. The improvement is a result of a strong emphasis placed on constructing projects within budget, the use of practical design and value engineering. By limiting overruns on contracts the department can deliver more projects, which will lead to an overall improvement in the entire highway system.

Total Contractor Payment vs. Award Amount

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>3.1%</td>
</tr>
<tr>
<td>2004</td>
<td>4.1%</td>
</tr>
<tr>
<td>2005</td>
<td>2.1%</td>
</tr>
<tr>
<td>2006 Q1</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

Desired Trend: N/A
Fast Projects That Are Of Great Value

Average construction cost per day by contract type

Results Driver: Dave Nichols, Director of Project Development
Measurement Driver: Dave Ahlvers, State Construction Engineer

Purpose of the Measure:
This measure tracks the cost per day for project completion to determine the impact to the traveling public, enabling MoDOT to better manage project completion needs.

Measurement and Data Collection:
This information is gathered by extracting the actual time used for construction from the summary of working days in the SiteManager database and dividing it by the total costs of the project.

The measurement groups construction contracts into three categories:
- WD working day contracts
- CD calendar day contracts and;
- A + B or innovative contracts that provide incentive/disincentives to the contractor for early completion.

Improvement Status:
The greater use of A+B and calendar-day contracts resulted in a larger amount paid per calendar day. MoDOT’s strategy of utilizing innovative contracting techniques has resulted in faster contract completion and fewer delays to the traveling public. We are reviewing the contract type selected to make a determination if we are using our resources most effectively for timely completion of projects.

![Average Amount Paid per Elapsed Calendar Day Graph](image-url)
Average Amount Paid per Elapsed Calendar Day
All Contract Types

Number of Dollars
- 2002 2003 2004 2005 2006 Q1
- Fiscal Year
- $13,302 $12,667 $12,685 $11,268 $18,017

Desired Trend:

Number of Active Contracts

Number
- 2002 2003 2004 2005 2006 Q1
- Fiscal Year
- Working Day
- Calendar Day
- A+B

Desired Trend:
N/A
Fast Projects That Are Of Great Value

Percent of customers that feel completed projects are the right transportation solutions

Result Driver: Dave Nichols, Director of Program Delivery
Measurement Driver: Ernie Perry, Organizational Performance Administrator

Purpose of the Measure:
This measure provides information regarding the public’s perception of MoDOT’s performance in providing the right transportation solutions.

Measurement and Data Collection:
Data was collected through a statewide telephone survey conducted for the long-range planning initiative called Missouri Advance Planning. The survey effort included interviews with 3,100 Missourians with an overall margin of error of +/- 2.9 percent. This measure will be collected on an annual basis through a stratified, statewide telephone survey.

Improvement Status:
Forty-six percent of the sample feels most or all of MoDOT’s transportation solutions were the right solutions. Thirty-seven percent feels some of the projects were the right solutions, and 13 percent feels that few or none of the projects were the right solution to their transportation needs.

While this is a positive starting point, MoDOT continues to utilize community outreach and communication efforts to gain greater public support so all projects are viewed as the right solution. Additional analysis of the respondents stating that few or none of the projects were the right solutions will be completed in November 2005 to identify performance gaps that can then be addressed.

Desired Trend: N/A
Fast Projects That Are of Great Value

**Percent of project timeliness as compared to other state DOTs**

**Result Driver:** Dave Nichols, Director of Program Delivery  
**Measurement Driver:** Kathy Harvey, State Design Engineer

**Purpose of the Measure:**  
This measure tracks how MoDOT compares to other state Departments of Transportation with regards to project timeliness. As MoDOT develops projects working with the public, we give them schedules for construction that include an estimate of when the road will be open to traffic. In addition, our construction contracts have completion times included that are often shown on construction signing. Comparing the percentage of times that MoDOT completes construction when promised with other states will help demonstrate its level of performance to the public and could point out a need for an educational effort with the public or the need for partnering efforts.

**Measurement and Data Collection:**  
The AASHTO Standing Committee on Quality has launched a pilot project (through its Subcommittee on Performance Measures) for comparative performance measures with regards to the topic of project delivery. MoDOT is participating in this prototype venture along with five other states – Delaware, New Mexico, Ohio, Florida and Virginia. The committee developed a survey that was completed this summer. It requested very specific information related to how each DOT defines its universe of contracts or projects for measuring performance, how it defines its performance measures, and the business rules, data fields and time horizons utilized to track performance.

MoDOT customers have an expectation that our roadway construction be completed when promised, despite factors – including unfavorable and unpredictable weather – that can cause significant delays. For this measure, the definition of ‘on time’ selected is as follows: “The contract must be completed on or before the original specified completion date.”

**Improvement Status:**  
MoDOT compares quite favorably, with indicators between 70-73 percent for the four data points. The other states, listed anonymously here because that was a condition of participation in the pilot project, have posted on-time percentages between 0-82 percent.

None of the definitions that have been developed to date for the purpose of this survey have gone far enough to enable the tracking of project timeliness from a “needs identification to ribbon cutting” perspective. MoDOT intends to advocate this scope as the subcommittee continues its work.
Percentage of Projects Completed On or Before the Original Specified Completion Date

<table>
<thead>
<tr>
<th>State</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>Jan.-July 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>State A</td>
<td>18%</td>
<td>9%</td>
<td>3%</td>
<td>n/a</td>
</tr>
<tr>
<td>State B</td>
<td>45%</td>
<td>15%</td>
<td>7%</td>
<td>n/a</td>
</tr>
<tr>
<td>State C</td>
<td>58%</td>
<td>n/a</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>State E</td>
<td>22%</td>
<td>21%</td>
<td>19%</td>
<td>0%</td>
</tr>
<tr>
<td>State F</td>
<td>28%</td>
<td>30%</td>
<td>72%</td>
<td>82%</td>
</tr>
<tr>
<td>MoDOT</td>
<td>70%</td>
<td>72%</td>
<td>73%</td>
<td>72%</td>
</tr>
</tbody>
</table>

Desired Trend:

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Fast Projects That Are of Great Value

Percent of projects that represent great value

Result Driver:  Dave Nichols, Director of Program Delivery
Measurement Driver:  Kathy Harvey, State Design Engineer

Purpose of the Measure:
This measure tracks how MoDOT projects provide great value once they are constructed and open to traffic. When the measure is established and a baseline trend is available, it will show at what level MoDOT is providing projects of great value.

Measurement and Data Collection:
Defining ‘value’ is difficult in establishing this measure – how should MoDOT define it … how do other DOTs define it … how does the public define it? A question in the “Missouri Advance Plan: Survey of Missouri Adults,” completed in May 2005, is related to this measure and has been used to provide the information shown below.

Improvement Status:
MoDOT customers expect to receive at least what they wanted – or more – for their transportation dollars. The best way MoDOT has for evaluating this expectation is through the Missouri Advance Planning (MAP) survey conducted during one week in May 2005. Of those persons surveyed, only 43 percent feel Missouri uses its transportation dollars efficiently and effectively. However, this survey was conducted just as many of the Smooth Roads Initiative (SRI) projects were getting underway. The SRI projects are being funded through Amendment 3, passed by Missouri voters in Nov. 2004.

There could be other ways to measure the value of MoDOT projects. MoDOT has submitted a research proposal to the National Cooperative Highway Research Program that would provide standardized costs of doing transportation business for peer states. It could be about two years before data is available. Besides providing appropriate regional comparisons of construction and materials costs and other DOT activities, it would answer questions such as the following. How does MoDOT compare to a peer state in the cost of construction of one mile of road and mowing one acre of right of way? How does MoDOT compare in relation to peer states in square-foot costs to build a bridge? How do MoDOT’s public involvement costs per project compare to other peer states?

MoDOT has also entered into a cooperative effort with the Missouri Department of Economic Development to analyze the impacts road and bridge projects have on the state’s economy, revenue and demographics. The partnership will look at 20 projects per year. This analysis of transportation projects’ influences on job creation and other economic development factors will help clarify projects’ value. The information will be used to help the departments plan and invest funds and to show the benefits the state gets for its transportation investments.

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>9%</td>
</tr>
<tr>
<td></td>
<td>Somewhat Agree: 43%</td>
</tr>
<tr>
<td></td>
<td>Strongly Agree: 34%</td>
</tr>
<tr>
<td></td>
<td>Desired Trend:</td>
</tr>
</tbody>
</table>
MoDOT takes great pride in being a good steward of the environment, both in the construction and operation of Missouri’s transportation system and in the manner in which its employees complete their daily work. The department strives to protect, conserve, restore and enhance the environment while it plans, designs, builds, maintains and operates a complex transportation infrastructure.
Environmentally Responsible

**Percent of projects completed without environmental violation**

*Result Driver:* Dave Nichols, Director of Program Delivery  
*Measurement Driver:* Kathy Harvey, State Design Engineer

**Purpose of the Measure:**
This measure tracks environmental violations. MoDOT projects must comply with several environmental laws and regulations. In order to be in compliance, MoDOT makes commitments throughout the project development process that must be carried forward during construction and maintenance. In addition, the various permits obtained for projects also contain specific requirements for compliance. If a violation is noted, it can result in either a Letter of Warning or a Notice of Violation to MoDOT.

**Measurement and Data Collection:**
Both LOWs and NOVs are written correspondence to MoDOT from regulatory agencies, which are tracked in a MoDOT database by location or project number, as appropriate. Where tracked by project, the violations received may span several years. The first chart below is based on a calendar year of construction projects reported to be completed during that year and the number of violations received on those projects over the life of the project. The second chart is a report by calendar year of the LOWs and NOVs received by the department for any activity.

**Improvement Status:**
The graph for the past three years shows a relatively level trend line. However, based on a few serious violations received in 2004, the department implemented several strategies to achieve a possible decrease in violations this calendar year. An Environmental Quality Circle was formed in September 2004 that has completed the first phase of an environmental action plan for the department. The action plan will be implemented over the next several months. In addition, all department environmental staff has been consolidated into one unit that will result in improved efficiencies in the environmental area by providing the department with “one-stop shopping.”

Staff conducted national research to determine if an appropriate benchmark state exists. An appropriate benchmark state was not found. MoDOT believes that the benchmark to use is 0 percent NOVs. A small number of LOWs can be tolerated since they are by reference only warnings, but it is unacceptable to the department to have a violation. Regardless of what other states are doing, MoDOT has a zero-tolerance policy.

For the first three quarters of 2005, MoDOT has received zero Notices of Violation and six Letters of Warning. The LOWs were for one construction project, two rest areas and three maintenance lots. Based on this trend, the department will be conducting an inspection of all maintenance lots over the next few months to determine what actions, if any, are needed to avoid similar LOWs in the future.

![Bar chart showing percent of projects completed without environmental violation from 2002 to 2004.](chart.png)

**Desired Trend:**
Number of LOWs & NOVs

Calendar Year

2002 2003 2004 2005 YTD

Number

 LOW  NOV

1  2  3  4  5  6  7  8

Desired Trend:
**Number of projects on which MoDOT protects or restores sensitive species or habitat**

**Result Driver:** Dave Nichols, Director of Program Delivery  
**Measurement Driver:** Kathy Harvey, State Design Engineer

**Purpose of the Measure:**  
Missouri is home to many rare species of plants and animals, some of which are on the federal endangered species list. The Endangered Species Act of 1973 (as amended) prohibits harm or harassment of these species. Avoiding or minimizing harm to these species and protecting or restoring their habitat is a fundamental obligation of this organization. Avoidance and/or protection is the first goal of our efforts, but restoration is the minimum acceptable result.

**Measurement and Data Collection:**  
This measure is tracked annually by calendar year. On all MoDOT projects, the department investigates and informs the US Fish and Wildlife Service of any activity in the vicinity of a known threatened or endangered species or critical habitat. Through this consultation with them, primarily through letters, MoDOT has the data to report on this measure. Because this measure focuses on projects that protect or restore sensitive habitats that could not initially be avoided, many MoDOT projects are not included in this data.

**Improvement Status:**  
There is no desired trend with this measure; the number reported will fluctuate depending on our program each year, type of projects being constructed, location and just the ability to make adjustments to avoid impact on sensitive species or habitat. It can be assumed that as MoDOT’s program increases the number will go up.

During the first three quarters of 2005, there have been nine additional projects where MoDOT has protected or restored sensitive species or habitat. This includes the following species: Ozark Cave Fish (twice), Missouri Bladderpod, Indiana Bat, Gray Bat, Pallid Sturgeon, Ozark Hellbender, Bald Eagle and the Topeka Shiner.

![Number of Projects on Which MoDOT Protects or Restores Sensitive Species or Habitat](chart.png)

**Desired Trend:** N/A
Environmentally Responsible

**Percent of air quality days that meet Environmental Protection Agency standards by metropolitan area**

**Result Driver:** Dave Nichols, Director of Program Delivery  
**Measurement Driver:** Machelle Watkins, Transportation Planning Director

**Purpose of the Measure:**  
This measure tracks MoDOT’s role in improving the air quality of Missouri’s metro areas. The Environmental Protection Agency approves state plans to improve air quality. MoDOT makes every effort to design and build roads that meet air quality standards and do not violate the EPA-approved plans.

**Measurement and Data Collection:**  
EPA establishes several air quality standards for the United States. The ground level ozone standard affects Missouri. Ozone readings are collected in Kansas City and St. Louis during the ozone season – April through October. The data contained in the table below reflects the available percentage of days, by metro area, that met the EPA’s ground level ozone standard. The data for the 2005 ozone season has not been received at the time of printing.

**Improvement Status:**  
MoDOT’s efforts coupled with milder than normal weather in 2004 contributed to 100% positive air quality days as measured by EPA standards. Changes in EPA standards and warmer than normal weather during the 2005 ozone season may contribute to a reduction in the percentage of positive air quality days.

---

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Percentage</th>
<th>St. Louis</th>
<th>KC</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>99%</td>
<td>99%</td>
<td>100%</td>
</tr>
<tr>
<td>2001</td>
<td>99%</td>
<td>99%</td>
<td>100%</td>
</tr>
<tr>
<td>2002</td>
<td>98%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>2003</td>
<td>96%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>2004</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Desired Trend:**

- **St. Louis**
- **KC**

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Environmentally Responsible

**Percent of alternative fuel consumed**

**Result Driver:** Dave Nichols, Director of Program Delivery  
**Measurement Driver:** Dave DeWitt, Deputy Administrative Officer

**Purpose of the Measure:**  
This measure tracks the use of alternative fuels. It shows MoDOT’s contribution toward environmental responsibility and conservation of resources.

**Measurement and Data Collection:**  
Alternative fuel is E-85 and biodiesel. When a user pumps fuel into a MoDOT vehicle or piece of equipment, that usage by gallon and by fuel type is captured in the SAM II system. Reports are generated to extract the number of gallons used from that system.

**Improvement Status:**  
There was a significant increase in the usage of biodiesel during the first quarter. This is a result of MoDOT partnering with the Missouri Soybean Association to educate our employees and our fuel vendors. Vendors were trained on MoDOT’s requirements and our employees gained knowledge about using the product. This effort eliminated some of the myths regarding biodiesel and resulted in our employees building strong relationships with our vendors. Availability of biodiesel continues to be a problem in the south central and southeast districts of the state. Education and communication with fuel vendors in these districts continues and will improve availability. Until we are guaranteed that the use of biodiesel will not cause interruptions to winter operations, we will pilot usage in two districts.

Currently the department operates two E-85 bulk fuel stations and is planning to install others in District 4 and District 7 in FY 07.

![Percent of Alternative Fuel Consumed](chart.png)
Number of historic resources avoided or protected as compared to those mitigated

Result Driver: Dave Nichols, Director of Program Delivery
Measurement Driver: Bob Reeder, Historic Preservation Coordinator

Purpose of the Measure:
Federal historic preservation laws relating to federally-funded projects, gaining public and agency support for particular projects, and general environmental stewardship require MoDOT to avoid, minimize, or mitigate project impacts to historic buildings and bridges whenever feasible. Compiling information about projects impacts to important cultural resources provides a measure of MoDOT’s success at avoiding, protecting, or mitigating project impacts to important cultural resources.

Measurement and Data Collection:
Data collection begins at the approved Conceptual Plans stage. As project design plans and right of way plans are prepared by the district, department staff track the number of historic resources in project footprints and the number of resources that can be avoided or protected by MoDOT revising the design of a project versus the number of resources MoDOT can not avoid and must be mitigated. The data include only historic resources identified as potentially affected by projects after the conceptual plan stage. The data do not include historic resources avoided during early project planning or those avoided during consideration of different alignments during NEPA studies.

Improvement Status:
The 2005 information is for the first three quarters of the calendar year. MoDOT’s overall success at minimizing and avoiding project impacts to historic resources is illustrated by only five historic resources ultimately being impacted by any MoDOT project during the first nine months of 2005 and requiring mitigation. Very early project design efforts to lessen project impacts to significant historic resources were successful, resulting in only twenty resources remaining in project footprints at the conceptual plans stage. MoDOT continued trying to reduce project impacts to historic resources during final design of the projects and fourteen of the twenty resources were subsequently avoided. One resource could not be avoided but is protected or preserved in the project footprint. Thus far in 2005, only five historic resources could not be avoided and required mitigation. Four of these were older bridges requiring replacement. MoDOT’s goal is to maximize the number of historic resources avoided and minimize the number of resources impacted and mitigated. This measure has no overall desired trend. For any year, data for the measure will vary due the number of projects in the MoDOT program and the specific nature of those projects; however, the overall effectiveness of MoDOT’s historic preservation efforts is reflected by MoDOT’s 2005 projects to date have required the mitigation of only five historic resources.

![Graph showing number of historic resources avoided, protected, and mitigated from 2003 to 2005 YTD.]

Desired Trend: N/A
Ratio of acres of wetlands created compared to the number of acres of wetlands impacted

Result Driver: Dave Nichols, Director of Program Delivery
Measurement Driver: Gayle Unruh, Environmental & Historic Preservation Manager

Purpose of the Measure:
Wetlands are a valuable resource in Missouri, having beneficial functions such as wildlife habitat, flood storage and water quality improvement. In addition to these benefits, it is required in the Clean Water Act that impacts to wetlands be avoided or minimized or that wetlands are recreated when a wetland is destroyed during a transportation project. MoDOT has unavoidable impacts on wetlands and thus recreates wetlands. The national goal, set by the FHWA, for recreating wetland is to construct 1.5 acres of wetland for every 1.0 acre of wetland impacted. Recreating wetlands at this ratio helps to offset the lost beneficial functions during the time it takes for a wetland to develop, which in the case of forested wetlands can be a considerable time period. This measure helps ensure that MoDOT is doing its part to maintain wetlands in Missouri.

Measurement and Data Collection:
Acres of impact will be taken from Clean Water Act permits and will be listed by project. Acres of wetland construction will be taken from roadway design plans or mapped wetland areas recreated by MoDOT, again listed by project. Impacts may occur in a different year from the mitigation, so for the purposes of this measure, timeframe for the reporting is when the mitigation construction is complete based on a calendar year.

Improvement Status:
MoDOT improved in 2005 by replacing wetlands at a rate of 2.2 to 1 and for year-to-date 2006 improved even more with a ratio of 1.6 to 1. Statewide training targeting the interpretation and attention paid to wetland development plans was conducted with construction inspectors and resident engineers to help achieve this improvement. However, mitigation for violations of the Clean Water Act in 2003 will be built in FY 2006. These acres of mitigation will be reflected in the next Tracker. The statewide training also targeted the causes for those violations so that mitigation for projects other than the violations is very near the benchmark of 1.5-to-1. Since this measure is also tracked by other states through FHWA, MoDOT contacted FHWA to find out which states are successful at meeting the 1.5 to 1 ratio. Although, FHWA does not give out the statistics on the ratio for each state, they did give MoDOT a list of states that are very successful at meeting this ratio. Some states have mitigation ratios set by state laws that exceed the 1.5-to-1 ratio. Thus, in complying with the state law they are successful for the FHWA measure. Most of the states queried said that the biggest factor in successfully meeting the ratio is in the use of wetland mitigation banks. They had greater control over achieving their target ratios and had better wetland success when they had mitigation banks in place. MoDOT is in the final stages of establishing a statewide wetland mitigation banking agreement and two bank sites are in the planning stages for proposal to the regulating agencies.

Ratio of Wetland Acres Created Versus Wetland Acres Impacted, by Year

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>1.47</td>
</tr>
<tr>
<td>2001</td>
<td>1.42</td>
</tr>
<tr>
<td>2002</td>
<td>1.41</td>
</tr>
<tr>
<td>2003</td>
<td>2.71</td>
</tr>
<tr>
<td>2004</td>
<td>8.51</td>
</tr>
<tr>
<td>2005</td>
<td>2.2</td>
</tr>
<tr>
<td>YTD 2006</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Desired: Trend 1.5:1

October 2005 TRACKER – Page 10f
Number of trees planted compared to number of acres cleared

Result Driver: Dave Nichols, Director of Program Delivery
Measurement Driver: Jerry Hirtz, Technical Support Engineer, Construction & Materials

Purpose of the Measure:
This measure tracks MoDOT’s effort to replace trees removed as a result of clearing operations on its construction projects.

Measurement and Data Collection:
MoDOT has committed to plant two trees for each six-inch-or-larger tree removed by construction operations. MoDOT documents acreage cleared through its contract administration processes and a record is maintained of trees ordered each year for spring planting. In the future, this measure will be amended to compare trees planted to trees removed as the data becomes available.

Improvement Status:
Over the past several years, areas cleared for construction have steadily increased and the number of trees planted has decreased. Close monitoring has allowed staff to better assess how MoDOT is meeting its tree replacement obligations and should improve the previous deficiency.

Number of Trees Planted Compared to Number of Acres Cleared

<table>
<thead>
<tr>
<th>Year (Fiscal)</th>
<th>Number of Acres Cleared</th>
<th>Number of Trees Planted</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>655.0</td>
<td>496.8</td>
</tr>
<tr>
<td>2001</td>
<td>588.0</td>
<td>132</td>
</tr>
<tr>
<td>2002</td>
<td>956.7</td>
<td>110</td>
</tr>
<tr>
<td>2003</td>
<td>420.0</td>
<td>748.6</td>
</tr>
<tr>
<td>2004</td>
<td>964.0</td>
<td>1,042.2</td>
</tr>
</tbody>
</table>
Environmentally Responsible

**Number of tons of recycled/waste materials used in construction projects**

**Result Driver:** Dave Nichols, Director of Program Delivery  
**Measurement Driver:** Joe Schroer, Field Materials Engineer

**Purpose of the Measure:**  
This measure tracks MoDOT’s efforts to be environmentally conscious while being fiscally responsible through the use of recycled/waste material when applicable.

**Measurement and Data Collection:**  
The number of tons of recycled/waste material used in construction projects is measured through MoDOT’s construction management database which tracks material incorporated into projects. Data is collected on an annual basis.

**Improvement Status:**  
Available data from 2004 and through the end of September 2005 has been included. The data for 2005 shows that the amount of recycled/waste material incorporated into projects during 2005 has already surpassed the amount used in 2004. Project specifications were revised to allow a greater amount of recycled materials in asphalt and concrete mixtures. An increase due to the Smooth Roads Initiative program accounts for such a large increase in hot mix asphalt as contractors have used these materials to augment virgin aggregate shortages. We continue to evaluate materials provided by contractors and modify specifications to allow acceptable materials. Contractor successes will be passed on to encourage use.

---

**Number Of Tons Of Recycled/Waste Materials Used In Construction Projects**

<table>
<thead>
<tr>
<th>Number of Tons</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot Mix Asphalt</td>
<td>195,000</td>
<td>387,000</td>
</tr>
<tr>
<td>Concrete</td>
<td>34,000</td>
<td>34,000</td>
</tr>
</tbody>
</table>

**Calendar Year**

**Desired Trend:**

- Blue: Hot Mix Asphalt
- Red: Concrete
Efficient Movement of Goods

Missouri’s location in the nation’s center makes it a major crossroads in the movement of goods. Transportation infrastructure must be up to the task so that as the flow of freight becomes more efficient, businesses and communities share the economic benefits.
**Freight tonnage by mode**

**Result Driver:** Dave DeWitt, Deputy Administrative Officer  
**Measurement Driver:** Brian Weiler, Multimodal Operations Director

**Purpose of the Measure:**  
The measure tracks trends and indicates diversification of freight movement on Missouri’s transportation system.

**Measurement and Data Collection:**  
Port tonnage is reported to MoDOT from public ports. Air cargo data is collected via mail survey to commercial airports with known cargo activity. Rail tonnage is obtained from the Association of American Railroads. MoDOT calculates motor carrier freight movement using commercial vehicle miles traveled, trip length per shipment, and average truck cargo weight.

**Improvement Status:**  
Total freight tonnage for all modes exceeds 1.2 billion tons, which reflects positive economic growth and development for the State of Missouri. Rail freight demand is strong, but tonnage has remained relatively steady due to a rail labor shortage and system capacity issues. Missouri does not currently invest public funding in private rail infrastructure, but MoDOT has supported efforts to remove rail system bottlenecks, such as the KC Flyover Project and adding a second bridge on the Union Pacific mainline over the Osage River. Motor carrier freight tonnage has experience steady growth since 2001. MoDOT has implemented several process improvements and outreach efforts to streamline motor carrier registration and inspection services.

Port tonnage continues to be impacted by low flows on the Missouri River and an inadequate lock and dam system on the Upper-Mississippi River. MoDOT supports a federal proposal from the Corps of Engineers to update and expand this system, which is currently being considered by Congress. Aviation tonnage continues to be impacted by a down turn in the aviation industry from 9-11 and the resulting financial impacts to airlines, which carry a significant portion of air cargo. Commercial airports fall under the jurisdiction of the FAA, but MoDOT’s Aviation Advisory Committee helps identify ways to better support the commercial aviation industry.

![Rail Freight Tonnage Graph](image-url)  
* Missouri information for 2004 is based on preliminary numbers. Data for Illinois and Texas is not available for 2004.*
Average travel times for trucks on selected roadway sections

Result Driver: Dave DeWitt, Deputy Administrative Officer
Measurement Driver: Michelle Teel, Technical Support Engineer

Purpose of the Measure:
This measure tracks average truck travel times on selected roadway sections. Monitoring travel time is a tool for improving transportation system performance. MoDOT recognizes that the efficient movement of trucks is critical to the economy. Timely, reliable goods movement allows businesses to reduce manufacturing and inventory costs and to improve responsiveness to rapidly changing markets and consumer desires.

Measurement and Data Collection:
The Federal Highway Administration (FHWA) launched the Freight Performance Measure initiative to monitor travel times in freight-significant corridors, including Interstate 70. In 2002, FHWA established a partnership with the American Transportation Research Institute (ATRI) to determine whether and how information from communications technologies used by the freight industry could provide data to support freight performance measures. ATRI worked with technology vendors and commercial carriers to demonstrate that location data from communications technologies can be used to derive measures of travel time. After removing all information except time and location from the satellite data stream, ATRI measured average travel rates. The data provided is preliminary research data from FHWA. The reported average travel rate (speed) has been converted to travel time per mile. Future FHWA research may explore the use of other technologies, such as electronic toll collection and weigh-in-motion equipment.

Improvement Status:
To help improve truck travel time, live traffic data for three Missouri metro areas is available on MoDOT’s website at www.modot.gov in the Services Section under Traveler Services. Kansas City Scout provides traffic information for Kansas City, Gateway Guide provides traffic information for St. Louis, and Ozarks Traffic provides traffic information for Springfield. Preliminary research data including truck travel times is available from FHWA on Interstate 70 across the nation. This data allows us to measure Missouri’s truck performance on Interstate 70 as compared to the entire Interstate 70 corridor. Due in part to an increase in the number of Missouri work zones this summer, travel times increased slightly in June through August. The desired trend is a reduction in average travel times, as long as they do not exceed the posted speed limit.
Efficient Movement of Goods

Percent of trucks using advanced technology at Missouri weigh stations

Result Driver: Dave DeWitt, Deputy Administrative Officer
Measurement Driver: Barbara Hague, Special Project Coordinator

Purpose of the Measure:
This measure indicates motor carriers’ acceptance of tools designed to improve the flow of freight traffic on Missouri highways.

Measurement and Data Collection:
Data is collected by HELP, Inc.’s PrePass system computers which scan transponder-equipped vehicles as they approach 19 Missouri weigh stations. Pavement sensors check the vehicle’s weight while computers review MoDOT’s records to determine the carrier’s compliance with safety, insurance and other state and federal regulations. Drivers are notified to stop or are allowed to continue without delay. Carriers that comply with state and federal regulations save time and money. The Missouri State Highway Patrol provides a quarterly measure of the number of trucks that use Missouri’s weigh-in-motion scales located at Mayview and Foristell. These scales measure weight as trucks pass over them at 40 m.p.h. Using ramp scales rather than verifying weight on fixed scales that require a full stop saves both time and money.

Improvement Status:
The number of trucks using PrePass increased to 33.5 percent. This is the result of a 12.8 percent increase in the percent of transponder-equipped vehicles traveling in Missouri during the first three quarters of 2005. Of the twenty-four states participating in the PrePass program, Missouri ranks fourth in the number of advanced technology sites and third in the number of vehicles traveling through these technology sites. MoDOT recognizes the benefits of the PrePass program and is reaffirming its Memorandum of Understanding with the Missouri State Highway Patrol and Help, Inc. Through the MOU, the MSHP takes care of minor maintenance on the ramp sorters.

The eastbound Foristell weigh-in-motion scale was closed during the third quarter of 2005 while a computerized system was replaced. During the repair, drivers who would normally use the weigh-in-motion scale to save time were required to stop at fixed scales. Through educational outreach and publications, MCS promotes usage of the PrePass technology to the motor carrier industry.
Efficient Movement of Goods

Interstate motor carrier mileage

Result Driver: Dave DeWitt, Deputy Administrative Officer  
Measurement Driver: Joy Prenger, Accounting Services Supervisor

Purpose of the Measure:  
This measure determines if motor carrier freight travel in Missouri is increasing or decreasing during specific quarters of the year. Data could also indicate fluctuations of freight movement in Missouri. Information received provides direction on how to strengthen and increase the program to facilitate freight movement by monitoring the quarterly fuel tax rate(s) and voluntary compliance.

Measurement and Data Collection:  
Data is collected quarterly. Total taxable miles traveled in Missouri by Missouri-based carriers and carriers based in IFTA (International Fuel Tax Agreement) member jurisdictions is tracked utilizing IFTA tax returns and member jurisdiction monthly transmittals. This information is used to reflect freight movement, support revenues and track usage from the motor fuel tax refund appropriation.

Improvement Status:  
Diesel prices are a reported $0.968 cents higher than a year ago. The Midwest fuel price average is $3.144 a gallon compared to the national average of $3.148 a gallon. Due to the rising fuel prices, it is estimated that our desired trend will be adversely affected. It is reported through the American Trucking Association (ATA) and the Federal Highway Administration that the motor carrier industry burns an estimated 665 million gallon of diesel each week. A survey is being conducted by the ATA to find out how increased diesel prices are affecting the trucking industry’s profits, if it is changing freight movement and how is the industry coping.

In January 2006, Motor Carrier Services will be providing taxpayers access to their fuel tax account(s) through our web-based system. We expect tax return errors to decrease due to an automated calculation process, thus creating more accurate reporting and collections.

MCS is currently surveying our eight border states to determine if they are able to raise quarterly fuel tax rates without changing rules or regulations. Missouri’s quarterly rate is set by state statute.

Desired Trend:
Efficient Movement of Goods

**Percent of satisfied motor carriers**

**Results Driver:** Dave DeWitt, Deputy Administrative Officer  
**Measurement Driver:** Mary Jo Pointer, Motor Carrier Manager

**Purpose of the Measure:**
This measure tracks MoDOT’s progress toward the goal of expeditiously meeting the needs of the motor carrier industry and facilitating freight movement. MoDOT’s Motor Carrier Services team uses the data to identify opportunities to improve customer satisfaction.

**Measurement and Data Collection:**
MCS personnel, working with the Missouri Transportation Institute, developed a survey to collect customer satisfaction data. A single survey addressed all four MCS program divisions, International Registration Plan/International Fuel Tax Agreement, Over-dimension/Over-weight Permitting, Safety and Compliance and Operating Authority. Survey respondents identified the service(s) they use when doing business with MCS, then indicated their level of satisfaction with 12 customer service factors such as “timely response”, “friendly”, “respectful”, and “outcome”. They also gave an “overall satisfaction” score. Customers used a four-point scale ranging from 4=Very Satisfied to 1=Very Dissatisfied.

**Improvement Status:**
Overall MCS customer satisfaction continues to be high with 84.7 percent of respondents reporting that they were “satisfied” or “very satisfied” with MCS customer service. There is slight decrease in the number of responses from the second quarter.

Strong areas of customer service include “helpfulness”, “concurrence with policy”, “returning phone calls/emails”, “outcomes” and “how issues are resolved”. Satisfaction levels were lowest with “timely response”, mainly because of extreme wait times experienced by OD/OW customers.

To improve timely response issues, MCS implemented numerous improvements including:
- A staggered registration schedule has been implement and 53% of the carriers chose this option.
- Dedicated staff to contact OD/OW customers before MCS working hours to issue permits and designated a central staff contact for incoming calls from district offices.
- Added staff to the OD/OW team to manage the extremely high call volume.
- Phasing in the transaction of business through the Internet-based system.
**Efficient Movement of Goods**

*Average wait time spent by customers obtaining over-dimension / over-weight permits*

**Result Driver:** Dave DeWitt, Deputy Administrative Officer  
**Measurement Driver:** Mary Jo Pointer, Motor Carrier Manager

**Purpose of the Measure:**  
This measure tracks MoDOT Motor Carrier Services’ success in minimizing the time it takes motor carriers to obtain permits that allow them to haul loads that are taller, wider, longer or heavier than those regularly permissible on Missouri highways.

**Measurement and Data Collection:**  
Using the WebView database to gather call center data, MCS calculates the average customer wait time on the phone (called “in queue”) plus the average length of time speaking to a MCS agent to obtain a permit. In the future, MCS will also collect wait time data from both telephone requests and the Internet-based permit ordering system. Benchmark data is scarce as other states do not currently track wait time data.

**Improvement Status:**  
During the third quarter of 2005, MCS received a total of 13,412 calls from OD/OW customers and 10 agents issued 39,274 permits. The average time the customer waited in queue was 3 minutes, 33 seconds. The average time the caller spent with the agent to complete the transaction was 7 minutes, 52 seconds, resulting in an average of 11 minutes, 25 seconds to obtain an OD/OW permit.

To decrease the average amount of time it takes a customer to obtain an OD/OW permit, MCS has implemented the following:

- Dedicated staff to contact OD/OW customers before MCS working hours to issue permits and designated a central staff contact for incoming calls from district offices.
- Added staff to the OD/OW team to manage the extremely high call volume.
- Phasing in the transaction of business through a new Internet-based system.
- New rules approved by the Commission that will allow the carriers to obtain permits for new different types of load configurations.
- MCS is open for business on six 2005 state holidays.

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**Average wait time spent by customers obtaining over dimension/over weight permits**

<table>
<thead>
<tr>
<th>Number (in minutes &amp; seconds)</th>
<th>3rd Qtr. 2005</th>
<th>Calendar Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minutes with Agent</td>
<td>7.52</td>
<td>11 min. 25 sec.</td>
</tr>
<tr>
<td>Minutes in Queue</td>
<td>3.33</td>
<td>3rd Qtr. 2005</td>
</tr>
</tbody>
</table>

**Desired Trend:**

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MoDOT has an active role in all modes of transportation, including rail, air, water, and transit. Transportation is more than highways and bridges. Every day millions of tons of goods move through the state by rail. Thousands of passengers use Missouri’s airport facilities. And hundreds of barges navigate state waterways. All of these modes combine to keep Missouri’s economy robust and vital.
Number of airline passengers

Result Driver: Brian Weiler, Multimodal Operations Director
Measurement Driver: Joe Pestka, Administrator of Aviation

Purpose of the Measure:
This measure tracks the number of passengers boarding airplanes at Missouri’s commercial airports. It helps determine the viability of Missouri’s commercial airline industry. This number is also used by the Federal Aviation Administration to help determine airports’ capital improvement funding levels.

Measurement and Data Collection:
The data is collected annually from the Federal Aviation Administration (FAA). Comparison data has been collected from the same source for the states of Arizona, Tennessee and Washington. These three states were selected based on similar populations in 2004. Tennessee and Washington have slightly higher state population totals with Arizona and Missouri being very close with only an approximate 11,000 difference. The annual passenger boardings data provided by the FAA is normally published in October for the preceding year. Airline passengers are considered passengers boarding airplanes.

Improvement Status:
Data is passengers boarding airplanes and is tracked on an annual basis. The significant decrease in flights by American Airlines at St. Louis Lambert International Airport (approximate reduction of 200 flights per day in November 2003) and the effects of 9/11, in part, have contributed to the decrease in airline passengers over the last four years. It appears, based on the sample data collected below, that the sample states tracked, and within Missouri, airline passenger boardings are beginning to recover from the effects of 9/11. The reduction in flights by American at St. Louis Lambert International Airport continues to negatively impact growth in passenger boardings. Also, increases in airline operational costs and airline bankruptcy filings pose challenges to communities seeking enhanced air carrier service. MoDOT is participating with the Federal Aviation Administration, Illinois Department of Transportation and the East-West Gateway Council of Governments in a St. Louis Area System Plan study. The study will assess the region’s aviation assets and develop a regional approach for the future development of those assets. MoDOT is also participating with the St. Louis International Airport and Kansas City International Airport in researching state tax issues that may be an impediment to increased air carrier services or new air carrier markets.
Number of rail passengers

Results Driver: Brian Weiler, Multimodal Operations Director
Measurement Driver: Rod Massman, Administrator of Railroads

Purpose of the Measure:
This measure tracks the number of people using the Amtrak train service in Missouri. This includes all those taking a train trip in Missouri at any point within the state. This includes the state supported passenger rail trains between Kansas City and St. Louis and the national trains that run through the state, and the St. Louis to Chicago trains, which are supported in part by the state of Illinois. For comparison purposes, the state of Washington’s data is shown based on similar size, population and the fact that they have both national and state supported trains and their Cascades train service is a model for the nation in that the state invests millions of dollars in both infrastructure and operations every year.

Measurement and Data Collection:
Amtrak provides the number of passengers per train in Missouri on a monthly basis. These numbers are then tabulated by the Multimodal Operations Division, Railroad Section.

Improvement Status: FY05 is the first year since 2001 when total ridership numbers on the St. Louis to Kansas City route went up. The first two months of FY 06 are showing an increase as well. The rising price of gas and increased congestion may explain the increase from an external viewpoint. An internal viewpoint within MoDOT shows stepped-up publicity efforts by MoDOT including new roadside signs, a wide-ranging distribution of train schedules, a focus on college students, and a variety of other publicity efforts never attempted before and further cooperation and collaboration between Amtrak, MoDOT and Union Pacific Railroad to improve the service is also helping in increasing on-time performance, thereby raising passenger numbers.

![Number of Passengers Chart](chart.png)
Number of transit passengers

Result Driver:  Brian Weiler, Multimodal Operations Director  
Measurement Driver:  Steve Billings, Administrator of Transit

Purpose of the Measure:  
This measure gauges the use of public transit mobility services in Missouri. It also provides a historical perspective and trend of public transit service use in Missouri.

Measurement and Data Collection:  
The total number of transit passengers is measured by the annual total of one-way unlinked transit trips taken by passengers on public transit vehicles. Data is obtained from urban and rural providers of general public transit services. The 2004 measure is benchmarked to Wisconsin, which has a comparable total statewide population.

Improvement Status:  
Metro (urban) transit service cutbacks in 2002 – 2003, driven by declining local transit sales tax revenues and reduced state general fund transit appropriations, resulted in lower transit utilization statewide. Metro ridership in 2005 declined by 4.3 million trips compared to 2004 due to fewer transit trips taken by riders in St. Louis and St. Joseph. Non-Metro (rural) ridership has increased by 13% over the five-year reporting period from 2.9 million trips in 2001 to 3.3 million trips in 2005. Missouri compared favorably to Wisconsin in 2004. For state budgets in 2005 and 2006, MoDOT proposed a $10 million general revenue transit funding increase. In 2005, MoDOT worked with transit providers to develop and implement the Missouri Rural Transit Marketing Campaign that received national recognition.

Annual Transit Passenger Trips

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Metro (in Millions)</th>
<th>Non-Metro (in Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>68.4</td>
<td>2.9</td>
</tr>
<tr>
<td>2002</td>
<td>56.3</td>
<td>3.1</td>
</tr>
<tr>
<td>2003</td>
<td>55.1</td>
<td>3.1</td>
</tr>
<tr>
<td>2004</td>
<td>61.6</td>
<td>3.1</td>
</tr>
<tr>
<td>2004 WI</td>
<td>60.0</td>
<td>2.4</td>
</tr>
<tr>
<td>2005</td>
<td>55.7</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Desired Trend:
Easily Accessible Modal Choices

Number of passengers and vehicles transported by ferryboat

Result Driver: Brian Weiler, Multimodal Operations Director
Measurement Driver: Sherrie Martin, Waterways Program Manager

Purpose of the Measure:
This measure tracks the statistics regarding use of ferryboat services.

Measurement and Data Collection:
Missouri’s two ferry services submit a monthly report that includes this information and the cost for providing the service and for any service disruption.

Improvement Status:
For the fiscal year ended June 30, 2005 statistics for both services have improved slightly even though both have experienced several days of lost time due to high water and boat maintenance. The Mississippi County ferry service operated 6% fewer days but increased vehicles by 7% and passengers by 7%. The New Bourbon ferry operated 1% fewer days but increased vehicles by 7% and passengers by 1%.

During the first quarter of fiscal year 2006 traffic on the Mississippi County ferry has decreased since last year by 1.8%. The port attributes this decrease in a significant drop in tourist traffic. Bridge repairs being performed by IDOT on both the Interstate 57 bridge and the US 60 bridge increased traffic to the ferry. The I57 bridge repairs are being done with lane restrictions and should be complete by December 21. The US 60 bridge is closed during repairs and is scheduled to reopen on November 4.

The New Bourbon Regional ferry service has experienced a 12% decrease in vehicles and a 36% decrease in passengers from fiscal year 2005. This ferry serves the Ste. Genevieve area where tourism is a major part of the economy. Tourism has been affected by high fuel prices and extreme heat during peak tourist season. MoDOT and the ports are reviewing signage and brochures at both ferry services.

Number of Passengers and Vehicles
Transported by Ferryboat
Mississippi County

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Vehicles (in Thousands)</th>
<th>Passengers (in Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>'00</td>
<td>10.9</td>
<td>12.2</td>
</tr>
<tr>
<td>'01</td>
<td>11.8</td>
<td>13.7</td>
</tr>
<tr>
<td>'02</td>
<td>13.7</td>
<td>31.3</td>
</tr>
<tr>
<td>'03</td>
<td>16.4</td>
<td>37.3</td>
</tr>
<tr>
<td>'04</td>
<td>17.7</td>
<td>39.9</td>
</tr>
</tbody>
</table>

Desired Trend:
### Number of Passengers and Vehicles Transported by Ferryboat

**New Bourbon Regional**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Number (in Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>'00</td>
<td>17.8</td>
</tr>
<tr>
<td>'01</td>
<td>10.3</td>
</tr>
<tr>
<td>'02</td>
<td>17.2</td>
</tr>
<tr>
<td>'03</td>
<td>15.8</td>
</tr>
<tr>
<td>'04</td>
<td>52.2</td>
</tr>
<tr>
<td>'05</td>
<td>58.2</td>
</tr>
</tbody>
</table>

#### Desired Trend:

- **Vehicles**
- **Passengers**
Easily Accessible Modal Choices

**Number of days the river is navigable**

**Result Driver:** Brian Weiler, Multimodal Operations Director  
**Measurement Driver:** Sherrie Martin, Waterways Program Manager

**Purpose of the Measure:**  
This measure provides historical data regarding the use of the inland waterways navigation system.

**Measurement and Data Collection:**  
The U.S. Army Corps of Engineers publishes an Annual Operating Plan for the Missouri River and bases the end of navigation season on pool storage levels as of July 1 each year.

**Improvement Status:**  
The 2005 navigation season opened April 1. Minimum navigation releases were maintained through the season. Based on July 1 storage level and drought conditions, the navigation season ended October 14, 2005, 48 days early. Full navigation season would end December 1. Senators Kit Bond and Jim Talent sent the President of the United States a letter requesting the navigation season be extended due to the low level of the Mississippi River. At St. Louis the Missouri River provides at least half the water to the Mississippi. Decreasing the Missouri flow into an already low Mississippi increases the chance of a river closure during peak harvest.

The draft 2005-2006 Annual Operating Plan is scheduled for release in November for public review and comment. The Missouri Department of Natural Resources has been designated as the State’s lead agency on this issue.

Historically there has been a cycle of drought and flood conditions in the Missouri River system. While we are experiencing drought conditions MoDOT is assisting the public ports by focusing on landside access issues. This will allow the ports to shift to alternative modes and remain financially stable until drought conditions ease. Port Capital Improvement funds have been used to address storm water runoff problems in the rail yard area of the Kansas City Port in FY05. Access and service road improvements at St. Joseph Regional Port in FY06 will include a city street realignment, an intersection improvement and service road paving on port property.
Easily Accessible Modal Choices

**Number of business capable airports**

**Result Driver:** Brian Weiler, Multimodal Operations Director  
**Measurement Driver:** Joe Pestka, Administrator of Aviation

**Purpose of the Measure:**  
This measure tracks the number of airports capable of handling business aircraft. Local communities and economic development agencies can use airports to assist in increasing a community’s economic viability for business retention and development.

**Measurement and Data Collection:**  
The graph shows the number of business capable airports. A business-capable airport is defined as accommodating business- or corporate-type aircraft with a runway length of 5,000 feet or more. Since 2000, four additional airports have either extended their runway or constructed a new runway of 5,000 feet or greater. This increase allows additional communities and an increased population greater exposure to business-capable airports. Data is collected by monitoring airports’ development. The data is collected on an annual basis.

**Improvement Status:**  
The State Airport System Plan Update and the annual development of the STIP identify airports that meet the demand criteria and would support the development of a 5,000-foot runway. The State Aviation Trust Fund which is used for maintenance and capital improvement projects at airports increased from approximately $3 million in calendar year 2004 to $6 million in calendar year 2005. This increase was from an airport survey and information campaign conducted by MoDOT and a review of the status of the trust fund completed by the Department of Revenue.

![Number of Business Capable Airports](chart.png)

**Desired Trend:**

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Number of Airports</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>26</td>
</tr>
<tr>
<td>2002</td>
<td>26</td>
</tr>
<tr>
<td>2003</td>
<td>27</td>
</tr>
<tr>
<td>2004</td>
<td>29</td>
</tr>
<tr>
<td>YTD 2005</td>
<td>29</td>
</tr>
</tbody>
</table>
Number of daily scheduled airline flights

Result Driver: Brian Weiler, Multimodal Operations Director
Measurement Driver: Joe Pestka, Administrator of Aviation

Purpose of the Measure:
This measure tracks the number of airline flights. This data assists in determining options available to the traveling public. It provides an indication of the airline industry’s economic stability in Missouri.

Measurement and Data Collection:
A scheduled airline flight is a takeoff by a scheduled commercial air carrier. Data is being collected from seven airports in the state that presently accommodate scheduled airline flights. These airports are: St. Louis Lambert International, Kansas City International, Springfield-Branson, Joplin, Columbia, Waynesville and Cape Girardeau.

Improvement Status:
The flights are measured on a quarterly basis with a daily snapshot collected for that quarter. The number of flights have stayed relatively consistent for the first three (3) quarters with slight growth from Quarter 1 through Quarter 3. MoDOT is participating with the Federal Aviation Administration, Illinois Department of Transportation and the East-West Gateway Council of Governments in a St. Louis Area System Plan study. The study will assess the region’s aviation assets and develop a regional approach for the future development of those assets. MoDOT is also participating with the St. Louis International Airport and Kansas City International Airport in researching state tax issues that may be an impediment to increased air carrier services or new air carrier markets.
Average days per week rural transit service is available

Result Driver: Brian Weiler, Multimodal Operations Director
Measurement Driver: Steve Billings, Administrator of Transit

Purpose of the Measure:
This measure identifies the average existing public transit service in rural Missouri by indicating the availability of rural mobility services for employment, medical appointments and necessary shopping.

Measurement and Data Collection:
Reviewing published transit service schedules in each rural Missouri county and averaging those daily frequencies within a week’s schedule for available countywide transit service calculates the statewide average days per week that rural transit service is available. The second chart depicts this average by MoDOT District. Rural transit agencies operate on an annual budget and customarily make transit service changes with the start of a new budget. This measure will be updated annually with the next report available in the January 2006 Tracker.

Improvement Status:
Rural transit service at a statewide average of two days per week is not sufficient for its riders to support full time employment. Rising fuel costs without increased revenues will negatively impact rural transit service schedules in 2006. The outlook for 2007 suggests a rebound in rural transit service based on a 67% increase of federal rural transit funds authorized to Missouri in SAFETEA-LU. When viewed by MoDOT District, the locally supported single-county rural transit systems in Southeast Missouri (District 10) tend to have higher levels of service than the multi-county systems such as OATS and SMTS. MoDOT worked with local transit providers to produce a speaker’s video to help transit managers make a persuasive case for more local funding in order to enhance rural transit service.
Number of active transit vehicles

Result Driver: Brian Weiler, Multimodal Operations Director
Measurement Driver: Steve Billings, Administrator of Transit

Purpose of the Measure:
This measure tracks the number of active transit vehicles in passenger service. This data indicates the collective potential capacity for Missouri’s transit agencies to deliver mobility services.

Measurement and Data Collection:
The data represents the number of transit vehicles dedicated to urban and rural public transit services and those federally funded vehicles used by specialized transit providers. Data previously reported in earlier TRACKER editions was for urban transit vehicles only. The 2005 measure is benchmarked to Wisconsin which has a comparable total statewide population.

Improvement Status:
Reduced local transit sales tax revenues in St. Louis and Kansas City in 2002 along with reduced state transit funding in 2003 (July 2002) led to reductions of transit services and the number of active transit vehicles. Transit service and fleet size have slowly rebounded since that time. Missouri has more total combined public transit and specialized transit vehicles in service than Wisconsin. Wisconsin has more urban transit vehicles in service than does Missouri, however, Wisconsin has 13 urbanized metro areas each over 50,000 population compared to Missouri’s seven (7) urbanized metro areas. MoDOT serves as the lead procurement agency for rural and specialized transit vehicles providing a menu of over 125 combined floor plans, wheel chair lifts and engines from which transit agencies can select. This consolidated procurement lowers costs through volume pricing that, in turn, helps purchase more vehicles with available funding.

Number of Active Transit Vehicles

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Total Specialized and Public Transit Vehicles</th>
<th>Urban Transit Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>2894</td>
<td>1200</td>
</tr>
<tr>
<td>2002</td>
<td>2754</td>
<td>1060</td>
</tr>
<tr>
<td>2003</td>
<td>2757</td>
<td>1063</td>
</tr>
<tr>
<td>2004</td>
<td>2794</td>
<td>1100</td>
</tr>
<tr>
<td>2005</td>
<td>2845</td>
<td>1156</td>
</tr>
<tr>
<td>2005 Wisconsin</td>
<td>2273</td>
<td>1428</td>
</tr>
</tbody>
</table>
Number of inter-city bus stops

Result Driver: Brian Weiler, Multimodal Operations Director
Measurement Driver: Steve Billings, Administrator of Transit

Purpose of the Measure:
This measure tracks the number of inter-city bus stops. Inter-city bus stops represent access points to inter-city bus services provided by Greyhound, Jefferson Lines and Trailways. More stops among Missouri’s 114 counties means greater access. Fewer stops create a barrier by necessitating greater traveling distances in order to board an inter-city bus.

Measurement and Data Collection:
Data on the number and location of inter-city bus stops is obtained annually from the national and regional inter-city bus carriers. The year-to-date 2005 measure is benchmarked to Wisconsin, which has a comparable total statewide population.

Improvement Status:
The number of Missouri’s intercity bus stops continues to decline with the changes in Greyhound service. Greyhound has indicated that additional stops along the US 67 corridor between St. Louis and Little Rock may be eliminated this year. MoDOT’s Organizational Results Division is currently counting and surveying coach riders to better determine the needs for intercity bus service in Missouri.

Number of Inter-city Bus Stops

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>50</td>
</tr>
<tr>
<td>2004</td>
<td>47</td>
</tr>
<tr>
<td>YTD 2005</td>
<td>39</td>
</tr>
<tr>
<td>Wisconsin 2005</td>
<td>52</td>
</tr>
</tbody>
</table>

Desired Trend:
Easily Accessible Modal Choices

Percent of customers satisfied with transportation options

Result Driver: Brian Weiler, Multimodal Operations Director
Measurement Driver: Ernie Perry, Organization Performance Administrator.

Purpose of the Measure:
This measure provides information about the public’s perception of MoDOT’s performance in providing transportation options.

Measurement and Data Collection:
Data was collected through a statewide telephone survey conducted for MoDOT’s long-range planning initiative called Missouri Advance Planning. The survey effort included interviews with 3,100 Missourians with an overall margin of error of +/- 2.9 percent.

Improvement Status:
For the 2005 survey, over 67 percent of the population sampled agrees they are at least somewhat satisfied with their transportation options. Conversely, 28 percent of the sample is not satisfied with the transportation options available to them. When compared to the 2000 data provided from the statewide customer survey, 52 percent of the sample is satisfied with transportation options and 47 percent respond that they are dissatisfied with the options available to those who do not or cannot drive. This is a positive start and a demonstrated improvement from 2000. MoDOT expects to see increases in the public’s satisfaction with transportation options as the Multimodal Operations Division continues to work towards improving service and awareness of transportation options.

Percent of Customers Satisfied with Transportation Options

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Strongly Agree</th>
<th>Somewhat Agree</th>
<th>Somewhat Disagree</th>
<th>Strongly Disagree</th>
<th>Not Sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>18</td>
<td>34</td>
<td>27</td>
<td>20</td>
<td>13</td>
</tr>
<tr>
<td>2005</td>
<td>13</td>
<td>54</td>
<td>20</td>
<td>8</td>
<td>4</td>
</tr>
</tbody>
</table>

Desired Trend: N/A

October 2005 TRACKER – 12k
Customer Involvement in Transportation Decision-Making

Tangible Result Driver – Dave Nichols, Director of Program Delivery

MoDOT seeks out and welcomes any idea that increases its options, because the department doesn’t have all the answers. The department creates and preserves a transportation decision-making process that is collaborative and transparent, involving its customers in the determination of needs right through to the development, design and delivery of projects.
Customer Involvement in Transportation Decision-Making

Number of customers who attend transportation-related meetings

Result Driver: Dave Nichols, Director of Program Delivery  
Measurement Driver: Bob Brendel, Outreach Coordinator

Purpose of the Measure:  
This measure gauges MoDOT’s public involvement success. MoDOT does not make decisions regarding transportation improvement projects in a vacuum – they are made in collaboration with the general public, communities, elected officials, stakeholders, etc. As a part of the regular updates of Missouri Advance Planning initiative, and during the planning and design phase of projects, MoDOT conducts public meetings and hearings to involve the public in the decision-making process.

Measurement and Data Collection:  
Attendance is determined by analyzing sign-in sheets utilized at public meetings.

Improvement Status:  
During a time of year – the summer vacation season – when MoDOT would typically not hold a lot of project-related meetings, attendance still held steady as a result of Amendment 3-related projects that accounted for 44 percent of the total shown below (1193 of 2686). Fourteen meetings were held to seek public input on three major corridor projects that were approved by the Commission in May– Routes 36, 60 and 67. More than 800 persons attended those meetings.

At an August community relations “advance,” it was agreed that performance associated with this measure will be improved with development of a MoDOT public involvement guide (including best-practice examples), formulation of comprehensive public involvement plans at the project level, Community Relations involvement early in the project development process and proactive communications with the public and stakeholder groups.

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Number of Customers</th>
<th>Calendar Year 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Quarter</td>
<td>1392</td>
<td>2nd Quarter</td>
</tr>
<tr>
<td></td>
<td>2996</td>
<td>3rd Quarter</td>
</tr>
<tr>
<td></td>
<td>2686</td>
<td></td>
</tr>
</tbody>
</table>

Desired Trend:
Customer Involvement in Transportation Decision-Making

Percent of customers who are satisfied with feedback they receive from MoDOT after offering comments

Result Driver: Dave Nichols, Director of Program Delivery
Measurement Driver: Bob Brendel, Outreach Coordinator

Purpose of the Measure:
This measure tracks responses made by MoDOT to its customers. MoDOT routinely asks people who attend public meetings/hearings to submit comments that will be examined by the project team and that will become part of the project’s official record. It is important that people who avail themselves of this opportunity know that their comments are taken seriously.

Measurement and Data Collection:
MoDOT Design, Community Relations and Organizational Results worked with the Missouri Transportation Institute to develop a survey instrument for persons who attend project-specific meetings and hearings. The initial survey was sent to more than 4,500 persons who had attended meetings in the last five years.

Improvement Status:
Survey results indicated two-thirds of those who submitted comments were satisfied with how MoDOT handled their comments. Within the last quarter the public survey was redesigned based upon MTI’s experience with the previous surveys to enable additional insights into the perspective of attendees at outreach meetings. Since the initial survey, additional contact lists have been accumulated for recent projects and those persons are currently being surveyed. New data will be available for the next Tracker report.

While the current data is a positive reflection of how well customer comments and questions from project-specific meetings and hearings are addressed, staff has addressed ways to improve performance. At an August community relations “advance,” it was agreed that performance associated with this measure is being improved with:

- Development of a MoDOT public involvement guide (including best-practice examples).
- Formulation of comprehensive public involvement plans at the project level.
- Community Relations involvement early in the project development process.
- Proactive communications with the public and stakeholder groups.

Desired Trend:

Participants in Projects from CY1999-CY2005

<table>
<thead>
<tr>
<th>Percent</th>
<th>Very Satisfied</th>
<th>Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>-</td>
<td>55.2%</td>
</tr>
<tr>
<td>80%</td>
<td>66.7%</td>
<td></td>
</tr>
<tr>
<td>60%</td>
<td>11.5%</td>
<td></td>
</tr>
<tr>
<td>40%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

October 2005 TRACKER – Page 13b
Customer Involvement in Transportation Decision-Making

**Percent of customers who feel MoDOT includes them in transportation decision-making**

**Result Driver:** Dave Nichols, Director of Program Delivery  
**Measurement Driver:** Machelle Watkins, Transportation Planning Director

**Purpose of the Measure:**  
This data will assist in identifying the effectiveness of MoDOT’s project planning outreach efforts.

**Measurement and Data Collection:**  
Data was collected through a statewide telephone survey conducted for MoDOT’s long-range planning initiative called *Missouri Advance Planning*, or *MAP*. The survey effort included interviews with 3,100 Missourians with an overall margin of error of +/- 2.9 percent.

**Improvement Status:**  
Forty-six percent of the sample feels MoDOT takes into consideration their concerns and needs when developing transportation decisions. However, 44 percent feels MoDOT does not take their concerns and needs into consideration when making transportation decisions. While this is a positive starting point, MoDOT anticipates that community outreach and communication efforts will result in greater public support in transportation decision-making.

Part of Transportation Planning’s *MAP* effort is to increase and improve the public’s involvement in transportation decision-making. To accomplish this, six groups have been created, called Regional Working Groups (RWG). These groups are made up of Missouri citizens that include economic development leaders, educators, farmers, bankers, community leaders and others. These groups met for the first time Sept. 14, 2005, and have a second round of meetings scheduled between Dec. 6 and Dec. 8. RWG members are helping MoDOT analyze transportation policies and strategies in an effort to plan for Missouri’s transportation future. This form of public outreach provides customer involvement in transportation decision-making.

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![Percent of Customer Satisfaction with the Decision-Making Process](chart.png)

- **Somewhat Agree:** 46%
- **Strongly Agree:** 10%
- **Total:** 100%

**2005 Calendar Year**

**Desired Trend:**

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October 2005 TRACKER – Page 13c
Customer Involvement in Transportation Decision-Making

**Percent of positive feedback responses received from planning partners regarding involvement in transportation decision-making**

**Result Driver:** Dave Nichols, Director of Program Delivery  
**Measurement Driver:** Bill Stone, Technical Support Engineer

**Purpose of the Measure:**  
This measures MoDOT’s efforts with planning partners (members of metropolitan planning organizations, regional planning organizations and others) in transportation-related decision-making. The percent of positive feedback through the surveys will display planning partners’ involvement.

**Measurement and Data Collection:**  
MoDOT Transportation Planning has worked with Missouri Transportation Institute to develop a survey for use at MoDOT administered meetings that measure planning partners’ involvement in the transportation decision-making process.

Survey data for this quarter is available from individuals participating in MoDOT outreach efforts during the Planning Framework Quality Assurance/Quality Control (QA/QC) workshop Sept. 13, 2005, and the Missouri Advance Planning workshop Sept. 14. Survey answers were based on the following scale: strongly disagree, disagree, agree and strongly agree.

**Improvement Status:**  
In the first quarter of Fiscal Year 2006, 44 surveys were completed, and 37 surveys indicated positive experiences and involvement in the outreach efforts. MoDOT worked with planning partners at the QA/QC workshop to identify top improvements needed in the planning process. MoDOT staff has developed actions to make these improvements and has requested involvement of external partners to assist in these actions. The following are the actions that were developed from the identified short-term improvements of the QA/QC workshop:

- Establish policy and procedure for cost participation, cost revisions and federal earmarks  
- Negotiate and publish a planning framework schedule/timeline  
- Convert current prioritization tool from a spreadsheet system to a database  
- Update definitions in the Practitioner’s Guide  
- Clarify and communicate planning framework process and terms into easily understood format  
- Develop consistent use of environmental factor and evaluation of one-lane bridges

---

**Positive Feedback Received from Planning Partners Involved in Transportation Decision-Making**  
*(Note: The percent for each quarter reflects agree and strongly agree answers from the survey.)*

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Percent</th>
<th>1st Qtr. FY 2006</th>
<th>4th Qtr. FY 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>91%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>95%</td>
<td>84%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>90%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>85%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Desired Trend:**
Convenient, Clean and Safe Roadside Accommodations

Tangible Result Driver – Don Hillis, Director of System Management

Many Missouri motorists depend on roadside parks and rest areas during their travels for the opportunity to rest and refresh themselves in a safe environment. Providing safe, clean and convenient accommodations allows motorists to travel more safely and comfortably.
Convenient, Clean and Safe Roadside Accommodations

Percent of customers satisfied with rest areas’ convenience, cleanliness and safety

**Result Driver:** Don Hillis, Director of System Management  
**Measurement Driver:** Jim Carney, State Maintenance Engineer

**Purpose of the Measure:**  
This measure helps MoDOT understand customer expectations concerning the convenience, cleanliness and safety of its rest areas. This information will provide insight to rest area location, lighting, and security as well as the overall cleanliness expectations.

**Measurement and Data Collection:**  
MoDOT measures this attribute with both an internal and external data collection. MoDOT receives information in the form of a survey card offered at all rest areas in the system. The survey cards ask a variety of questions with three of the questions specifically asking if the rest area is convenient, clean and safe. This provides direct input from our customers and is considered our external source.

To ensure the customer satisfaction, all rest areas are inspected using a list of attributes, which were developed and based on an industry-wide literature review. The attribute list includes characteristics rest-area users identified as what they consider convenient, clean and safe. MoDOT maintenance employees inspect all rest areas at least two times per month using this list and are considered our internal source.

**Improvement Status:**  
The rest area survey cards were made available in May 2005 with 300 delivered to each location during the annual inspection. Between May 1 and June 30 a total of 1,459 cards were returned providing partial data for the fourth quarter of fiscal year 2005. For the first quarter of the fiscal year 2006 (July – September) 2,404 cards were returned after an additional 600 cards were distributed to the rest areas. Based on the cards returned from 46 different states, Canada, Ireland and the United Kingdom, MoDOT is meeting the needs of its customers.

The internal rest area inspections started during May 2005. MoDOT is doing extremely well at meeting the customers’ expectations for convenient, clean and safe facilities, largely in part to these inspections conducted a minimum of two times per month. The score average for all rest areas in the fourth quarter of the fiscal year 2005 (May – June) was 92.52 percent and for the first quarter of the fiscal year 2006 (July – September) MoDOT inspections scored 92.78 percent, a slight increase over the previous quarter. Based on the number of visitors listed in Tracker 14c, it is expected the first quarter of the fiscal year will be the busiest at Missouri rest areas. MoDOT takes care of maintenance concerns in a timely manner to keep the rest areas open for use.
Percent of Customers Satisfied with Rest Areas' Convenience, Cleanliness and Safety

Fiscal Year

Fiscal Year

Internal Inspection Ratings for Convenience, Cleanliness and Safety of Rest Areas

Fiscal Year

Desired Trend:

Desired Trend:
Convenient, Clean and Safe Roadside Accommodations

Percent of commuter lots that meet customers’ convenience, cleanliness and safety expectations

Result Driver:  Don Hillis, Director of System Management
Measurement Driver:  Jim Carney, State Maintenance Engineer

Purpose of the Measure:
This measure will help the department understand the MoDOT customer expectations concerning the convenience, cleanliness and safety of its commuter lots. This information will provide insight to location of commuter lots, lighting and security at commuter lots as well as their overall cleanliness.

Measurement and Data Collection:
Staff is in the process of determining the best data collection method. It is anticipated that data collection will begin fall 2005

Improvement Status:
Measure is Under Development
Number of users of rest areas

Result Driver: Don Hillis, Director of System Management
Measurement Driver: Stacy Armstrong, Roadside Management Supervisor

Purpose of the Measure:
This measure tracks the number of vehicles entering rest areas. This information helps MoDOT better understand the peak days and times visitors use rest areas, impacting staffing decisions.

Measurement and Data Collection:
Temporary mechanical traffic counters are placed at four rest areas for seven consecutive days per quarter. All of the four sample locations have counters placed at the entrance of each rest area to count users traveling in both directions. All four locations have two counters for a total of eight counts. These sophisticated counters are able to identify vehicles as either cars or trucks. This measurement started in mid-April, 2005, and the first four sample areas are Dearborn I-29, Wright City I-70, Conway I-44 and Bloomsdale I-55. Sampling for the first quarter of the fiscal year 2006 included the July 4th holiday week.

Improvement Status:
A total of 59,447 vehicles visited the four selected rest areas during the seven-day period of the first quarter of the fiscal year 2006 compared to 45,213 vehicles during the seven-day period of April 2005. An increase was expected for three reasons. First, in the previous quarter, a low count for the westbound Conway rest area on Monday was recorded. Secondly, the first quarter of the fiscal year 2006 occurs during the summer vacation season. And finally, the actual count for the first quarter of the fiscal year occurred during the July 4th holiday. Continued tracking of these locations will help determine if these assumptions are correct. Overall, Friday continues to be the busiest day followed by a major increase on Saturday during this period. Monday remained the day with the least activity, even though it was the actual July 4th holiday.

Number of Users of Rest Areas by Location

<table>
<thead>
<tr>
<th>Location</th>
<th>4th Quarter 2005</th>
<th>1st Quarter 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bloomsdale</td>
<td>12,329</td>
<td>10,009</td>
</tr>
<tr>
<td>Conway</td>
<td>13,624</td>
<td>11,933</td>
</tr>
<tr>
<td>Wright City</td>
<td>18,516</td>
<td>16,184</td>
</tr>
<tr>
<td>Dearborn</td>
<td>9,647</td>
<td>12,418</td>
</tr>
</tbody>
</table>

Desired Trend: N/A
Number of Users of Rest Areas by Day
Bloomsdale, Conway, Wright City and Dearborn

Desired Trend:
N/A
Number of users of commuter parking lots

Result Driver: Don Hillis, Director of System Management  
Measurement Driver: Tim Jackson, Technical Support Engineer

Purpose of the Measure:
This measure tracks the number of commuter parking lot users. It will help the department determine whether the commuter parking lots provided by the department are adequate at their current locations and whether they are fulfilling the traveling public’s needs.

Measurement and Data Collection:
District maintenance personnel count the number of vehicles parked in each commuter lot on a quarterly basis. Data is collected from every district to create a statewide report. Data collection started in May 2005.

Improvement Status:
There was an increase in the number of vehicles parked in the commuter lots from the previous quarter. This increase came after a news release was sent out to statewide media encouraging motorists to use these lots. A list of all lots was also included on MoDOT’s web site prior to the news release. The news release let motorists know these lots are available and encouraged their use to save people money with increased fuel costs. MoDOT will continue to encourage motorist to use these lots through new releases.

Number of Users of Commuter Parking Lots

<table>
<thead>
<tr>
<th>Fiscal Year/Quarter</th>
<th>Number of Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY05/Q4</td>
<td>2265</td>
</tr>
<tr>
<td>FY06/Q1</td>
<td>2376</td>
</tr>
</tbody>
</table>

- **Desired Trend:**
- **Available Spaces**
- **# of Parked Vehicles**
Number of truck customers that utilize rest areas

Result Driver: Don Hillis, Director of System Management
Measurement Driver: Tim Jackson, Technical Support Engineer

Purpose of the Measure:
This measure tracks the number of trucks at rest areas. The numbers of trucks using the rest areas and the nearby ramps could be used to help determine how many spaces are needed to provide convenient parking facilities at each rest area.

Measurement and Data Collection:
On a monthly basis, district maintenance personnel will count the number of trucks parked at rest areas and on nearby ramps within 15 miles of the rest areas. The count is done between 4 and 6 a.m., which is typically the busiest time. Data is collected from every district to create a statewide report. Data collection began in May 2005.

Improvement Status:
The May counts were taken between 6 and 9 p.m. Starting in June, the counts were to be taken between 4 and 6 a.m. The time change of the counts was based on recommendations from district field personnel that the early morning hours had much heavier usage of the rest area truck parking and on nearby ramps. The June counts appear to be a combination of evening and morning counts. The July, August and September numbers confirm those observations. MoDOT is working with our motor carrier partners to find innovative solutions to provide more truck parking spaces.

Number of Truck Customers That Utilize Rest Areas

<table>
<thead>
<tr>
<th>Month - Year</th>
<th>Number of Trucks</th>
<th>Number of Trucks (Rest Area)</th>
<th>Number of Trucks (Ramps)</th>
<th>Total Available Truck Parking Spaces (Rest Area)</th>
</tr>
</thead>
<tbody>
<tr>
<td>May '05 (6-9 p.m.)</td>
<td>294</td>
<td>76</td>
<td>228</td>
<td>301</td>
</tr>
<tr>
<td>Jun '05 (4-6 a.m.)</td>
<td>285</td>
<td>587</td>
<td>228</td>
<td>515</td>
</tr>
<tr>
<td>Jul '05</td>
<td>281</td>
<td>741</td>
<td>228</td>
<td>1069</td>
</tr>
<tr>
<td>Aug '05</td>
<td>314</td>
<td>748</td>
<td>228</td>
<td>1072</td>
</tr>
<tr>
<td>Sep '05</td>
<td>311</td>
<td>751</td>
<td>228</td>
<td>1079</td>
</tr>
</tbody>
</table>
Providing the best value for every dollar spent means MoDOT is running its business as efficiently and effectively as possible. A tightly managed budget means more roads and bridges can be fixed. That keeps Missouri moving. This is one of MoDOT’s values because every employee is a taxpayer too!
**Number of MoDOT employees (in salaried positions)**

**Result Driver:** Roberta Broeker, Chief Financial & Administrative Officer  
**Measurement Driver:** Micki Knudsen, Human Resources Director

**Purpose of the Measure:**  
This measure tracks the growth in the number of employees within the department.

**Measurement and Data Collection:**  
The data is collected and reported in the first quarter of each fiscal year. The data is a high level view of overall staffing at MoDOT in relation to authorized positions that could be filled.

**Improvement Status:**  
Employment levels (both actual and authorized) are below the levels of the 1990s and early years of this decade. For FY 06, MoDOT has 6476 authorized salaried positions. As of September 30, 2005, the actual number of employees fell to 6348. MoDOT is meeting the expectations of SRI, without increasing the full time staffing level. However, our temporary employment reached an all time peak of 951 in July 2005. A team has been formed to make improvements to the seasonal program, which could result in changes to both actual and authorized employment numbers. These improvements will be implemented for the next hiring season. In addition, the supervisor to employee ratio will be improved by having the local HR Manager evaluate the need to fill every supervisory position that becomes vacant to ensure greater efficiency in the use of full time positions.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Actual</th>
<th>Authorized</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>6501</td>
<td>6501</td>
</tr>
<tr>
<td>2002</td>
<td>6298</td>
<td>6490</td>
</tr>
<tr>
<td>2003</td>
<td>6290</td>
<td>6490</td>
</tr>
<tr>
<td>2004</td>
<td>6329</td>
<td>6498</td>
</tr>
<tr>
<td>2005</td>
<td>6362</td>
<td>6483</td>
</tr>
</tbody>
</table>

**Trend:** N/A
**Percent of work capacity based on average hours worked**

**Result Driver:** Roberta Broeker, Chief Financial & Administrative Officer  
**Measurement Driver:** Micki Knudsen, Human Resources Director

**Purpose of the Measure:**  
This measure shows how many hours the average employee works. It can assist management in determining staffing and productivity levels.

**Measurement and Data Collection:**  
This measure tracks organizational work capacity based on average regular hours worked and average overtime hours worked by employees. This measure also tracks the percentage of regular hours available that are worked.

Average regular hours worked does not include seasonal or wage employees. Overtime hours does not include exempt, seasonal, or wage employees. Annual leave and sick leave are held constant and are accounted for in determining the percentage of available hours worked.

**Improvement Status:**  
Through September 2005, employees have worked an average of 65 hours of overtime, which is a slight increase over 2004. The Human Resources Division has analyzed leave usage information and shared the data with district and division leaders. A committee is assessing the department’s sick leave policy, potential leave abuse among employees, appropriate corrective measures, and implementation plans for identified improvements to more effectively administer leave usage. These improvements will be implemented no later than March 2006.

![Annual Work Hour Capacity Chart](chart.png)
**Rate of employee turnover**

**Result Driver:** Roberta Broeker, Chief Financial & Administrative Officer  
**Measurement Driver:** Micki Knudsen, Human Resources Director

**Purpose of the Measure:**
This measure tracks the percentage of employees who leave MoDOT annually in comparison to similar-sized, like organizations that are judged to be the best in terms of turnover and as the place to work.

**Measurement and Data Collection:**
The data will be collected statewide to assess employee overall turnover. Comparison data will be collected from various sources annually. SAS, Genetech, and Qualcomm were selected for comparison this measurement period based on best practice turnover rates, employee friendly practices, and benefits according to *Graduating Engineer*.

**Improvement Status:**
As of September 2005, the turnover rate for this calendar year is 5.5 percent. The department is on pace to have a significant increase in turnover for this calendar year. Of particular concern is the number of civil engineers leaving the organization in the metropolitan areas of the state. The Human Resources Division has identified strategies to address recruitment and retention in critical positions, as well as to better manage poor performers. If approved, these strategies including several policy changes are planned for implementation in January 2006.
Percent of satisfied employees

Result Driver: Roberta Broeker, Chief Financial & Administrative Officer
Measurement Driver: Micki Knudsen, Human Resources Director

Purpose of the Measure:
This measures the level of employee satisfaction throughout the department in comparison to the organization reporting the best levels of employee satisfaction using the same survey instrument.

Measurement and Data Collection:
Employee satisfaction is measured using 18 items from an annual employee survey, Organizational Performance Survey (OPS). To date, only the numerical responses to the rating scales have been received from the vendor. A preliminary report including full analysis of the survey and written comments is due from the vendor in mid-November. Comparison organization data is collected from the vendor of the OPS.

Improvement Status:
Employee response rate to the 2005 survey was 70 percent, which is a considerable increase over the 51 percent that responded to the previous survey. The progress made by the department is promising. The employee satisfaction subscale shows an 11 percent shift toward the neutral and satisfied levels since the last survey, with somewhat satisfied increasing 7 percent. A breakdown in the questions within the subscale shows that four issues continue to push down overall ratings: promotions, rewards (pay), recognition, and employee input. Focus group meetings were held with employees in Spring 2004, and again this fall, to discuss their concerns. Since the 2004 meetings, MoDOT has implemented over 75 strategies to address the concerns identified. After the most recent meetings, HR identified 10 strategies to address rewards, recognition, and retention issues. If approved, several policy changes designed to address rewards and retention strategies are planned for implementation in January 2006. The Employee Advisory Council is working to identify strategies for recognizing long-term employees. The department will need to develop additional strategies upon receipt of the vendor’s final report.

Percent of Satisfied Employees

<table>
<thead>
<tr>
<th>Level of Satisfaction</th>
<th>MoDOT 2003</th>
<th>MoDOT 2005</th>
<th>Best Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Satisfied</td>
<td>7%</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>Somewhat Satisfied</td>
<td>32%</td>
<td>59%</td>
<td>52%</td>
</tr>
<tr>
<td>Neither Satisfied</td>
<td>12%</td>
<td>9%</td>
<td>6%</td>
</tr>
<tr>
<td>Somewhat Dissatisfied</td>
<td>21%</td>
<td>24%</td>
<td>21%</td>
</tr>
<tr>
<td>Very Dissatisfied</td>
<td>8%</td>
<td>4%</td>
<td>8%</td>
</tr>
</tbody>
</table>
Number of lost work days per year

Result Driver: Roberta Broeker, Chief Financial & Administrative Officer
Measurement Driver: Beth Ring, Risk Management Director

Purpose of the Measure:
This measure tracks the actual number of days that employees cannot work due to work-related injuries sustained during the reporting period. Note that the results do not include lost workdays for injuries that occurred during previous reporting periods.

Measurement and Data Collection:
The data is collected from Riskmaster, the risk management software, and reported quarterly.

Improvement Status:
The number of lost workdays for the nine months ended September 30, 2005 is 20% higher than the same period last year while the number of lost time incidents decreased by 17% for the same period. The injuries sustained this year are more severe than last year. The largest increase in lost workdays occurred in Districts 5, 6, 9 and 10. In an effort to reduce these injuries and related lost days, we are issuing written warnings for safety violations at an increased pace and are rolling out a work simulation physical exam program for new applicants. We are developing a post-incident physical program and a statewide return to work program. District and Central Office Risk Management staff reviews all incidents monthly and identifies and adjusts processes and equipment that are causing injuries.

![Total Number of Lost Work Days Chart]

Desired Trend:
# Best Value for Every Dollar Spent

## Information Systems expenditures per salaried position

**Result Driver:** Roberta Broeker, Chief Financial & Administrative Officer  
**Measurement Driver:** Mike Miller, Information Systems Director

**Purpose of the Measure:**  
The measure tracks the cost of information systems for the department.

**Measurement and Data Collection:**  
The data is collected based on expenditures recorded in the statewide financial accounting system. Expenditures include all costs associated with District and Central Office IS divisions. Not included are the employer’s share of Social Security/Medicare taxes or state match for deferred compensation. Also excluded are telecommunications charges for the entire department. Expenditures classified as the following by divisions other than IS divisions: information technology supplies, information technology outsourcing, information technology consulting and services, computer hardware & software maintenance services, computer equipment and software.

**Improvement Status:**  
The graph reflects a decrease in expenditures per salaried position on an annual basis compared to 2005. However, the trend for 2006 will remain relatively smooth with fiscal year 2005. Although the Motor Carrier Service project, which required over $10 million in FY 2005, will require less funding in FY 2006, other business process improvements requiring technological resources will be funded. Two of these projects are Realty Asset Inventory Management System and State Transportation Improvement Program Enhancement, which total approximately $750 thousand. During the fiscal year the Information Technology Improvement Program Committee will approve additional projects. Technological investment decisions by MoDOT will impact the expenditures per salaried position in any given fiscal year.

![Information Systems Expenditures Per Salaried Position](chart.png)

**Desired Trend:** N/A

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Best Value for Every Dollar Spent

Fleet expenditures per salaried position

Result Driver: Roberta Broeker, Chief Financial & Administrative Officer
Measurement Driver: Jeannie Wilson, General Services Manager - Fleet

Purpose of the Measure:
The measure tracks the cost of the department’s fleet equipment.

Measurement and Data Collection:
The data is collected based on expenditures recorded in the statewide financial accounting system and inventory usage. Expenditures charged to the following have been included: capital leases, operating leases, purchase of fleet assets, fuel, liability insurance and the cost of maintaining the fleet including salaries. Expenditures do not include the employer’s share of Social Security/Medicare taxes and the department’s match for deferred compensation.

Improvement Status:
In FY 05 a cross-functional team made recommendations to improve consistency in reporting MoDOT fleet expenditures. Beginning in FY 06, the Fleet Budget and expenditures are tracked by the following specific areas, statewide: Equipment Acquisition, Leases, Fuel, Repairs and Liability Insurance. General Services – Fleet, and Maintenance are partnering to investigate best practices presented at the National Conference of State Fleet Administrators to determine if they support MoDOT’s mission and values. These best practices may help determine future fleet composition. Capital (acquisitions and leases) fleet expenditures for FY 05 are consistent with the average of the previous three fiscal years. Fleet operating expenditures reflect an upward trend for FY 05. This trend can be attributed to the rising cost of fuel across the nation. Because of the rising fuel prices the following strategies have been implemented: all employees are directed to conserve fuel, employees assigned pool cars are expected to transport other personnel attending the same meeting, and GS is developing consistent and efficient state wide procurement practices and comparing bid prices with OPIS (Oil Price Information Service).

Note: Washington DOT and City of St. Louis information includes operating and capital/lease costs.
Best Value for Every Dollar Spent

Building expenditures per salaried position

Result Driver: Roberta Broeker, Chief Financial & Administrative Officer
Measurement Driver: Chris Devore, General Service Manager - Facilities

Purpose of the Measure:
This measure tracks the cost of operating department buildings and department building capital improvements.

Measurement and Data Collection:
The data is collected based on expenditures recorded in the statewide financial accounting system. The following expenditures are included in the analysis: the cost of labor, benefits, and materials for central office facilities management and facilities maintenance divisions. It does not include the employer’s share of Social Security/Medicare taxes and the department’s match for deferred compensation. Operating expenditures, including repair supplies, custodial supplies, janitorial and other services, repair services, building and storage leases, and utilities have been included in the data where a building job number has been assigned. Labor by department employees charged to a building job number is not included unless the employee is assigned to the facilities management and facilities maintenance sections of central office. Expenditures for capital projects are charged to a construction project.

Improvement Status:
As operational needs developed, extra consideration and funding were expended to repair/replace with energy efficient options. These improvements have included, but are not limited to, installing energy efficient windows, overhead doors, and new HVAC system and insulating maintenance bays. We anticipate a decrease in capital expenditures in FY 06 due to a decrease in budget allocation. With the energy efficient upgrades made, we anticipate a decrease in FY 06 operating expense if not offset by inflationary increases.

![Building (maintenance and capital) Expenditures Per Salaried Position](chart)


Desired Trend: N/A
Best Value for Every Dollar Spent

Utility expenditures per square foot of occupied space

**Result Driver:** Roberta Broeker, Chief Financial & Administrative Officer  
**Measurement Driver:** Chris DeVore, General Services Manager - Facilities

**Purpose of the Measure:**  
This measure tracks the department’s utility costs for occupied buildings.

**Measurement and Data Collection:**  
The data is collected based on expenditures recorded in the statewide financial accounting system. Expenditures classified as electricity (excluding roadways, lighting and signal), natural gas, propane (excluding employee travel), water and sewage, fuel oil, and other fuel and utilities are included in the data. Occupied square footage includes all buildings, including leased buildings where the department is responsible for utilities. The buildings may contain material, equipment, people or any combination.

**Improvement Status:**  
FY 05 operational upgrades made to our facilities should result in a decrease of future utility usage. As operational needs developed, extra consideration and funding were expended to repair/replace with energy efficient options. These improvements have included, but are not limited to, installing energy efficient windows, overhead doors, and new HVAC system and insulating maintenance bays. Utility costs increased 7% from FY 04 to FY 05. This is consistent with the increases in utility costs nationwide of 7.2% as reported by the Department of Energy.

**Utility Expenditures Per Square Foot of Occupied Space**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>0.80</td>
</tr>
<tr>
<td>2005</td>
<td>0.85</td>
</tr>
<tr>
<td>1st Qtr. 2005</td>
<td>0.17</td>
</tr>
<tr>
<td>1st Qtr 2006</td>
<td>0.18</td>
</tr>
</tbody>
</table>

**Desired Trend:** N/A
**Best Value for Every Dollar Spent**

**Dollars expended on non-design related consultants**

**Result Driver:** Roberta Broeker, Chief Financial & Administrative Officer  
**Measurement Driver:** Debbie Rickard, Assistant Controller

**Purpose of the Measure:**  
The measure tracks the department’s use of non-design consultants.

**Measurement and Data Collection:**  
The data is collected based on expenditures recorded in the statewide financial accounting system. The data includes expenditures for professional services and computer information services.

**Improvement Status:**  
Expenditures for non-design consultants in a fiscal year are dependent on the Department’s needs. Fluctuations between fiscal years are not abnormal. Included in FY 05 consultant expenditures are costs related to the Motor Carrier Services’ integrated software project, approximately $8 million, and consultant services for Statewide Integrated Management and Operations Plan, Missouri Weather Response System, and the Missouri Statewide 511 and work zone systems. The Department will continue to utilize non-design consultants for specialized services and to supplement available employee resources. FY 2006 IS projects utilizing consultants will include the completion of the Motor Carrier Services’ integrated software project, the Realty Asset Inventory Management System, and the State Transportation Improvement Program Enhancement. Estimated consultant costs related to these projects totals $3.6 million. Other consultant costs in FY 06 will include Missouri Statewide Traveler Information system and the completion of MoDOT Emergency Communication Services system.

---

**Dollars Expended on Non-design Related Consultants**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Number of Dollars in Thousands</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>13,366</td>
</tr>
<tr>
<td>2003</td>
<td>9,424</td>
</tr>
<tr>
<td>2004</td>
<td>12,656</td>
</tr>
<tr>
<td>2005</td>
<td>22,585</td>
</tr>
<tr>
<td>YTD 2006</td>
<td>1,898</td>
</tr>
<tr>
<td>2006</td>
<td>104,726</td>
</tr>
</tbody>
</table>

**Desired Trend:** N/A

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Percent of vendor invoices paid on time

Result Driver: Roberta Broeker, Chief Financial & Administrative Officer
Measurement Driver: Debbie Rickard, Assistant Controller

Purpose of the Measure:
This measure tracks the department’s timeliness in processing vendor payments.

Measurement and Data Collection:
The data is based on check date and the date of service or receipt of goods. The number of days between the date of service or receipt of goods and check date determines if an invoice is paid on time. Timeliness is defined as a check issued less than 31 days from the date of service or receipt of goods.

Improvement Status:
The percent of invoices paid on time indicates a decrease over the five quarters. The steps to address the decrease are: (1) Identify vendor types to determine time from date of service to date of invoice to determine if a particular vendor type results in delayed payment (contractors, consultants, product suppliers, utilities, purchase cards) (2) Determine if delayed payments are common to a particular division or district (3) Identify processes contributing to the delayed payment. The Department’s average payment cycle is 26 days from the date of service to the check date. The shortest payment cycle is 2 days.

Desired Trend:
**Percent of actual state highway user revenue vs. projections**

**Result Driver:** Roberta Broeker, Chief Financial & Administrative Officer  
**Measurement Driver:** Todd Grosvenor, Finance Manager

**Purpose of the Measure:**  
The measure shows the precision of the state highway user revenue projections.

**Measurement and Data Collection:**  
State highway user revenue includes: Motor Fuel Taxes, which are taxes collected on each gallon of motor fuel purchased; License and Fees, which are driver licenses and taxes and fees collected on motor vehicle licensing and registrations; and Sales and Use Taxes, which are taxes collected on the purchase of motor vehicles.

Projections are based on the current financial forecast. Percent is based on year-to-date revenues. The actual data is provided monthly to Resource Management by the Controller’s Office.

**Improvement Status:**  
The actual state highway user revenue is slightly less than projections through the first quarter of 2006. The revenue was projected to be $241.14 million. However, the actual receipts were $240.99 million, a difference of $0.15 million and a variance of −0.06%. Increases in Licenses and Fees helped to offset the declines in Motor Fuel and Sales and Use Taxes. The desired trend is for the actual revenue to match projections with a variance of 0%.

MoDOT staff continues to analyze the fiscal impact of increased fuel prices. The forecast will be adjusted if revenues begin to show declining trends.
**Best Value for Every Dollar Spent**

**MoDOT national ranking in revenue per mile**

**Result Driver:** Roberta Broeker, Chief Financial & Administrative Officer  
**Measurement Driver:** Todd Grosvenor, Finance Manager

**Purpose of the Measure:**  
This measure shows Missouri’s national ranking in the amount of revenue per mile that is available to spend on the state highway system.

**Measurement and Data Collection:**  
Revenue is the total receipts less bonds as reported in the Federal Highway Administration’s annual highway statistics report entitled, *Revenues Used By States For State-Administered Highways*. The mileage is the state highway agency miles as reported in the Federal Highway Administration’s annual highway statistics report entitled, *Public Road Length – Miles By Ownership*. Resource Management collects this information from the Federal Highway Administration.

**Improvement Status:**  
Missouri’s revenue per mile of $49,372 ranks 45th in the nation. Missouri has a very large state highway system. Our state highway system has 32,448 miles, which ranks 7th. Most states that have a state highway system of 30,000 to 40,000 miles rank in the 40’s for revenue per mile. New Jersey’s revenue per mile of $825,122 ranks 1st. However, their state highway system contains only 2,313 miles. South Carolina’s revenue per mile of $20,818 ranks 50th. Their state highway system contains 41,575 miles.

MoDOT staff continues to communicate with the public the need for additional transportation funding. Our current funding level leaves us well short of what is required to address all of Missouri’s transportation needs. Even if Amendment 3 funds (fully phased-in) were added to this analysis, Missouri’s ranking would have only moved up to 44th.
Best Value for Every Dollar Spent

Average salary of outsourced contract design and bridge engineer vs. full-time employee

Result Driver: Roberta Broeker, Chief Financial & Administrative Officer
Measurement Driver: Jim Deresinski, Controller

Purpose of the Measure:
The purpose of the measure is to demonstrate a responsible use of taxpayers’ money, with the emphasis of spending for design and bridge engineering efforts.

Measurement and Data Collection:
The data collection is based on outsourced contracts and employee expenditures.

Improvement Status:
The process is to measure external design consultant costs and compare to MoDOT staff design engineer costs. Both categories are fully costed and comparable. Consultant rates increased 7.1% from 2004 to 2005 while MoDOT design and bridge engineer costs increased 2.6% for the same period. The desired trend is to narrow the profit factor gap between the two rates.

Previous year’s data was updated based on reporting corrections for those periods.
Best Value for Every Dollar Spent

Distribution of expenditures

Result Driver: Roberta Broeker, Chief Financial & Administrative Officer
Measurement Driver: Jim Deresinski, Controller

Purpose of the Measure:
The purpose of the measure is to demonstrate a responsible use of taxpayers’ money, with the emphasis of spending on the construction and maintenance of our transportation system.

Measurement and Data Collection:
The data collection is based on cash expenditures by appropriation. Construction and maintenance expenditures are defined as expenditures from the construction and maintenance appropriations. Other expenditures include: administration, multimodal, and information systems, fleet, facilities, and other services appropriations.

Improvement Status:
The Department’s emphasis is on expenditures for routine maintenance of the system (maintenance appropriation) and renovation and construction of the system (construction appropriation). Although the percent of MoDOT expenditures for maintenance decreased, the dollars will increase assuming spending continues at the current rate for the remainder of the fiscal year. Construction expenditures have increased overall, percentage and dollars, as construction projects have accelerated as a result of bond proceeds. Expenditures from appropriations other than construction and maintenance remain constant, which is consistent with the desired trend.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Thousands of Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2002</td>
</tr>
<tr>
<td>Construction</td>
<td>$1,328,787</td>
</tr>
<tr>
<td>Maintenance</td>
<td>$263,990</td>
</tr>
<tr>
<td>Other</td>
<td>$196,260</td>
</tr>
</tbody>
</table>
Number of lane miles per MoDOT employee as compared to neighboring states

Result Driver: Roberta Broeker, Chief Financial & Administrative Officer
Measurement Driver: Jim Deresinski, Controller

Purpose of the Measure:
The purpose of the measure is to demonstrate a responsible use of taxpayers’ money, by controlling the number of employees.

Measurement and Data Collection:
The data collection on lane miles is from FHWA and the number of employees is from responses by state DOT’s. This graph compares states that either border or are near Missouri.

Improvement Status:
Missouri ranked second among its neighboring states at 11.2 lane miles per employee in FY2004. The desired trend is to increase the number of lane miles per employee.

Number of Lane Miles Per Employee as Compared to Neighboring States

<table>
<thead>
<tr>
<th>State</th>
<th>Number of Lane Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nebraska</td>
<td>13.6</td>
</tr>
<tr>
<td>Missouri</td>
<td>11.2</td>
</tr>
<tr>
<td>Arkansas</td>
<td>9.5</td>
</tr>
<tr>
<td>Tennessee</td>
<td>7.8</td>
</tr>
<tr>
<td>Kansas</td>
<td>7.3</td>
</tr>
<tr>
<td>Illinois</td>
<td>7.2</td>
</tr>
<tr>
<td>Iowa</td>
<td>7.1</td>
</tr>
<tr>
<td>Indiana</td>
<td>5.6</td>
</tr>
</tbody>
</table>

Desired Trend:

October 2005 TRACKER – Page 15p
**Best Value For Every Dollar Spent**

*Number of lane miles per MoDOT employee as compared to the ten best states*

**Results Driver:** Roberta Broeker, Chief Financial & Administrative Officer  
**Measurement Driver:** Jim Deresinski, Controller

**Purpose of the Measure:**  
The purpose of the measure is to demonstrate a responsible use of taxpayers’ money, by controlling the number of employees.

**Measurement and Data Collection:**  
The data collection on lane miles is from FHWA and the number of employees is from responses by most DOT’s. This graph compares the ten highest-ranking DOT’s in the nation. The states on this graph represent the states with the highest number of lane miles per employee.

**Improvement Status:**  
Missouri ranked ninth among ten states at 11.2 lane miles per employee in FY2004. South Dakota had 18.0 lane miles per employee in the same period. The desired trend is to increase the number of lane miles per employee.

![Graph showing number of lane miles per employee among the ten best states for Fiscal Year 2004.](image-url)

Desired Trend:
Attractive Roadsides

Tangible Result Driver – Don Hillis,
Director of System Management

An enjoyable transportation experience includes more than a smooth surface – motorists expect to see roadsides free of litter and debris, well-managed and maintained grass and other vegetation and other attractive enhancements. MoDOT works to meet and exceed expectations for roadsides. Beautiful roadsides are visible proof that MoDOT takes pride in everything it does.
Attractive Roadsides

Percent of roadsides that meet customers’ expectations

Result Driver: Don Hillis, Director of System Management
Measurement Driver: Jim Carney, State Maintenance Engineer

Purpose of the Measure:
This measure tracks the percent of MoDOT's roadway system that meet customers’ expectations for attractiveness.

Measurement and Data Collection:
A list of roadside quality attributes were developed and approved based on an industry-wide literature review. The attributes selected for this measure were used to develop a quality assurance checklist for roadside attractiveness. Data collection for this measure is based on a yearly inspection of a number of randomly selected sample sites located throughout the state. The random sites are inspected yearly for each attribute.

Improvement Status:
Over the past three reporting years, the five roadside attributes referenced below have shown varying trend lines. By sharing these results with district personnel, they are able to shift resources to improve in all categories. A reduction in mowing will allow resources to be shifted to weed control and litter/debris pickup to improve the overall results.

Percent of Roadsides That Meet Our Customers' Expectations

<table>
<thead>
<tr>
<th>Roadside Attributes</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mowing</td>
<td>82</td>
<td>92</td>
<td>93</td>
</tr>
<tr>
<td>Litter/Debris</td>
<td>66</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>Brush/Trees</td>
<td>80</td>
<td>82</td>
<td>78</td>
</tr>
<tr>
<td>Slope Erosion</td>
<td>88</td>
<td>84</td>
<td>85</td>
</tr>
<tr>
<td>Weed Control</td>
<td>61</td>
<td>50</td>
<td>59</td>
</tr>
</tbody>
</table>

Desired Trend:
Attractive Roadsides

Number of hours of litter pickup by MoDOT staff and incarcerated crews

Result Driver: Don Hillis, Director of System Management
Measurement Driver: Stacy Armstrong, Roadside Management Supervisor

Purpose of the Measure:
This measure tracks how much time and effort is spent picking up litter. A variety of industry studies have consistently ranked a litter-free roadside as attractive.

Measurement and Data Collection:
MoDOT tracks the actual number of hours spent picking up roadside litter. Before April 2005, the incarcerated personnel labor hours were estimated from the MoDOT employees’ time. The average number of inmates per inmate leader times the number of hours devoted to litter removal was used. As of April 2005, actual inmate litter pickup hours are recorded. Increasing the use of incarcerated crews frees up MoDOT employees to do other work. Statewide, MoDOT must vie with many agencies for approved incarcerated personnel labor. To remain eligible to receive labor and encourage additional assignments, the Maintenance Division follows and surpasses Department of Correction’s standards and requirements.

Improvement Status:
Overall, MoDOT does a good job of using incarcerated personnel to pick up litter, keeping roadsides more attractive. In the 2005 fiscal year, 353,060 hours were logged; and over half were from incarcerated crews, 198,355 hours. MoDOT has established a positive trend by consistently delegating more than half, and up to 66 percent of total litter removal to incarcerated crews. The Maintenance Division continues to look for ways to increase the potential of using additional incarcerated personnel labor.

Number of Hours of Litter Pickup

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Inmate Hours</th>
<th>MoDOT Maintenance Hours</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2002</td>
<td>194,600</td>
<td>183,903</td>
<td>378,503</td>
</tr>
<tr>
<td>FY 2003</td>
<td>215,121</td>
<td>33,402</td>
<td>248,523</td>
</tr>
<tr>
<td>FY 2004</td>
<td>133,269</td>
<td>348,390</td>
<td>481,659</td>
</tr>
<tr>
<td>FY 2005</td>
<td>124,968</td>
<td>366,318</td>
<td>491,286</td>
</tr>
<tr>
<td>FY 2006 YTD</td>
<td>198,355</td>
<td>355,661</td>
<td>553,956</td>
</tr>
</tbody>
</table>

Desired Trend: N/A

October 2005 TRACKER – Page 16b
Attractive Roadsides

Number of miles in Adopt-A-Highway program

Result Driver: Don Hillis, Director of System Management
Measurement Driver: Stacy Armstrong, Roadside Management Supervisor

Purpose of the Measure:
This measure tracks public involvement in taking care of Missouri’s roadsides through the Adopt-A-Highway program. Missouri has one of the largest and oldest Adopt-A-Highway programs in the nation. The volunteers learn about litter awareness and some of the challenges MoDOT faces, while allowing maintenance crews to do more critical activities.

Measurement and Data Collection:
Adopters agree to pick up litter on a designated roadway section for a minimum of four times a year and report their results. Adopters commit to and sign a three-year agreement when they join the program. Urban adoptions are for a minimum of one-half mile and rural adoptions are for at least two miles. Miles are measured by the centerline, however, volunteers are responsible for both sides of the roadway. Adopter-related information is maintained in an Adopt-A-Highway database using the Transportation Management System.

Improvement Status:
In recent years, the number of miles adopted has been increasing. The number of miles adopted from 2000 to 2002 went down because of MoDOT’s initiative to reorganize tracking methods, purging inactive groups and because some groups did not renew their agreements. Growth from 2002 to 2004 may be due to increased public awareness through No MOre Trash!, a litter-prevention campaign coordinated by the departments of Transportation and Conservation. Total miles continue to increase in 2005. There are 286 new adoptions in January through September. MoDOT is making the Adopt-A-Highway rules and regulations simpler, which may further increase the miles adopted. The program will continue to be promoted at Earth Day, state and county fairs, and other events.

Number of Miles in Adopt-A-Highway Program

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Number of Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>6,662</td>
</tr>
<tr>
<td>2001</td>
<td>6,246</td>
</tr>
<tr>
<td>2002</td>
<td>5,042</td>
</tr>
<tr>
<td>2003</td>
<td>5,142</td>
</tr>
<tr>
<td>2004</td>
<td>5,243</td>
</tr>
<tr>
<td>2005 YTD</td>
<td>5,251</td>
</tr>
</tbody>
</table>

Desired Trend:
Total mowing and herbicide cost

Result Driver: Don Hillis, Director of System Management
Measurement Driver: Stacy Armstrong, Roadside Management Supervisor

Purpose of the Measure:
This measure tracks the effectiveness of the MoDOT roadside vegetation management practices, through the total costs of mowing and herbicide use. Tracking total cost will help MoDOT choose the most cost-effective methods for maintaining Missouri roadsides.

Measurement and Data Collection:
Mowing is usually done April through October. Chemical and other methods may be used throughout the year. Total cost includes labor, contracts, cash expenses, inventory usage, and equipment usage. The roadsides begin at the edge of the pavement and can vary in width from 30 feet to 300 feet or more depending on the location.

Improvement Status:
MoDOT is doing a great job of reducing expenditures on mowing, allowing maintenance personnel time to do more work on the road surface. Environmentally responsible management methods such as site-appropriate plantings, judicious herbicide use, and partnerships, have reduced roadside maintenance costs, yet allowed roadsides to remain attractive.

![Graph of Total Mowing and Herbicide Cost](image_url)
Transportation issues can be extremely diverse and complex. An efficient transportation system requires leadership and, most importantly, a champion to ensure the resources support projects that will help the department fulfill its responsibilities to the taxpayers. MoDOT will be an advocate for transportation.
**Percent of minorities and females employed**

**Result Driver:** Pete Rahn, Director of MoDOT  
**Measurement Driver:** Brenda Treadwell-Martin, Equal Opportunity Director

**Purpose of the Measure:**  
This measure tracks minority and female employment in MoDOT’s workforce and availability data from the Missouri 2000 Census report. Efficient use of people resources would provide opportunities for the department to leverage transportation resources to available human capital. By placing the right people in the right place, the department can better serve its customers and help fulfill its responsibilities to the taxpayers.

**Measurement and Data Collection:**  
MoDOT’s Affirmative Action software database and Missouri 2000 Census Report is used to collect data. During this reporting period, MoDOT researched the private sector, other Department of Transportation agencies, Missouri State agencies, and Missouri 2000 Census Data to determine a benchmark for this measurement. Due to the significant variations for some of these entities, i.e., pay incentives, number of employees, geographic locations, etc., it was determined Missouri 2000 Census Data, based on jobs used by the department, would be the benchmark for this measurement.

**Improvement Status:**  
The employment trend chart reflects progress made in MoDOT female and minority employment compared to availability data in Missouri 2000 Census report from 2002 through Year to date (YTD) September 2005. During this quarter, MoDOT female percentage decreased by .05 percent, while female employment exceeded Missouri availability percentage by 1.86 percent.

MoDOT minority employment increased by .04% and experienced a 4.41% shortfall against the benchmark. Steps taken to improve this measurement include but were not limited to: developing an Applicant Tracking Report to monitor hiring practices for each geographic location, meeting with management staff to obtain feedback on diversity initiatives, implementing Mentoring Program to assist with recruitment and retention, expanding outreach activities to educate individuals about opportunities at MoDOT, expanding the Co-op Program to include Criminal Justice and Civil Engineering Technology degrees, and developing additional measurement indicators to track progress.

![MoDOT Female Employees vs. Missouri Availability](image-url)
MoDOT Minority Employees vs. Missouri Availability

Fiscal Year

Percent

2002 2003 2004 2005 YTD

Minorities
Missouri Availability

Desired Trend:
Advocate for Transportation Issues

Percent of transportation-related pieces of legislation directly impacted by MoDOT

Result Driver: Pete Rahn, Director of MoDOT
Measurement Driver: Pam Harlan, Senior Governmental Relations Specialist

Purpose of the Measure:
This measure tracks the department’s impact on the total number of transportation-related bills filed by the General Assembly as well as the department’s progress on its own legislative agenda.

Measurement and Data Collection:
Data is obtained by reviewing bills in all of the transportation-related subject categories on both the Senate and the House Web sites for legislation. Each bill is reviewed for department impact. A percentage is determined from the total number of bills the department impacted in each category divided by the total number of bills in each category.

Every fall, potential legislative proposals are submitted to the Missouri Highways and Transportation Commission for their review and approval. The second chart tracks each approved legislative proposal through the legislative process.

Improvement Status:
MoDOT has improved in the percent of impact on legislation from 2004 to 2005. The improvement for this year is due to a variety of reasons: (1) increased presence at the capitol from the MHTC, management, divisions, and districts; (2) successful passage of Amendment 3; (3) decrease in the number of transportation-related bills filed, and (4) having an additional legislative liaison. What we have learned from this improvement is that it takes more than the Governmental Relations unit to be “the advocates for transportation” at the Capitol. With Team MoDOT working together as advocates for transportation, much more can be accomplished.

MoDOT’s desired trend is to have successful passage of as many of its proposals as possible. One lesson learned from this session relates to the motor carrier registration issue that was addressed in a separate consent bill. Historically, bills on the consent calendars were passed before the end of session. This session was unusual in the fact that many bills were left to die on the consent calendars. We will need to advocate for consent bills much earlier in session to raise the possibility of a successful passage. MHTC has approved MoDOT’s legislative proposals for the 2006 legislative session. Governmental Relations has identified potential sponsors for each proposal and is securing their sponsorship before December 1. Bills may be pre-filed beginning December 1. GR is scheduled to get legislation filed early to improve the opportunity for final passage and, has already submitted its proposals to prospective sponsors. GR has also worked during the summer with various stakeholders to ensure their support of MoDOT’s legislative proposals.
Percent of Transportation-Related Pieces of Legislation Directly Impacted by MoDOT

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>25</td>
</tr>
<tr>
<td>2005</td>
<td>38</td>
</tr>
</tbody>
</table>

- House
- Senate

Trend: Increase

Progress on MoDOT Legislative Initiatives

- **SB 221 Seat Belt**
- **HB 339 Seat Belt**
- **SB 354 Motor Carrier**
- **HB 591/777 Motor Carrier**
- **SB 313 Work Zone Safety**
- **HB 518 Work Zone Safety**

Desired Trend: N/A
Advocate for Transportation Issues

**Percent of federal roadway earmarked projects on the state highway system**

**Result Driver:** Pete Rahn, Director of MoDOT  
**Measurement Driver:** Kent Van Landuyt, Federal Liaison

**Purpose of the Measure:**  
Missouri’s support for transportation on the national level is demonstrated by the impact of federal legislation on Missouri’s ability to address transportation needs. The percent of state highway system earmarks that are identified Missouri needs is representative of the department’s success as an advocate of the state’s transportation needs.

**Measurement and Data Collection:**  
The data represents the percent of earmarked roadway projects that are on the state highway system and the percent that are identified as needs. The percent of individual projects on the state highway system represents the department’s success in working with Missouri’s Congressional delegation and the percent of state system earmarks that are locations already identified as needs demonstrates that MoDOT has provided adequate information to our Missouri Congressional members that these needs are the same as the needs recognized by their other constituents. The identified needs for this measure are projects on the state highway system that are included in the STIP or projects ready to be added as soon as funding becomes available.

**Improvement Status:**  
The following chart displays the progress Missouri has made as an advocate for transportation on our highways. The first measure shows the percent of federal earmarks on the state highways system. This percentage should be above 75% in each annual and special appropriation. The second measure is the percent of earmarked state highway projects that are identified as needs. A percentage above the 85% level is expected. The department will continue regular communication with Congressional staff members with the purpose of increasing the number of earmarked projects that are identified needs on the state transportation system.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Percent of Federal Roadway Earmarked Projects on the State Highway System</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY04</td>
<td><strong>100</strong></td>
</tr>
<tr>
<td>FY05</td>
<td><strong>72</strong></td>
</tr>
<tr>
<td>SAFETEA-LU</td>
<td><strong>62</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Earmarked MoDOT projects identified as needs</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Earmarked projects on MO State Highway System</strong></td>
</tr>
</tbody>
</table>

**Desired Trend:**

October 2005 TRACKER – Page 17c
Percent of customers who view MoDOT as Missouri’s transportation expert

Result Driver: Pete Rahn, Director of MoDOT
Measurement Driver: Jay Wunderlich, Governmental Relations Director

Purpose of the Measure:
This measure tracks whether our customers feel the department is a leader and expert in transportation issues. The measure will eventually show us how effectively MoDOT conveys its expertise to the traveling public.

Measurement and Data Collection:
The data has been collected in conjunction with the Missouri Advance Planning initiative from its May 2005 survey. This data will be collected on an annual basis. Next year the Missouri Transportation Institute will be conducting the survey.

Improvement Status:
Each year we survey the traveling public, we hope to “drill down” deeper by asking more specific questions to collect information that will tell us what it will take to make MoDOT the state’s transportation expert. The current information displays that 73 percent feel MoDOT is the transportation expert they rely on. The data provides us with a baseline to continue to explore the question of what a “transportation expert” means to our customers and what geographical areas of the state view us as such. Staff is currently working to find what other state DOTs are doing to measure their efforts in this arena and learning from these contacts how other states work to improve partnerships with citizens, legislators and special interest groups.
Accurate, Timely, Understandable and Proactive Transportation Information (Outbound)

Tangible Result Driver – Shane Peck, Community Relations Director

Accurate, consistent and timely information is critical to accomplishing MoDOT’s mission. By providing this information to its customers, MoDOT becomes the first and best source for transportation information in Missouri. Openness and honesty build trust with our customers.
Number of public appearances

Result Driver: Shane Peck, Community Relations Director
Measurement Driver: DeAnne Bonnot, Community Relations Coordinator

Purpose of the Measure:
This measure tracks and encourages regular, personal contact with our customers.

Measurement and Data Collection:
District Community Relations managers collected appearance information from their administrators and sent it to Central Office Community Relations where it was combined with similar CO data from divisions and business offices to create a statewide report. Data collection began April 1, 2005. The numbers are apt to change from quarter to quarter because certain events and other public appearance opportunities are seasonal (i.e. school visits, fairs, etc.).

Improvement Status:
MoDOT district and central offices reported a total of 361 public appearances during July, August and September 2005. Community Relations updated its Intranet site to provide tools such as a basic MoDOT PowerPoint presentation, ready-to-print handouts and answers to frequently asked questions for those who speak on behalf of the department. An announcement that promotes MoDOT employees as speakers appears periodically in ExpressLane, MoDOT’s electronic newsletter.

Number of Public Appearances

![Number of Public Appearances Chart]

Desired Trend:

October 2005 TRACKER – Page 18a
**Accurate, Timely, Understandable and Proactive Transportation Information (Outbound)**

**Percent of customers who feel MoDOT provides timely information**

**Result Driver:** Shane Peck, Community Relations Director  
**Measurement Driver:** DeAnne Bonnot, Community Relations Coordinator

**Purpose of the Measure:**  
This measure tracks whether customers are comfortable with MoDOT’s proactive efforts to provide information they need and use.

**Measurement and Data Collection:**  
Data was collected as part of the Missouri Advance Planning initiative. A customer survey of 3,100 Missourians was conducted by telephone in May 2005. New data will be collected in Spring 2006.

**Improvement Status:**  
Overall, 71 percent of respondents reported that MoDOT provides timely information. Strong agreement was reported by 17 percent of those surveyed.

MoDOT made greater use of portable message boards to announce directly to travelers the dates when projects start and the estimated length of delays when applicable. Permanent message boards were added to interstates and other major routes to inform drivers of delays and conditions that might affect their safety. Other examples of timely communication include the Amendment 3 point-of-presence signs with completed as promised banners, offers for subscriptions to e-updates and an e-newsletter, the online construction and road conditions maps and the I-44 and I-70 Incident Management team efforts to communicate traffic conditions statewide.

<table>
<thead>
<tr>
<th>Percent of Customers Who Feel MoDOT Provides Timely Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
</tr>
<tr>
<td>71%</td>
</tr>
<tr>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

2005 Calendar Year
Accurate, Timely, Understandable and Proactive Transportation Information (Outbound)

Percent of customers who feel MoDOT provides accurate information

Result Driver: Shane Peck, Community Relations Director
Measurement Driver: DeAnne Bonnot, Community Relations Coordinator

Purpose of the Measure:
This measure tracks whether MoDOT customers feel they can rely on information the department provides. MoDOT can use the data to determine whether adjustments in message content or delivery are needed.

Measurement and Data Collection:
Data was collected as part of the Missouri Advance Planning initiative. A customer survey of 3,100 Missourians was conducted by telephone in May 2005. New data will be collected in Spring 2006.

Improvement Status:
Overall, 72 percent of respondents reported that MoDOT provides accurate information. Strong agreement was reported by 1 out of every 5 respondents.

During the 2005 construction/maintenance season, MoDOT expanded its efforts to be the first, best, most accessible source of information about projects that affect travelers. For example, portable message boards were used to a greater extent to announce project start dates and communicate delays. District offices offer automatic e-update subscriptions – up-to-the minute information e-mailed directly to customers who have selected their interest areas from a list of categories – and CO offers an e-newsletter twice a month. The I-44 and I-70 Incident Management teams communicate on a daily basis to ensure the department’s information is accurate. When customers find reliable information easily, they’re likely to feel satisfied.

![Percent of Customers Who Feel MoDOT Provides Accurate Information](image)

Desired Trend:
Accurate, Timely, Understandable and Proactive Transportation Information (Outbound)

Percent of customers who feel MoDOT provides understandable information

Result Driver: Shane Peck, Community Relations Director
Measurement Driver: DeAnne Bonnot, Community Relations Coordinator

Purpose of the Measure:
This measure indicates if customers were able to comprehend MoDOT’s many proactive, outbound communications.

Measurement and Data Collection:
Data was collected as part of the Missouri Advance Planning initiative. A customer survey of 3,100 Missourians was conducted by telephone in May 2005. New data will be collected in Spring 2006.

Improvement Status:
Overall, 70 percent of respondents reported that MoDOT provides understandable information. One out of every 5 people surveyed strongly agreed that MoDOT’s information was understandable. With MoDOT’s soundbite and electronic newsletter services, media representatives and citizens can call a toll-free number or visit the Newsroom on MoDOT.org to hear experts’ recorded messages. Automatic e-updates from district offices and the statewide e-newsletter also inform subscribers in clear language. An improved Connections newsletter helps employees become familiar with issues so they can convey department messages within their communities. Visibility improvements such as an increase in the size of letters on some highway signs and installing more visible center line stripes, improve motorists’ comprehension while traveling.
**Number of contacts initiated by MoDOT to media**

**Result Driver:** Shane Peck, Community Relations Director  
**Measurement Driver:** Jeff Briggs, Community Relations Coordinator

**Purpose of the Measure:**  
This measure tracks how well MoDOT’s staff is “reaching out” to reporters to tell them about the good work MoDOT does.

**Measurement and Data Collection:**  
All contacts (news releases, e-mail, phone, correspondence, etc.) initiated by MoDOT staff are included. Central Office Community Relations collects quarterly results, including submissions from districts.

**Improvement Status:**  
This quarter’s numbers have dramatically increased, for two reasons. Our traditional outreach methods, mainly news releases, have increased due to additional efforts to publicize our programs and activities. Also, the additional bar in the third quarter reflects contacts from the St. Louis and Kansas City districts to reporters detailing incidents from the traffic operations centers – contacts we hadn’t counted before.

Our numbers will continue to climb as we identify more issues for which news releases and other traditional contacts will be appropriate, work more with other agencies to issue joint news releases, and start counting contacts from our new e-newsletter.

![Media Contacts Chart]

**Calendar Year**

<table>
<thead>
<tr>
<th>Number</th>
<th>2nd Qtr 2005</th>
<th>3rd Qtr 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>With Traffic Updates</td>
<td>24,177</td>
<td>148,554</td>
</tr>
<tr>
<td>Traditional</td>
<td>35,187</td>
<td></td>
</tr>
</tbody>
</table>
Accurate, Timely, Understandable and Proactive Transportation Information (Outbound)

**Percent of MoDOT information that meets the media’s expectations**

**Result Driver:** Shane Peck, Community Relations Director  
**Measurement Driver:** Jeff Briggs, Community Relations Coordinator

**Purpose of the Measure:**  
This measure tracks how MoDOT is meeting the media’s needs by providing appropriate information.

**Measurement and Data Collection:**  
Community Relations sends out surveys asking statewide media if our news releases, public meetings and events are meeting their expectations. They are asked to rate their level of satisfaction in the areas of press releases, public meetings and events. Each area is further rated in newsworthiness, timeliness, and how understandable it is.

**Improvement Status:**  
Data was collected in June 2005 from all media, statewide. Although the numbers are good, we’re expecting future improvement by offering our website newsroom. This new service for media was launched in August, and includes sound bites from department spokespeople, story visuals and other background to enhance media reports. All media are also receiving our biweekly Express Lane newsletter, which provides additional story ideas and background.

![Percent of MoDOT information that meets the media’s expectations](Image)

Desired Trend:

- Newsworthy
- Timely
- Understandable

Calendar Year 2005
**Percent of positive newspaper editorials**

**Result Driver:** Shane Peck, Community Relations Director  
**Measurement Driver:** Jeff Briggs, Community Relations Coordinator

**Purpose of the Measure:**  
This measure tracks how MoDOT is being perceived by media, and by extension the public.

**Measurement and Data Collection:**  
Using a newspaper clips database, Community Relations staff reviews statewide newspaper editorials and determines whether they’re positive or negative toward MoDOT and/or the issues it advocates. Only editorials written by newspaper staff are included; guest editorials and letters to the editor are not. Results are charted quarterly.

**Improvement Status:**  
This quarter, 23 of 31 editorials were positive. The percentage remains high, although a little below last quarter’s. No issues were prominent; the editorials covered a wide variety of topics. The quantity of editorials was well off the pace of last quarter’s total of 57, when there were high-profile issues such as primary seat belt legislation, practical design and the beginning of Amendment 3 work. Outreach efforts such as Director Rahn calling reporters on his one-year service anniversary and staff participation at the annual meeting of the Missouri Press Association should improve our numbers in the next quarter.
**Number of repeat visitors to MoDOT’s web site**

**Result Driver:** Shane Peck, Community Relations Director  
**Measurement Driver:** Matt Hiebert, Community Relations Coordinator

**Purpose of the Measure:**  
This measure tracks the number of customers who have used MoDOT’s website on a repeat basis. The data helps demonstrate whether the public views the site as a valuable information resource. If they are returning to the site for multiple visits, they probably view it as a worthwhile use of their time online.

**Measurement and Data Collection:**  
Data is gathered using Web Trends software. Web Trends measures site activity and produces reports in graphic and tabular formats.

**Improvement Status:**  
We’ve enacted several methods to boost repeat visitors to MoDOT’s web site. Overall these methods have dealt with marketing the site to the public and our business partners. The web site address is being added to many MoDOT vehicles to inform more people about the existence of the site. An e-mailed newsletter with teaser blurbs that link back to various pages on the site is also being distributed. Reciprocal links from other state DOTs, media outlets, weather information and athletic venues are currently in place and their number is increasing. These are all part of a 10-point marketing plan to promote the site. New E-business pages that advertise and sell surplus vehicles and equipment have been added, and a hundred-page MoDOT business site being hosted by another agency, and therefore not tracked, was recently converted and moved to the in-house server. The WebTeam and manager are also training in methods and technologies to better market the site and evaluate its content.