2006

Report to the

Joint Committee on Transportation Oversight



Missouri Department of Transportation

Mission Our mission is to provide a world-class transportation experience that delights our customers and promotes a prosperous Missouri.

Progress You Can Feel, Innovation You Can Expect

The past year can be chalked up as another success in the record books of Missouri transportation. In addition to working to improve 2,200 miles of the state's busiest highways, we completed a number of projects as promised. Here's a look at some of our other highlights:

- 2006 saw our largest construction season ever.
- We announced plans to improve 800 of our worst bridges by 2012 under our Safe & Sound Bridge Improvement Plan.
- In addition to the Safe & Sound Plan, we moved ahead with two additional designbuild projects: rebuilding Interstate 64 in St. Louis and rehabilitating or replacing the Paseo Bridge in Kansas City.
- Missouri legislators passed several key laws to keep Missourians safe as they travel, including stronger requirements for children in booster seats and specific penalties for injuring or killing workers in work zones.
- New emergency reference markers went up across the state to help travelers instantly determine their exact location and direction of travel on Missouri's interstate highways a key benefit in an emergency.
- We completed installing guard cable on Interstate 70, an initiative that prevented vehicles from crossing the median along this corridor 94 percent of the time in 2005.
- We got a little greener in the last year by becoming the first government agency in the nation to test new energy-saving diesel-electric bucket trucks.



"In my State of the State address, I had the opportunity to say MoDOT had turned the corner and was earning the trust of Missourians, and that is true. Missourians are seeing that and feeling that through the Smooth Roads Initiative, which has been a tremendous success."

Gov. Matt Blunt at the announcement of MoDOT's Safe & Sound Bridge Improvement Plan, Sept. 7, 2006



"Last year during this address, I made a lot of bold statements. I said that together, the people of Missouri and MoDOT, would make our highways smoother and safer, sooner than anyone could imagine. I said that MoDOT would become a model for state government by demonstrating openness, accountability and an unrelenting focus on the people we serve. And I said we would make the absolute best use of every taxpayer dollar we spent on your transportation system. Last year, I talked the talk. During the past year, we have walked the walk. With your help, we are proud to bring you progress you can feel!"

MoDOT Director Pete Rahn in the 2006 State of Transportation Address to a joint session of the Missouri legislature



- To help travelers combat congestion and high gas prices and provide an additional transportation option for Missourians, we began exploring the option of adding an Amtrak rail line between Springfield and St. Louis.
- To help motor carriers conduct their business faster and easier, we extended our work hours and introduced MoDOT Carrier Express an Internet-based computer system.
- We launched a new electronic newsletter, ExpressLane, to help us keep our customers informed about what's going on in transportation.
- A team of independent auditors certified that our finances meet generally accepted accounting principles – a ruling that shows we're being accountable with the resources we're given.

Report At A Glance

The next few pages will provide more detail about our achievements over the past year and show how we're striving every day to make sure:

- you have a smooth ride when you drive Missouri's roadways;
- your travel is not delayed;
- you get where you're going safely;
- you're getting a dollar of value for every dollar we spend; and
- you have a voice in projects that impact your life.

Getting A Smooth Ride

Smoother, Safer, Sooner

We've been able to make significant progress in highway improvements with our Smoother, Safer, Sooner initiative made possible by additional revenue from Amendment 3. The initiative has three components: 1) smooth roads, 2) accelerated projects and 3) new construction.

Smooth Roads Initiative

Our engineers took to the streets from August to October to inspect the work completed under the Smooth Roads Initiative, a project focused on improving 2,200 miles of our most heavily traveled highways. As part of our Seat of Your Pants Tour, we checked the smoothness of the work where it counts – the seat of your pants. We also examined the wider, brighter lane markings and the easier-to-read road signs included in the work. Our goal is to meet Gov. Matt Blunt's challenge to complete this initiative by the end of this year - a full year ahead of schedule.

Accelerated Projects

Work is under way on 53 projects totaling almost \$379 million that we've been able to speed up thanks to Amendment 3.

A few examples of major projects that have been accelerated are:

- Rehabilitation of the Route 67 bridge crossing the Missouri River in St. Louis;
- Major congestion relief work on the 3-Trails Crossing Memorial Highway (formerly known as the Triangle) in Kansas City; and
- Completion of Route 61 to four lanes in northeast Missouri.

New Construction

Work is already under way on 15 of the 38 new construction projects funded by Amendment 3. Here are some of the projects:

- Replace the Truman Road bridges over I-35 in Kansas City
- Build Route 54 interchange near Camdenton
- Upgrade Route 165 in Hollister
- Upgrade Route 171 to Route 66 in Joplin (Range Line Bypass)

Largest Construction Season Ever = Progress As Promised

Missourians encountered a lot of work zones this year as we tackled our biggest construction season ever. Thanks to Amendment 3, this level of work will continue for a few more years. The 2007-2011 Statewide Transportation Improvement Program contains 905 projects totaling \$5.7 billion, which means we'll have another busy construction season next year.

For the next three years, we'll average more than \$1.4 billion a year in construction and right of way. Some of the projects planned for the next five years are completion of significant four-lane corridors:

- U.S. 60 from Springfield to Sikeston
- O U.S. 71 (Bella Vista Bypass)
- O I-64/U.S. 40 connecting to I-70
- U.S. 65 from Buffalo to Arkansas
- U.S. 67 from Festus to Poplar Bluff
- U.S. 36 from Macon to Hannibal
- Route 21 in Jefferson County to Hillsboro
- Camden County Route 54



Our construction program has been booming largely due to the construction bubble made possible by Amendment 3. That amendment required us to issue construction bonds and use the proceeds from Amendment 3 to pay off the bonds. That means, our total debt can't exceed revenues from Amendment 3.

Beginning in 2010, however, the construction bubble bursts, and funding will drop to about \$700 million a year. We'll then return to a construction program that is about the same level as we had before Amendment 3.

Completed as Promised

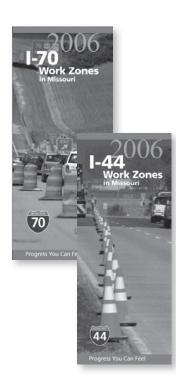
- Making Route 36 four lanes from New Cambria to west of Macon
- Making Route 61 four lanes from lowa to the Route 136 spur in northeast Missouri
- Replacing the Route 13 Missouri River Bridge at Lexington
- Making Route 71 four lanes from Pineville to Arkansas (a different project than the Bella Vista Bypass)
- Making Route 412 four lanes near Kennett in southeast Missouri
- Adding lanes on I-44 from Franklin County to Allenton Road near St. Louis

"I just wanted to let you know how much I appreciate the new pavement on 270 in South County! It's so much better now that it's smooth. Thank you for scheduling the work well after rush hour to avoid causing traffic problems. Keep up the good work!"

Comments from a customer's e-mail, June 22, 2006

"Your work zone maps are GREAT! I travel about 2,000 miles a month to places all over the state, and the maps are fantastic for helping me plan my trips. Thanks!"

Comments from a customer's e-mail, April 21, 2006



All of this work results in a lot of orange barrels across the state. If you've traveled anywhere in Missouri lately, it's likely you've encountered one of the more than 1,250 active work zones. While this work poses some inconvenience for Missouri motorists, the end result will be well worth it – smoother, safer highways that save lives, create jobs and improve travel.

Reducing Delays

Incident and Work Zone Management Teams

We built on the success of the incident and work zone management teams we created last year to better coordinate work along some of our busiest corridors, such as Interstates 44 and 70, where roadwork and congestion pose unique challenges. The teams cross district boundaries and work daily to give travelers the information they need about work zones and construction. We also continued to use portable message boards, billboard advertising, radio public service announcements, news releases and our Web site to inform motorists about construction work and potential delays.

Work Zone Maps

This year we offered the public printed work zone maps that detail specific work on Interstates 70 and 44 where the bulk of construction is occurring. We also created a statewide construction map showing major construction projects across the state. These three maps are also available online, along with a more interactive work zone map that allows motorists to organize their work zone search by trip origin and destination, route or region. Color-coded icons display active sites by degree of delay. Motorists can click on icons for more detailed information on specific work zones. Text displays describe the duration of the work zone, the type of work being done and expected lane closures.

Top 10 Work Zones To Look Out For

To help travelers prepare ahead of time for road construction, we issued the top 10 list of highway work zones to look out for in 2006, ranked in order of impact. Resulting news coverage of this list, along with our work zone maps, helped motorists avoid travel delays due to road construction.

Night and Off-Peak Hours Work

To help lessen the impact our work has on drivers, we performed a lot of work at night or during off-peak hours. In fiscal year 2006:

- 109 projects that required lane closures were done at night.
- 145 projects that required lane closures were done during off-peak hours.
- 107 projects included innovative contract methods, such as penalties for a project not completed on schedule.
- 74 projects required closing a road to speed construction.

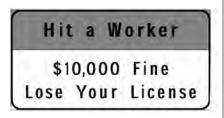
Getting You Where You're Going Safely

There were 1,257 traffic-related fatalities on Missouri's roads in 2005, the most since 1978. That's unacceptable. Here are some things we're doing about it:

Work Zone Legislation

Between 2001 and 2005, 118 people were killed and 6,445 were injured in Missouri work zones. Thanks to Missouri legislators and Gov. Matt Blunt, we have a new

highway work zone law aimed at decreasing accidents, injuries and deaths in work zones. We're hoping the new law - which among other provisions sets a fine of up to \$10,000 for killing a highway worker - will make motorists sit up and take notice. To alert Missourians to this new law, we have installed signs throughout the



state warning of the potential fine. We also held news conferences around the state to spread the word about the tougher penalties. As an added step, we have worked with the Missouri Highway Patrol to educate motorists about a related law - the Move Over law - by putting bumper stickers with that message on MoDOT vehicles.

A Tribute

Highway work is dangerous, and our employees put their lives at risk every day. Unfortunately, we lost three valued workers, as well as several contract employees, on the job this year. We pay tribute to:

- Ken Hoierman, District 6, August 2006
- Robert Mayer, District 3, April 2006
- Bob Eftink, District 10, April 2006

Their friends and families remain in our thoughts as we continue to be diligent in our efforts to protect our employees and keep our work zones safe.

Giving Kids A Boost

Again, thanks to the work of Missouri legislators and the governor, we now have a booster seat law that will keep children safer when riding in a vehicle. The new law requires children ages four through seven to be in booster seats. The fine for violating this law is \$50 plus court costs. To inform the public about the specifics of this new law, we sent 12,000 informational postcards to hospitals, physicians, local health departments, Parents As Teachers groups, child care providers, car dealers, insurance companies and others. We also created an informational brochure and issued a statewide news release on the topic. We're airing two radio advertisements to spread the word and are working on an educational tape for law enforcement personnel. "On behalf of my family and friends I would like to compliment MoDOT and its contractors for a job very well done on the stretch of Highway 61 between Troy and Bowling Green. We all noticed this past weekend that our ride was extra smooth and quiet while driving to and from our property in Pike County. I know you all aren't used to compliments as much as criticisms but my hat's off to everyone involved in resurfacing both north and southbound lanes on the before-mentioned section of 61. Thanks again."

Comments from a customer's e-mail, May 10, 2006



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Guarding the Middle

To help reduce fatalities on Missouri highways, we recently completed installing threestrand, low-tension median guard cable along Interstate 70. The cable is designed to "catch" a vehicle before it crosses into the opposing traffic lanes. A 2005 MoDOT study showed the guard cable prevented vehicles from crossing the median 94 percent



of the time. There were 24 fatalities involving crossover crashes reported in 2002 before the guard cable was in place. However in 2005, with the majority of guard cable installed along Missouri's busiest interstate, only six crossover fatalities were reported, four of which occurred in locations without guard cable at the time. We're about three-quarters of the way finished with placing guard cable on I-29 between Kansas City and St. Joseph, and installation is in progress along most of the I-44 corridor. Median guard cable is already in place along I-435 in the Kansas City region, as well as on I-44 and I-55 in the St. Louis region.

Marking the Way

We are almost finished installing new emergency reference markers on Missouri interstates to help travelers instantly determine their exact location and direction of travel – a key benefit in an emergency. The green signs show the road's name, direction of travel and exact mileage location, down to the nearest two-tenths of a mile. They replace two types of older markers and will help us save an estimated \$200,000 a year in maintenance costs. Motorists are also benefiting from wider, six-inch center lines and edgeline rumble stripes being installed as part of the Smooth Roads Initiative.

Protecting Young Drivers

We continue to place a strong emphasis on educating young drivers to use safe driving habits. Here is a brief look at some of those initiatives:

Restrain Yourself challenged high school students across the state to use their creativity to develop an original 30-second public service announcement that convinces their peers to buckle up every time they are in a vehicle.

Battle of the Belt is an educational program in which local high schools compete against each other to increase safety belt use and potentially save lives.

Modifications to Missouri's **graduated driver license law** require 40 hours of behindthe-wheel driving instruction (effective Jan. 1, 2007). This is an increase of 20 hours of supervised instruction. The law also includes restrictions on the number of passengers that new drivers are allowed to transport.

The **Operation Safe Teen** campaign includes an aggressive advertising effort supported by enforcement of Missouri's traffic laws, including provisions of the graduated driver license law that make safety belt use a requirement for teens and their passengers.

Changing Missouri's Safety Belt Law

Changing Missouri's safety belt law to allow for primary enforcement will be our top legislative priority in the 2007 session. We have an opportunity to save 90 lives a year



and prevent more than 1,000 disabling injuries with a primary safety belt law. While this issue may not be universally popular, it's the right thing to do. Of the more than 500 Missouri traffic offenses, the state's safety belt law is the only one restricted to second-ary enforcement. In addition to saving 90 lives a year, a primary safety belt law could:

- Save Missourians approximately \$231 million a year in costs associated with traffic crashes;
- Reduce Medicaid costs in Missouri by approximately \$103 million over a 10year period;
- Qualify Missouri for an additional \$16 million in federal funds for transportation safety projects; and
- Reduce the costs to employers who face lost productivity, higher insurance premiums and greater workers' compensation and medical costs when employees are injured in traffic crashes.

Getting a Dollar of Value for Every Dollar We Spend

Design-Build

In 2005, the legislature gave us authority to pursue three design-build projects, and the Missouri Highways and Transportation Commission has approved all three pilot projects: rebuilding a 12-mile stretch of Interstate 64 in St. Louis, rehabilitating or replacing the Paseo Bridge in Kansas City and repairing 800 of our worst bridges. Here are a few more details about each of those projects:

The New I-64

This project – the largest, single highway construction project in Missouri history – involves rebuilding 12 miles of I-64 from west of Spoede Road in St. Louis County to Sarah Street in St. Louis City, including about one mile of I-170 as it approaches the I-170/I-64 interchange. The project improvements include: fix the interstate-to-interstate connection, fix heavily traveled interchanges, add one lane each direction from west of Spoede to I-170, rehabilitate or replace more than 30 bridges, repair or replace pavement and improve safety for the average 150,000 motorists who use it each day. Two teams will compete for the contract, which we expect to award in November. Construction is scheduled to begin in spring 2007 and be completed no later than Oct. 1, 2010. The project is fully funded in our construction program for \$535 million.

I-29/I-35, Paseo Bridge

Our second design-build project to be approved is the Interstate 29 and Interstate 35 project in Kansas City, which includes the Paseo Bridge. The project is four miles long and extends from Route 210 to the Central Business District. The project improvements include adding capacity to improve traffic flow and rehabilitating or replacing the Paseo Bridge. The project was fully funded through several sources providing a unique opportunity to complete this project now. Amendment 3 funds provided the revenue source for \$195 million for the project. Sen. Kit Bond also identified \$50 million in SAFETEA-LU for the job. The final Environmental Impact Statement for the project will be released later this year. Construction is expected to begin in early 2008 and be completed by Oct. 31, 2011.

"I just wanted to commend you and your Roadside Assistance program, particularly Dennis, who changed a left-front flat for me quickly and efficiently on a Sunday. What a wonderful service you provide...I had no idea until my tire blew out in an area that would have been unsafe for me to change it myself. I really felt like, well now, THAT's a good use of my tax dollars! Thanks again."

Comments from a customer's e-mail, April 6, 2006



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"MoDOT's e-business system (for motor carriers) is better than we anticipated. We're able to complete our filing much more quickly - we estimate it's freed up an entire workday every month. This is definitely a win-

win situation."

Kevin Rose, Contract Freighters, Inc.

Safe & Sound Bridge Improvement Plan

Most of Missouri's worst bridges will be repaired or replaced by 2012 under the Safe & Sound Bridge Improvement Plan, which targets 800 bridges for improvement by 2012. The project consists of large-scale system improvements to bridges in each of Missouri's 114 counties. We are using this project as our third design-build project to encourage

innovative approaches and affordable financing so we can fix a large number of bridges in a short amount of time. Under the proposal, we are asking the private sector to finance the cost of the project, estimated to be between \$400 million and \$600 million. We're also proposing that the contractor be responsible for structural



maintenance of these bridges for at least an additional 25 years. Our goal is a financial plan that requires no commission payments during the initial five-year construction period, with uniform annual payments spread over the remaining maintenance period. This is an extremely innovative program we're attempting, and we're excited to see how industry responds to this proposal.

Getting Greener

In July, we became the first government agency in the nation to test three new energy saving, diesel-electric bucket trucks as part of the Utility Hybrid Truck Pilot Program. The trucks are expected to cut fuel costs and smog-producing emissions in half, while also reducing maintenance costs and noise. The trucks also provide an alternative power source in emergencies. We have placed the hybrid trucks in service along with comparably sized conventional trucks to assess performance, reliability and business benefits.

Practical Design

We continue to apply our Practical Design approach to all projects, allowing us to customize projects to fit specific needs, rather than apply generic standards across the board. This effort has been enormously successful in controlling project costs, especially in light of the price pressures all state transportation departments are facing due to increased construction costs. In fact, with project costs running just 6.8 percent over program estimates in fiscal year 2006, Missouri was the lowest of 11 states in a recent federal survey. Other states were reporting cost overruns of up to 69 percent.

MoDOT Carrier Express

In February, we launched an Internet-based system that allows motor carriers to electronically file fuel tax reports and international registration updates and to apply online for permits for over-dimension and overweight loads. Carriers responded enthusiastically, reporting that Carrier Express allows them to complete transactions in minutes rather than days. More than 80 percent of over-dimension/overweight permit applications are now filed through the system, which recently received a Computerworld Honors Laureate Medal. The medal recognizes technology projects for originality, vision and benefit to society.

Staggered Registration for Motor Carriers

Thanks to new legislation, motor carriers now have a choice of one of four deadline dates to renew their registration. Businesses have reported that the staggered registration improves their cash flow management. We benefit, too. Employees now process a steadier stream of registration materials year-round.

Tracking Our Results

We continue to monitor and publish our progress in meeting our customers' expectations in our quarterly publication, the Tracker. The Tracker contains 111 performance measures that help determine whether Missourians are getting a good return on their transportation investment and where improvements are needed. The publication identifies objective measures for success in areas such as traffic flow, smooth roads, safety, timely project completion and best value for every dollar spent. It then shows the latest data that tracks progress toward achieving these measures.

Here are some of the Tracker's latest findings:

- Sixty-one percent of our major highways are in good condition; 71 percent of our minor highways are in good condition.
- Seventy-six percent of MoDOT construction projects were completed on time in the past year - that means completed by the date we promised the public. Even if we have changes to a project that add to its length, we hold ourselves to the high standard of completing the project by the original date.
- Seventy percent of Missourians are satisfied with MoDOT.
- MoDOT Motorist Assist crews in St. Louis and Kansas City helped 54,000 stranded motorists in the past year.
- Thirty percent of all fuel used by MoDOT vehicles in the past year was ethanol or biodiesel.
- Motorcycle fatalities increased dramatically from 55 in 2004 to 88 in 2005.
- Approximately 57 miles of new four-lane corridors were completed in 2005.
- In the first half of 2006, big trucks traveled nearly 2.7 billion miles on Missouri interstate highways.
- 433,000 people traveled in Missouri by rail in the past year, and 75,800 passengers and 34,500 vehicles were transported by ferryboat.
- Adopt-A-Highway volunteers take care of 5,529 miles of Missouri roadsides.

"I drive to work daily from Ballwin to Rock Hill. Each day I use Manchester Road to get to and from work. I am amazed and impressed with the roadwork that has been completed on Manchester Road without causing any challenges for rush hour drivers. I was driving home this past Friday and was surprised to see all of the new blacktop because I didn't even take note of previous work being completed. Thank you for all of your hard work! It is appreciated!"

Comments from a customer's e-mail, May 22, 2006





Having a Voice in Projects That Impact Your Life

Missouri Advance Planning – Mapping Our Transportation Future

We've completed most of the work on our long-range transportation planning initiative called Missouri Advance Planning. The MAP initiative interviewed stakeholders, surveyed Missourians and interacted with citizen-based working groups around the state to find out what our transportation system could and should do for its citizens and how best to fulfill those expectations. In short, Missourians said MoDOT should focus on taking care of Missouri's transportation system, explore new ideas that give Missourians the most for their transportation dollars and secure more transportation funding. We also learned there is not a major difference in Missourians' values about transportation no matter where they live and work. Missourians consistently support smoother roads, safe bridges and a healthy and prosperous quality of life. They also feel Missouri's economic vitality is more important than lower transportation costs. A summary of the findings will be available for public comment later this year.

Partnering for Innovative Efficiencies

We continue to involve and solicit input from industry leaders, government officials, and interested citizens to improve Missouri's transportation system through meetings called "Partnering for Innovative Efficiencies." Together we discuss ways to produce transportation projects faster, better and cheaper within our limited resources. To date, we have involved 132 participants and generated more than 177 concepts, including making better



use of technology, examining ways to get projects finished quicker and using innovative methods for project delivery and contracting. With partner volunteers, nine teams have investigated and implemented 22 creative solutions.

Where We Are Now

Thanks to the construction bubble funded by Amendment 3, we'll average more than \$1.4 billion a year in construction and right of way for the next three years. Beginning in 2010, however, transportation funding will drop to about \$700 million a year. That means we'll basically be back to providing the same highway program we did before Amendment 3. As we saw when we put together the 2007-2011 construction program, we will only have enough funds to maintain what we have. There is very little money for any new construction in 2011. This, along with rising construction costs, declining revenues and the fact that we continue to rank 45th in the nation in revenue per mile, has us deeply concerned.

In the near future, Missourians and their elected officials will have to decide at what level they want their transportation system to operate and then fund it accordingly. In the meantime, we'll continue to look ahead at the state's transportation needs, talk about Missouri's priorities and get things ready because major projects require a great deal of study before they're ready to be constructed. That way, if funds become available, we can move quickly and efficiently in delivering quality transportation improvements.

As you can see by the many references we made to the Missouri legislature in this report, it's obvious we couldn't have made the progress we did without your help. We look forward to working with you for even greater progress in the years ahead – progress you can feel!



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