

Executive Summary

2004 Report to the Joint Committee on Transportation Oversight

Introduction

The past fiscal year was one of both challenges and opportunities for the Missouri Department of Transportation and the Missouri Highways and Transportation Commission. That's because we have a big job - we're responsible for planning, designing, building, maintaining and operating more than 32,000 miles of highway – the seventh-largest highway system in the United States. We also work to improve aviation, waterways, transit and railroads in Missouri.

We have tested our processes to ensure we deliver quality projects on time and within budget, but it is obvious we need additional resources to improve road and bridge conditions throughout the state. Despite the fact that we don't have enough money to do all of the projects Missouri needs, we continue to make progress and achieve success.

Many challenges lie ahead, but the foundation is in place for positive things to happen. We will continue to strive for continuous improvement and work with our partners to deliver a better state transportation system. **Our bottom line commitment to you is to provide a dollar of value for every dollar we spend.**

The next few pages will tell you and all Missourians 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 have a voice in projects that impact your life; and
- you're getting a dollar of value for every dollar we spend.

We'll also outline the resources we need to improve transportation in our state.

GETTING A SMOOTH RIDE

Working for you

We continue to bring our road construction projects in on time and within budget. In fact, in fiscal year 2004:

- **We completed 359 construction projects within four percent of the project estimates even with rising oil, steel and concrete prices.**
- **Over the past five years, we've delivered more than 1,000 projects totaling \$3 billion within less than one percent of the estimated cost.**
- **We saved \$3.8 million by rejecting bids in excess of our estimates and rebidding them.**

In fiscal year 2004, we replaced or made major repairs to more than 50 bridges throughout the state. In addition, we made minor repairs to more than 100 bridges. Also, due to maintenance efforts and previous projects contained in our Statewide

Transportation Improvement Program, 242 bridges were removed from the deficient bridges category in 2003 and made our system safer. However, there are still 2,959 bridges that people use every day that are structurally or functionally deficient.

Smoother roads

We awarded more than 1,200 miles of roadway resurfacing projects in fiscal year 2004. This work, which ran the gamut from minor sealing to major resurfacing, will contribute to improving our overall road conditions. In addition, nearly \$20 million was redirected to pay for additional pavement maintenance across the state. These additional projects should be let next spring and summer. Still, only 46 percent of our major highways are in good or better condition.

REDUCING DELAYS

We continue to concentrate resources on reducing traffic congestion. Here are some specifics:

The cutting edge of traffic technology

The Gateway Guide program – St. Louis’ regional intelligent transportation initiative – entered its second year of operation. Kansas City Scout, the Kansas City area’s traffic management system, was launched in January 2004. With the help of closed-circuit television cameras and roadway sensors, the systems monitor traffic conditions, send help to clear incidents, relieve congestion and provide more and quicker traffic updates to travelers.

Helping motorists

Another important way we’re working to reduce traffic congestion and minimize delays is through our motorist assist programs in the state’s urban areas. Motorist assist provides a number of roadside services, from changing flat tires to clearing highway debris. A University of Missouri-Columbia study conducted in fiscal year 2004 showed St. Louis’ motorist assist efforts:

- reduced vehicle delays by 188,677 hours.
- decreased secondary crashes on I-70 and I-270 by 456.
- saved \$16.4 million, or \$16 for every \$1 spent.

Work zones

When we perform highway maintenance and construction, our goal is to have a minimal impact on drivers while also completing projects on time and within budget. Here are some of the ways we met these goals:

- 87 projects that required lane closures were done at night.
- 86 projects that required lane closures were done during off-peak hours.
- 39 projects included innovative contract methods such as specifying, incorporating and combining liquidated damages and savings.
- 26 projects required closing a road to speed construction.

We also changed our orange work zone warning signs to dramatically improve their quality and visibility. Managing our work zones better minimizes delays and helps everyone get where they need to be.

GETTING YOU WHERE YOU'RE GOING SAFELY

Saving lives

There were 1,232 traffic-related fatalities on Missouri's roads in 2003. That's unacceptable. Here are some things we're doing about it:

- **Guarding the middle**
We have installed more than 100 miles of three-strand guard cable on our interstate system to reduce the number of crashes caused by vehicles leaving the left side of the roadway, crossing the median, and striking oncoming vehicles. We also spent more than \$24 million on projects to make driving safer. The projects included providing interchange lighting, adding shoulder and stop approach rumble strips, installing traffic signals, upgrading intersections, improving signing and upgrading guardrail. In addition to these safety-specific projects, safety is inherent in all of our highway improvement projects.
- **Missouri's Blueprint for Safer Roadways**
To address the problem of too many traffic-related fatalities, we joined with more than 100 of our safety partners to develop a *Blueprint for Safer Roadways*. The blueprint is based on using partnerships to develop and implement strategies to reduce these fatalities by 20 percent or more by the year 2008. Regional committees are being established to develop plans to specifically address local problems and implement corrective activities.
- **Click It or Ticket**
Our Click It or Ticket campaign, designed to increase safety belt and child restraint use, helped to increase seat belt use in Missouri by three percent, from 73 percent in 2003 to 76 percent in 2004. The increase in belt use prevented 23 fatalities and 516 injuries and resulted in an economic savings of more than \$58 million. Child restraint use increased by four percent, from 73 percent in 2003 to 77 percent in 2004. The federally funded campaign includes radio and billboard advertising and provides for grants to pay for additional law enforcement efforts.
- **Laws to get us there**
Last year, we pursued legislation that would allow law enforcement to stop drivers for not wearing their seat belts. Under current state law, officers can only issue safety belt citations if the drivers are stopped for some other violation. We plan to pursue this legislation again in the upcoming session. If Missouri passes a primary safety belt law now, we could save 89 lives a year and prevent 1,050 serious injuries saving \$217 million in economic costs, such as health care expenses and lost productivity.

We also plan to pursue legislation that would increase the penalties for killing or injuring a highway worker in a work zone. The proposal would raise public awareness by posting signs about the penalties in work zones. It would also impose a \$5 surcharge on traffic violations that would be deposited into a fund to pay law enforcement officers to patrol work zones.

Transportation – it's more than just driving

We're not just about highways and bridges. We're also about aviation, rail, water and transit modes. Our multimodal division is the only area that administers programs funded with state general revenue, which has been cut 37.5 percent since fiscal year 2002.

During 2004, we administered \$46.7 million in capital, maintenance and operating assistance to aviation, rail, waterway and transit facilities to help people and goods get where they need to go. Here is a tally of some of our major multimodal projects:

- \$5.9 million for state supported Amtrak passenger service, and \$5.3 million for highway rail crossing safety improvements.
- \$300,000 in state operating assistance for 13 public ports and two river ferry operations.
- \$11.5 million in state and federal aviation funding to improve and maintain Missouri's 119 general aviation airports.
- \$23.8 million in state and federal transit funding to support 69 million passenger trips provided by 226 public and specialized transportation providers.

Nonetheless, multimodal services continue to struggle due to a lack of funding. The following is a list of the top issues facing multimodal transportation:

- Need to identify an adequate and stable funding source for multimodal transportation.
- Need to revise our long-range plan to view transportation in terms of moving people and goods, rather than as separate modes.
- Need funding for Missouri's portion of an improved and expanded regional passenger rail system.
- Need additional funds to help support public and specialized transportation providers who provide transportation to people who don't have vehicles.

HAVING A VOICE IN PROJECTS THAT IMPACT YOUR LIFE

Your opinion matters

In 2003, the Missouri Highways and Transportation Commission challenged us to involve local officials and the public to a greater extent in our planning efforts. We teamed together with our statewide and local planning partners to create a process called the planning framework that includes local communities in making decisions about transportation projects. Under the new planning framework, local officials and the general public have a greater role in making transportation decisions for Missouri. Two national organizations, the National Association of Development Organizations (NADO) and the American Association of State Highway and Transportation Officials

(AASHTO), recognized us for innovation and partnering efforts for our planning framework, achievements that clearly show we're thinking outside the box.

More competitive bidding

We have begun using an alternate bidding process on our highest volume routes. The new bidding process allows contractors to use either concrete or asphalt on the job. We estimate we've saved between \$2.25 million and \$4.2 million on the first 16 projects we bid using this process when compared to the one-year and three-year average prices we received prior to implementing the alternate bidding option. It's also nearly doubled the number of bids we typically receive. We'll continue to seek every opportunity to increase competition in the bid process.

GETTING A DOLLAR OF VALUE FOR EVERY DOLLAR WE SPEND

Taking care of the system

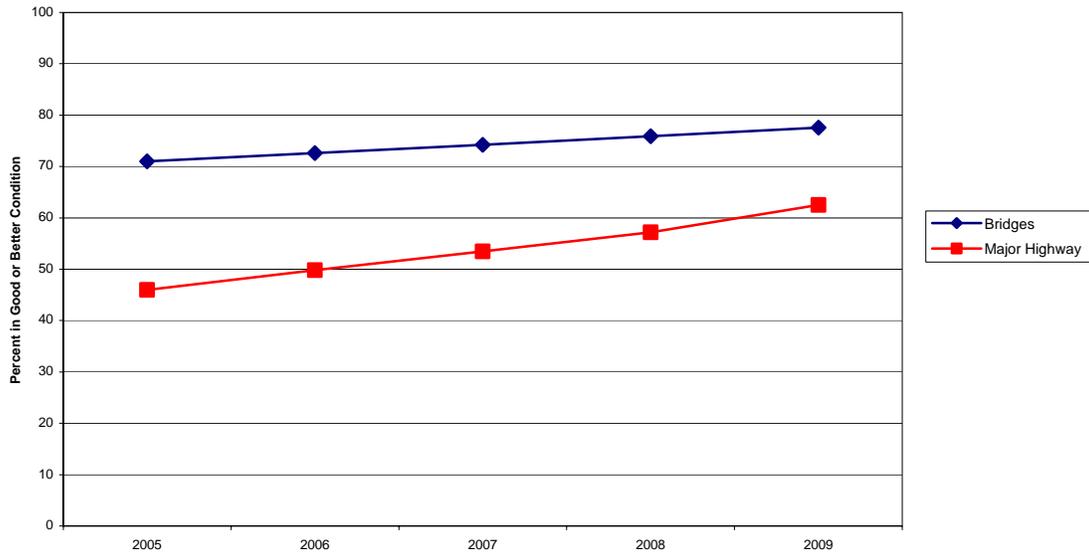
For the past several years, we have steadily increased the amount of funding we dedicate to rehabilitating and reconstructing our existing highway system. This is slowly starting to reverse the declining conditions of our highways and bridges. While it's necessary to take care of our existing system, we must keep in mind that allocating funds for this purpose means less money is available to address needed corridor expansion projects.

The new funding distribution method increased the amount being spent annually on taking care of the system by \$160 million. In January 2003, the amount we spent on taking care of the system increased to \$400 million, and in June 2004 it rose to \$430 million. Furthermore, beginning in 2006, the commission has allocated \$100 million a year of flexible funds that can either be used for major projects or taking care of the system as determined through our cooperative planning framework.

We're also committed to helping local economies grow by setting aside funds for road projects that promote economic development. This funding, often in conjunction with local matching funds, builds projects that bring new jobs to an area. In January 2003 this funding increased from \$15 million to \$20 million annually, and in May 2004 the funding increased again to \$30 million.

The following graph predicts how dedicating funds to our existing system will help improve the condition of Missouri's major highways and bridges over the next five years. The figures reflect projects approved by the commission in our 2005-2009 Statewide Transportation Improvement Program.

Take Care of System Funding Impacts on Condition of Bridges and Major Highways



Where we are now

Despite our efforts to dedicate more funding to our current highway system, the amount is still only enough to make very modest improvements over time. This level of improvement is not enough to satisfy Missouri motorists.

As it stands now, 46 percent of the pavement on major highways is rated in good or better condition, leaving 54 percent in fair to poor condition. The outlook for our bridges is slightly better: 71 percent are in good or better condition. Nonetheless, 29 percent rank fair to poor in condition.

To see real results, we have to quit playing “catch up” and invest additional funding in taking care of our transportation system. Consider this:

- We have the seventh-largest state highway system in the country, yet we rank 44th in the nation in revenue we receive per mile.
- Our highway system, with 32,000 miles, is larger than the systems of our eight neighboring states, yet our fuel tax of 17 cents per gallon is lower than the tax in six of those states.
- Twenty-five years ago, 17 percent of the state’s budget was spent on transportation - now it’s 7.5 percent.

We simply do not have enough funding to bring the condition of Missouri’s roads and bridges to good or better status. The result is major, unfunded needs. This is especially true with our interstates, despite the fact that the commission dedicated \$100 million to improve these roadways.

Missouri's 1,100 miles of interstate connect the state's most populous areas, provide mobility for those who live in rural areas and foster economic vitality. Unfortunately, these critical facilities are aging and in need of reconstruction. Additional capacity and an upgrade to today's design standards will improve safety and reduce congestion. Studies are either planned or under way to determine the long-term needs of these corridors. Because no funds currently exist for us to tackle these ambitious projects, we must start thinking outside the box if we're to make any progress.

Interstate 70

I-70 connects the state's two largest cities and carries more rural daily traffic than any other route. Fifty-eight percent of Missouri's population lives within 25 miles of I-70.

Today I-70 is in a crisis. The interstate, now almost 50 years old, was designed for a 20-year lifespan. Many portions of the facility are strained beyond capacity, with deteriorating pavement and poorly functioning interchanges compounding the problem. **Traffic is expected to double by the year 2030**, when all segments of I-70 are expected to operate at failing levels of service. Some areas will reach the failing point before then, and others are already there.

We're working now to develop a plan for the future of I-70, that would widen the facility to six lanes, rebuild its interchanges and correct design deficiencies. The environmental studies will be completed early in 2005 and put MoDOT in position to design and build the improvements when a funding source is identified. Full implementation will cost an estimated \$3 billion.

Tolling is one proposal that could save I-70. Toll roads were discussed extensively in the last legislative session, and we'll be looking at this issue again this year.

Interstate 44

I-44 is tomorrow's I-70. The problems that exist on I-70 may not be as readily apparent while driving Interstate 44, but it won't be long before I-44 is experiencing the same problems as its older cousin to the north.

Interstate 64

I-64, known by many as Highway 40, has some sections that were built in the 1930s and 1940s. The highway's original concrete foundation is literally crumbling away. Maintenance crews must routinely remove loose pieces of concrete from bridges to keep them from falling on motorists and pedestrians. The long-term solution lies not in spot repairs, but in replacement. Alternatives for doing so have been presented in an environmental impact statement that should be ready for approval in 2005.

Paseo Bridge/Interstate 29/Interstate 35

The Paseo Bridge, built in the early 1950s, is the second busiest bridge spanning the Missouri River in the Kansas City area. In the short term, we are preparing for routine rehabilitation that will require closing the bridge to traffic for up to nine months in 2005.

To address long-term needs, we are studying whether the existing bridge and associated interstate connections will be able to handle traffic in the coming years.

Poplar Street Bridge

Statistics show the transportation network at the core of the St. Louis/Metro East-Illinois urban area will be at the point of failure within 20 years. The bridge, a focal point of interstate traffic movement through downtown St. Louis since the 1960s, is severely overburdened, and the forecast shows congestion will only get worse. In fact:

- by the year 2020, the 90-minute period of rush-hour congestion will double to three hours.
- average delays will increase from 10 to 55 minutes.

The estimated cost for a new Mississippi River Bridge and roadway connections is \$1.6 billion. Missouri and Illinois would split the cost, with Missouri's share estimated to be \$650 million.

Blue Ribbon Panel Report

We continue to implement the recommendations of the Blue Ribbon Panel and use the report as a directive for improving our credibility, accountability and efficiency.

Achievements and Awards

Despite our many needs, we still achieved a number of successes in fiscal year 2004. Here's a brief list of some of our accomplishments and awards:

Bill Emerson Memorial Bridge and the Page Avenue Extension

On Dec. 13, 2003, we dedicated two major projects representing more than \$500 million in construction work. The two projects were the Bill Emerson Memorial Bridge over the Mississippi River at Cape Girardeau and the opening of the Page Avenue Extension between St. Louis and St. Charles counties.

Statewide Traffic Analysis Reporting System (STARS)

According to the Statewide Traffic Analysis Reporting System (STARS), alcohol-related crashes in Missouri in 2003 decreased from the previous year by 4.69 percent, resulting in 15 fewer deaths and 440 fewer injuries. We believe this decline can be attributed to our efforts in the following areas:

- Specialized traffic safety training for law enforcement and members of the court system on topics such as standardized field sobriety testing, traffic crash investigation, breath alcohol testing equipment, courtroom testimony, etc.
- Equipment purchases for state and local law enforcement that included radar units, breath/blood alcohol testing equipment, and safety equipment for conducting sobriety checkpoints.
- Grants to 147 law enforcement agencies across the state for overtime enforcement efforts of Missouri's traffic laws including speeding, impaired driving, underage

drinking, safety belt and child restraint use. More than 1,850 officers worked an additional 17,809 hours of overtime.

Child Safety

We provided more than 1,800 child safety seats to low income and minority families; held six child passenger safety trainings that resulted in certifying 79 new technicians; and added seven new locations for checking child safety seats for correct use.

Taking Inventory

We have begun developing a comprehensive inventory of MoDOT-owned real estate to include data regarding physical characteristics, acquisition details, location with respect to the transportation system and disposal information. The new system will allow us to more accurately and quickly process and report real-estate data. This will help us better manage our assets and make timely business decisions, making the best use of tax dollars.

Diversity

We continue to take measures to make our workforce more diverse. Specifically, we:

- extended full-time positions to seven of 12 Lincoln University Coop students.
- increased our Transportation and Civil Engineering (TRAC) staff volunteers from 61 to 73 to further educate students about careers in engineering.
- received the 2003 Governor's Employment Advocate Diversity Award for outstanding efforts in promoting diversity in the area of employment.
- were recognized by the American Association for Affirmative Action as an essential partner.
- developed a newsletter to better communicate with contractors and the Disadvantaged Business Enterprise community.
- Published a monthly bidding opportunity alert to assist DBE firms on how to become prime contractors.
- hired a female minority consultant firm to make recommendations to help increase Minority/Women-Owned Business Enterprise (M/WBE) participation in our competitive bidding and informal quotation processes.

Construction Prep Center

We continued to provide funding for the Construction Prep Center in St. Louis, an innovative, cooperative effort to increase minority and female participation on highway construction projects. The center offers classes in life skills, conditioning, technology, work ethics, safety, and equipment skills. Since its inception, 493 students have graduated from the center, and 286 have been placed in construction jobs. We are working to develop a similar training program in the Kansas City area.

Grow Native

We teamed with the Missouri Department of Conservation and Grow Native! to transform hundreds of acres of roadsides into native plant showcases. Using native plants helps us cut down on mowing and spraying, which saves maintenance costs and time.

No More Trash!

More than 500 groups and 4,000 individuals picked up more than 13,500 bags of trash around Missouri during No More Trash! Week, May 1-9. This effort is designed to remind Missourians not to litter in the hopes of reducing the \$5 million we spend a year picking up trash.

Awards

- Our Pavement Design and Type Selection team took first place in the 2004 AASHTO Team Excellence Program. The team was also selected as one of the top five candidates for the Missouri Team Quality Award from the Excellence in Missouri Foundation and is being considered for the National Partnership for Highway Quality “Making a Difference” Award.

- The new Page Avenue extension in St. Louis won two awards. The Creve Coeur Lake Memorial Bridge on Page Avenue was a winner in the Portland Cement Association’s 2004 Ninth Biennial Bridge Awards Competition. In addition, Roads & Bridges Magazine ranked the extension third in its top 10 road projects of the year.

- The Asphalt Pavement Alliance gave us a Perpetual Pavement Award for a stretch of highway on Route 63 in Texas County that was originally built in 1963.

- AASHTO named us an Exemplary Partner for teaming up with the Department of Natural Resources to decrease notices of violations and speed projects.

- Our “Drive Smart” work zone awareness campaign won two awards: an AASHTO Pathfinder award and the 2003 Work Zone Safety Awareness Award from the American Road and Transportation Builders Association.

- We won two first-place awards in the 2003 National Association of Government Communicators awards competition for our *Pathways* magazine and a No More Trash! anti-litter video public service announcement.

- We received the 2004 Honda Environmental Award for our outstanding achievements in the area of improving environmental quality through leadership in fleet management.

- The Missouri/Kansas Chapter of the American Concrete Pavement Association gave us the Best General Aviation Project award for the Hannibal Regional Airport’s new runway, apron and parallel taxiway.