

Connections

Completed One Year Ahead of Schedule
January 2007

MoDOT Delivers 2,200 Miles of Smooth Roads One Year Ahead of Schedule

by Sally Oxenhandler

“Governor, I want to report to you we accepted your challenge, and we have delivered. I believe the state of Missouri is better for the challenge the governor made, and we know Missouri’s roads are better as well.”

With those words, Director Pete Rahn announced we had met Gov. Matt Blunt’s challenge to deliver the Smooth Roads Initiative a full year ahead of schedule. Rahn and Blunt held a news conference Dec. 8 along Highway 54, eight miles south of Jefferson City, to mark the comple-

tion of SRI. About 50 people, including legislators, industry partners and MoDOT employees, braved the cold weather to celebrate the project’s completion.

The aggressive road-improvement program was scheduled to be finished in December of 2007. However, in this year’s State of the State address, the governor challenged the department to complete the work a year early.

“I issued the challenge because I firmly believed MoDOT had turned the corner

and was up to the task of improving our worn out roads as quickly as possible,” Gov. Blunt said. “I’m proud of the way the agency and its partners worked to restore the citizens’ trust. We needed these improvements, and MoDOT delivered.”

Commissioners Mike Kehoe and David Gach and Rep. Neal St. Onge, chairman of the House Transportation Committee, also spoke at the event. At the end of the remarks, Director Rahn and the governor unveiled a road sign that said “Smoother, Safer, Sooner – 2,200 Miles of Smooth Roads by Winter 2007” with a yellow banner plastered across it that read “Completed As Promised.” They then applied a second yellow banner on the sign proclaiming, “Completed One Year Ahead of Schedule.”

To round out the ceremony and officially complete the Smooth Roads initiative, the pair painted the last stretch of edgeline striping on a marked section of Highway 54.

“I’d especially like to thank the District 5 employees who helped with this ceremony,” Rahn said. “Thanks to them, it was a great event!”

Every MoDOT employee had a hand in helping to complete the Smooth Roads Initiative a year early, Rahn said. As a reward for these efforts, all full-time and permanent part-time MoDOT employees

SRI Benefits

Safety improvements will:

- save an estimated 14 lives and prevent 589 injuries
- prevent an estimated 761 crashes
- result in a cost savings of more than \$74 million to the public

Early completion of SRI will:

- increase income to Missouri by \$133 million (source: Department of Economic Development)
- save \$2.2 million in costs that would have been incurred for routine maintenance and striping

Smoother pavement will:

- produce a 2.46 percent increase in fuel savings for large trucks, a savings of more than \$7 million dollars per year for the trucking industry
- save about \$383 in vehicle maintenance costs each year for motorists

were given a day off during the holidays, which were staggered so that the department could conduct business as usual.

“Thanks to the dedicated efforts of MoDOT employees, our industry partners, state and local officials and contractors throughout the state, we were able to meet the governor’s challenge,” Rahn said. “We hope we’ve shown Missourians we’re accountable and can deliver timely, quality projects within budget.”

continued on page 4



Gov. Matt Blunt and MoDOT Director Pete Rahn paint the last stripe on the final stretch of Route 54 south of Jefferson City, symbolizing the early completion of the Smooth Roads Initiative.

Commission Congratulates MoDOT Employees for Meeting the SRI Challenge

In a letter to MoDOT employees, members of the Missouri Highways and Transportation Commission expressed their appreciation for the department’s efforts to complete the Smooth Roads Initiative ahead of schedule.

Dear Team MoDOT Employees:

The people of Missouri have many things for which to be thankful as we start this new year. We live in a beautiful state, full of diverse landscapes, cultures and people. Now we can add to that list 2,200 miles of smooth pavement on our busiest highways. You – all of the employees of MoDOT – are responsible for this achievement.

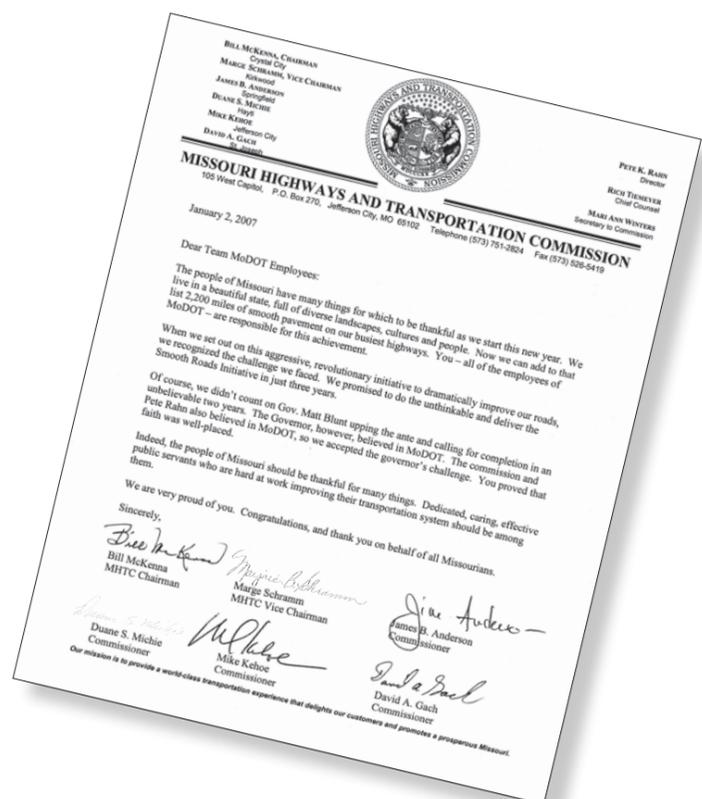
When we set out on this aggressive, revolutionary initiative to dramatically improve our roads, we recognized the challenge we faced. We

promised to do the unthinkable and deliver the Smooth Roads Initiative in just three years.

Of course, we didn’t count on Gov. Matt Blunt upping the ante and calling for completion in an unbelievable two years. The governor, however, believed in MoDOT. The commission and Pete Rahn also believed in MoDOT, so we accepted the governor’s challenge. You proved that faith was well-placed.

Indeed, the people of Missouri should be thankful for many things. Dedicated, caring, effective public servants who are hard at work improving their transportation system should be among them.

We are very proud of you. Congratulations, and thank you on behalf of all Missourians.



Way to Go MoDOT!

Dear MoDOT Team:

Way to go, everyone! You did it. Through your hard work, commitment and sacrifice, we were able to come together as "One Team" to complete the colossal Smooth Roads Initiative an incredible 13 months ahead of schedule.

All MoDOT employees in every department made essential contributions during the Smooth Roads Initiative process to make sure the job was done right. Whether you carried on your regular duties or made adjustments by taking on additional duties, changed your normal work hours or lent a helpful hand or resources across district lines; your efforts helped us stay on course to accomplish our SRI goals. Without missing a beat, you pulled together as "One Team" in a remarkable fashion so that MoDOT could forge ahead to not only meet, but also exceed everyone's expectations.

The magnitude of this work effort can't be overstated. Together we have turned the course of the Missouri Department of Transportation, showing Missourians that we are accountable, we are responsible and we can produce quality projects on time and within budget. More importantly, Missouri roads are now smoother and safer because of you.

We appreciate that Missouri voters provided us with the resources to make these improvements, but we couldn't be more proud of your efforts to make the Smooth Roads Initiative a reality. You are some of the most talented and dedicated state DOT employees in the nation, and we sincerely thank you. It is a privilege to work with you.

Sincerely,

The Safer Aspect of Smoother, Safer Sooner

by Megan Mills

New pavement installed on 2,200 miles of highways has made them smoother in just two short years, but how did our roads become safer?

"In order to make Missouri roadways safer we installed a new pavement marking system, added miles of guard cable and put in new emergency reference markers," said System Management Director Don Hillis. "All of these improvements will contribute to saving lives and reducing the severity of injuries to Missouri motorists and workers on the roadways."

These improvements included:

New Pavement Marking System

The new pavement marking system includes wider stripes, very reflective tape, rumble stripes, delineators, more durable paint and signs to improve safety and visibility for Missouri drivers.



The new striping includes centerline stripes that are now six inches, instead of four, and made from a durable tape instead of paint. The tape has a raised pattern for better reflectivity, making it more visible to drivers.

Rumble stripes are designed to alert motorists sooner and keep them on the road to avoid potential crashes, which is better than just stripes or grooved patterns. A rumble stripe is a grooved pattern in the pavement that is painted with durable, highly reflective paint. The rumble stripes cause the vehicle to vibrate and produce a loud noise to alert drivers when their vehicle leaves the driving lane. The markings run along the outside edge of the driving lane and provide additional visibility, especially at night and in the rain.

Guard Cable

Although guard cable installation was not a part of the SRI project, it has been or is being installed on SRI roadways. However, adding delineators to all guard cable, guardrails and concrete barriers was a part of the Smooth Roads Initiative's new pavement marking system.

Guard cables are an important safety feature on our highways because they are virtually eliminating cross-median crashes.

Emergency Reference Markers

New roadside markers were installed on 1,200 miles of Missouri interstates. The new markers combined the func-

"I do want to compliment MODOT... It is great to be able to travel from St. Louis to Springfield and not bounce my way there. I just hope we can continue to have this kind of roadway for years to come and it not be neglected later. Also the safety cable dividers are the best thing for saving head-on accidents. I have seen many areas where it has just been put in and it has already be run into. Thanks for your attention."

Bill Ballard
Springfield Area

tion of two different signs - mile markers and reflective posts - in addition to adding several new features.

The new signs provide the road's name and direction of travel, and are installed every two-tenths of a mile, instead of every mile, to provide motorists



more accurate location information in emergency situations. The new signs also replace the white reflective posts, which were installed every one-tenth of a mile.

The new signs are larger, more durable and more reflective than the old posts to improve safety. Missouri is one of the first states in the nation to make extensive use of the markers.

The signs will save the department money in the long run, due to fewer overall signs.

"I travel from Kingdom City to Columbia daily and have been pleased with the improvement in I-70, but it wasn't until I traveled to St. Louis on July 2 that I realized what a great job MoDOT has done in improving I-70. It was the smoothest I have seen I-70 for years, and I greatly enjoyed my trip. Also, I have been pleased and impressed with the limited disruption in daily commutes due to planned nighttime work rather than during the day. Thanks again."

Jill Cooper
Kingdom City, Mo.

SRI Timeline: From Passage to Completion

Nov. 10, 2004: MoDOT unveils Smooth Roads Initiative

Jan. 14, 2005: Commission approves second phase of SRI



July 8, 2005: Commission approves third phase of SRI as a part of the STIP

Jan. 12, 2006: Gov. Blunt challenges MoDOT to deliver SRI a year ahead of schedule

Nov. 2, 2004: Amendment 3 passes

Dec. 10, 2004: Commission approves first phase of SRI



July 1, 2005: Amendment 3 takes effect, phasing in over next four years

July 14, 2005: First bonds issued for SRI



“Roadies” Tested SRI Progress This Summer

by Megan Mills

MoDOT management literally hit the road this summer, touring the state in an extended maroon van to measure how the roads targeted by the Smooth Roads Initiative looked and how they felt.

The road trip, appropriately named the “Seat of Your Pants” tour, occurred between August and October and covered all 2,200 miles, allowing participants to measure progress and make sure that we would be able to deliver on our promise to complete the initiative ahead of schedule.



State Traffic Engineer Eileen Rackers and District Engineer Roger Schwartz, District 5, board the van to tour SRI routes and measure progress.

“I just wanted to take a minute to commend your department on the reconstruction of a stretch of westbound Highway I-44 between Leasburg and St. James, Missouri. I cannot say that it was not inconvenient because it was. However, the job not only was done in a timely manner but the quality of the resulting road is excellent.”

Rita Heady
Bourbon, Mo.

“Thank you, thank you so much for completing the Smooth Roads Initiative for Southeast Missouri. Driving is much more pleasant now that we have such improved highways. Sometimes we feel overlooked in this area. However, this time we have seen such a major improvement here. Keep up the good work.”

Mary Peters
Cape Girardeau, Mo.

MoDOT and Contract Workers Feel the Impact of SRI

One Team. One Purpose: Making 2,200 miles of Missouri’s busiest highways smoother and safer in just two years.



Contract workers, like these men from APAC®-Missouri Inc., were also essential in completing SRI on time.

As MoDOT and our contractor partners faced the monumental task of completing such a large amount of work in such a short amount of time, it quickly became clear that SRI was going to have a significant impact on our work force, as well as the staffing needs of the contractors we hired to do various jobs.

According to Human Resources, during the past two years department employees worked an additional 69,139 hours

of overtime as compared to fiscal year 2004. Most of this additional overtime can be attributed to the extra work needed to complete SRI projects. That’s

a lot of time and sweat equity! In fact, one person working a 40-hour week each week of the year would have to work for more than 33 years to equal the amount of overtime accumulated during this time.

Hannibal-based Chester Bross Construction was an asphalt contractor that played a significant role in the completion of SRI.

“We had to gear up for the project by adding extra people and equipment,” said Mike Bross, vice president. “It was a challenge to get material and trucks to haul the material in a timely fashion.”

The company also had to add new services to its lineup. “Diamond grinding was new to us,” Bross said. “We added six grinders, an asphalt plant and a paving crew.”

Beyond the overtime, new equipment and sweat equity, SRI impacted our workers in other positive ways, too.

Once again, the size and extent of the project required us to make decisions

quicker than ever before. That’s where MoDOT stepped up and embraced its value to empower employees. We implemented new ways to accomplish our goals that allowed decisions to be made at the field level. As a result, we were able to accomplish great things in a record amount of time.

“Working with so many contractors and under such a tight time frame, we had to be able to make decisions faster than before,” said Dave Ahlvers, state construction and materials engineer. “SRI really helped put into play some of our new quality control processes, like the new End Result model. As a result, MoDOT’s role has evolved from quality control to quality assurance.” Under the End Result model, the contractor performs quality control testing during a project, while we provide quality assurance at the end.

SRI also helped us truly realize that teamwork produces the best results. By working closely with companies like APAC®-Missouri, Inc. – one of the project’s largest asphalt contractors, we were able to stay on schedule and solve problems as they arose.

“Every day was a learning process,” said Chad Girard, area manager of APAC®-Missouri, Inc. “Through co-op meetings and weekly scheduling meetings with MoDOT, we were able

to work together to minimize and fix the day-to-day problems.”

However, all partnerships weren’t external. Time after time, one or more districts lent a helping hand or resources to a fellow district. The most common cross teamwork was probably experienced by maintenance crews as they came from various maintenance facilities within a district or across district boundaries so that road repairs could be completed just ahead of the contractors and to install signs (see story on page 16).



Office Assistant Penny Priest, Columbia Project Office, keys in overtime hours during SRI work.

“SRI gave us a sense of purpose,” said Ahlvers. “All of us worked together moving toward one goal, and we got great results.”

The first phase of SRI may have been a daunting task to say the least, but one team with one purpose has put us well on our way to producing one great transportation system for Missouri.



Aug. 18, 2006:
“Seat of Your Pants” Tour kicks off



Dec. 8, 2006:
SRI completed one year ahead of schedule

Feb. 7, 2006:
Director Rahn accepts Governor’s challenge to complete SRI a year ahead of schedule



Oct. 6, 2006:
“Seat of Your Pants” Tour wraps up

2,200 Miles of Smooth Roads by Dec 31, 2006

Days	Hrs	Min	Sec
23	13	30	

A Tribute to Employees Lost

by Patti Knopke

Highway work is dangerous. Our employees put their lives at risk every day. The friends and families of the employees lost in the line of duty during the two-year period of SRI remain in our thoughts as we continue to be diligent in our efforts to protect our employees and keep our work zones safe.

William L. Crain II of Walnut Grove, a seasonal worker for MoDOT, died in a roadway accident about 10 miles east of Springfield on Oct. 17, 2006.



William L. Crain

On Aug. 9, 2006 Motorist Assist Operator **Ken Hoierman** of District 6 was working at the scene of a crash that killed a highway worker when he paused to remind TV viewers to slow down in work zones. Just six days later, Hoierman was responding to another highway incident when he was killed by a motorist who drove through orange cones into the work zone.



Ken Hoierman

Robert Mayer, senior crew worker in District 3, died April 23 as the result of

a fall while on the job. “Bob Mayer was one of the most dedicated employees I ever worked with, and the crew here all feel the same way,” said Roger Parton, who supervised Mayer. “He loved his family very much and loved his job. Bob was always smiling, always upbeat. I can tell you he is missed deeply here at the Edina maintenance building and all through the community.”



Robert Mayer

Bob Eftink, intermediate construction inspector, died on a construction site in Cape Girardeau County on April 7, 2006. Eftink fell in the path of a loaded asphalt truck that was backing up to the paver. Eftink served the citizens of Missouri with honor and distinction during his 20-year tenure as a MoDOT employee. He worked out of the Jackson project office and lived in Marble Hill.



Bob Eftink

SRI Completion Ceremony

continued from page 1

SRI delivered smoother pavement; brighter striping; rumble stripes; bigger, easier-to-read signs; and other safety improvements on Missouri’s most heavily traveled highways. With the completion of the Smooth Roads Initiative, about 70 percent of the state’s major roads are in good condition. Three-fourths of these roadways were in fair to poor condition at the beginning of 2005 when the work started.

“In just two short years, we repaired or repaved almost enough highway miles to stretch from New York to Las Vegas,” said Rahn. “We want to thank Missourians for approving Amendment 3 and giving us the funds to tackle this important road work. I think everyone was tired of hearing how bad and unsafe Missouri’s roads were, and we

worked hard to turn that around in a short amount of time.”

MoDOT experienced its largest construction seasons ever in 2005 and 2006 because of the Smooth Roads Initiative. Now, with the end of the Smooth Roads Initiative, we’ll be busy tackling new projects funded by Amendment 3, as well as those that were sped up because of the increased revenue. In addition, we’re working with interested contractors on our Safe & Sound Bridge Improvement Plan, a design-build program that will repair or replace 802 of the state’s worst bridges by the end of 2012.

“We’ve made progress, but we won’t be taking a break,” Rahn said. “We’ve got a lot of work ahead of us. You ain’t seen nothin’ yet!”

Practical Design’s Role in SRI

by Bob Brendel

The Design Division played a major, early role in the Smooth Roads Initiative. Project Development and Project Operations worked meticulously to put together guidelines for the districts regarding what type of work and what materials or treatment strategies should

be used for various projects. Design was responsible for coordinating project development guidelines and bid lettings for all SRI projects.

Fortunately for us, the advent of “Practical Design” came just in time to help MoDOT take on this Herculean effort.



Design staff, from left, Dan Tschirgi, Joe Jones, Tom Allen, Angie Otto and Keith Smith discuss how the “Practical Design” concept will be used to deliver SRI projects.

“Practical Design” had just become the department’s project development credo about the same time as the passage of Amendment 3,” said Bruce Green, design liaison engineer. “Without this new tool, it may not have been possible to complete the program in such a short time

SRI Fast Facts

- Smooth Roads Initiative brings busiest 2,200 miles of Missouri highways up to good condition
 - ✦ That mileage will get you from Missouri to Florida – and back!
- Three-fourths of these roads were in fair to poor condition when the initiative began
- These roads comprise just seven percent of state highway system, but carry 60 percent of all miles traveled
- 86 percent of Missourians live within 10 miles of one of these roads
- 80 million miles a day are traveled on these highways
 - ✦ That’s a lot of driving – 3,213 laps around the earth, for example.
- Installed 188,000 signs, 12,000 emergency markers and 150,000 guardrail and guard cable reflectors as a result of Smooth Roads Initiative
- Used 266,485 square feet of sign panels – that’s 13 times our normal production
- Smooth Roads Initiative used 12.8 million tons of asphalt – that’s twice our normal amount
 - ✦ That’s enough asphalt to completely fill up a major league baseball stadium – three times!
- Also used 424,000 square yards of concrete pavement
- MoDOT crews spent more than 888,000 labor hours on SRI
 - ✦ That’s more hours than you’ve been alive, unless you’re 101.

“We realize that this is not a cure all and there is work that still has to be done to maintain the level that has been mandated by our directors, but we are up for the task. The response from the public has been great.”

Wendell Lockridge
MoDOT Maintenance Supervisor
Haiti Maintenance Facility – District 10

and it would not have been completed within budget.”

Practical Design’s main thrust of developing a series of “good” projects to create a “great” system dovetailed perfectly with what was needed to complete the Smooth Roads Initiative. And it’s proven to be a critical tool for designing and delivering the new major projects that were also enabled by the passage of Amendment 3.

“If we had been looking at longer-term pavement solutions, the choices for the many miles of major road improvements that were required would have been much different,” said Jay Bestgen, assistant state design engineer. “Thicker pavements would have carried with them higher costs and the tradeoff would have meant many fewer miles of improved roadways.”

Instead MoDOT was able to get more value for every dollar spent with thinner asphalt overlays and diamond grinding of concrete pavements while making system-wide safety improvements with investments in wider striping, rumble stripes, guardrail, larger signs and the like.

“We’ve made the roads smoother and we’ve made them safer,” Bestgen said, “and we delivered a huge number of projects one year ahead of schedule.”

The Smooth Roads Initiative involved 223 projects that were awarded at \$388 million. Originally \$400 million was budgeted for the program.

He also noted that consistent with Practical Design principles, SRI delivered a system improvement rather than a series of smaller, disconnected projects.



Central Office

Sign Shop Helped Produce SRI's Public Image

by Megan Mills

While MoDOT road crews were busy working overtime outside to complete the Smooth Roads Initiative, MoDOT's Sign Production Center was busy working inside to get their part done. Since



The Sign Production Center produced a phenomenal amount of signs, marker and delineators for SRI.

the initiative began, MoDOT's Sign Production Center's small staff produced almost 500,000 signs, more than 12,000 emergency reference markers and more than 150,000 delineators for guardrail and guard cable.

In addition, the sign shop helped produce several public awareness campaign elements, such as 6,500 magnets to promote the on-time completion of the project. The magnets are a 2-inch by 4-inch replica of the "Completed One Year Ahead of Schedule" sign unveiled at the SRI completion ceremony.

"We have been very busy producing all the SRI-related items in addition to our normal requests and some weeks have been crazy over here," said Terry Baker, sign shop superintendent. "But thanks to the cooperation and extra work put

in by our employees we were able to complete all orders in a timely manner."

The shop's 14 full-time employees and four seasonal employees used more than 500,000 square feet of aluminum

panels to produce all the SRI signs over the past two and a half years. The shop produced more than 188,000 SRI signs and more than 304,000 non-SRI signs, in addition to the emergency reference markers and guardrail and cable delineators for the initiative.

"The hard work and extra hours put in by workers at the Sign Production Center is greatly appreciated," said

System Management Director Don Hillis. "All the SRI materials look great and were crucial to making the roadways safer and keeping the public up-to-date about the progress of the initiative."



Regular sign requests still had to be filled along with SRI needs.

Even though the SRI work has been completed, the sign shop's workers are now busy playing catch up and gearing up for the next big project.

Avoiding the Big Rig Squeeze

by DeAnne Bonnot

Patti Suling is relieved.

She printed a list of this week's lane restrictions and smiled.

"Wow. Three pages. When SRI was in full swing this list could be 16 pages long."

Suling is one of several Motor Carrier Services agents who issue permits for

oversized and overweight loads. Carriers often ask to carry these loads on specific highways. Suling checks the list of temporarily narrowed or closed lanes to see if a large load can safely pass. If not, the carrier is sent a different way.

Work zone coordinators in district offices ensure restriction information is logged into TMS, MoDOT's traffic

Many Bridges Get Smoother Decks

by Jeff Briggs

When most people think about the Smooth Roads Initiative, they think of pavement. But did you know that those 2,200 miles includes more than 1,400 bridges? Their surfaces have got to be in good condition too, so the ones that weren't in good condition had to be improved. The Central Office Bridge Division played a huge role in delivering this aspect of SRI.

"We worked with maintenance groups to form inspection teams that field-checked all these bridges," said Assistant State Bridge Engineer Paul Kelly. "The teams recorded the condition

and smoothness of the bridge decks and recommended how to make them smoother.

"Then we put all this field information into a database to make sure bridges that needed new surfaces could handle them without reducing their load limits," Kelly added.

The Bridge Division worked closely with districts throughout the two-year SRI period to provide engineering support and specifications. "It was a busy two years, but the results are great," Kelly said. "I'm very proud of our team."

Transportation Planning Helped Define SRI Program

by Jeff Briggs

A very early player in the Smooth Roads Initiative was the Central Office Transportation Planning Division. They helped determine which roads would get improved.

"Very early on, Director Rahn asked us to figure out which roads had the highest VMT (vehicle miles traveled) and the worst road conditions," said Planning Data System Coordinator Jay Whaley. "He wanted to find out where we had the most traffic and the worst roads, and fix those first.

"And then he wanted all that data quintiled (broken into 20 percent increments)," Whaley said. "I thought to myself 'Holy Cow, we don't have that kind of data.'"

But Transportation Planning got to work on it, though it wasn't easy. "At one point we were sorting so much data that it killed my computer," Whaley said.

Ultimately this sorting determined that 2,200 miles of highways carry 60 percent of all state highway system traffic, and that three-fourths of this mileage was in fair to poor condition. That information defined the Smooth Roads



Determining what roads and what type of work was needed was the first step.

Initiative – which roads to work on, and how much work was needed.

"Next up was map-making," Whaley said. "Pavement teams hit the road using our data to determine what type of work was needed on the roads we identified.

This work was turned over to the programming group in Transportation Planning, to get the projects put into MoDOT's five-year construction program.

"This was a very ambitious program, and we accomplished some things we hadn't tried before," Whaley said. "It kept us all very busy – I'm really pleased with how it all turned out, and how well everyone worked together."

for more info

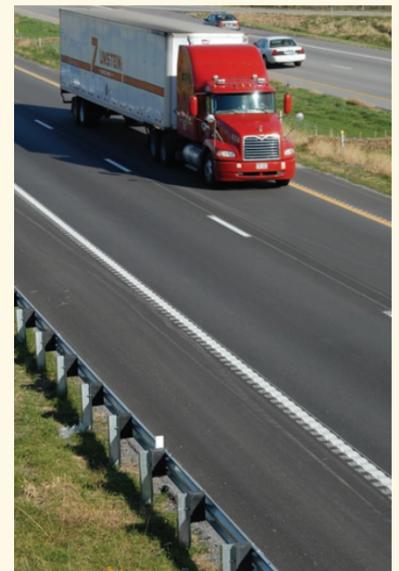
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management computer system. They also get an earful from contractors who are eager to get on with the job, but who cannot close a lane with less than 14-days notice.

"Our district coworkers really look out for our customers. They know that we issue permits days in advance. If they allow a contractor to close a lane when it's not an emergency, our customers quite literally can get stuck," said Suling. "Sending a wide truck through a narrow lane is like pushing a tomato through a funnel. Something's gotta give. We just don't want it to be other vehicles or God forbid, a highway worker."



D1

Northwest

Goodbye SRI

by M. Elaine Justus

The Smooth Roads Initiative began with a “bang” on April 28, 2005. That’s when we started our very first project, the resurfacing of Route 36 in Buchanan County. From the Missouri River bridge to east of Route AC, we put in almost \$3 million worth of mill and relay asphalt. With an average daily traffic count over 25,000, this section was high on our list of “most important.”

When all was said and done for SRI, the Northwest District had completed

What does this mean in terms of “man hours?” Comparing the last construction season to this one, it’s fair to say that in 2005-2006 we inspected approximately \$42 million worth of projects. This season we inspected over \$85 million worth of projects. Averaging out the last three years, we increased our overtime by at least 50 percent.

What were the challenges? Getting the aggregate needed to complete the projects was critical (aggregate in Northwest Missouri is always an issue).



Scotty Williams

Hot-in-place recycling was the technique used to resurface Interstate 29 in the Kansas City District. The Northwest District assisted our neighbors to the south on this project.

17 projects, with a combined length of 156.4 centerline miles at a cost of \$28 million. We also had two projects that were accelerated due to SRI that totaled 44.6 centerline miles. They included the unbonded concrete overlay on Interstate 35 and the resurfacing on Interstate 29 from Business 71 to Route 59. The total cost of these two projects added an additional \$25 million.

6



Lori Dake

Concrete replacement by our crews was step one in the SRI process.

Having enough employees to cover the inspections was also a challenge, as was trying to have a smooth, seamless end result project even though some jobs “overlapped” between contractors with two different approaches.

What was unique? The unbonded concrete overlay is fairly unique. This project on I-35 was our first actual interstate rehabilitation project done using this technique. On I-29 from Frederick Boulevard south to Route O, the contractor added a ground tire rubber and Vestenamer (see sidebar) to the asphaltic cement to increase the quality. This is being done as a test for the entire state of Missouri.

It was hard work. It was fast work. It was good work. And, if the comments of the drivers we serve are true, the end result was worth all the effort.



Troy Slagle

The end result? A beautiful, smooth well-marked driving surface with rumble strips installed.

Vestenamer: brand name for a semicrystalline rubber used as a processing aid making for easier, faster and safer asphaltting. It has a low melting point and low viscosity.

SRI on a Personal Note

by Holly L. Murphy

Gina Orozco, senior construction inspector, has worked for MoDOT for 15 years. This past construction season proved to be one of the most challenging for her so far. She was chosen to be the inspector on the project on Interstate 29, which consisted of median guard cable installation and the SRI hot-in-place recycling resurfacing project on the northbound lanes in Clay County in District 4. Gina was one of several Northwest District employees who assisted our neighbors in District 4 with their SRI projects this past year.

was done primarily at night so the two contractors could reduce the amount of congestion for motorists.

Gina, who worked nights for a couple of months, admits that this past year has been challenging. Working in another district in an unfamiliar area and coordinating two projects with different contractors proved to be a little hectic at times. She commented that working in the high volume traffic areas of Kansas City was something that was very different for her as well.

Gina began working on the median guard cable project in April and the project was completed in November. During this time she also coordinated the SRI resurfacing project, which meant a lot of communication with the 10 separate contractors involved in the two projects. The guard cable work

Gina believes that the guard cable is a big benefit to Interstate travelers and working on this project has been a real learning experience. As for Gina’s four children, ages 4, 7, 17, and 18, they helped hold down the fort while she was working some very long hours. They’re glad that SRI is completed, too.



Holly L. Murphy

Senior Construction Inspector Gina Orozco had to find a way to balance increased work schedules, night work and raising her four children to make SRI succeed.

for more info

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D2

North Central

Just in Time for Holiday Travel



Macon Mayor Dale Bagley, Rep. Cathy Chinn, Sen. Bill Stouffer and Macon County Presiding Commissioner Craig Jones unveil the Smoother, Safer, Sooner sign for Route 63 in Macon.

District 2 kicked off its first Amendment 3-funded Smooth Roads Initiative project back in April of 2005 to smooth Route 63 through the community of Macon.

A ceremony was held not only to celebrate the start of that particular resurfacing in Macon, but all of the SRI work scheduled for the district.

With the first project passing right by the district office, MoDOT employees were among the first to experience the reality of this great new initiative.

aspect SRI brings to the state of Missouri, 667 new signs and new guard cable on this 24-mile stretch were measurable safety improvements to this section of interstate.

The guard cable alone has been hit so many times it makes us wonder how we ever managed without it.

One of the internal benefits of SRI was every employee being a part of the statewide objective. Employees were working across departments within the district as never before, and it didn't



Contract crews begin removing the old pavement on Route 63 in front of the district office.

In addition to the Macon project, smoother roads came to the communities of Kirksville, Chillicothe and Moberly, and a 14.5 mile stretch of Interstate 70 in Saline County.

An improved smooth driving surface to District 2's portion of I-70 in Saline County wasn't the only SRI improvement to that area. As part of the "Safer"

stop there. SRI was the beginning of an era of blurred district lines encouraging employees to assist other districts to get the job done.

District 2 was very proud of the fact that over 60 employees traveled to six other districts, assisting fellow employees across the state to complete SRI and other major priority projects.

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Senior Construction Inspector Kevin Walter prepares to take a density sample of the new pavement on Interstate 70.



District 2's concrete crew works on Interstate 44 in St. Louis near the Chrysler plant.

Now that SRI is complete and we have celebrated that success, District 2 is looking ahead to continuing the work began by SRI.

District 2 has a great start on replacing signs on all of our major roads, and have plans in place to continue improving our major roadways.

The 2007 construction season will bring several highly anticipated projects to north central Missouri. Three of the top projects are:

Route 36
 Route 36 will see a major rehabilitation to 47-miles of driving surface on both the eastbound and westbound lanes between Brookfield and Chillicothe. Along with the resurfacing two narrow sections will be widened, several bridges will be rehabilitated, and rumble

stripes will be added throughout the project limits to increase safety.

Route 63
 Additionally in 2007 two new sections of four-lane highway will be added on Route 63. One section south of Kirksville and one section north of Macon will be the finishing touch to four-lane Route 63 from Kirksville to Jefferson City (with the exception of the city of Macon).

"The work that has been accomplished through SRI is testament to how talented and committed MoDOT employees are," said District Engineer Dan Niec. "It has truly been a great experience seeing everyone step up to the plate to deliver SRI. The citizens of Missouri and every motorist traveling across our state are feeling the benefits."



Greg Lyon, Herbert Latchew, Martin Rainey, Clark Thomas and Tim Koch set new signs on Interstate 70.

D3

Northeast

SRI Moved Projects Ahead

It's a big deal for MoDOT to move a project ahead of schedule. "I was very impressed with the work ethic our MoDOT staff has demonstrated," said NE District Engineer Kirk Juranas. "We prepared more plans, repaired more pavement, replaced more signs, and striped more roads than any other time I'm aware of."



A total of 63 miles was included in the NE District's Smoother, Safer, Sooner plan, and a lot of that was completed in 2005.

Smooth pavement and sooner projects weren't the only benefits of SRI. Almost 2,000 bigger signs replaced smaller ones and 153 miles of 6-inch stripe replaced 4-inch stripes on the new SRI roads.

"Getting the smooth roads work completed before the end of 2006 was a challenge, but we like being challenged, so we're taking it to the next level," Kirk said.

What Kirk is talking about is completing the four-lane of Route 36 before 2010. "Shhhh...it's still a secret...sort of," he'll tell you.

The St. Louis and NE Districts partnered so MoDOT could meet the deadline, and the partnership proved successful. "Both our pavement and sign crews learned from each other and now communicate on other issues," Kirk said.



More than 150 miles of new 6-inch stripe replaced 4-inch stripes on SRI roads.



Maintenance crews throughout the district patched rough areas in the road to help prepare for SRI on Route 61. A lot of crews repaired shoulders by removing bad spots and putting in rock and hot mix. In the south, Troy maintenance crews repaired "dip de doos," a non-engineering term for dips in the concrete, to make the roads smoother.

Striping, Guard Rail Byproducts of SRI

Wider, brighter stripes are being noticed on new pavement across the district, and even though new guard

rail may be less noticeable, it's helping improve safety as well.



Steve Spegal (far right), construction inspector, oversees the guard rail replacement along Route 61.

"We have seen a slight reduction in fatalities on our major highways later in the year, and we'd like to attribute it to the wider, more visible stripes and rumble strips," said Mark Giessinger, maintenance and traffic engineer.

Guard rail is usually part of a resurfacing contract, but this year it was separated out to reduce SRI contract costs.

Design Team Meets Challenge

There were a couple of highlights of the SRI projects back in the design department. Someone's idea about rounded shoulders on shaped slopes saved some money resurfacing Route 61 through Hannibal. The thickness transitions

were shorter than on regular projects at the beginning and end of each resurfacing project, as well as at every bridge and ramp. All in all, though, Trent, Shawn, Kevin and Tony agree that the work wasn't hard, it was all about



Tony Weichhaus, Shawn Parrish, Kevin Williams and Trent Murphy are designers who worked on the SRI projects in the NE District.

figuring out the new standards. "Each resurfacing project was different, but using the standards found on the Intranet helped a lot," Tony said.

Over the Hill at Night

When asked how she felt about being part of SRI, Brandi Baldwin is probably one of only a few employees who would respond "excited and nervous." She had a small piece of SRI; four miles through the Mineola Hill area on Interstate 70 which included resurfacing, rumblestrips, and 3M tape for striping. But these weren't what made her nervous.

"This was one of the few jobs on SRI that was allowed to be done at night, and it was my first interstate job, so, yea...I was a little nervous," she said. "It only lasted a few weeks, we didn't have any accidents, so I'm pretty happy with it." Brandi is a construction inspector at the Mexico Project Office.

Sign Crews Are Priceless

Mike Haggerty was not available for an interview because he was taking a well-deserved vacation, at least according to his boss. "He's my install man," said Darrell Britt, supervisor of the sign and striping crews.

Mike's not the only one Darrell wanted to brag about, though. "We helped the St. Louis District finish their SRI in November," he began. "We had four employees who worked 11 hour days, six days a week to finish digging holes and pouring concrete for 40 signs



Mike Haggerty, the "install man," is working with James Cox to move one of the larger signs in place.

around Wentzville," he said. It costs about \$100 for a small sign, and about \$50 for a round trip tank of gas, but the sign crews...well, they're priceless!

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D4

Kansas City Area

SRI Concludes in District 4

Enhanced Safety Features Make Program Shine

by Steve Porter

With so much of the focus on making 2,200 miles of the state's busiest roads smooth, an important aspect of the Smooth Roads Initiative could fade into the shadows.

But a second look shows how MoDOT's commitment to safety delivered extra value to the push for smoother driving. Just check out what happened in District 4 alone:

- 454 miles of clear zones
- 17,000 new signs, most that are larger, more visible and easier to read
- 490 miles of wider, brighter striping, both down the centerlines and along the sides of roads
- 490 miles of delineators

There's no doubt that the \$70 million in Amendment 3 money invested in District 4 made road surfaces smoother – and therefore safer – for the vast

majority of Kansas City-area motorists. Many of Kansas City's busiest routes, from Interstate 470 in the southeast to Interstate 29 to the north, are smoother. From ramps to mainlines, either diamond-grinding or asphalt overlays made the way smoother for motorists throughout District 4. Potholes are on the retreat, thanks to 50,475 square yards of pavement repair that largely preceded resurfacing operations.

You want to talk resurfacing? How about 1.1 million tons of asphalt spread about two inches thick over hundreds of miles of Kansas City-area state routes? Ultra-thin, bonded asphalt wearing surfaces covered 230,000 square yards, and District 4 diamond-grinding projects made 546,000 square yards of good pavement even smoother.

Extra Efforts All Around

The first Smooth Roads Initiative project in District 4 started in May 2005. The \$8.3 million milling and



Diamond grinding operations made a sound Route 7 even smoother in southeast Cass County.

Steve Porter

resurfacing project on Route 50 in Johnson County stretched from the Jackson County line to Route HH west of Warrensburg. The work included the SRI elements that would soon become familiar to both construction inspectors and drivers – fog-sealing shoulders, sign replacement, mile-marker changes, rumble strips along the shoulder and the new, wider 6-inch epoxy striping.

All of those Smooth Roads Initiative elements added to the workload of construction and materials inspectors, maintenance crews and designers. Maintenance workers jumped in early to make hundreds of pavement repairs in preparation for resurfacing contracts.

"Maintenance crews under Superintendents Todd Gibson, Pat Calhoun and Tony Bryant particularly found themselves a lot more involved in SRI than they expected," said Assistant District Engineer Chris Redline. "All maintenance crews were performing concrete joint replacement prior to contractors' resurfacing work. Those crews took on an enormous challenge and knocked it down quickly."

Maintenance Superintendent Pat Moseley's crew handled some joint replacement work in January 2005. "It surprised me how much we were able to get done, especially given the winter temperatures," he said.

Helping Hands

And before maintenance or construction crews could begin their labors, the design department had to complete their work on nearly 50 projects. Much

of that effort took place from December 2004 through August 2005.

"Then in December 2005, they came to us with a package of six more projects," said Design Engineer Scott Humphrey. District 1 designers stepped in to help, relieving some of the pressure on the department's workflow and establishing a relationship that continues today.

Oh, and did anyone ask the sign crews whether they might have a spare moment to take care of a non-SRI job? They were busy placing or replacing 162,412 square feet of aluminum – that's about 3.7 acres of new signage in the Kansas City district. Extra help, in the form of assistance from crews from Districts 1, 2 and 5, kept them on schedule.

"Everyone in District 4 proved once again that we are eager to meet a challenge," said District Engineer Beth Wright. "Nearly two years of long days and demanding schedules paid off in safer transportation for millions of motorists. MoDOT team members have good reason to be proud of this extraordinary accomplishment.

"I'm most proud and impressed with everyone's willingness to help each other. One division helped another, each of our area teams helped the other three, and each district helped other districts. It was truly one team MoDOT."



Milling operations preceded much of the asphalt resurfacing.

Steve Porter

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Asphalt resurfacing moved quickly on a stretch of Route 71 south of Harrisonville.

Steve Porter

D5

Central

What a Difference! Smooth Roads Success

by Holly Dentner

Like every district, central Missouri faced its largest construction seasons ever over the past two years. SRI meant our major highways would be made safer and smoother, but it was a lot of work squeezed into two short years.



Senior Design Technician Patrick Kremer and Senior Highway Designer Michelle Neuner work on SRI plans.

Highway workers were spread out all over the district, laying asphalt on our most-traveled roads. They spent days and nights diamond grinding rough pavement and installing new signs and safety features.

“Our biggest adjustment was all the night work,” said Bert Maddox, assistant resident engineer at the Columbia Project Office. “We had to shift to a 24-hour schedule to stay on time and minimize traffic congestion.”

Before that work could take place, the district design team raced to make field checks and create plans and contracts.

“When Amendment 3 was passed, we had to drop everything and get it done,” said Laurie Wyrick, transportation project designer. “We found ways to speed up the process and there was a lot more teamwork involved.”

According to Jason Vanderfeltz, one of the district’s project managers, the key was a fast turnaround.

“We are always busy, but SRI made us even busier,” said Vanderfeltz. “It was up to the designers to get every job ready on time, and they did outstanding work.”

Eleven major projects were completed in the district’s largest city, Columbia. Concrete replacement, resurfacing, and diamond grinding made the busy state routes through the city smoother and safer for travelers.

Interstate 70 runs through three counties in the district, and the entire stretch was resurfaced. New rumble stripes, delineators, signs, median guard cable, and reflective guardrail and bridge tabs made the road safer.

Commuters between Jefferson City and Columbia now enjoy the smooth stretch of Route 63 that runs between the two cities. The resurfacing work also included the Hominy Creek Bridge replacement and improvements to the I-70 and Route 63 interchange.



Eric Schroeter

New rumble stripes on Route 54 in Cole County are the only bumps drivers should feel in the “seat of their pants.”

Travelers through the Lake of the Ozarks also benefited from SRI, with seven miles of Route 54 through Osage Beach resurfaced. This was the first SRI project completed in District 5.

Eleven bridges in the central Missouri area were replaced, and additional resurfacing took place through Jefferson City, Sedalia and many other routes in the district’s 13 counties.

Time and time again, it seemed the key to completing SRI was collaboration. Working with other districts was part of

that effort, and District 5 did its part to help.

The district signing crew helped District 4 install more than 500 signs and our electricians helped District 6 locate underground wires in preparation for roadside marker placement.

Merely receiving funding for smoother, safer roads doesn’t guarantee success. It has taken the hard work of every employee to complete the Smooth Roads Initiative ahead of schedule.



Before and after: Route 63 in Callaway and Boone Counties.

Concrete Crew ‘Cements’ Our SRI Progress

by Holly Dentner

It took only about a year and a half for the District 5 concrete crew to finish their work for SRI. Considering that they made their way through 3,300 concrete patches during that time and had a crew of only six people, it was quite a job.

“We didn’t have to work overtime, but every member of my team maxed out their vacation leave,” said Henry Hentges, special maintenance supervisor. “I am extremely proud of them and the maintenance crews we worked with to get this finished.”

According to Hentges, the most challenging part of SRI was the constant effort to coordinate and schedule con-

crete work ahead of the contractors’ work. Communication between the work crews and project planners was critical. Despite the quantity of work that had to be done, they stayed on schedule and even found creative methods for getting things done on time.

“In the 33 years I’ve worked here, I’ve never poured concrete in the winter,” said Hentges. “Last year, the crew poured concrete on I-70 when the temperature was 18 degrees in the morning.”

That day they had the curing concrete covered with blankets to trap the heat.

During the 18 months of SRI work, Hentges says he worried even more

than usual about the safety of his crew. They had several close calls and one incident where a vehicle’s side mirror clipped the elbow of one of the crew members.

“The most important thing is to be safe,” said Hentges. “The concrete and maintenance crews did a great job.”



Eric Schroeter

More than 3,000 concrete patches were required before SRI work could begin in mid-Missouri.

From Start...To Finish

10



Mike Wright

MoDOT kicked off the start of the Smooth Roads Initiative in April 2005 with an event on Route 63 in Boone County. State officials and contractor representatives spread asphalt in an actual work zone where a crew was repairing sections of the road.



Holly Dentner

Fast forward to Dec. 8, 2006, when Crew Worker Shahid Koochak-Yazdi helped Gov. Matt Blunt paint the final stripe during the SRI completion ceremony on Route 54.

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D6

St. Louis Area

District 6 Smooths Over 800 Centerline Miles As Promised

By Kara Price

St. Louis District Engineer Ed Hassinger personally congratulated employees Friday, Dec. 8, at an appreciation celebration for accomplishing the early comple-

ted more than \$106 million worth of resurfacing to bring this initiative to life. MoDOT and its contractors completed the project one-year early, which is



From left to right: Greg Horn, assistant district engineer; Ed Hassinger, district engineer; Randall Glaser, transportation project manager; and Tom Blair, assistant district engineer, with the original tattered District 6 SRI map that Glaser used as the key tool during the initiative.

tion of the Smooth Roads Initiative this month. More than 800 centerline miles were resurfaced or smoothed out within District 6 as part of the statewide Smooth Roads Initiative. The St. Louis region

is an extraordinary goal that couldn't have been accomplished without all of the employees' dedicated efforts.

"District 6 delivered what our customers expect and the employees, as well as the industry, did an extraordinary job of helping deliver 2,200 miles of smoother roads statewide," Hassinger said. "The employees were our key component in accomplishing this goal and their hard work is sincerely appreciated."

Assistant District 6 Engineer Tom Blair said, "St. Louis had the most SRI miles in the state and our challenge was accomplished due to the cooperation with our neighboring districts. Those districts played the biggest role in this accomplishment because they went over and above the expectations to help, which made the teamwork phenomenal."

At the celebration, Hassinger recognized Randall Glaser, transportation project manager, for being the leader of the District 6 SRI initiative. He named Glaser a "driving force" behind St. Louis' efforts to improve the city's roads. Hassinger presented him with an original tattered SRI map of District 6 that Glaser used as the key tool when taking charge of the initiative.

"When we were told to finish a year early, I thought 'we can do that,' especially since we had a two month head start when we jumped into it," Glaser said. "We had five to eight key projects that had to be accelerated - one of those projects was Route 30 that involved nearly 30 miles of roads, and it was one of the largest projects we've worked on."

Several employees who worked on the SRI initiative were apprehensive about the challenge of completing this big project on time, especially one year early. However, many agree they are proud of their hard work and are excited that the project was "completed as promised" and earlier than expected.

"I wasn't sure if we would pull off SRI on time and thought I wouldn't see the end of the project," William Shadick, maintenance specialist in the striping department, said. "It went really well



The smooth east- and westbound lanes on I-70 near the Blanchette Bridge that crosses the Missouri River was one of many SRI projects.

considering everyone pulled together as a team."

Several St. Louis residents are happy with this project and are even impressed that MoDOT completed it so quickly. Don Ouellette, a driver for Bates Utility Company in Weldon Spring, travels about 100 miles a day in the St. Louis metropolitan area. He is always concerned about the safety of the roads, especially the smoothness, since a majority of his job is being out on the roads.

"It's so easy to know when you are on roads that have been diamond ground because of this initiative," Ouellette added. "The biggest benefit is the comfort when driving on the new and improved roads because I feel like I glide along while driving."

Congratulations, District 6, on all your hard work and dedicated efforts in making the roads smoother and safer for the St. Louis area drivers!

Paving The Way

District 3 Crew Contributes To District 6 Success

by Andrew Gates

With more than one-third of the roads impacted by the Smooth Roads Initiative, District 6 needed a little help from its northern neighbors to meet the challenge of completing SRI one year ahead of schedule.

District leaders knew local crews were going to need some help pouring concrete, according to Owen Hasson, District 6 maintenance superintendent. District 6 does not have a concrete crew, as most of the concrete replacement work is included in the district's contracts. Since it was quite expensive to include concrete replacement in SRI projects, Hasson looked for ways to accomplish the work with MoDOT assets. District 3 concrete crews helped in the district last year, so Hasson and Butch

Mundle, District 3 maintenance superintendent, worked together through the winter months to get crews ready to pour this year.

"The 13-person crew from District 3 started work in late February and continued through early October," Hasson said. "Four crew members were full-time department employees, while the remaining members were seasonal hires."

The crew worked more than 80 days around the greater St. Louis metropolitan area, including many nights and weekends. They also assisted in all seven district maintenance areas, according to Hasson, removing and pouring concrete on 14 routes. In all, District 3 crews poured more than 3,000 cubic yards - or nearly 1.4 miles - of concrete

during the various projects. "As part of the project, the crews ripped through the concrete deck - ranging from about eight inches to nearly 18 inches, depending on the route - and then repoured it prior to repaving or diamond grinding," Mundle said.

During a typical project, the crew would leave District 3 at about 4:30 a.m., according to Sam Vice, District 3 special maintenance supervisor.

"By the time we arrived at the work-site, at about 6 a.m., the maintenance superintendent in District 6 would have the work zone set up," Vice said. "We would start sawing and removing concrete when we got there. We would usually finish our pour about 6 p.m." The crew could pour up to 100 cubic yards of concrete in a night, according to Vice.

While working in District 6, the District 3 crew members stayed in local hotels, arranged by Hasson, as necessary.



Special maintenance crews from District 3 replaced concrete along Memorial Drive near the Arch to help deliver SRI results in the St. Louis area.

"We also supplied traffic control and a driver with a tandem," Hasson said. "The team from District 3 did the rest!"

"The support provided by District 6 was great," said Mundle. "Everyone was wonderful to work with - from the district engineer to the newest crew workers."

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D7

Southwest

SRI Workload Sparks Innovations

by Wendy Brunner-Lewis

The ancient Greek philosopher Plato said, "Necessity is the mother of invention." He could have been talking about the Smooth Roads Initiative.

"SRI brought about a lot of innovations we're benefiting from and that we'll benefit from for a long time," said Special Maintenance Supervisor Ron Combs. Combs and his concrete crew worked the last two winters nonstop due to the unusually mild temperatures.

Because the concrete must be kept above a certain temperature to properly cure, they had to cover the new concrete with weather blankets. Normally the blankets are held in place with weights filled with sand, and if they're hit, they could damage vehicles. To reduce damage to vehicles, Combs

began using tubes filled with water that are usually used to hold swimming pool covers in place.

"Since it was just water in the tubes, if they were hit it wouldn't cause damage to a vehicle," Combs said.

SRI increased the crew's workload three to four times what they normally do. It wasn't unusual for them to have three work zones on a road at one time, and once they had six on the southern part of Route 71 at one time.

"SRI showed us how to do the work in an assembly-line fashion," Combs said. "We perfected our moving operations during SRI. We knew our work had to be as good or better than what a contractor would do."



The Joplin Special Crews cut out concrete for replacement this summer on an SRI route.

Square Yards of Concrete Replaced

Concrete South

2005	23,549 square yards
2006	13,601 square yards

Concrete North

2005	12,048 square yards
2006	17,348 square yards

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SRI Route Resurfaced with Recycled Material

Interstate 44 was one of District 7's SRI routes, and two miles of it received a new treatment called hot in-place recycling.

"The entire process was very impressive," said Resident Engineer Mike Middleton. "It had a quick turnaround, and we were able to get traffic back on those lanes quickly."

Steps involved with hot in-place recycling:

1. Custom-made, propane-fueled preheaters move across the roadway.

2. The last heater pulls a scarifier that loosens the heated asphalt pavement.
3. The asphalt recycle paver is next and adds rejuvenation oil prior to milling and mixing.
4. After the addition of rejuvenator, the material is milled, mixed and redistributed.
5. The reprocessed asphalt is then compacted using conventional rolling methods.

(Information from the Dustrol, Inc. Web site: <http://www.dustrol.com/hotinplace.htm>)



SRI Taught Us...

"It gave us all a sense of direction. We all understood what needed to be done, then each area developed a plan on how to get the work done in the time allotted. The tight deadline showed all of us exactly how much we can accomplish when we work together to achieve a common goal.

"When I first came to District 7 last January, I would sometimes be asked, 'What if we don't get SRI done on time?' I'd say, 'That isn't an option. If I have to go put up signs and every

person in the office has to work in the field, we'll get it done.' Guess what? Everyone just went to work and figured out a way to get everything done: pavement, shoulders, signing, striping, guardrail...it all looks great!

"I've heard several employees talk about how rewarding these accomplishments have been. We have an amazing MoDOT family."

--District Engineer Becky Baltz

D8

Springfield Area

SRI: District 8 Workers 'Took This to Heart'

by Bob Edwards

District 8 did its part to meet MoDOT's end-of-2006 deadline to complete the Smooth Roads Initiative, pushing hard the last six months to finish repairing concrete joints, upgrading shoulders and paving and diamond grinding.

"Our people across the board took this to heart," said District Engineer Dale Ricks. "I'm super pleased."

Cooperation made the task possible, he said, with employees sharing crews and equipment on a daily basis.

"Every group in the department chipped in and did what needed to be done to make it happen," he said. All the while, employees performed the essentials of their regular duties.

The Concrete Crew received special recognition for its planning and systematic completion of pavement repairs along many miles of SRI routes. The 22 full-time and seasonal crew workers earned the 2006 Governor's Award for Quality and Productivity.

The SRI program in District 8 covered 307 miles of the most heavily-traveled state roadways. Included are:

- I-44 in Greene, Webster and Laclede counties and major sections of Routes 65, 60, 160 and 13 outside Springfield.
- In Springfield, Chestnut Expressway (Bus. 65/Loop 44), Glenstone Avenue (Loop 44/Bus. 65), Kansas Expressway (Route 13), West Bypass (Route 160), West Sunshine Street (Route 413) and East Sunshine Street (Route D) and Campbell Avenue (Route 160/13) south of the James River Freeway.

Those roads are smoother to drive and safer, too. The program involved putting up new highway signs with larger, easier-to-read type and better nighttime reflectivity. Wider, easier-to-see pavement stripes were put down along with rumble stripes in many areas.

The many work zones, with a fair amount of nighttime work, kept employees working longer hours on the busiest roadways, increasing their exposure to the hazards of traffic. Yet through much of the SRI program, District 8 workers lost no work time due to on-the-job injury.

The district went 19 months – November 2004 through July 2006 – without a lost-time incident.

District Safety and Health Manager Gary McLarry said credit for the excellent safety record can be shared by everyone, from field crews paying close attention to setting work zones and watching out for one another to top management for emphasizing safety at every opportunity.

"It's just all-inclusive," McLarry said.



Contractors worked hard as well to hit the time target in the two-year long effort, Ricks said.

"We have provided a very good service to Missouri taxpayers," Ricks said.

for more info

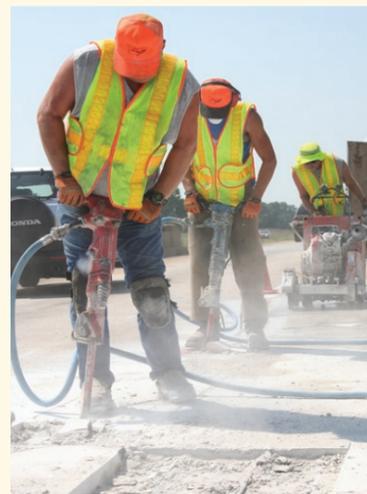
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The I-44 Work Zone Group, a cooperative effort among four districts, played a key communication role with Smooth Roads Initiative projects along Interstate 44.

The group was established in the spring of 2005 to improve I-44 work-zone



Bob Edwards

D8 at Work on SRI

July 2006 (Top Left Photo) – Deck of southbound Route 65 bridge over Catalpa Street in Springfield is repaired by the Bridge Crew, including Seasonal Crew Workers, from left, Bob Jasper, Jace Polodna and Larry Allen.

July 2005 (Top Right Photo) – Bolivar Senior Crew Workers Jimmy Chastain, left, and Brian Proctor pound a sign post into the median of Route 13 north of Springfield.

March 2005 (Middle Photo) – Pavement on northbound Route 13 north of Springfield being repaired by, from left, Concrete Crew Senior Crew Worker Dwayne Rogers and Seasonal Crew Workers Mike Swearingin, Brent Berry and Jason Creasy.

May 2006 (Bottom Photo) – Springfield Senior Construction Inspector Gail Hannaford, right, checks asphalt being laid on Chestnut Expressway (Business 65) near Route 65 in Springfield.

I-44 Work Zone Group Gets Word Out on SRI

by Bob Edwards

management and incident response. District 9 District Engineer Tom Stehn took the lead, with representatives from Districts 6, 7 and 8 participating.

Several major expansion and reconstruction projects along I-44 were on the horizon. So were I-44 SRI projects.

"That (SRI) was a big part of our discussion," said District 8 Assistant District Engineer Andy Mueller.

The communication system that sends traffic alerts from the St. Louis Transportation Management Center to message boards, emergency response agen-

cies and news media along I-44 was in use for SRI projects along the corridor.

"It minimized inconvenience to the traveling public. It was very successful," Stehn said. "It really brings the districts closer together as a team in managing that corridor as one."

"Talkin' Transportation"
Call-In Radio Show
KWTO 560 AM, Springfield
10-10:50 a.m. Wednesdays
radiospringfield.com

D9

South Central

SRI Success Sweeps South Central District

One Team Approach Gets the Job Done

The success of the Smooth Roads Initiative can be traced to every division within the South Central District and their commitment to making it a priority. Each employee, whether directly or in a support capacity, played a role in not just meeting but beating the accelerated deadline.

It all began with the passage of Amendment 3. South Central District Engineer Tom Stehn switched gears literally overnight following the election. He knew he had to quickly rally the team.

Design was immediately presented with the challenge of fast-tracking projects so construction could forge ahead. They worked the projects into their existing workload, putting in many long hours and sacrificing holidays and weekends. Squad leaders and project managers took extra steps to ensure everything went smoothly by following up and working closely with Central Office.

Once the projects were let, bids were received and approval was given to proceed, the project offices kicked into high gear. Plans were formed to optimize staff and resources and match them with projects. For example, the Willow Springs Project Office sent inspectors to Interstate 44 to help get the job done.

In the meantime, traffic management was recognized as a key component to meeting the commitment. With a large portion of the work within the South Central District located on I-44,

a need to collaborate with neighboring districts was identified. The South Central District joined with the three other districts located along the corridor to discuss communication, best practices and management of the entire interstate.

Within the South Central District, a partnership was formed between Troop I of the Missouri State Highway Patrol and MoDOT maintenance and construction divisions to actively manage the work zones. This helped keep traffic moving by rerouting it when incidents occurred and making provision for emergency access to accident scenes.

The maintenance superintendents responsible for the counties through which the interstate runs, as well as members of the construction division assisted the Springfield District with

setting up a similar work zone management system. In addition, crew members from area maintenance facilities worked to manage backups from the South Central side and assisted over the line as needed.

Things went smoothly enough that as other needs in fellow districts were identified, members of the South Central District offered help. Signing crews traveled to the Springfield and St. Louis Districts. The electricians helped in the St. Louis District as well.

The Willow Springs Concrete Crew also pitched in with pavement repairs on the interstate for the Springfield District. This work meant being away from home for six weeks. The crew was restructured to increase efficiency. The result was a tripling of their normal productivity.

“The events since the passage of Amendment 3, and especially since the governor’s challenge was announced in January of this year, have proven MoDOT can step up to the plate when called upon,” said Stehn. “The effort and skill displayed by members of the South Central District and throughout MoDOT as we pursued this accomplishment was tremendous. By meeting such challenges, our credibility as a department grows exponentially. This is a very proud time for MoDOT.”

Stehn gives full credit to the staff in the South Central District for doing its part to make sure the “Completed as Promised” banner could be placed on the signs. “Every employee in our district understood the magnitude of this challenge. It was a true reflection of one team, and I am proud of their dedication.”



The South Central District reconstructed 12 miles of Interstate 44, westbound, throughout Crawford County as part of the Smooth Roads Initiative.

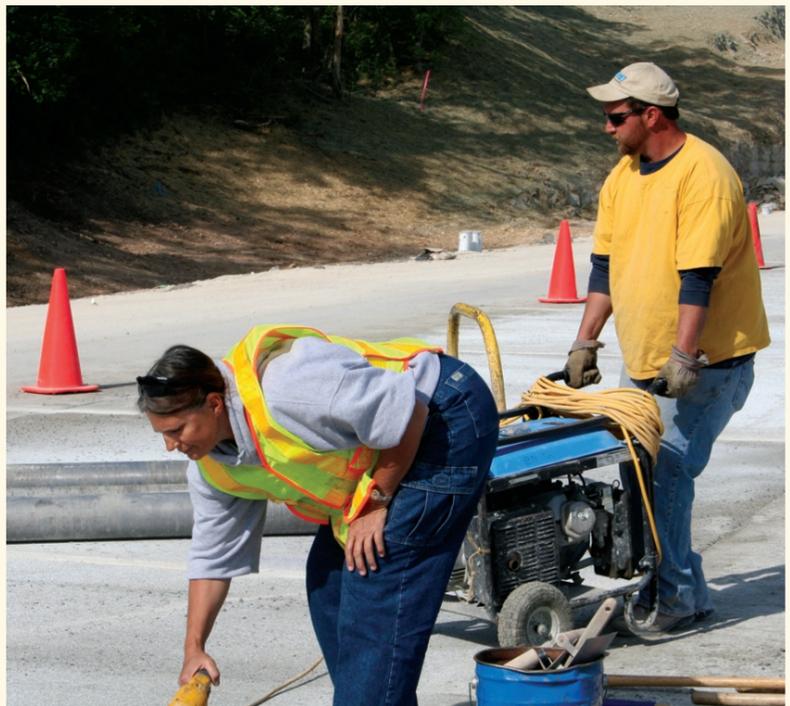
14



While traffic moved a little slower than normal, the Work Zone Management Team kept motorists moving during construction on Interstate 44.

for more info

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 P.O. Box 220
 Willow Springs, MO 65793



Construction Inspector Cindy Dzurick and a contractor employee are shown on a newly constructed ramp at Interstate 44 and Route 63 in Rolla.

D10

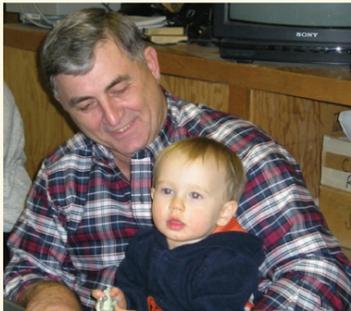
Southeast

SRI: Southeast Success District Engineer Mark Shelton

In November 2004 when the voters of the Show Me State said yes to Amendment 3, they said yes MoDOT, show me. Twenty-four months later, we went from an idea to approximately 225 miles of completed smooth roads in southeast Missouri.

In the 21 years I have been with MoDOT, I have never seen such an accomplishment or been so proud to be a part of the MoDOT team. I am thrilled to declare victory as part of the Southeast District.

When I joined the district in the summer of 2005, SRI work was well under way. Plans had been prepared in record time, thousands of pavement repairs were in progress and construc-



"I'd say this photo is a genuine reflection of Bob and represents the kind individual he truly was," said Darius Dowdy, resident engineer.



Mark Shelton, district engineer in Sikeston, applauds and thanks District 10 for their hard work on SRI.

tion inspections were being performed literally around the clock.

I have heard great comments about your work from legislators, folks in the coffee shop, friends and family. You have done a great job. You have delighted our customers. Thank you, for a job well done.

Victory didn't come cheap, it didn't come easy, it took team work, determination, sweat, extra time away from families and unfortunately, it even took the life of one of our own. Last April, Intermediate Construction Inspector Bob Eftink lost his life while inspecting an SRI project along Interstate 55 in Cape Girardeau County. Our team continues to miss him and his contributions.

Poplar Bluff Worked Nights on Route 67

What type of work was completed in Poplar Bluff and who contributed?

The Business Route 67 resurfacing was inspected by Chris Barnfield, Robert Thomason, Lisa Camden and Jarrod Jernigan. Plenty of overtime and night work took place. On July 19, we started the project, and Aug. 24 was the last day we laid asphalt. The final striping continued through the end of September.

What was the greatest effect of the SRI work?

The most important thing was the smoother pavement, which created a more enjoyable ride. Everything turned out very well.



Tracee Fischer, senior construction inspector, discussed the SRI project along Business 67 in Poplar Bluff.

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In The Beginning . . .

How much time did your staff have to get the plans ready? About a month. We found out SRI would be implemented in November 2004 and began work in December. This is a greatly accelerated timetable even for our super group of project development folks.

What are the benefits of SRI?

SRI improved many business routes in our district, such as Kingshighway in Cape Girardeau, Main Street in Scott City and Malone in Sikeston. Before

SRI, we weren't sure when we would be able to improve these roads. Thanks to SRI, we were able to make these roads better for everyone.



Barry Horst
District Design
Engineer

Bootheel Cooperation

How were the roads before SRI?

Before SRI, our interstate system was deteriorating at a pace so fast it was hard for each maintenance building to keep up with the work. In our area, we had help preparing for the SRI contractors from the Kennett and Arbyrd sheds. Through this partnership, we repaired hundreds of holes along our interstate. The combined efforts of our crews, along with those of the contractors, have resulted in an interstate that's more attractive and much safer.

Who else contributed?

We would be thoughtless if we didn't applaud our construction inspectors,



Wendell Lockridge, maintenance supervisor in Hayti, commented on the SRI work completed in the Bootheel.

sign crews and even our incarcerated crews. It took a combined effort from everyone. The cooperation from group to group was great. I thank everyone involved and appreciate all the effort to make it all come together.

Jackson Busy on I-55

How important was the SRI inspection crew?

The whole crew made sacrifices by working long hours in the evening. Without them, we could never have completed all the jobs.

How are the overall results of the SRI work?

Everyone seems very happy. We made major improvements. The ride quality is tremendously better than what it was.



Some of the Jackson Project Office inspection team includes, front row, from left, Bob York, Ron Robertson and Deb Seabaugh; back row, Rick Lamb, Johnnie Sample and Jim Johns.

Park Hills in District 6



Matt Malone
Resident Engineer

Where was the SRI work in the north area?

Our team inspected SRI improvements along Route 67 from Route W in Farmington all the way to Interstate 55 in District 6.

How many miles were completed?

Thirty-five miles were completed on the four-lane highway.

How long did it take to complete all 35 miles?

We started work in October of 2005 and finished in June of 2006. It worked out well because we started and finished ahead of schedule.

Which maintenance crews were involved in the SRI work?

Ste. Genevieve, Perryville, Fredericktown and Park Hills all worked on pavement repairs before the diamond grinding, which was performed by the contractors.

Connections

The mission of *Connections* is to be a monthly source of Missouri Department of Transportation news and feature articles that connect employees statewide. It is distributed to MoDOT employees and retirees.

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District Lines Dissolve Among Maintenance Crews

by Megan Mills

From the start of the Smooth Roads Initiative, MoDOT maintenance and traffic crews worked together to ensure that everything would be completed as promised. Across the state, districts

“The cooperation among the districts allowed MoDOT to complete almost all of the concrete repair and sign installation without help from outside contractors, which ultimately saved money,” said

work on time or at all. Depending on the project, districts either asked for help or willingly offered manpower or materials.

more advanced resources or completed their projects ahead of schedule. District 2 crews worked in an unprecedented six other districts, and District 5’s specialized equipment helped District 4 complete some of their signage and concrete replacement work.

“I am extremely impressed with the way the districts were able to work together on projects all over the state,” said Carney. “Since the start of the Smooth Roads Initiative, maintenance and traffic employees have really demonstrated MoDOT’s One Team mentality.”

The biggest challenges throughout the state were trying to stay ahead of contractors with concrete repair, repairing the concrete during winter months, prioritizing work, facing a lack of resources and continuing to maintain the rest of the roads while completing the SRI project.

Overall, maintenance employees worked extra hours and longer days to complete the projects. From Jan. 1, 2005 to Oct. 31, 2006, MoDOT maintenance crews spent more than 888,000 hours of labor to complete all projects. District 4 had more than 201,000 labor hours alone and District 10 completed almost 183,000 labor hours.



Maintenance crews work hard to repair and replace concrete so that Missouri roadways are prepared for new, smoother pavement.

readily swapped crews and materials back and forth when other districts were faced with tight deadlines or short supply. Most of the crossover work included concrete replacement or repair to prepare the roadways for the new pavement and sign installation.

State Maintenance Engineer Jim Carney. “In addition, it helped alleviate some of the pressure to complete projects on time.”

All district maintenance engineers agree that without the team mentality, it would have been much harder to complete the

“We received structural steel signposts from districts 5, 9, and 7 when we were in a bind, and later sent some to District 5 when they needed more materials,” said David O’Connor, District 8 maintenance engineer. “We also received additional crews from District 9 when we weren’t sure we’d get a project completed on time, and they were more than willing. Across the state it was really a team effort.”

One major example of the teamwork was District 3’s concrete crews helping District 6 repair concrete on 14 roads in 80 days throughout the St. Louis area. (See story on page 11.)

In-district cooperation made it possible for the Springfield District Concrete Crew to saw and pour more than 4,000 full-depth patches in an 18-month period as they prepared 307 miles of roadway for SRI. Their efforts didn’t go unnoticed either. The crew received a 2006 Governor’s Award for Quality and Productivity this fall for improvements they made in the pavement repair process.

Many districts offered help when they didn’t have many SRI projects in their area, had additional or



Brighter, easier-to-read signs are hung with care by MoDOT maintenance crews. The Sign Shop prepared 188,000 signs specifically for SRI.

“My husband and I work out of our truck and the work your crews did on Route 63 between Ashland and Columbia made our job easier. I input information on a laptop while my husband drives the truck and now it isn’t jumping around on my lap. The road is so smooth! Thanks again.”

Fred and Penny Martie
Ashland, Mo.

“Thanks much for making Route 63 from Route 54 to Columbia much smoother! And the same goes for Route 50/63 through downtown Jefferson City. I appreciate you folks and your hard work!”

Geoff Oswald
Holts Summit, Mo.