

FHWA

Missouri Division Semi-Annual Stewardship Report

End of PY 2012

Data as of May 31, 2012



Federal Highway Administration
Missouri Division
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Vision

To sustain an improved highway system where the Interstate and the National Highway System is first class and provides a pleasant experience to those who travel in Missouri.

Mission

Through innovation, leadership and public service, continually improve highways in Missouri with emphasis on the Interstate, the National Highway System and its connectors to other modes so that they are safe, effective and well maintained.

Values



Collaboration

We maximize our collective talents through teamwork and partnerships based on mutual trust, respect, support, cooperation, and communication.



Personal Development

Through a wide variety of learning opportunities, we nurture the development and use of leadership, technical, and professional skills in all of our employees.



Integrity

Ethics, fairness, and honesty define the way we do our work and conduct ourselves. We have the courage to be both innovative and make tough decisions.



Public Service

We are committed to the pursuit of professional excellence motivated by serving the public interest and providing high quality products and timely services.



Respect

We value individual diversity and the unique strengths, skills, expertise, and background of our employees. We treat others in a polite and courteous manner.



Family

We support, care about, listen to, and respond to employees and their family needs.



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MoDOT Work Zone Awareness
Don't Barrel Through Work Zones. Drive Smart.
 Kevin, Ashley, and Dawn at MoDOT Central Office



"I am pleased to present the FHWA Missouri Division PY 2012 Stewardship Report and PY 2013 Business Plan. We have experienced many changes in our organization as we continue to work hard in our stewardship responsibilities time and time again demonstrating an attitude of partnership.

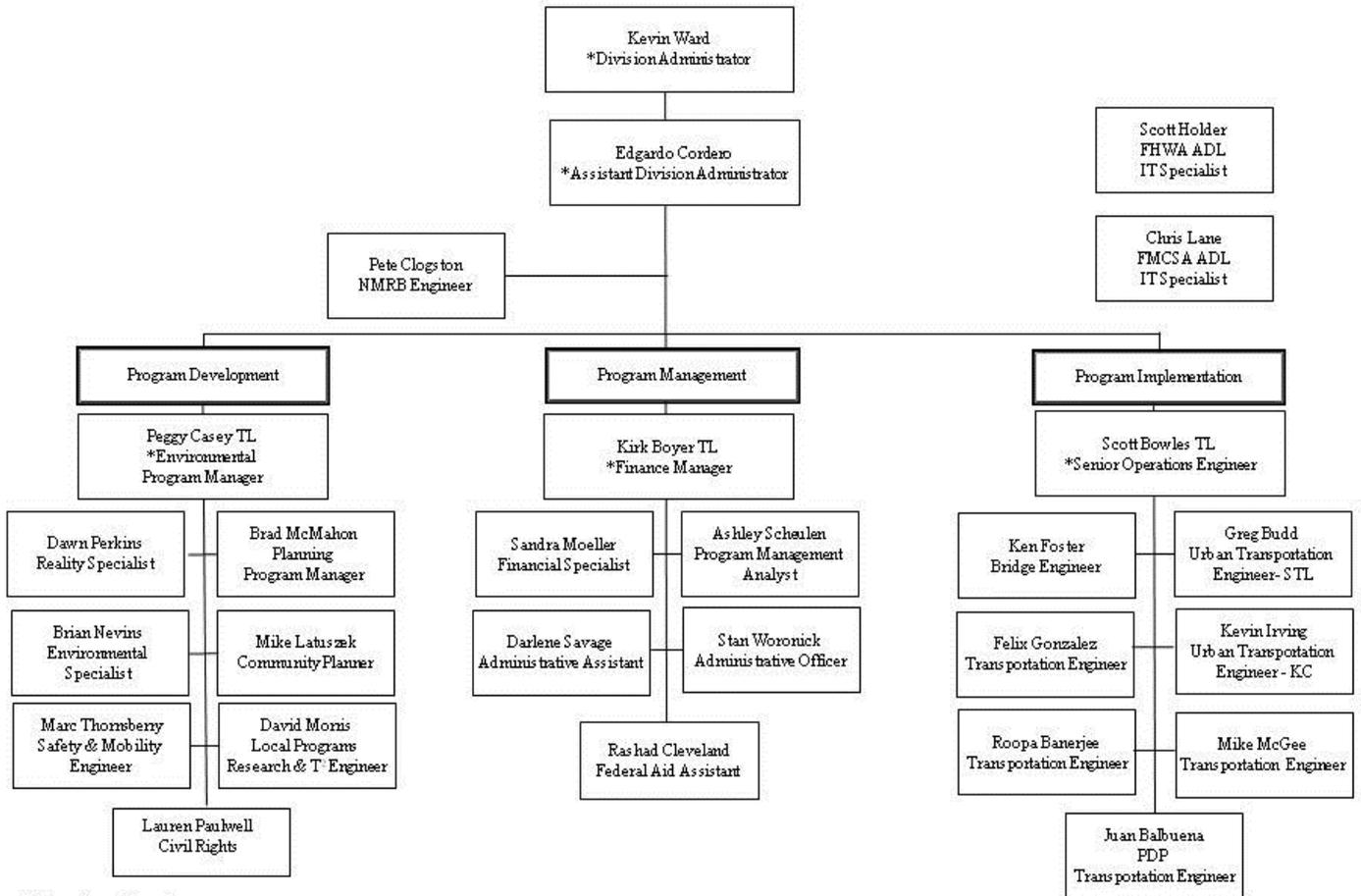
As we look towards 2013, I know our Division is ready to take on the challenges it brings. We have employees who are committed to excellence, who know what our priorities are and strive to meet the expectations others have of us. Our relationships are strong and getting stronger every day while moving our key initiatives to implementation.

I'm very proud of the Division's accomplishments this year as you will read about in the pages that follow and can't wait to see what our team will achieve next year.

When those we work with think of FHWA, it is the Division's goal that we are thought of as problems solvers, facilitators and most importantly...partners who can be counted on to deliver when needed."



Missouri Division Team



* Leadership Team

New Employees in 2012



Scott Bowles
Program Implementation Team Leader
and Senior Operations Engineer



Dawn Perkins
ROW/Reality Specialist



Lauren Paulwell
Civil Rights Manager



Victor Mendez's visit for the Missouri Work Zone Awareness Kick-Off, April, 2012



Missouri Division Awards



Peggy Casey received a Career Achievement award from the FHWA Environmental Discipline. This award acknowledges her experience, knowledge and leadership in making a tremendous impact on the environmental program in Missouri and for her vital role in the success of the Division office. Peggy’s career with FHWA has spanned more than 35 years of which 29 have been in Missouri. She delivered complex and challenging projects in a timely fashion, she was an excellent mentor to other discipline members, and she fostered a very strong working relationship with her MoDOT partners.

Dawn Perkins and Kirk Boyer received the FY 2012 TIGER Discretionary Grant award for their help in successfully evaluating a staggering number of TIGER applications within a very short timeframe over of six months. Their work made the FHWA stand out by delivering thorough, documented recommendations, but more importantly, their exceptional efforts will help put people back to work—a vital accomplishment considering the trying economic times we are currently facing.



Dawn Perkins, Kevin Ward, Edgardo Cordero, and David Morris received the Secretary’s Partnering for Excellence Award for their exemplary teamwork, dedication, and innovative thinking in successfully implementing the TIGER II discretionary grants program to meet key Departmental objectives.

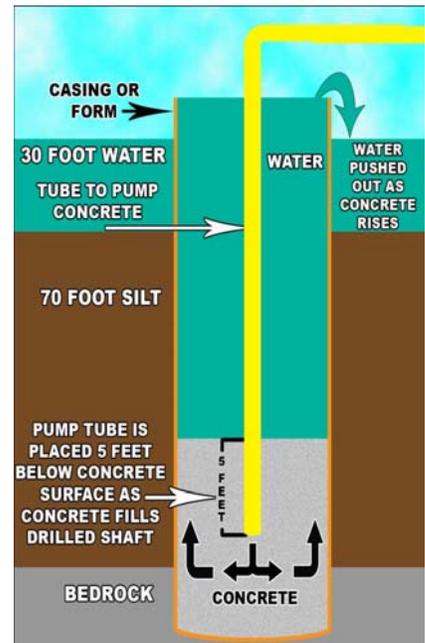


PY 2012 Accomplishments and Performance Outcomes

Strategic Goal: National Leadership

- State Infrastructure Bank (SIB):** Final report was presented to MoDOT in December. We recommended MoDOT to modify their partnership development application form, as appropriate, to include the applicable Federal requirements for Buy America and the use of the Manual of Uniform Traffic Control Devices. Based on the testing of relevant internal controls over loan processing and reporting we found MoDOT’s internal controls and administration of the SIB program generally comply with the applicable requirements.
- The New I-70 Mississippi River Bridge (NMRB) project in St. Louis:** In June 2012 the NMRB project passed the 50% completion milestone, including the topping out of the 2 river bridge towers at 400’ above the Mississippi River. This new relocated I-70 alignment will tie Missouri and Illinois together over the Mississippi River just north of downtown St. Louis. When completed it will reduce existing congestion for over 200,000 vehicles that currently travel the existing Mississippi River bridges in downtown St. Louis on a daily basis. This \$714 million major project is within budget and on schedule for completion in early 2014. Project highlights include the pending completion of the largest archaeology dig in the United States, over \$100 million in contract dollars going to DBE companies, and approximately 24% (vs. the USDOL goal of 14.7%) of the total project labor hours being completed by minority workers.

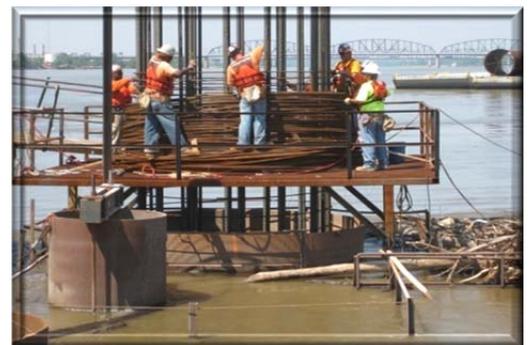
Figure 1: NMRB: Pouring Concrete Underwater



NMRB: Core Drilling and Retrieval



NMRB: Once Completed



NMRB: Rebar Installation



• **Innovative Financial Reviews and Assessments:**

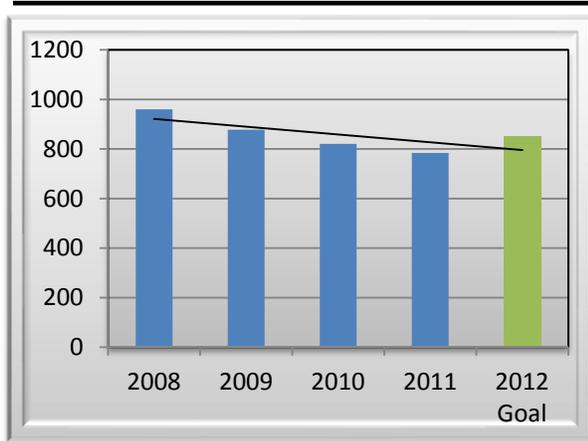
- ✓ **Additive Rate Review:** We reviewed and approved the Construction, Equipment, Materials and Salary Additive Overhead rates to allow MoDOT to seek additional Federal reimbursement.
- ✓ **PE/ROW Payback Review:** Review ensures federally funded preliminary engineering (PE) and right-of-way (ROW) projects are not advanced to construction within 10 or 20 years, respectively. As a result of this review, one project was withdrawn since it did not move to construction by the time extension granted.
- ✓ **NMRB Financial Plan:** Reviewed NMRB plan and provided comments/improvements to MoDOT prior to submittal to FHWA HQ. The final version includes a July 1, 2011, estimated amount of \$694.8M which is \$30.1M less than the amount shown in the previous draft submittal.

- **Climate Change:** Updated white paper with current MoDOT efforts and provided results on sustainability to Headquarters.

- **Livability:** The Division co-developed a Region VII Interagency Partnership resource guide, providing technical knowledge of FHWA funding programs and Livability initiatives. Participated in monthly regional interagency meetings, and quarterly national meetings presenting on region-wide Livability projects, programs, and outreach activities.

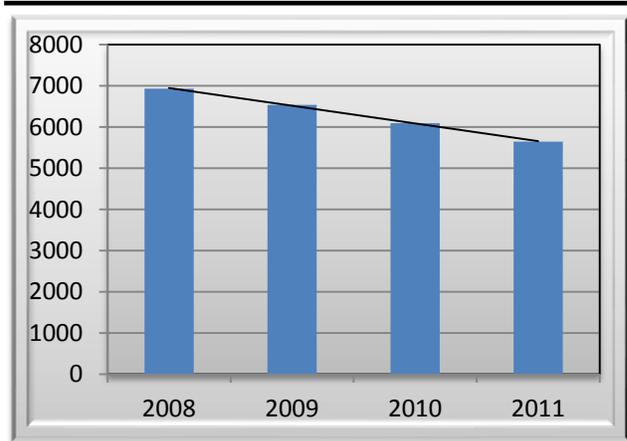
FHWA Strategic Goal: System Performance

Figure 2: Number of Missouri Highway Fatalities



Source: MoDOT April 2011 Tracker Report

Figure 3: Number of Disabling Injuries Related to Highway Crashes



Source: MoDOT April 2011 Tracker Report



- Missouri Coalition for Roadway Safety (MCRS):** FHWA served as Chair of Infrastructure Subcommittee and presented Subcommittee report at MCRS Annual Executive Committee Meeting. Actively worked with State Chapters of ITE and MoDOT on the review of Introduction to Traffic Practices, a Guidebook for Local Agencies.
 - ✓ Mission continues to be focused on local roads
 - ✓ Continued to promote RSAs with local agencies – Mo-Kan, NW Missouri Regional Council of Governments and Green Hills Regional Planning Commission received the Excellence in Regional Transportation Award at the National Rural Transportation Conference for their RSA program.
 - ✓ Promoted RSAs and other Proven Safety Countermeasures at Safety Days and MO Chapter of APWA Fall Meeting.



Marc Thornsberry at the Ribbon Cutting for the Transportation Management Center of the Ozarks

- 2011 HSIP Annual Report:** Presented MoDOT’s safety accomplishments for the year in the HSIP Annual Report.
- 2012 Work Zone – Self Assessment (WZ-SA):** Identified MoDOT’s successes in work zones and opportunities for improvement through the completion of the 2012 WZ-SA including the following assessment areas: Leadership & Policy; Project Planning & Programming; Project Design; Project Construction & Operation: Communication & Education; and Evaluation.
- 2011 Traffic Incident Management – Self Assessment (TIM-SA):** Assessment found both of Missouri’s major urban areas (St. Louis & Kansas City) were assessed and those findings will be used by MoDOT and the Division to further advance TIM in Missouri’s largest urban areas.
- “Partners in Education” day at a local middle school:** Eight Division employees volunteered at the school hosting the Survivor Game for the 5th year. We are 1 of 8 organizations at the school, including Missouri State Highway Patrol, and Missouri Department of Transportation. The activity was voted #1 for the 2nd year by over 300 students.



Brian Nevins coordinating a sign identification activity



Felix Gonzalez assisting in an obstacle course to increase awareness of distractive driving



- **Every Day Counts (EDC) Initiatives:**
 - ✓ **Safety Edge:** Provided recommended specifications to improve the EPG and to provide additional training. MoDOT is specifying the Safety Edge on all single lift projects which is estimated to total over 700 centerline miles for 2012. We actively promoted EDC Initiatives to local agencies including presentation at Missouri Chapter of APWA Fall Meeting.
 - ✓ **ASCT:** Actively promoted ASCT to state and local agencies including presentation at Safety Days Event in Kansas City.
 - ✓ **EA and EIS Improvements:** Finalized and implemented EA and EIS checklists and Coordination Plan templates to be used by consultants hired to complete EA and EIS documents for MoDOT. We also implemented the Coordination Plan template to help streamline project delivery of projects requiring EISs.
 - ✓ **Geosynthetic Reinforced Soil:** Hosted a MO-wide video conference on the construction of GRS-IBS during the EDC Exchange # 2 and delivered a presentation on GRS-IBS to 62 participants at the Transportation Engineers Association of Missouri's Annual Meeting. We also assisted with the Innovative Bridge Research and Deployment (IBRD) grant application utilizing GRS-IBS and Prefabricated Bridge Elements and Systems (PBES) elements.

- **Congestion Management Strategies:** KC Scout has completed its weather integration project and has integrated the NWS, Clarus, and 8 Scout weather sensors into its central ATMS software and message sets for weather response and warnings.

- **Operations Opportunity State Action Plan:**
 - ✓ Worked with the Office of Operations to host the following FHWA workshops and assessment:
 - Improving Regional Transportation Systems & Operations Management: A Capability Improvement Workshop (Kansas City metro Area)
 - Advance TIM Workshop for Mid-Level Managers (St. Louis & Kansas City metro areas)
 - FHWA Managed Traffic Lanes Workshop – St. Louis
 - Operation Green Light Traffic Signal Operational Assessment
 - ✓ Worked with Office of Operations to secure scholarship to Operations Academy for MoDOT Representative
 - ✓ Working with State Partners and Office of Operations to host Operations Summit tentatively scheduled for September 2012 in St. Louis.

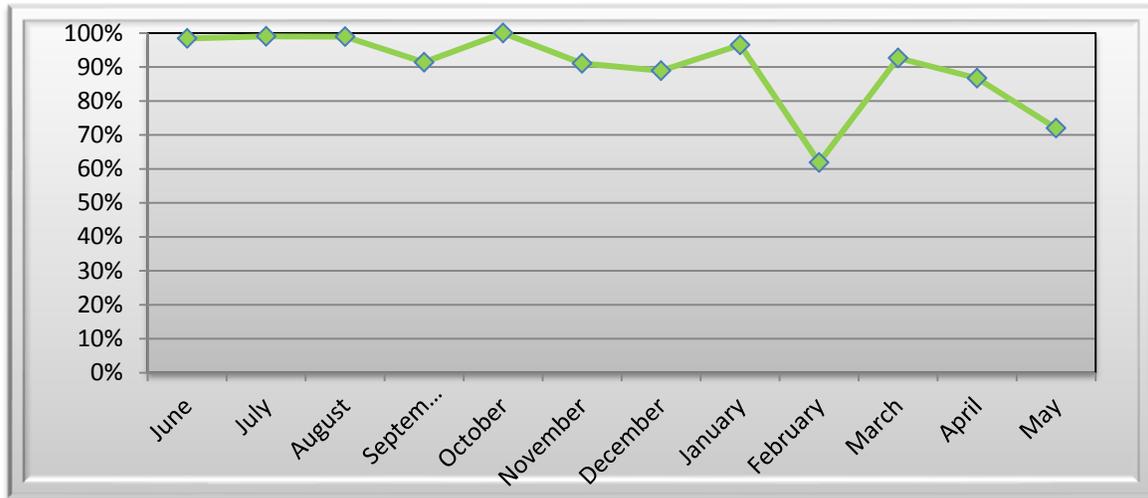
- **Safety Inspection of In-Service Bridges:** Revised the NHI 130055, Safety Inspection of In-Service Bridges training course as part of a national. This two-week training is the comprehensive training required for bridge inspectors to qualify as a team leader. The work this year included technical review and input on material prepared by the contractor and attendance and participation at the two-week pilot class in Charlottesville, VA to provide input on improvements from this pilot delivery.

- **National Bridge Inspection Program Annual Review:** The new annual review process for the National Bridge Inspection Program (NBIP) was conducted, assessing the state's bridge inspection program on each of the 23 metrics. Each metric was evaluated according to the defined process and procedures at the intermediate level to establish a national benchmark. In addition to the 23 metrics, the Division performed a field review of 24 bridges. The state was found to have 9 metrics needing improvements and the Division worked with MoDOT to establish nine plans of corrective action to actively improve on these metrics. We are now monitoring progress on these corrective actions. The findings of the CY2011 NBIP compliance review was presented to MoDOT bridge inspection staff and managers at the annual Statewide Maintenance and Management Meeting. MoDOT is in the process of reorganizing their bridge inspection program and the Division is active in this effort providing guidance and ensuring compliance with the National Bridge Inspection Standards (NBIS).



- FHWA and MoDOT Partnering Agreements:** We are in the beginning stages of implementing a true performance based partnering agreement with MoDOT. We have incorporated performance measures in each program area. Figures 4 and 5 are tracked in the Finance Partnering Agreement in relation to FMIS.

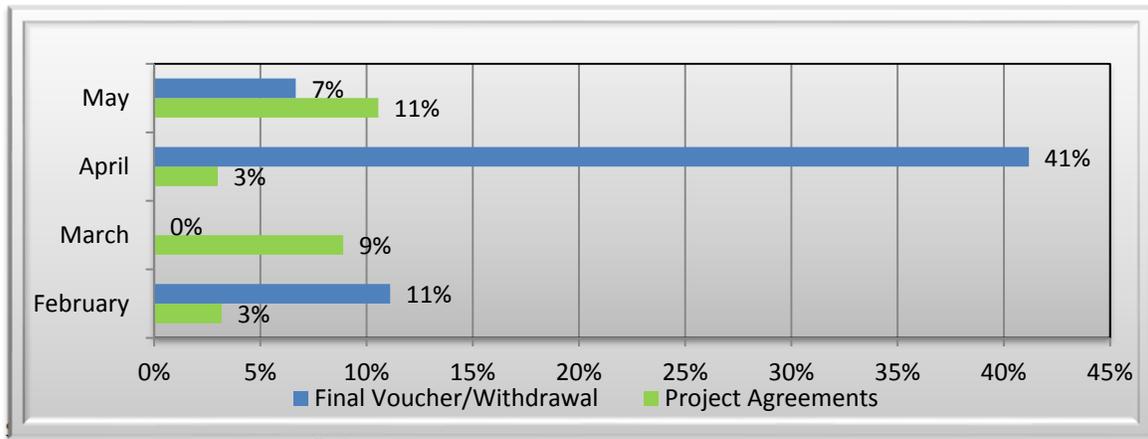
Figure 4: FMIS Project Agreements Meeting our Partnering Agreement Goals



Source: MO Division FMIS Tracking System

Note: Partnering Agreement states 80% of Project Agreements should be signed within 10 working days. Final Vouchers should be signed within 30 working days. The decreasing trend is directly related to the decrease in FTE.

Figure 5: FMIS Projects Returned to MoDOT for Correction



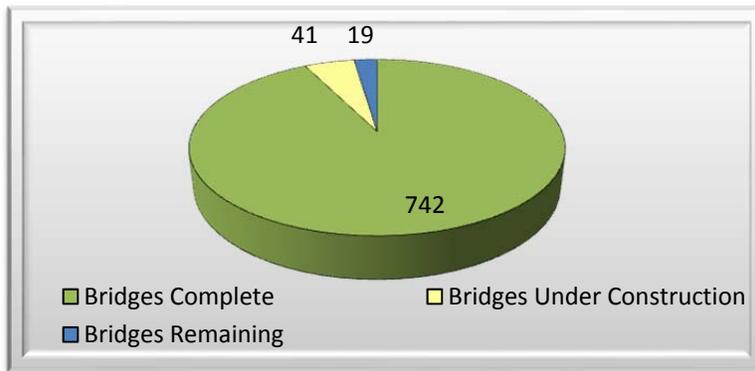
Source: MO Division FMIS Tracking System

- National Bridge Inventory:** Coordinated with MoDOT to ensure timely submittal of the National Bridge Inventory (NBI) data to HQ. This electronic submittal was completed ahead of the deadline and a review of the data showed no persistent errors and no items to correct this year. This is a result of the diligence of MoDOT staff in their efforts to submit accurate data.



- Safe and Sound Bridge Improvement Program:** The Safe and Sound program has completed 729 bridges at the end of the performance year (May 31, 2012), with anticipated completion of the 802 bridges by August 2012, one full year ahead of schedule. We continue to attend the executive meetings for this program and work with issues that arise, such as change orders. Additionally, 3 Highways for Life grant bridges utilizing the hybrid composite beams have been interjected into the design-build project and the Division coordinated the kick-off meeting and has field reviewed the first bridges built.

Figure 6: Safe and Sound Bridge Improvement Progress



Source: MoDOT Safe and Sound Website 06-21-12

- Hurricane Deck Bridge Replacement:** Provided guidance in developing an Alternate Technical Concepts (ATC) process which encouraged bold confidential contractor innovation during the design phase to be included in the bidding process. We completed environmental reevaluation which accommodated utilization of the ATC process and reviewed and approved multiple ATC designs for this fast-tracked project. The successful bidder submitted an ATC design with a 100-year lifespan vs. the 75-year lifespan baseline design, for roughly the same cost. The existing 2,200 foot long Hurricane Deck Bridge, which carries NHS Route 5 over the Lake of the Ozarks south of Sunrise Beach in Camden County, was built in 1934. Construction began following a groundbreaking ceremony held May 4, 2012 and the new bridge will be completed in late 2013. The entire project, including demolition of the existing structure, will be completed in spring 2014.

Strategic Goal: Program Delivery

- Civil Rights:** Completed the Title VI self assessment early in the performance year, working with State DOT partners to resolve the few items that required attention. MoDOT implemented 100% of the DBE Work Plan. Regular meetings with MoDOT leadership to proactively address major issues, field review of both DBE/CUF, and the ADA Transition Plan, and presentations at the Missouri EEO Contractor Compliance Workshop contributed to the success of the DBE Work Plan.
- LPA Program:** In a joint effort with MoDOT, we developed and implemented a strategic vision to rebuild the Statewide LPA Program. The Vision included corrective elements to address all deficiencies identified in the Statewide LPA Program Review which we completed in early FY 2012 in addition to those identified in the 2010 OIG report on LPA Deficiencies. A few of the Vision highlights included mandatory certification training of both Local Sponsors and Consulting Engineers, a tiered certification program, a comprehensive new online LPA Manual, a comprehensive online project tracking system and a required statement to confirm there is no conflict of interest issues between project sponsors and consulting



engineers. More than 800 LPA participants have had the basic level of training and are qualified and certified as a Federal aid funding recipient.

- Local Agency Billing Process:** Reimbursed approximately \$150 million to MoDOT for local public agency (LPA) project costs in FY 2011. Our 2012 joint risk assessment identified local agency billings as a high-risk area due to susceptible areas of improper payments based on FHWA billing reviews, spot checks, an OIG complaint, and other program reviews. We took several actions to help improve compliance with the Improper Payments Information Act of 2002 (IPIA) requirements, such as assisting MoDOT in developing and implementing billing checklists and an invoice template. Completing these actions, as well as developing and implementing enhanced initiatives in the future, will effectively reduce improper payments.



Route 141

- Americans with Disabilities Act (ADA) Transition Plan Program Review:** Completed the ADA Transition Plan in coordination with MoDOT. After mapping the processes and reviewing the tools, the goal was to determine if they were consistent, meaningful, and purposeful. It was determined that the ADA Transition Plan and the inventories are compliant with the Federal regulations and requirements. Several opportunities for improvement in the processes and tools related to data collection, storage, and monitoring are included in the report. These opportunities derived from MoDOT personnel suggestions and a nationwide search for best practices. An action plan was developed and is currently being implemented.



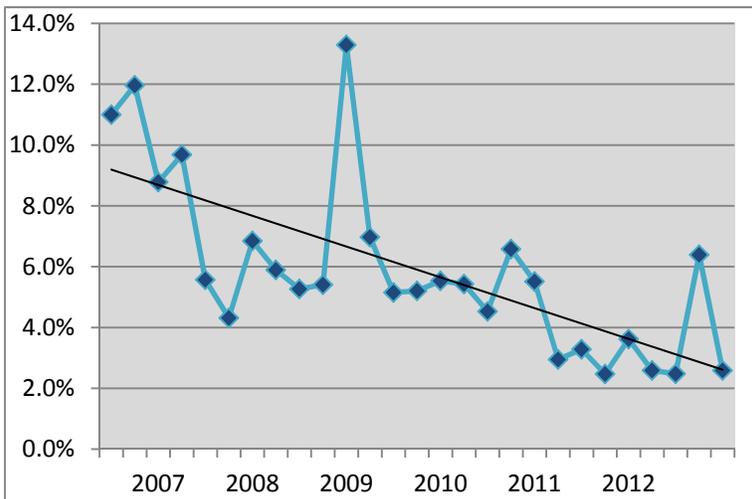
Page Olive Connector

- American Recovery and Reinvestment Act (ARRA):** Surpassed the National 75% goal in February 2011 and currently 95% of our Recovery funds totaling \$605 million have been expended. Over 70% of our ARRA projects are closed out, meeting the National performance goal. We set a goal of performing documented reviews on 20% of the remaining active ARRA projects, above the National 10% goal. The remaining active list contained 62 projects, for a goal of 13 projects. We exceeded the goal and performed reviews on 30 projects (48%) at the end of May 31, 2012. A Lessons Learned whitepaper has been developed to highlight the Recovery Act processes that have been incorporated into day-to-day business practices.
- Route 141 ARRA Project:** A new type of concrete is being used on a 1500 foot section of the Route 141 Recovery Act project in St. Louis. The concrete with a photo-catalytic additive of titanium dioxide goes by many names such as TX Active concrete and smog eating concrete. Regular monitoring will be done to evaluate the benefits of removing pollutants like carbon dioxide and improving air quality and water quality. This is the first time this concrete has been used in the United States. The study is being done in partnership with MoDOT, University of Iowa, University of Missouri – Kansas City and Weber Construction.



- Page Olive Connector ARRA Project:** Completed 7 construction inspections and concluded the project is being administered and constructed in conformance with the contract requirements. The project is currently at 99% work completed and is expected to open in July. The project was the largest local agency Recovery Act project in the State and the first local agency design/build project to be awarded.
- Review of Earmark and Discretionary Fund Obligation Process:** MoDOT had about \$200 million in unobligated earmarks and discretionary funds as of February 2011. MoDOT had a significant increase in the number of earmarks under the Safe, Accountable, Flexible, Efficient Transportation Equity Act; A Legacy for Users (SAFETEA-LU), which created management challenges to obligate funds on appropriate projects. As earmarks and discretionary funds remained unobligated over time, inadvertent errors in the obligation process resulted in requests to replace program funds with earmarks or discretionary funds.
- Inactive Projects:** FHWA’s partnership helps maintain an inactive obligations rate at 3 percent of MoDOT’s apportionment. The Division has continued to stress the importance of developing a proactive monitoring process to identify and manage stagnate projects before they are reported as inactive.

Figure 7: Inactive Obligation Rate trends for 2006 through 2012



Source: FHWA Quarterly FIRE Report

Inactive obligations make up 2.59% or \$23.8M of Missouri’s apportionment.

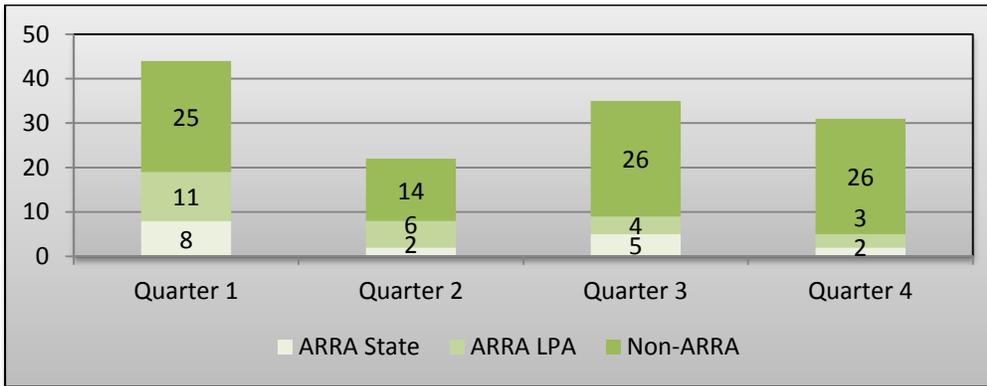
65% associated with local projects

Average LPA project costs \$500,000 in Federal funds

- Full Oversight Design/Construction:** Conducted 179 design reviews and 132 construction inspections, 91 on non-ARRA projects and 41 on ARRA projects. Almost 25 percent of the design reviews can be tied to one Design-build project which demonstrates the amount of resources required to perform oversight duties on Design-build projects.



Figure 8: Full Oversight Construction Inspections



Source: FHWA Engineer Report

- Spot Checks:** The Division conducted 63 construction spot checks on non-full oversight projects, exceeding the 10 percent goal of all active non-full oversight construction projects. There was only 1 significant finding pertaining to the FHWA Form 1273 not being included with contract and subcontracts. This issue was addressed by MoDOT and similar spot checks reflected that this was not a reoccurring issue.
- New I-64/US 40-61 Missouri River Bridge (Daniel Boone):** Provided stewardship to MoDOT during the procurement phase of this \$125M design-build project that will replace the very narrow 1930's era bridge over the Missouri River in St. Louis, with the inclusion of a multiuse path on the new bridge. We concurred in MoDOT's award of the project to the Walsh/Alberici team, whose proposal offered the most scope and the lowest cost. FHWA will continue to provide intensive stewardship and oversight of this project with MoDOT through the completion of construction.
- I-435/Front Street Diverging Diamond Interchange Project:** Provided design review and approval and construction oversight to deliver the Kansas City Metropolitan Area's first Diverging Diamond Interchange located at Interstate 435 and Front Street in Kansas City, MO. The project was the culmination of several years of successful partnership between FHWA and MoDOT where the two agencies worked together to advance this innovative and practical solution that addressed one of the regions' most congested and poorly functioning interchanges. FHWA coordinated a visit to the Turner Fairbanks Highway Research Center to develop a virtual model of the interchange which adds to the design process. The \$8 million project spanned two construction seasons and is substantially complete. A project ribbon cutting was held on May 24th, 2012 that included a speech by U.S. Representative Emmanuel Cleaver from Kansas City.

Figure 9: Access Justification Approvals (9 of 11 requests approved)



Source: Division Operations Systems



- **Emergency Response**

- ✓ **Emergency Relief (ER) Program:** The State of Missouri experienced one of the most catastrophic weather seasons in 2011. There were two declared disaster events that qualified for Emergency Relief Program funding. The first event included the Joplin and St. Louis tornados as well as severe flooding of the Mississippi River in Southeast Missouri. Total eligible ER damage for this event was over \$4 million. The second event was the historic Missouri River Basin flooding that occurred in the northwest part of Missouri where multiple regionally significant Federal-aid routes were under water for over 3 months. Total ER damage for this event was over \$19 million. The Division worked closely with FHWA Headquarters, MoDOT and Local agencies to identify eligible ER damage and efficiently administer the ER Program in order to provide critical funding as soon as possible to repair the damaged highway and bridge infrastructure across the state. We were able to secure \$2 million of Quick Release funds to help offset some of the initial costs for the State and Local agencies during the Missouri River Basin Flood. We also partnered with MoDOT to deliver a presentation on Emergency Relief at the 2012 TEAM Conference.
- ✓ **Emergency Support Function-1 (ESF-1):** We assisted in the response efforts during Hurricane Irene in August, 2011. A member of the Division was deployed as part of the National Emergency Response Team and performed ESF-1 related duties at the Emergency Operations Center in Richmond, Virginia. Members of this team were awarded the DOT Secretary's Gold Medal Award for their response efforts.



Levee Break at Wappapello Lake



Effects of the Joplin Tornado

- **ONE DOT/EPA Baseline Assessment Review of the regional air quality analysis and conformity determination process in the St. Louis metropolitan planning area:** Led Federal Interagency review focused on the regional emissions analysis and transportation CD process in the St. Louis. The Final Report included specific recommendations for improvement as well as strengths of the EWGCOG's overall CD process. The MPO, ONE DOT and SDOT's have agreed to implement all of the 18 recommendations.
- **Managing the Advanced Construction (AC) conversion process:** Led a FHWA/MoDOT collaborative effort that produced an improved STIP development approach that aligns with the actual MoDOT AC conversion practice, eliminates the need for STIP amendment actions, reduces the time needed to complete STIP administration actions while at the same time enhances the integrity of the transportation planning process and strengthens the effectiveness of our FHWA/MoDOT partnership.
- **Missouri MPO and MoDOT Freight Profiles:** Led the collaborative FHWA/MPO effort to update the 2010 Missouri TMA (EWG,MARC,OTO) Freight Profiles and to develop the original Freight Profiles for non-TMAs



(CAMPO, CATSO, SJATSO, JATSO) in the manner and timeframe requested by our Office of Freight Management (HOFM). We worked closely with MoDOT's new Freight Coordinator to update the 2010 MoDOT Freight Profile in the manner and timeframe requested.

- **STIP Amendment Process:** Championed and led the joint FHWA/MoDOT effort to develop a new amendment procedure that enhances the level of communication between the MoDOT District and Central Office staff, ensures the accuracy of MoDOT project information, streamlines MoDOT's internal process, reduces ONE DOT processing time and strengthens MoDOT's ability to continue to demonstrate fiscal constraint in connection with STIP amendments. This effort also led to the creation of a MoDOT statewide planning/ metropolitan planning staff and FHWA quarterly meeting arrangement characterized by informal roundtable information sharing and the exchange of value adding ideas.
- **Indirect Cost Allocation Plan:** Led the collaborative FHWA/MoDOT/MPO work effort that produced a streamlined process for the certification and MoDOT's review and approval of the St. Louis MPO's Indirect Cost Allocation Plan (ICAP).
- **Statewide Planning and Research (SPR) Program:** In observance of MoDOT's need to do more with less, we partnered with MoDOT to develop a new State Planning and Research (SPR) work program development process that presents SPR work program and SPR annual reporting data in one work product. The result of this value-adding work effort improves the ability of FHWA and our partners to efficiently deliver the Federal-Aid Program.
- **FHWA's involvement with TEAM:** The purpose of the Transportation Engineers Association of Missouri is to advance the knowledge of transportation engineering and to provide a forum for the continued education of and communication among all parties dedicated to promoting a quality transportation system that serves the public welfare of Missouri. In addition to their traditional transportation partners at the State, regional, and local level, the Division provides high quality information to ensure and maximize the objectivity, and integrity of the federal standards, policies, and regulations.
- **CUF Process Review:** In partnership with MoDOT, we reviewed MoDOT's Commercially Useful Function (CUF) process and procedures that MoDOT put into place approximately 2 years ago. MoDOT has made significant improvements to their CUF conformance. Several recommendations are being implemented to further improve the CUF process and procedures.
- **Route 71/I-49:** Provided stewardship and oversight by ensuring the completion of 178.96 miles segment of U.S. Route 71 corridor from 1.0 mile south of Route H near Pineville to I-435 in Kansas City will meet current interstate standards in all areas. Provided HQ Office a final report that included the documentation of the justification for the improvements and other design exceptions constructed along the entire corridor is being considered for Interstate designation. We continued to pursue the required approval of the FHWA Administrator necessary to allow the Route 71 corridor to be designated as Interstate Route 49. We attended quarterly meetings to discuss progress and concerns to ensure the projects along the entire corridor continue to a successful completion.



- New Interchange at I-270 / Page Avenue and New Diverging Diamond Interchange at I-270 / Dorsett Road:** These two interchanges were constructed under one contract. The I-270 / Page Avenue Interchange was voted one of the top 10 road projects in the country by Roads & Bridges Magazine and the I-270 / Dorsett Road Diverging Diamond Interchange project was voted one of the top 10 bridge projects by Roads & Bridges Magazine. In addition to providing PS&E approval and construction inspections, verifying project quality and adherence to Federal regulations, a \$2 million Value Engineering Change Proposal was executed that required that the approved AJR be modified with FHWA review and approval which was performed without impacting the project budget.



SW quadrant of I-270 @ Dorsett Rd interchange, looking east. Note DDI crossover in center of photo. Ramp in foreground is NB I-270 on-ramp from WB Dorsett Rd.



NB I-270 between Olive and Page Ave. Looking ahead at new auxiliary lane, concrete barrier, and sign installation. Approximately 1 mile south of new ramp construction at Page Ave interchange.



Ramp 3 (NBI-I270 to WB Page Ave) looking ahead at merge with Bennington Ramp, on right. Ramp 3 bridge over I-270 shown at left of photo.

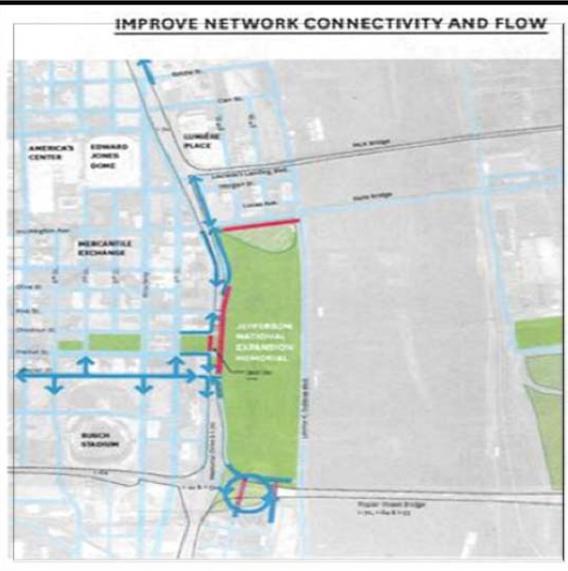


EB Dorsett Rd at the DDI crossover, immediately west of the I-270 overpass (I-270 overpass shown in background of photo).



- City-Arch-River 2015 (CAR2015) Improvements:** This project incorporates a “lid” over the current I-70 alignment between the Old Courthouse and the Arch grounds, and modifications to existing interstate access in the direct vicinity of the arch grounds. MoDOT was awarded a TIGER 3 grant of \$20 million which provided critical funding toward the completion of the “lid” and I-70- related parts of the overall improvement project. As of June 2012, we coordinated with MoDOT, CAR 2015 and FHWA HQ on the completion of the “term sheet” that defines the scope, budget and schedule for the project that will be funded with the TIGER 3 grant. MoDOT will administer this approximate \$57 million project that will include the “lid” and the related improvements to I-70. The NEPA and Access Justification Report (AJR) processes are on track for completion during the summer of 2012. These Tiger 3 funded improvements are scheduled to go to construction in 2013 and be completed in 2015.

Figure 10: CAR 2015 Plans



Note: Figure provides a general depiction of the proposed highway/roadway network improvements, including the location of I-70 relative to the Jefferson National Expansion Memorial (JNEM).



Note: Figure depicts the completed JNEM improvement project, which also expands the memorial onto the east side of the Mississippi River in Illinois.

- I-435/I-70 ARRA --Interchange Reconstruction Project:** Improved safety and reduced congestion through effective project stewardship of the most significant ARRA project in the Kansas City Metro Area. The Interchange reconstruction project included the addition of a half-diamond interchange at I-435 and US 40 highway, replacing the bridges at the Blue Ridge Cutoff (which services the sports complex for the Kansas City Royals and Kansas City Chiefs) and the US 40 bridge over I-435, reconfiguration of the ramp from northbound I-435 to eastbound I-70, a C-D road along I-70 between I-435 and the Blue Ridge Cutoff and the addition of a third through-lane on both eastbound and westbound I-70 through the interchange. The project will help improve safety and operation of the interchange in one of the most congested areas in the state where over 200,000 vehicles pass through each day. The I-70 portion of the project was opened



Kevin Irving, Victor Mendez, and Kevin Ward at the I-70/435 Interchange, Kansas City, MO

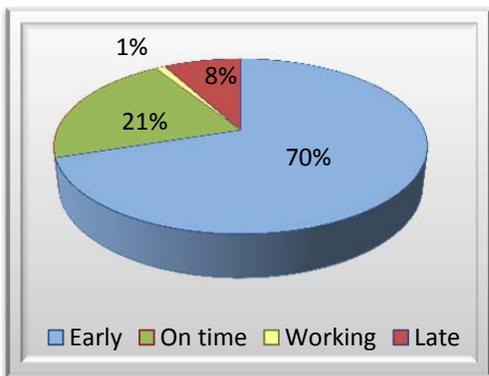


to traffic in November, 2011 and the entire project is scheduled to be completed by July 1, 2012. The Division has conducted numerous inspections and has maintained close coordination with MoDOT on project related issues. We also worked with MoDOT and the FHWA HQ office to hold a successful media event in November 2011 where Administrator Mendez addressed the media and promoted the need for transportation jobs and infrastructure as well as highlighting the significance of this project.

Strategic Goal: Corporate Capacity

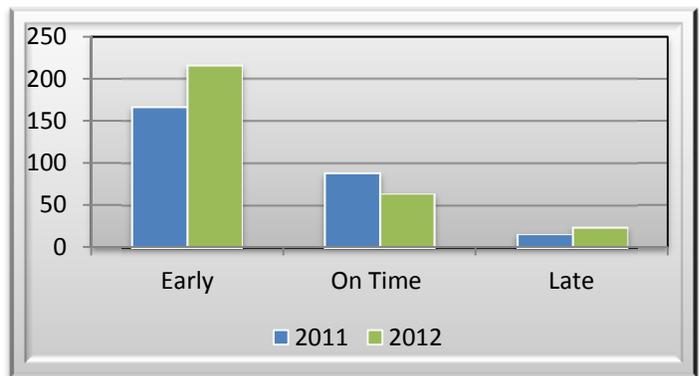
- **Administrative GOE cost savings:** Conducted a comprehensive evaluation of office overhead expenditures to eliminate unnecessary spending and procured new phone system and copier machine and replaced three costly GSA leased vehicles with more cost effective ones. Actions reduced Division overhead spending by \$5K.
- **Division Performance and Succession Planning:** Over 80% of our performance plan was completed at the end of the performance year, including 100% of our top risk strategies. We developed a comprehensive succession plan to meet the workforce requirements and risk to our program. We also identified a gap analysis for a 10% and 25% reduction in staff and a suggested plan for accomplishing this.
- **Division Office Improvement Team (DOIT):** Reviewed, implemented and tracked actions developed to address issues identified on the previous year All Employee Survey results. The team also provided a presentation to ensure Division employees were aware of all actions being taken to resolve their raised concerns. In addition, the team updated the Division’s employee recognition program and implemented “You’re a Star” award.
- **Professional Development Program- MO DIV:** Selected 4 Division employees to participate on the newly established Professional Development Management Team. The team’s purpose is to invigorate and inspire Division personnel to become the best all around professional they can be. A mission and purpose statement has been developed along with goals and 16 deliverable outputs that were prioritized by division personnel. Full implementation of this initiative will begin in PY 2013.

Figure 11: Percentage of Official Requests in PY 2011



Source: Division Project Actions Tracking System (PATS)

Figure 12: Official Requests the Division Responded to in PY 2011 and 2012



Source: Division Project Actions Tracking System (PATS)



**We Take Action to Reduce Risk, Improve Programs,
And Provide Successful Practices**

Risk: If appropriate monitoring and mechanisms and contractual requirements are not in place, then the integrity of the DBE program will be compromised and federal funds will be at risk. We completed program review of MO's DBE CUF processes resulting in improved scheduling of CUF verification interview initiatives, developed a supplier certification to determine CUF for material suppliers.

Risk: If we do not continue our LPA partnership and training with MoDOT, then project delivery could be delayed and project funding could be at risk. We co-developed and implemented the Strategic Vision with MoDOT to deliver a certification and training program, improve LPA Manual, provide program management tools, utilize performance measurement tools, and to provide continuous improvement in the program.

Risk: If MoDOT does not comply with NBIS, then the safety of Missouri's bridges could be at risk, the traveling public could be at risk and MoDOT could lose federal funding for construction projects. We completed the NBIS National Review on all 23 metrics and determined 9 metrics to be conditionally compliant with Plans of Action (PCA's) enacted. We performed 24 of the expected 20 bridge field reviews and hosted a workshop in July in partnership with the IL Division focusing on substructure elements.

Risk: If the ARRA program does not continue with the current high level of FHWA involvement, then there is a risk that some Local Agencies and possibly MoDOT will lose ARRA funding. We inspected 36 ARRA projects and reviewed their billings quarterly. We developed a Recovery Act Lessons Learned Whitepaper identifying the top Division risk areas and their associated issues.

Risk: If the STIP and/or TIPs are not developed and maintained in a manner that meets Federal planning regulations, then the Missouri Division may be unable to authorize and obligate funding for Federal-aid highway projects, resulting in substantial overall delays in the awarding of construction projects. We conducted the Annual STIP review and approval and worked with MoDOT to improve the STIP amendment process.

Risk: If MoDOT processes do not ensure federal eligible expenses are reimbursed, then MoDOT will be in violation of the Improper Payments Information Act (IPIA). We conducted quarterly billing reviews and the annual IPIA.

Risk: If LPA projects/contracts are not administered properly and monitored to ensure projects are closed timely, then local Federal funding could be impacted. We completed a Grants Management Review of MO's LPA program resulting in newly created checklist that will help both construction and consultant service invoices and invoice templates to help ensure protection of Federal funds.

If FHWA and FTA are unable to approve the MPO's conformity determination on any new or amended TIP or LRTP, then the Missouri Division will be unable to authorize and obligate funding for new Federal-aid highway projects, resulting in substantial overall delays in the awarding of construction projects. We completed the baseline assessment review of the air quality analysis and conformity determination process in St. Louis non-attainment area.



Planned Mitigation Strategies for PY 2013

Table 1: PY 2013 Identified Risks and Planned Strategies

Risk/Impact	Strategy
<p>1 Materials Quality: If MoDOT expands the use of contractor material test results in the acceptance process without ensuring adequate state material verification sampling and testing, and does not provide adequate construction inspection, then the material acceptance process may be statistically invalid and fail to accurately assess the actual quality of those materials represented by the test results, resulting in a risk that the contract requirements will not be met, thereby leading to the potential for compromised quality, safety, durability and eligibility of federal funding.</p>	<p>Conduct Joint Program Review</p>
<p>2 ARRA: If the ARRA program deadlines are not met and the projects are not monitored, then funding and quality of work could be jeopardized.</p>	<p>ARRA program/project reviews and monthly monitoring of project close-outs</p>
<p>3 LPA Project Monitoring: If the MoDOT Districts are not ensuring adequate and appropriate oversight with established financial and documentation controls, then there is a very high risk for funding losses and other negative issues.</p>	<p>Elevated involvement, training, and oversight by FHWA Division directed toward MoDOT District oversight and Central Office controls and procedures.</p>
<p>4 Air Quality Conformity: If the ONE DOT is unable to approve the MPO's conformity determination on any new or amended TIP/MTP, then we will be unable to authorize and obligate funding for new Federal-aid projects, resulting in substantial overall delays in construction projects.</p>	<p>Follow-on last year's Air Quality review to assess progress of local, state, and federal agency's efforts to implement recommendations</p>
<p>5 Project Monitoring and Closing: If projects do not make reasonable construction and project expenditure progress, then projects remain open/active increasing the risk of unallowable costs being billed to FHWA and elevating our unexpended obligations balance.</p>	<p>Conduct Joint Program Review</p>
<p>6 Bridge: If the bridge inspections in Missouri are not performed according to the National Bridge Inspection Standards (NBIS), then safety of the bridge and safety of the traveling public could be at risk and federal funding could be at jeopardy.</p>	<p>Conduct National Bridge Inspection Annual Review</p>
<p>7 DBE/CUF: If the program is not monitored and reviews are not conducted, then there is potential for misidentification of DBEs and associated goals.</p>	<p>Follow- on last year's program review implementation plan to ensure compliance with DBE CUF compliance</p>
<p>8 Work Zones: If work zones quality does not continue to be prioritized, then there is a risk that work zone related incidents, fatalities, delays, congestion and discomfort of the public will increase across the state.</p>	<p>Conduct Joint Program Review</p>

