

DRIVEN BY EXCELLENCE

A Report on MDOT Accomplishments





DRIVEN BY EXCELLENCE

A Report on MDOT
Accomplishments

*“If better is possible...
good is not enough.”*



JENNIFER M. GRANHOLM
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF TRANSPORTATION
LANSING

KIRK T. STEUDLE
DIRECTOR

Greetings:

In the five years since I became director of the Michigan Department of Transportation (MDOT), there has been seemingly endless talk about reducing the size of government. Across the board, cuts have been made, and made again. I can honestly say that at MDOT we have been cut to the bone – and cuts beyond that are still looming in our future.

The popular sentiment right now is that many people just want smaller government. Or so they say... until something goes wrong.

When something goes wrong, people clamor for government to step in. In a crisis, when the public needs a solution, they expect government to fix things.

Such was the case on a balmy Wednesday evening in July 2009, when a fuel tanker truck traveling down I-75 swerved to avoid an erratic vehicle and hit the 9 Mile Road Bridge. The bridge was immediately engulfed in flames. As it became clear that the bridge would be damaged beyond repair, MDOT and its partners – firefighters, police, local officials, other state agencies, the Federal Highway Administration, and private sector contractors – mobilized to address the problem.

There were so many hurdles to overcome. Traffic was disrupted as both I-75 and 9 Mile Road were closed to assess the damage and clear the debris. The new bridge had to be designed and constructed as quickly as possible. A contract needed to be let, and all the necessary legal and financial requirements met. MDOT's actions had to be coordinated with our transportation and local government partners, and publicized to drivers and area businesses. And of course, there were additional unexpected costs to be covered at a time when revenue was scarce.

Because of the dedication and nimble, creative thinking of the transportation professionals at MDOT and in our partner agencies, the collapse of the 9 Mile Road Bridge was a crisis that became a shining example of success. Thanks to the combined efforts of the public and private sectors, I-75 was cleared of debris and reopened to traffic in five days. The new 9 Mile Road Bridge was completed within five months after that, with a second phase of the project completed in the spring to lower the freeway and re-establish the optimum height for freeway traffic traveling under it and to accommodate the future reconstruction of I-75.

The public was delighted with the government's quick response to the crisis. Residents and travelers sent letters and e-mails. Commuters tweeted about it. Radio talk show hosts praised MDOT. Newspapers ran editorials lauding our efforts.

But what most people don't realize is that the same kind of focus, creativity, cooperation and willingness – eagerness – to rise to a daunting challenge is not just typical of MDOT's approach to a crisis. That "can do" spirit is typical of everything MDOT does.

So much planning, coordination, negotiation, design, performance measurement, and evaluation is required in the continuous process of running a transportation network. Because MDOT has jurisdiction over only 10,000 route miles of Michigan's 110,000 - mile road network, we also work diligently to build positive relationships with our local road partners, and with our partners in the other modes, to help ensure the best investment of transportation funds throughout the state.

Despite repeated budget cuts, the transportation professionals at MDOT strive every day to make the best decisions possible, to make the most of limited funding, and still keep Michigan's transportation system running smoothly. Some of what we do is highly visible to our customers, delineated with orange barrels or announced by the media.

But much more of what we do is not so visible. The millions of small details that MDOT staff take care of each day go unseen – because when things are working well, the effort that goes into making things happen is invisible to the customer.

This publication is intended to share with you some of the accomplishments MDOT has achieved over the past five years – successes that are not as visible as the reconstruction of the 9 Mile Road Bridge over I-75, but that were accomplished with the same kind of creativity and dedication to quality.

What strikes me – and what I hope you will recognize as you read about these efforts – is how much MDOT accomplished at a time when it's widely acknowledged that current funding for transportation is less than adequate.

Think for a moment about what might have been accomplished if funding for transportation were adequate.

The transportation funding crisis facing Michigan has yet to be resolved, in part because some people want smaller government. Or so they say, until something goes wrong.

Kirk T. Steudle, Director



FIVE YEARS OF PROJECT DELIVERY

Over the last five years, MDOT has repaired and rehabilitated 13,177 lane-miles of roadway and 1,237 bridges. In addition, MDOT completed several major projects across the state that contributed significantly to local economies, including the following projects:

I-96/36th Street Interchange (I-96 Airport Access), Kent County (2006)

The interchange connects I-96 to the 36th Street extension in Kent County near the Gerald R. Ford International Airport. This project also reconstructed I-96 between M-11 (28th Street) and Thornapple River Drive. This project improved access to employment centers and relieved congestion.

M-64 Bridge over the Ontonagon River, Ontonagon County (2006)

The multi-year M-64 bridge relocation project entailed the construction of a fixed-bridge on a new alignment of M-64, replacing an existing historic swing-bridge located downriver.

I-196/Chicago Drive in Grand Rapids (2009)

This multi-year project included the construction of two additional access points to the existing I-196/Chicago Drive interchange between I-196 and Baldwin Street in the Jenison area of Georgetown Township, Ottawa County. The additional ramps permit movement from the southbound I-196 exit to Baldwin Street and northbound entrance onto I-196 from Baldwin Street.





St. Ignace Transportation Center

St. Ignace Transportation Facility (2009)

In a unique partnership, MDOT and the City of St. Ignace built a state-of-the-art intermodal facility that is the first-ever permanent center to serve passengers transferring between the routes that serve Michigan’s lower and upper peninsulas.

The Grand Region received the following note:

“I would like to compliment your department on a project that I think is going exceedingly well - the resurfacing of I-96. I drive that road frequently and have yet to encounter any backups or delays because of construction. And, the work seems to be getting finished in record time. Congratulations on a job well done!”

Metro Detroit preparations for All-Star Game and Super Bowl (2005-2006)

In preparation for the 2005 Major League Baseball All-Star Game and Super Bowl XL in 2006, \$270 million was invested in improving transportation infrastructure in Metro Detroit. In 2004 and 2005, major reconstruction work was undertaken to improve access from the airport to downtown Detroit to accommodate the thousands of fans who came to high-profile sporting events. This work included 40 miles of pavement improvements along major event routes, repair of 106 freeway bridges, construction of a new Tied-Arch Gateway bridge on I-94, and installation of freeway lighting, as well as optimizing traffic signals, planting trees, and installation decorative sidewalks.

MAJOR PROJECTS UNDERWAY

Some MDOT projects are years in the making, but their benefits will be enjoyed for generations to come.

Detroit Intermodal Freight Terminal (DIFT)

The goal of the DIFT is to ensure that southeast Michigan can meet existing and future intermodal freight demand to support business growth. With the May 2010 environmental clearance, MDOT is actively seeking funding to move the project forward. The DIFT is projected to create 4,500 new permanent jobs in Michigan and is estimated to increase government revenue by \$1 billion by 2030. An agreement is in place between Norfolk Southern Railroad, Canadian National Railroad, Canadian Pacific Railroad, CSX Railroad, and other public sources to share the cost of the project.

M-53 at 18 1/2 Mile Road in Macomb County

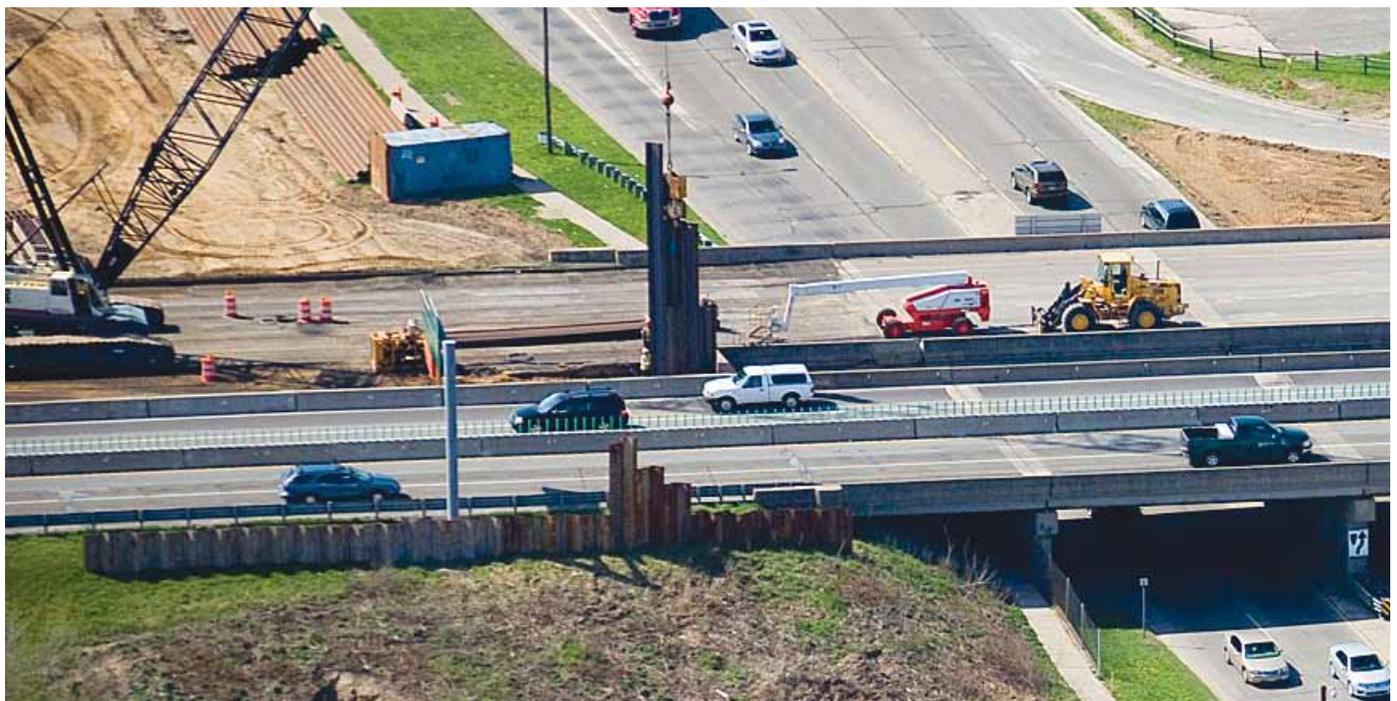
The main interchange construction was completed in 2005, and the results of sound mitigation tests performed in conjunction with the road's widening mandated noise wall installation. This work continues with a noise wall to be built by MDOT, and landscaping by the city of Sterling Heights. This project will be completed in the spring 2011.

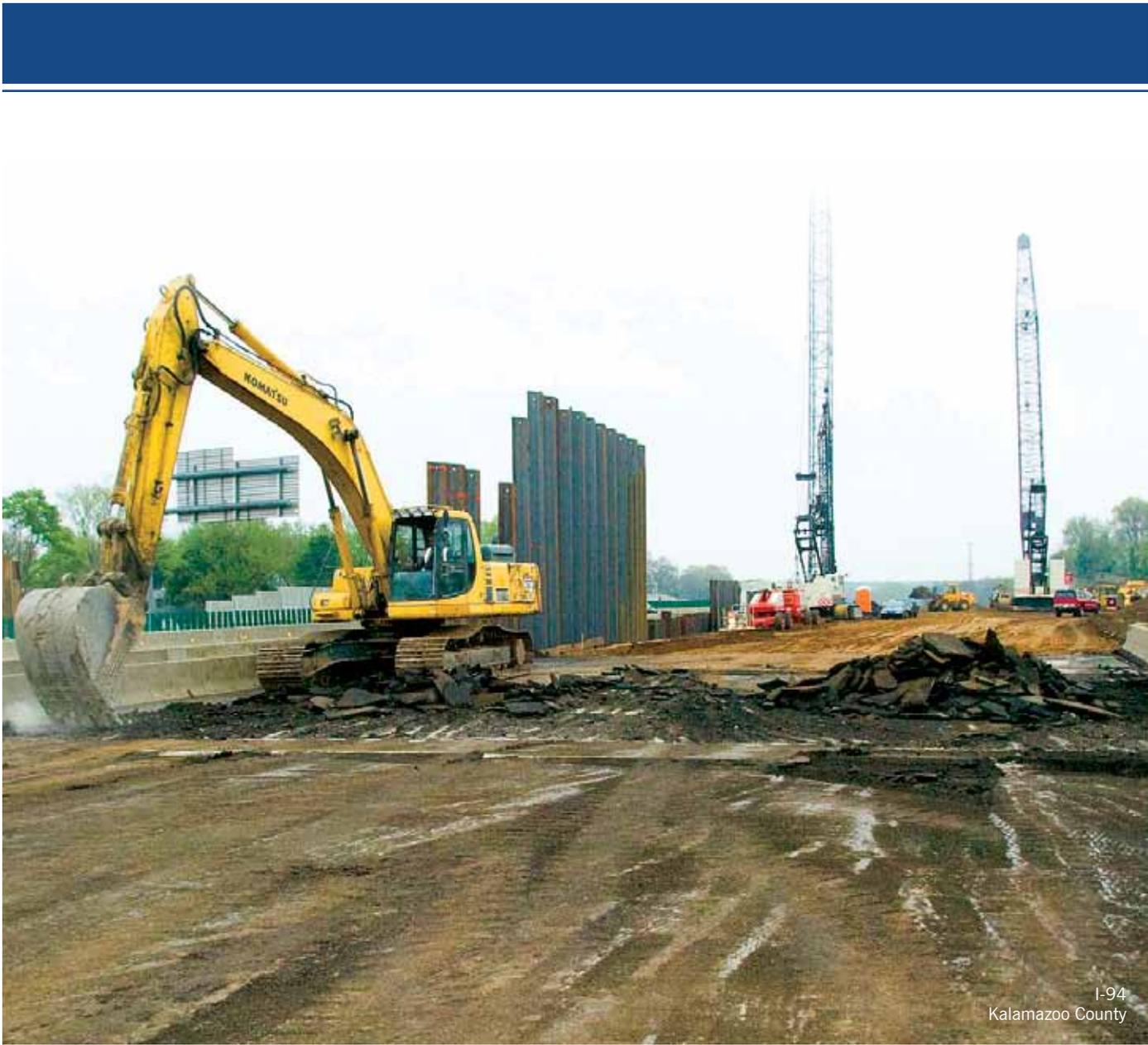
I-94, US-131 to Sprinkle Road in Kalamazoo County

This project widens I-94 from two to three lanes in each direction between the US-131 interchange and Sprinkle Road. Construction of the segment between US-131 and Oakland Drive is complete and open to traffic. Construction of the segment from Oakland Drive east to east of Lovers Lane has begun and will be completed in 2011.

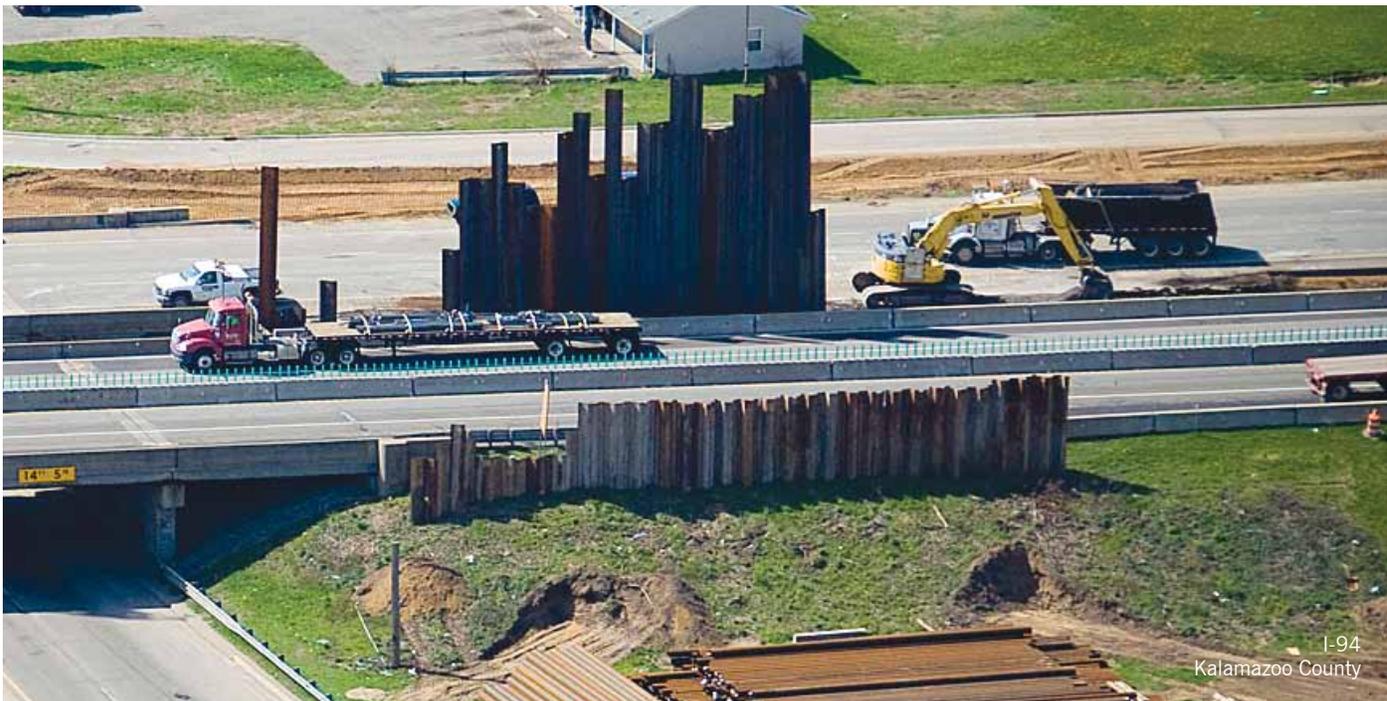
Benton Harbor's Community Transformation

The Harbor Shores project is designed to transform the Benton Harbor community through a variety of physical development and social initiatives. It is a 530-acre, \$475 million 12-year mixed-use development in northern Berrien County, being lead by a nonprofit organization. The physical development focuses on housing, retail, a golf resort, a hotel conference center, a water park, and transportation infrastructure. The social initiative focuses on improving literacy, workforce skills, housing, and arts and culture. MDOT is an active and engaged partner on this project with improvements to M-63 in 2008 and 2010, and the reconstruction of I-94 Business Loop/Main Street between 2009 and 2011, all of which will result in economic development opportunities and improved quality of life.





I-94
Kalamazoo County



I-94
Kalamazoo County

BORDER CROSSING PROJECTS

Southeast Michigan is home to two of the largest commercial border crossings in the U.S., two rail tunnels, a truck ferry, and a passenger tunnel that together carry nearly 15 million vehicles each year. Together, the southeast Michigan crossings account for over 40 percent of all U.S.-Canada cross-border trade. It is no surprise, then, that Michigan is engaged in major infrastructure projects to ensure that the economies of Michigan and the United States continue to benefit from this strong bi-national relationship.

Detroit River International Crossing (DRIC)

The project is a U.S./Canadian partnership to build a new Detroit River crossing, the associated inspection plazas on each side of the river, and connecting links to I-75 in Detroit and Highway 401 in Windsor. The Final Environmental Impact Statement has been completed and the Legislature is currently considering legislation to authorize construction as a public-private partnership.

I-75 Gateway Project in Southwest Detroit

This project addresses long-term congestion issues and provides a direct link between the United States and Canada. New ramps were constructed connecting the U.S. Customs Secondary Truck Inspection Facility to I-75 and I-96. Construction was completed in 2010, with landscaping to be completed in the spring of 2011.



MDOT received the following e-mail about the I-75 Gateway Project in Metro Region:

“As a supplier to many industries within the Michigan area, I have made many a commute across the bridge during the Gateway Project. Just wanted to let you know that you have done a terrific job of ensuring access to all highways remained accessible, and the signs provided for detour routing are probably the best I have ever seen!”

Blue Water Bridge Plaza, St. Clair County

The Blue Water Bridge has national significance for security, commerce, and enhancement to the national transportation system. This project will modernize 2 miles of the I-94/I-69 freeway corridor that connects to the bridge, replace the Black River Bridge, relocate the International Welcome Center, and expand the plaza. The design phase of the project began in 2009 with all work to be completed by 2017.

In 2010, Michigan received a \$30 million Transportation Investment Generating Economic Recovery (TIGER) grant for a portion of the Blue Water Bridge Plaza project – the I-94 Black River Bridge replacement.



Blue Water Bridge, Port Huron

INNOVATIVE DELIVERY OF PROJECTS

10

INNOVATIVE DELIVERY OF PROJECTS

Design-Build (DB) and Design-Build-Finance (DBF) Projects

Whether responding to an emergency or advancing projects from future years to take advantage of lower construction costs, DB and DBF projects provide a flexible and speedy alternative.

The emergency replacement of the 9 Mile Bridge over I-75 after an explosion and fire is a great example of a DB project.

9 Mile Bridge over I-75 project, from tanker explosion and fire to ribbon cutting



DRIVEN BY EXCELLENCE: A Report on MDOT Accomplishments



I-69 DBF Project

Two DBF Examples

M-21 at I-75 DBF Project

The M-21 DBF project near the city of Flint included the replacement of an existing bridge over I-75 and the demolition of an old police post in the northwest quadrant of the interchange. This bridge was originally scheduled for replacement in the 2011-2012 construction seasons, but by using the DBF process, was able to be constructed two years early.

I-69 DBF Project

The I-69 DBF project in St. Clair County included the reconstruction of 6 miles of freeway, and the rehabilitation of five bridges and one rest area. This project was originally scheduled for reconstruction in the 2012 construction season, and was completed in the 2009 construction season.



I-69 DBF Project

American Recovery and Reinvestment Act (ARRA)

MDOT wasted no time taking advantage of ARRA and the \$1.14 billion in transportation stimulus funding that came along with it. Throughout the department, staff rallied – shifting duties, reallocating personnel, working harder, faster, and smarter – to make the most of this extraordinary opportunity and ensure funds were distributed to projects in every corner of the state. More than halfway through the two-year funding program, contractors report more than 77,000* employees working on projects, providing opportunities for ordinary people hard-hit by the economic downturn, such as masons, carpenters, roofers, painters, plumbers, concrete workers, steel fabricators, drywall installers, laborers, iron workers, heavy machine operators, and electricians, among others.

MDOT met all ARRA deadlines in 2009, including obligating funds for 50 percent of the projects in 120 days. As of July 31, 2010*, there were 951* highway and transit projects under contract. The following showcases the types of projects supported by ARRA.

Clare County Transit – New Facility Construction

The new facility consolidates administrative, operational, maintenance, and indoor vehicle parking functions of the agency into one cohesive facility. Increasing demand-response service has resulted in a growth from 10 to 32 buses and an increase to 173,000 passenger trips in Fiscal Year 2008.

I-96: M-43 (Saginaw Highway) to Wacousta Road (Eaton and Clinton counties)

West of Lansing, I-96 is joined with I-69 and carries traffic to and from multiple areas of the state. The corridor is currently under reconstruction to rehabilitate 10 bridges, reconfigure the I-96/M-43 interchange, and improve the operation of the M-43/Canal Road intersection. Construction is scheduled for completion in late 2011. ARRA funding provided the opportunity to advance this project from FY 2015 to FY 2009. As of July 31, 2010, contractors reported 1,925 employees working on this project.



Clare County Transit Facility, During and After Construction

I-196: The primary east/west freeway through the city of Grand Rapids (Kent County)

The reconstructed freeway, scheduled to open to traffic in November 2010, will improve access to the developing Life Sciences Corridor. Various landscaping enhancements were added through partnerships with the City of Grand Rapids and local stakeholders. This project was originally planned as a reconstruction of the existing lanes only; ARRA funding allowed the addition of operational and capacity improvements. As of July 31, 2010, contractors reported 1,766 employees working on this project.

*Transportation and Infrastructure August 2010 Report for Michigan

Federal Highway Administration (FHWA) Administrator Victor Mendez wrote the following, commending MDOT on achieving the milestones for ARRA:

““Congratulations on this important achievement and on reaffirming for the people of Michigan that the transportation community knows how to deliver! After one year, all signs point to the Recovery Act as a great success. It’s working to cushion the greatest economic crisis since the Great Depression and lay a new foundation for economic growth. It’s preparing our infrastructure for the 21st century. And, most importantly, it’s saving and creating jobs all over the country. None of this would have happened without tremendous dedication, commitment and cooperation on the part of many people in your office and ours.””

M-59 Road Reconstruction and Widening (Oakland County)

A 10-year traffic bottleneck will be history when this project opens the final six-lane segment of continuous freeway between Oakland and Macomb Counties. This project supports many high-tech research and manufacturing facilities, will be completed in November 2010. As of July 31, 2010, contractors reported 3,063 employees working on this project.

M-13 Reconstruction – Hess to North of M-46 (Saginaw County)

The M-46 intersection and various locations along M-13 received safety upgrades and roadway improvements. This project will be completed in October 2010. As of July 31, 2010, contractors reported 484 employees working on this project.

Installation of Environmental Sensor Stations (Michigan’s Upper Peninsula)

Data will flow as freely as the traffic in this high-tech bridge monitoring system. In addition to monitoring bridge conditions, weather sensors will transmit data to road maintenance workers, allowing timely and more cost-effective decisions on when to plow, salt, or sand the local roads. This 2009 project has created or sustained 50 jobs.

Midtown Loop Project – Streetscape Improvements (Wayne County)

This Midtown Loop urban greenway will connect Wayne State University and Detroit Medical Center to greenways in surrounding areas and link the New Center area to downtown Detroit and the Detroit River. Construction will begin in 2011, creating or sustaining 50 jobs. In anticipation, new commercial activity already is taking place, including new boutiques, cafes, and shops opening along the corridor.



I-96, M-48 (Saginaw Highway) to Wacousta Road (Eaton and Clinton counties)

MORE THAN HIGHWAYS

14

MORE THAN HIGHWAYS

Michigan's Interstate routes and state highways lead to some of Michigan's most enticing destinations. Whether attending a Red Wings game in Detroit, visiting the locks in Sault Ste. Marie, or enjoying the picturesque Sleeping Bear Dunes, you've probably traveled a MDOT route.

What many people do not realize is that, while highways are a very important part of MDOT's business, MDOT employees also are engaged in planning, construction, and/or maintaining infrastructure and services for more than 15 modes, over multiple transportation systems, including highways, rail, water, air, and trails.

Soo Locks

Nearly 70 percent of the U.S. waterborne cargo capacity in the Great Lakes must use the Poe Lock - the largest of the Soo Locks. MDOT worked with the U.S. Army Corps of Engineers, and other Great Lake states, to secure a federal commitment to build a new lock. Twenty years later, construction of the new lock began at full federal expense. A groundbreaking ceremony was held on June 30, 2009, for the first phase, consisting of construction of the cofferdams that close off the north canal and deepening of the approach channels. The total project will be an investment of \$580 million.

"Thanks a (carpool) lot, Meijer!"

When fuel costs skyrocketed in 2007 and 2008, many drivers decided to "share the ride," and MDOT's 235 carpool parking lots were there to help. MDOT has carpool parking lots in every part of the state, but due to their newfound popularity, available space in many lots had become scarce. Because funding for new or expanded lots was not available, MDOT worked with Meijer in a new public-private partnership to designate up to 50 parking spaces at

each of six Meijer stores as carpool parking lots. This saved the department money and provided the public with a cost-effective way to commute at a time when demand for carpool lots was very high. The success of this partnership led to its expansion - another eight lots will be designated this year.



Soo Locks, Sault Ste. Marie

Passenger Rail

Michigan is “on board” with the national push for more transportation options, especially in providing more passenger rail travel opportunities. In less than a decade, Michigan has gone from making incremental speed changes in its high-speed rail corridor to updating or providing passenger rail stations and adding new passenger rail services. These include WALLY (Washtenaw and Livingston line from Howell to Ann Arbor), Ann Arbor-Detroit Commuter Rail, M-1 light rail in the Woodward Avenue corridor, and accelerating the development of Michigan’s high-speed rail corridor.

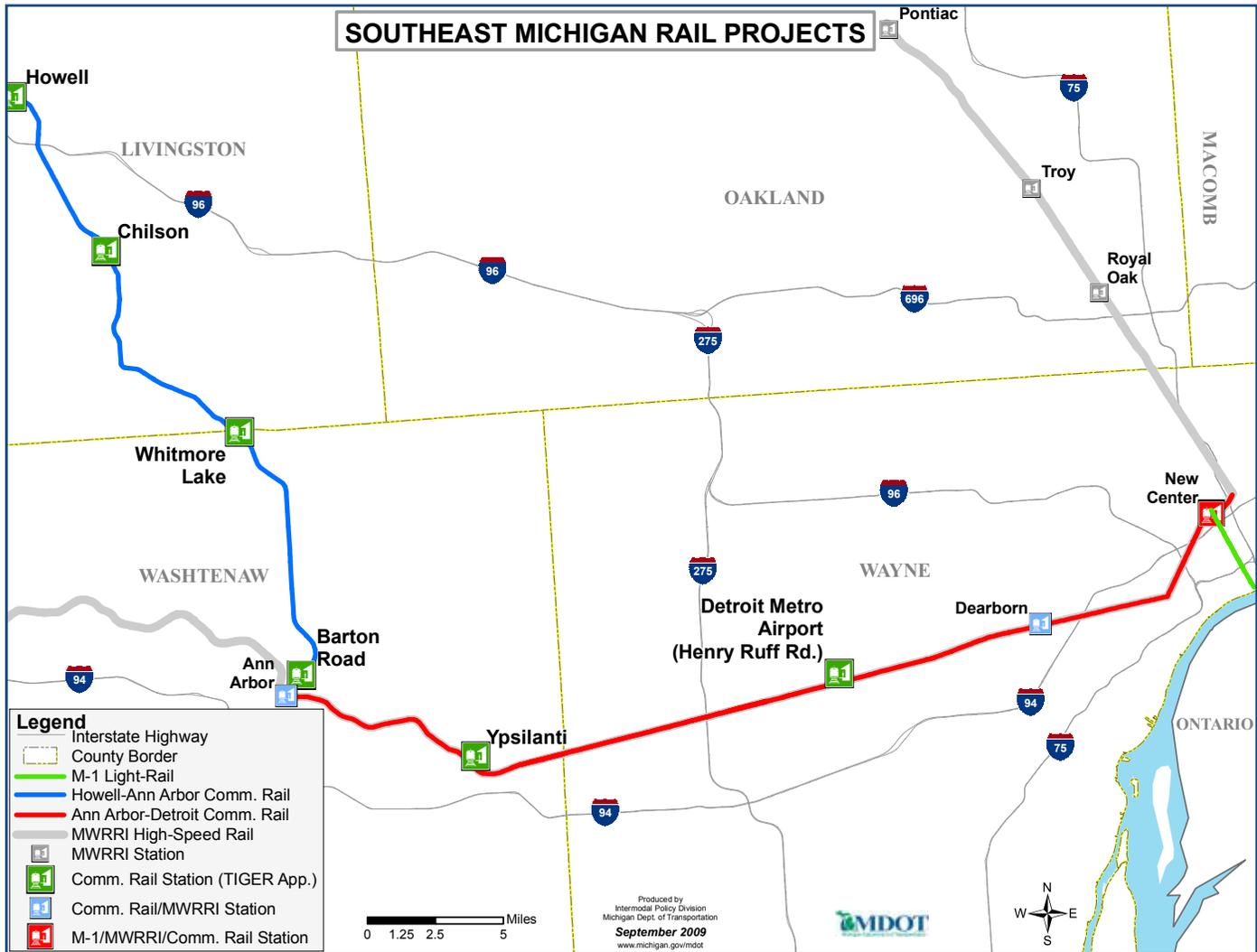
New services are being designed to link all major public transportation systems in southeast Michigan. For example, the northern terminus of the M-1 light rail service will be at the New Center Station serving Amtrak trains to Pontiac, west Michigan, and Chicago; and proposed commuter rail service to the Metropolitan Airport, Ypsilanti, Ann Arbor, and Howell. WALLY will

run in the US-23 corridor and will connect Livingston County with Ann Arbor, and the Ann Arbor to Detroit line will connect to New Center Station.

In 2010, Michigan received a \$25 million TIGER grant for the M-1 Light Passenger Rail project in Detroit. The total project cost for this effort is estimated at \$143 million. Several private donors have pledged approximately \$125 million to cover the project’s entire phase-one price tag.



AMTRAK Passenger Train



Likeable, Bikeable Michigan

The League of Michigan Bicyclists ranked Michigan 16th in the nation for bicycle friendliness. This designation is a solid expression of the success of MDOT partnerships with state/local agencies, nonprofits, and the participation of interested and active citizens to improve cycling conditions in Michigan.



Dequindre Cut Nonmotorized Trail
Wayne County

Complete Support for Complete Streets

MDOT has long employed Context Sensitive Solutions (CSS) as its primary way to interact with its stakeholders on projects. Now, CSS will incorporate Complete Streets requirements signed into law by Governor Granholm in August 2010. The Complete Streets approach means that roadways will be planned, designed, and constructed for all legal users. MDOT was pleased to support these bills as they worked through the House and Senate, and is eager to work with our partners to implement this improved approach.

Aviation

Michigan's large commercial airports are supported by a significant network of general aviation airports throughout the state, which handle flights for business, agriculture, training, recreation and even the military. MDOT worked with its airport partners over the past five years to build new runways, or extensions to existing runways, at 11 Michigan airports, and rehabilitated pavements at many others. In addition, MDOT assisted in the development or renovation of terminal buildings at 10 airports statewide in that time, and helped 25 airports acquire new airport rescue and fire fighting or snow removal equipment.



Sunset at Capitol City Airport, Lansing



Pere Marquette Rail-Trail
Midland and Clare Counties

MDOT received the following note from the city of Au Gres:

“Great news in the paper! Announcement of bike path from Bay City, up US-23 to link to Iosco County project. Wow... Is it for real? This certainly is wonderful news, and will tie wonderfully into the first phase of our project, scheduled to start this spring. I was so excited to see the announcement. We thank all of you for thinking of northeast Michigan when submitting your stimulus projects!”

Driving Down Accidents and Fatalities

The continued focus on safety by MDOT and its partners in law enforcement, emergency responders, and education has driven down accident and fatality rates across the state.

Michigan developed its Strategic Highway Safety Plan long before it became a federal requirement. The plan has contributed to a significant improvement in highway traffic safety in Michigan over the last five years, where:

- **The rate of traffic fatalities has fallen by more than 15 percent to one death per 100 million vehicle miles.**
- **Serious injuries are down nearly 24 percent.**
- **Michigan continually ranks among the top performing states in seat belt use at 98.8 percent.**

New investments in safety infrastructure, such as deployment of centerline and shoulder rumble strips along nonfreeway routes and investments in median cable guardrail, will continue to reduce the rate of fatalities and serious injuries.

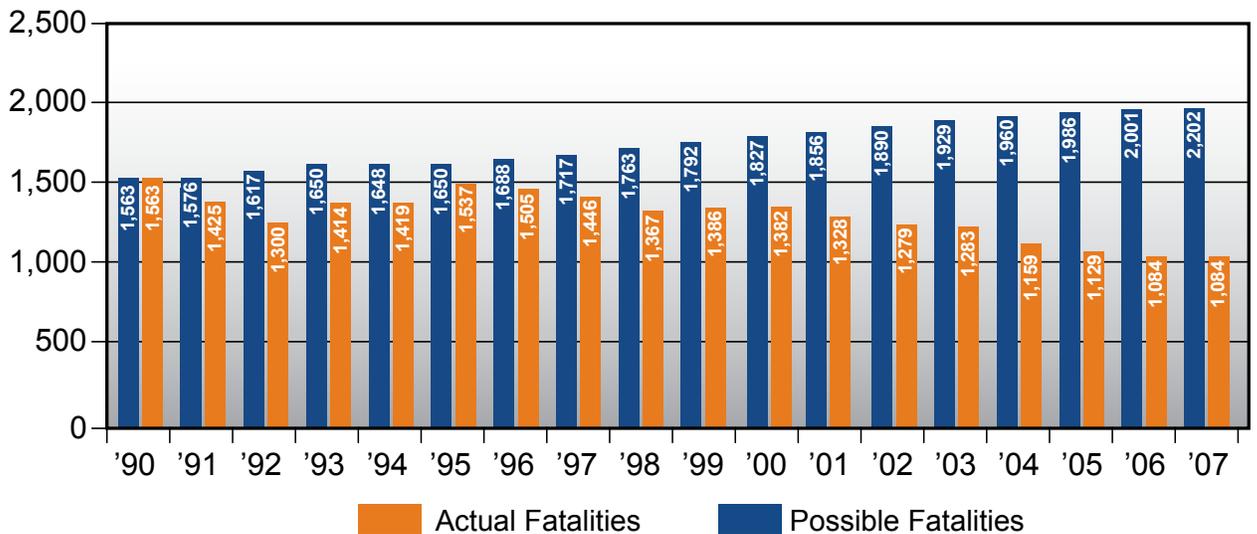


Median Cable Guardrail
I-69, Genesee County

Safety: MDOT Efficiencies/Effectiveness

Actual Fatalities vs. Possible Fatalities

Number of fatalities possible if the rate of fatalities had remained at 1990 level of 1.92 per 100 million vehicle miles traveled



MDOT received the following e-mail:

““ I'd just like to say thank you for those rumble strips along I-75 north. We were traveling north this winter in a virtual whiteout, not able to drive over 35 miles per hour. Those rumble strips kept me from driving into the ditch. ””



Cable Guardrail Install
I-69, Genesee County



Center Line
Rumble Strips



Nonfreeway Rumble Strips
M-66, Calhoun County

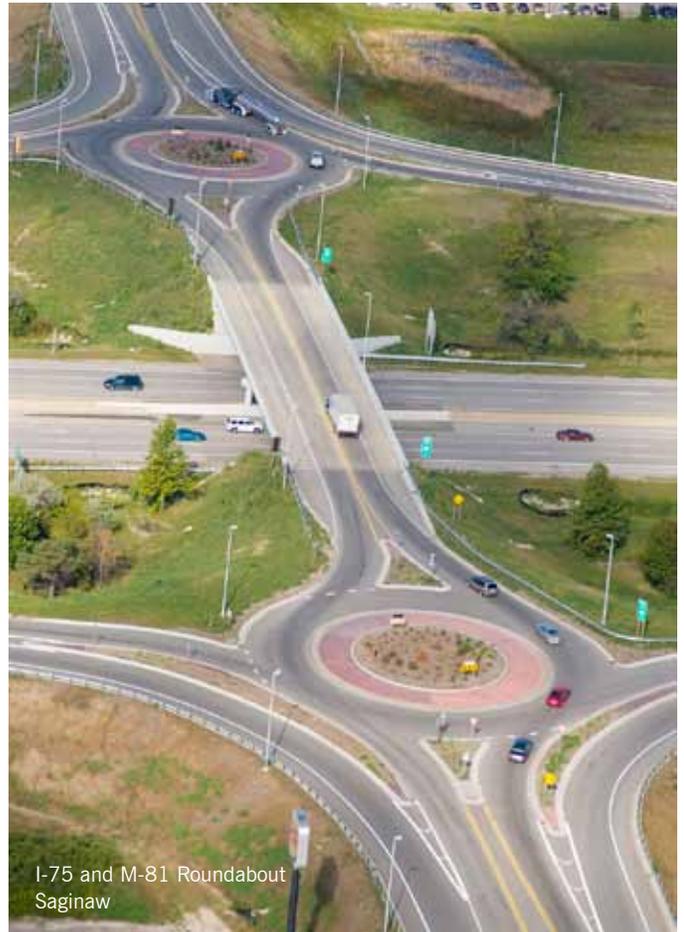
Rounder and Sounder

Roundabouts improve safety by reducing fatal/serious injury crashes, and also decrease idling, which is beneficial for cutting vehicle emissions.

The US-23/Lee Road roundabout project was the winner of the 2008 Eminent Conceptor Award for engineering excellence from the American Council of Engineering Companies (ACEC) of Michigan. This successful public-private partnership is the highest category award of the Michigan competition and evaluates projects on “complexity, innovation, client satisfaction, future value to the profession, and considerations for social, economic and sustainable design.”

A Superior Region resident recently sent the Ishpeming TSC the following note regarding a planned project:

“I just heard about the plans to build a roundabout in Marquette in 2010. Great idea. I think it will help move the traffic better and safer.”



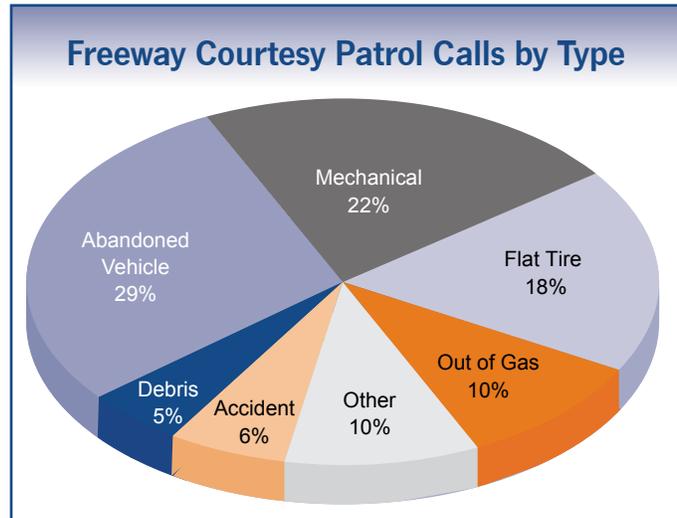
I-75 and M-81 Roundabout
Saginaw



I-75 and M-81 Roundabout
Saginaw

Freeway Courtesy Patrol

The MDOT Freeway Courtesy Patrol assists stranded and distressed drivers in southeast Michigan. In addition, it provides assistance to motorists by reducing potential crash situations, relieving traffic congestion, and helping to create safer driving environments. In 2008, the Courtesy Patrol provided assistance to over 38,000 motorists and this number increased to over 49,000 in 2009. Currently, the Courtesy fleet includes 24 vans and employs 22 courteous drivers.



A Michigan resident sent the following e-mail after reading MDOT's news release stating the Courtesy Patrol helped 35,000 Detroit motorists in 2008:

“I just want to say that I feel better knowing that the Courtesy Patrol is out there. I have seen them so many times on the side of the road helping a stranded driver, in the rain, cold, heat, whatever and I think how nice it is to know they are there if I need them. That is so great! Thank you to all those people who go out every day to help us when we need it!”

For many people, MDOT is not synonymous with “Environment,” but that may soon change. From energy-saving initiatives to recycling building materials to an extensive network of carpool parking lots, MDOT wants to help save the environment while saving the taxpayer a buck or two – and bring a whole new meaning to “going green.”

Alternative Power Sources

One way to become more efficient - and self-sufficient - is to employ alternative energy. MDOT now boasts seven rest areas where geothermal heat pumps are installed or will soon be installed. Add to that a carpool lot with lights powered with sun and wind, and the purchase of E-85-compatible half-ton trucks and automobiles, and it becomes clear MDOT is serious about alternative energy.

GEOHERMAL
Systems at Michigan Rest Areas

Summer COOLING

Winter HEATING

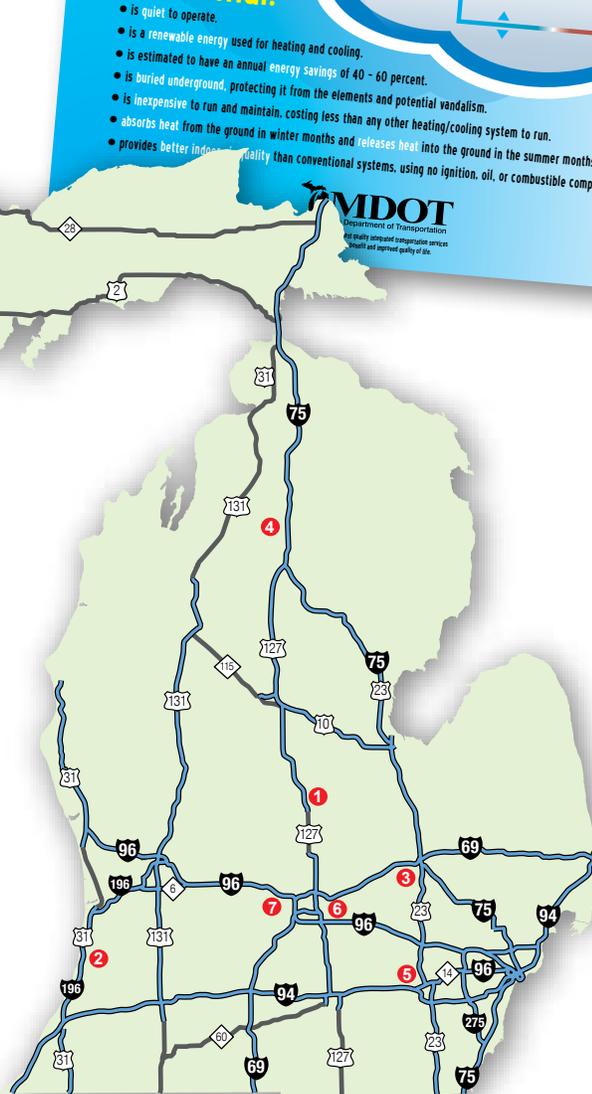
Geothermal:

- is quiet to operate.
- is a renewable energy used for heating and cooling.
- is estimated to have an annual energy savings of 40 - 60 percent.
- is buried underground, protecting it from the elements and potential vandalism.
- is inexpensive to run and maintain, costing less than any other heating/cooling system to run.
- absorbs heat from the ground in winter months and releases heat into the ground in the summer months.
- provides better indoor air quality than conventional systems, using no ignition, oil, or combustible components.

MDOT
Michigan Department of Transportation
Providing safe, efficient, and reliable transportation services
with the highest quality of care.

MDOT Geothermal Rest Areas

- 1. Northbound US-127**
Ithaca, Gratiot County
- 2. Northbound I-196**
Glenn, Allegan County
- 3. Eastbound I-69**
Swartz Creek, Genesee County
- 4. Southbound I-75**
Hartwick Pines, Crawford County
- 5. Southbound US-23**
Northfield Church, Washtenaw County
- 6. Westbound I-96**
Okemos, Ingham County
- 7. Eastbound I-96**
Grand Ledge, Clinton County



Transit “LEEDers”

Public transit has been a leader in green initiatives through the use of federal and state funds, including grants from MDOT. The Rapid in Grand Rapids built the first Leadership in Energy and Environmental Design (LEED)-certified transit facility in the country, followed closely by Bay Area Transportation Authority (BATA) in Traverse City, who received gold certification from LEED for their downtown transfer center. BATA was the first rural operator in the state to incorporate electric hybrid buses into their fleet, and MDOT has added a small hybrid bus to its list of state contracts so that all rural agencies now have this as an option.



Small Hybrid Bus

Green Construction

MDOT is incorporating “green” practices into construction projects by reusing materials that were formerly headed for landfills. The following are just a few ways MDOT is reducing waste while protecting resources:

Reducing Road Construction Waste

- Old steel re-enforcement is 100 percent recycled into new steel products.
- Concrete pavement is 100 percent recyclable, and is used by MDOT for road base and other applications.
- Fly ash and slag cement are substituted for up to 40 percent of cement materials.
- Sub-grade soil is stabilized using cement kiln dust that would otherwise go to the landfill.

Green Asphalt

- Using crumb rubber asphalt for up to 25 percent of the materials.
- 100 percent reclamation of asphalt pavement for use in new asphalt projects.

State Energy Program

MDOT received a \$2 million U.S. Department of Energy grant through the Michigan Department of Energy, Labor and Economic Growth’s State Energy Program to develop alternative energy projects at six MDOT locations.

Projects include placing solar panel systems and/or wind systems at six Welcome Centers or Rest Areas and are projected to be complete in 2012. When operational, the systems are expected to produce annual electric utility savings of over \$25,000 per year.



I-96 Concrete Paving, Eaton County

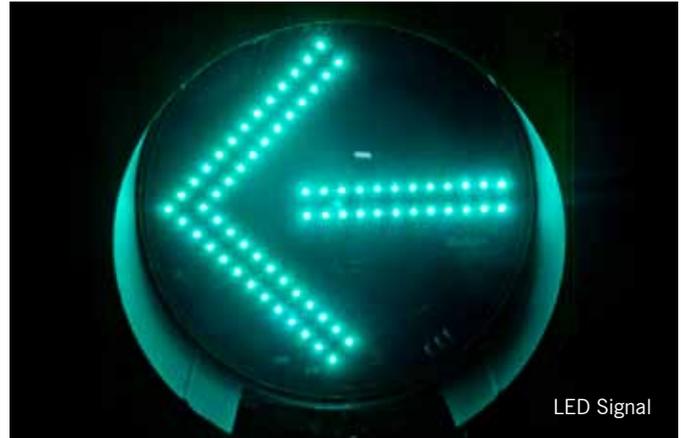


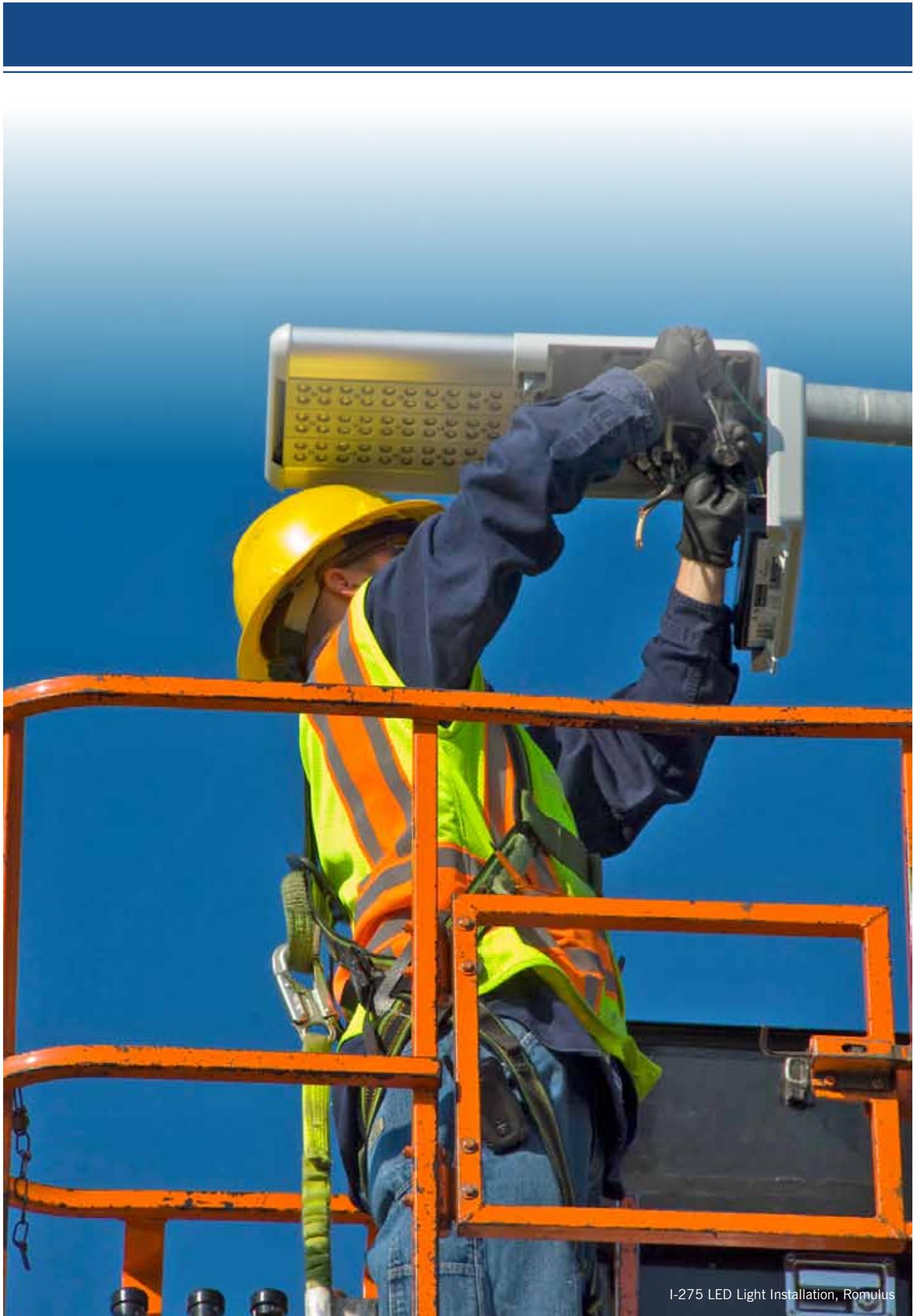
I-96 Concrete Recycling

Energy Conservation

MDOT is as careful with its energy use in department “work homes” as you are in your own homes. Here are some ways MDOT is saving energy (and tax dollars):

- **Installing Light-Emitting Diode (LED) traffic signals across Michigan to reduce energy and repairs.**
- **Installing programmable thermostats, with lower-energy settings for nights and weekends.**
- **Weather stripping doors and windows.**
- **Turning down hot water heaters’ temperatures.**
- **Tracking energy bills.**
- **Turning off lights when a room is not occupied.**
- **Turning off thermostats in unoccupied areas.**
- **Reducing external lighting.**





I-275 LED Light Installation, Romulus

GETTING MORE FOR YOUR MONEY

Working Smarter

Instead of being just one more thing on the “to-do” list, asset management is part of MDOT’s organizational culture to consistently identify and support good business practices and improve operations. Asset management was initially seen as a way to stretch dollars invested to improve infrastructure, but this approach also has helped MDOT streamline operations and reduce administrative costs.

Asset management efforts are best achieved when they are linked to strategic goals and desired outcomes. In 2010, MDOT published its first comprehensive performance measures report (for details, please go to www.michigan.gov/mdotperformance).

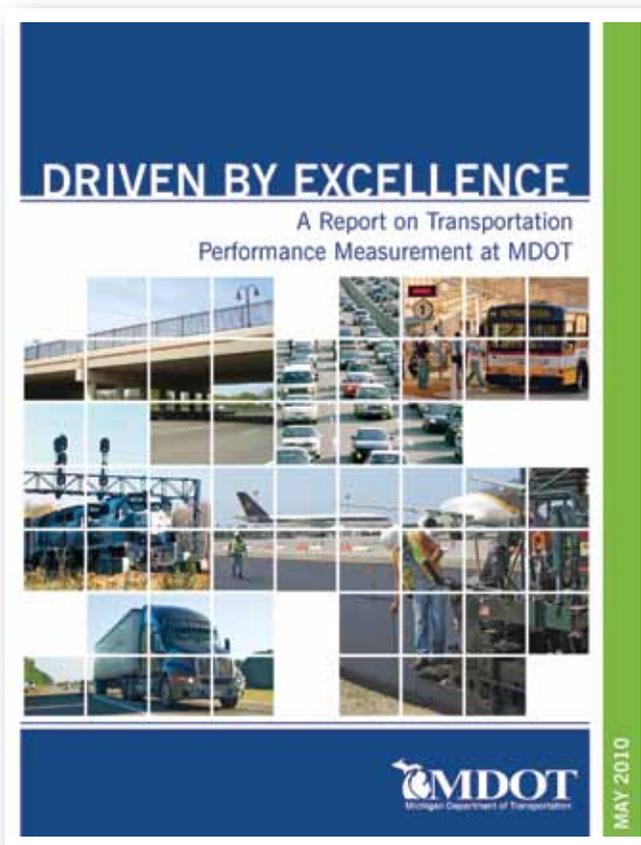
In 1997, when the economy was booming, the Michigan Transportation Commission set condition goals for our state trunkline and bridges. As you can see on the report card, MDOT has successfully achieved our 10-year pavement condition goal of having 90 percent of the state trunkline network in good condition by fiscal year 2007. In addition, we achieved the statewide nonfreeway bridge condition goal of 85 percent good or fair by Fiscal Year 2008, achieving the goal two years earlier than expected. While Michigan has seen its share of economic turmoil over the last several years, MDOT still was able to meet or exceed these goals thanks to the focus, creativity, cooperation and willingness of MDOT employees to rise to a challenge.

In another example, in July 2010, when a leaking pipeline outside of Marshall spilled oil into the Kalamazoo River, state and local government employees mobilized to protect the public, assess the damage and determine the need for cleanup. Thanks to a GPS inventory project MDOT had undertaken as part of its asset management program, Southwest Region staff were able quickly to identify with certainty every highway culvert, bridge and catch basin within 200 feet of the spill that could have been impacted by the leaking oil. As part of a pilot project, MDOT staff had previously inventoried the location, size and condition of these assets to ensure scheduled maintenance

MDOT REPORT CARD



Category	Grade
90 percent or more of pavement in good or fair condition	A
Reduce fatalities and serious injuries from auto crashes	A
Reduce cost resulting from crashes	A
Fewer structurally deficient bridges	A
Increase percent of trunkline railroad bridges in good or fair condition	A
90 percent of carpool lot pavements in good or fair condition	A
Preserve intercity bus and rail passenger service, and local transit services	A
Minimize disruption to mobility from traffic incidents	A

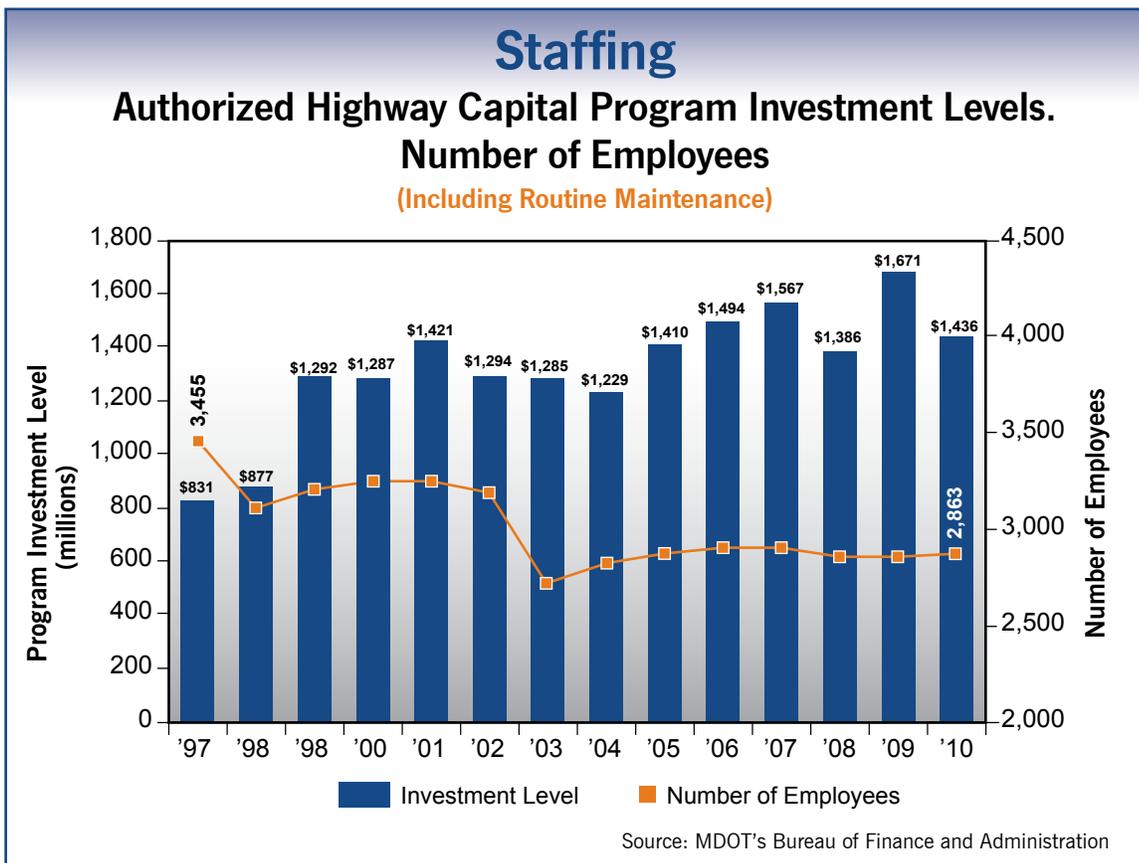
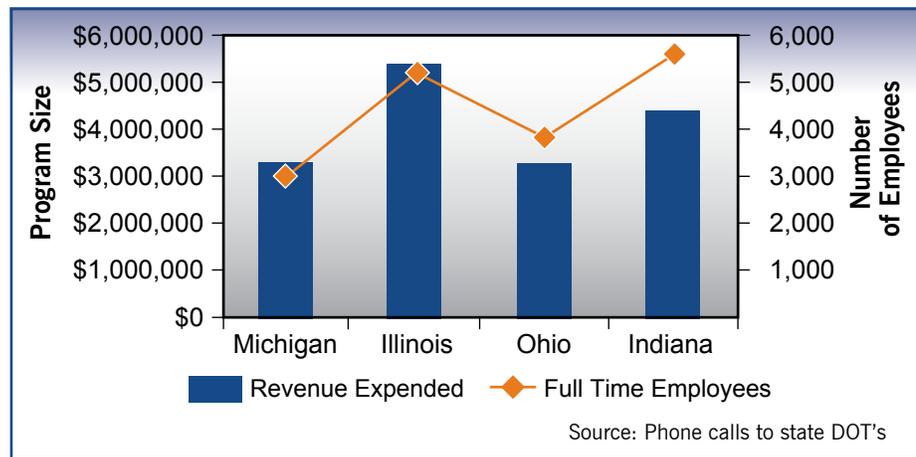
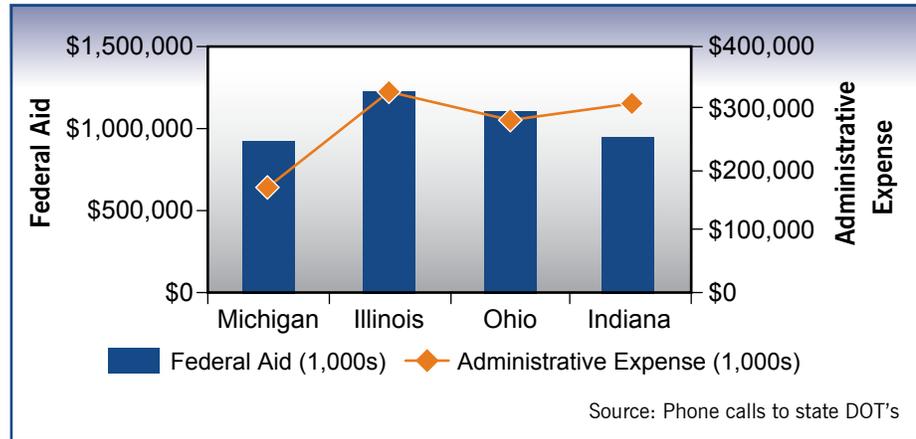


occurred as needed. Without that electronic inventory, it would have taken many field staff numerous days to properly identify the 116 bridges and culverts impacted by the spill. Not only did the technology save time and money in identifying the needs, it also enables MDOT to know with certainty that cleanup work will be focused on the appropriate assets.

Working Harder

Across the board, cuts have been made, and made again. In the department's continuing efforts to do more with less, MDOT reduced the ranks of full-time department employees by 250 between 1998 and 2009. During that same time, MDOT's annual program increased by 73 percent. (See chart at bottom of page.)

In comparing administrative costs or the number of employees, Michigan compares well with surrounding states. (See charts to the right.)



Bringing More Transportation Funding to Michigan

Michigan's rate of return on federal transportation funding was raised from 90.5 percent to 92 percent in the last federal funding authorization passed August 10, 2005. As a result, Michigan gets roughly \$18 million more per year from the increased rate of return, which creates additional infrastructure projects, as well as many jobs.



St. Ignace Transportation Center

Cutting Costs – Not Service

MDOT recently saved \$109,000 per year by changing an intercity bus route to cut 93 miles per day, while preserving the number of communities served. Intercity bus service is provided by the private sector. In areas where it is no longer profitable for the private sector to provide service along a route, MDOT chips in. The services purchased by MDOT, in combination with the unsubsidized service, provide a statewide intercity bus network that is within 100 miles of every Michigan resident. It also enables Michigan travelers to connect to the national intercity bus and train system.

Refinancing Bonds

Just as many homeowners took advantage of lower interest rates to refinance their mortgages, MDOT has been diligent in refinancing bonds to save money.

In October 2009, the department issued \$146.6 million in bonds to reduce overall debt service. This transaction freed \$4 million in cash, which was plowed right back into repairing roads. Since 2004, the department has saved nearly \$67 million through diligent re-evaluation and refinancing of bonds.





Rapid Central Station, Grand Rapids

IntelliDrive – Catalyst for the 21st Century

A few short years ago, Ford Motor Company was sending engineers to Minnesota to do Vehicle Infrastructure Integration (VII) research and development. Now, everyone who wants to be involved in IntelliDrive – an Intelligent Transportation Systems (ITS) initiative of wireless communication among vehicles, infrastructure, and personal communication devices – knows they must come to Michigan.

An overhaul of ITS in Michigan is placing our state at the forefront of this growing industry nationally and internationally. MDOT's Mi Drive Web site provides real-time traveler information, and will soon improve services for trucks and freight shipment. Weather information systems are supporting winter maintenance decisions and activities. And, MDOT is now able to remotely monitor bridges in the Superior Region and relay open/closed status of drawbridges in Bay City for emergency vehicle operations. ITS deployment is expanding statewide to cover much of southern lower Michigan, and southeast Michigan has become the epicenter for testing IntelliDrive technology.

Vehicle-based Information and Data Acquisition System (VIDAS)

VIDAS is a MDOT project utilizing visual observations to determine the accuracy and reliability of Road Weather Information System data. MDOT's goal is to expand the VIDAS service to the rest of the state to help with safety, mobility and planning.

Michigan International Speedway (MIS)

MDOT joined the MIS in a unique partnership for research, development, and safety innovation utilizing IntelliDrive technologies. Plans are underway to deploy a traffic signal equipped to test signal phase and timing technologies and Dedicated Short Range Communication radios at various locations on the MIS property. MIS is marketing the racetrack and its road course to organizations involved in testing new vehicle technology, and has hosted several demonstrations and tests.

“MDOT continues to be recognized a leader in the development of IntelliDrive technologies and applications.”



Interactive Driving System: IntelliDrive

The North Region received the following note in the mail:

““To the people who keep our highways safe, plowed, and sanded, THANK YOU for your hard work! Your job is one we take for granted - rarely give out praise and quick to complain - but I want you ALL to know even though we don't say it, we are BLESSED to have you take care of us. ””

Maintenance Ingenuity

MDOT's maintenance and operations personnel are continually devising ways to more efficiently plow snow and remove ice from roadways so Michigan travelers can arrive at their destinations safely. The following are some of the more recent innovations:

- Higher-capacity winter maintenance trucks to reduce truck-miles traveled and salt consumption.
- Side- and mid-mount wing snow plows to reduce the number of passes required to clear the pavement and shoulder.
- New salt distribution systems that improve control and reduce the amount of salt/material dispersed.
- New truck configurations so maintenance trucks can be used for either winter or summer maintenance without major modifications.
- Use of liquid anti-ice materials to pre-treat roads and bridges before winter storms.
- Use of liquids to pre-treat salt before application for a more effective road treatment.



Side-mount wing snow plow

Watch for “CHIMP” on the Bridge

Can a CHIMP make bridges safer? It can if it's the Critical Highway Infrastructure Monitoring Program.

Following the collapse of the I-35W Bridge in Minnesota, MDOT began developing a program to provide constant, remote monitoring of bridges. The Cut River Bridge on US-2 in the Upper Peninsula is the CHIMP test location. Monitors will register conditions like weather, vehicle weight, and stress, and relay that information back to the nearest MDOT facility at the Mackinac Bridge – 25 miles away.



CHIMP on the Cut River Bridge



CHIMP

MDOT involved the public in its efforts to develop and implement a comprehensive long-range transportation plan for the entire state that includes all modes of public transportation.

State Long-Range Transportation Plan

MI Transportation Plan: Moving Michigan Forward, Michigan's long-range transportation plan, published in June 2007, was developed with substantial guidance from transportation customers and stakeholders. The plan establishes a vision for Michigan's state transportation system and is a comprehensive analysis to help address needs to the year 2030. More than 5,000 Michigan residents participated in the development of MI Transportation Plan, either in person or through online Web questionnaires. Another 3,300 households were called to solicit their opinions, and businesses from eight major economic sectors served as advisors.



Social Media

Twitter, Facebook, YouTube: what do they have to do with managing a transportation system? Everything. The July 15, 2009, tanker explosion at the 9 Mile Road Bridge in Detroit is the perfect example of the communication technology MDOT utilizes to keep our customers informed. Michigan Intelligent Transportation Systems (MITS) freeway cameras shot footage of the resulting fire. Over the next few months, MDOT utilized Twitter, Facebook, YouTube and the MDOT Web site to keep the public updated regarding detours and the progress of the bridge reconstruction effort. The bridge was replaced and open to traffic in five short months – and MDOT “fans” were informed every step of the way.

MDOT ranks in the top five state departments of transportation in number of Facebook “fans” and in the top 10 for Twitter use.

YouTube has proven to be a valuable teaching tool. For example, MDOT has used YouTube to introduce drivers to a roundabout in Marquette (almost 16,000 views), acquaint the public with “The Fix on I-196” (over 18,000 views), and to train Adopt-A-Highway volunteers (2,000 views). In all, videos on MDOT’s YouTube channel have been seen over 71,000 times.

Social media also allows customers to communicate back to MDOT, such as this response to the installation of median cable guardrail along a stretch of I-96:

“This type of guardrail, used on I-96 near Portland, stopped my husband and son from going any further into the oncoming eastbound lanes of I-96... This guardrail, along with a very safe GM product, saved their lives, we believe. Please send our thanks and appreciation to those involved with this new guardrail.”

– MDOT customer



MDOT received the following note:

“Having updates on the Web will be helpful as well as possible/posted detour routes. Thanks again for communicating your actions/plans so local drivers will not be caught off guard and can plan accordingly. Many blessings on the work ahead!”

Mi Drive for Your Drive

Mi Drive is an interactive Web site where the public can access information about construction, lane closures, delays, driving conditions, alternatives to driving, and tools to enhance the trip itself.

Through a partnership with a number of private firms to collect and distribute traffic data, Mi Drive now has real-time access to speed and travel-time data on over 1,000 miles of roadway in Michigan.

In 2009, Mi Drive registered over 3 million page views.

E-mail from an MDOT customer:

“The Mi Drive Web site is very easy to use, including the MDOT legend and the ability to zoom in on roads and road projects throughout the state. Access to the hundreds of freeway cameras is also very handy, especially if you’re heading into morning or afternoon rush hour traffic.”



MDOT prides itself on building excellent working relationships with its partners, public and private. From local and federal government to the private sector and across the border in Canada, MDOT strives to improve collaboration and communication. By working together, agencies can save on costs, work more efficiently, and deliver the best possible product to the people of Michigan. Some highlights of successful partnerships follow.

Safe Routes to School (SR2S) Program

Relationships are key to the collaborative and grass-roots approach of Michigan's SR2S Program. To maximize outreach and training opportunities, MDOT partners with the:

- Michigan Fitness Foundation
- Michigan Department of Community Health
- Michigan State University (MSU) and MSU Extension
- Wayne State University
- Programs to Educate All Cyclists
- League of Michigan Bicyclists
- Michigan Trails and Greenways Alliance
- Michigan Association of Planning



Students walking one of Michigan's Safe Routes to School, Jackson

Director Steudle received the following letter from the Governor's Council on Physical Fitness, Health and Sports:

“On behalf of the Governor's Council on Physical Fitness, Health and Sports and the Michigan Fitness Foundation, I am writing to share how impressed I was with the Safe Routes to School event held recently in Saginaw. We value the opportunity to work in partnership with MDOT in administering the Safe Routes to School Program in Michigan. The strong leadership shown by MDOT for Michigan's Safe Routes to School program was certainly exemplified by the amazing contributions of your team.”

Enhanced Tribal Transportation Collaboration



Governor Granholm with Frank Ettawageshik, former Tribal Chairman of the Little Traverse Bay Bands of Odawa Indians.

MDOT organized 2007 and 2008 intergovernmental transportation meetings with federally recognized tribal governments. With FHWA, MDOT formulated and distributed to tribes a proposed

Intergovernmental Accord on Transportation. The Accord outlines a nonbinding structure for ongoing collaboration, and has already been endorsed by several tribes. This formal cooperation agreement will create a Transportation Advisory Committee, a regular forum for idea sharing and problem resolution among FHWA, tribes, and MDOT.



The Government Performance Project (GPP)

Michigan is consistently rated among the top states for how it manages transportation infrastructure, earning an A- in the infrastructure segment of the last GPP evaluation by *Governing Magazine* and the Pew Center for the States. Only Utah earned a better infrastructure grade than Michigan (two other states tied).



Context Sensitive Solutions (CSS)

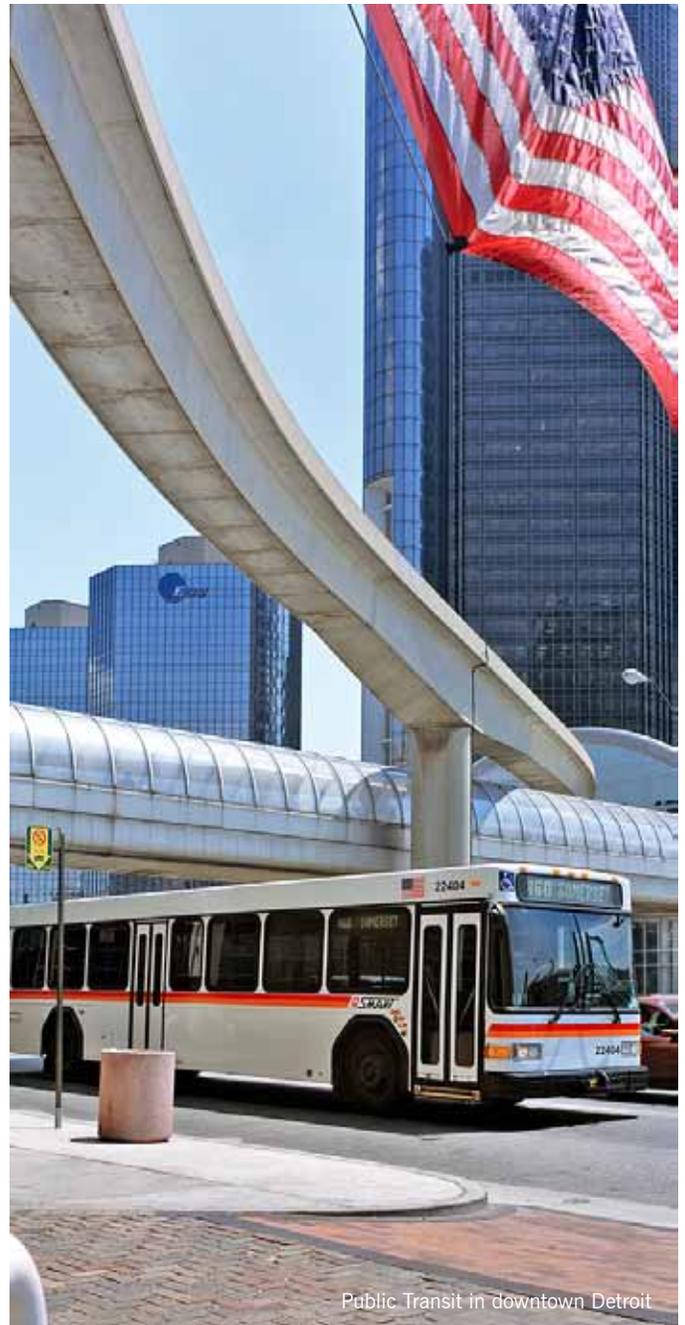
MDOT was awarded the Exemplary Human Environment Initiatives Award from the U.S. Department of Transportation for developing *Guidelines for Stakeholder Engagement*. This is a useful tool to educate people about CSS, a process used to engage the public in planning of transportation projects. MDOT's definition of CSS is: "A collaborative, interdisciplinary approach that involves stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources while maintaining safety and mobility."



I-94 Tied Arch Bridge and new sound wall

Transit Service

Public transit agencies in Lansing, Flint and Grand Rapids have received national awards for excellence. Michigan is often cited as a leader in the public transit industry, which is a reflection of the commitment of state and local government to provide high quality, responsive transit service. By forming strong partnerships with local transit agencies and stakeholders, the Bureau of Passenger Transportation has been able to effectively administer a comprehensive passenger transportation program, despite difficult financial times.



Public Transit in downtown Detroit

National Recognition (2006 – 2010)

MDOT's drive to succeed in all facets of transportation has been recognized with the following national honors:

2010

American Association of State Highway and Transportation Officials (AASHTO) Geographic Information System (GIS) for Transportation Award for Most Effective Cartography: MDOT - Metro Region Road and Trail Bicycling Guide

AASHTO GIS for Transportation Award for Best Official Transportation Map: Official MDOT Map - Uniquely Michigan

League of American Bicyclists Bronze Award: Lansing, Michigan, for being a Bicycle-Friendly Community

Federal Highway Administration's (FHWA) and Federal Transit Administration's (FTA) 2010 Transportation Planning Excellence Awards (co-sponsored by the American Planning Association): Honorable Mention for Dequindre Cut Greenway project

Women's Transportation Seminar (WTS), Michigan Chapter, Innovative Transportation Solutions Award: 9 Mile/I-75 Design-Build project, Metro Region

Construction Quality Partnership (CQP) of Michigan "Making a Difference" Award: US-41/Shelden Avenue reconstruction and streetscape improvement project completed in 2009

Michigan Concrete Paving Association (MCPA) Award of Excellence: Reconstruct I-75 from South Huron Drive to Gibraltar Road, Rockwood & Flat Rock – Wayne and Monroe counties

American Society of Civil Engineers (ASCE) officially dedicated the Mackinac Bridge as a National Historic Civil Engineering Landmark

National Partnership for Highway Quality (NPHQ) 2010 Making A Difference Awards:

Breaking the Mold Category: US-41/Shelden Avenue Houghton Reconstruction Project

Partnering Category: Michigan DOT and Michigan State University for the Farm Lane Underpasses

Work Force Training Category: Construction Quality Partnership (CQP) of Michigan for the CQP Training Development Program

FHWA Exemplary Award for Stakeholder Engagement Guidelines: Context Sensitive Solutions stakeholder engagement process

FHWA Exemplary Ecosystem Initiatives: Southwest Region High Quality Wetland Preservation

FHWA Exemplary Ecosystem Initiatives: Protected Areas Program

2009

Asphalt Pavement Alliance (APA) Perpetual Pavement Award: Two sections of US-31 in Ottawa and Muskegon counties

Best Transportation Publication: Bay Region Road and Trail Bicycling Guide, GIS-T Symposium

Excellence in Regional Transportation Award: National Association of Development Organizations

Best Transportation Publication

Honorable Mention: "Official 2009 Transportation Map" and the University Region "Road and Trail Bicycling Guide," GIS-T Symposium

ASCE Michigan Section, Quality of Life Award: Southern Links Trailway between Columbiaville and Millington, Cass City Transportation Service Center (TSC)

Finalist National Innovations Award: M-115, Osceola/Clare county line to Lake Station Avenue, Mt. Pleasant TSC

National Innovative Special Award: M-115 Osceola/Clare county line to Lake Station Avenue, Mt. Pleasant TSC, Highways for LIFE (HfL)

FHWA Exemplary Human Environment Initiatives Award: Context Sensitive Solutions (CSS) - Guidelines for Stakeholder Engagement

MCPA Award of Excellence: Telegraph Road and I-75/US-24 Connector, Brownstown Township, Wayne County

American Institute of Architects (AIA),

Detroit Chapter Design Award: Gateway Project's Bagley Avenue Pedestrian Bridge

AIA Exceptional Merit Award: Gateway Project's Bagley Avenue Pedestrian Bridge

2008

AASHTO's Standing Committee on Performance Management Gold Exemplary Partner Award for Team Excellence: MDOT TRAC Team

National Asphalt Pavement Association (NAPA): Quality in Construction Award

NPHQ National Partnering Model of Excellence: I-94/US-24 Single-Point Interchange with Modified Tied-Arch Bridges

AASHTO/National Transportation Public Affairs Workshop (NTPAW) – three awards for public relations activities: Best Radio Commercial or Public Service Announcement without a Consultant; Best News Release; Best Video Production

Recipient of \$50,000 "Safer Roads" Campaign: "Building Safety into Your Drive" public information and education, Roadway to Safety Foundation

CQP of Michigan Breaking the Mold Award: US-24 Corridor Bridge Rehabilitation, Dearborn and Dearborn Heights

American Council of Engineering Companies, Michigan Society of Professional Engineers (ACEC/MSPE) Engineering/Surveying Excellence Honorable Conceptor Award for Engineering: US-24 Bridge Rehabilitation over Rouge River

AASHTO Standing Committee on Quality Silver Pathfinder for Team Excellence: MDOT M-10 Reconstruction Project Team

2007

Silver Pathfinder Award for Team Excellence: MDOT TRAC Team, AASHTO Standing Committee on Performance Excellence

James L. Oberstar Safe Routes to School Award: Exemplary establishment of the Michigan Safe Routes to School Program

National Perpetual Pavement Award: M-24 between the Lapeer/Sanilac county line and Caro, Cass City TSC

NPHQ Gold Level Achievement Award: M-81 and I-75 Roundabouts, Bay City TSC

AASHTO Standing Committee on Quality Team Excellence Pathfinder Award: MI Transportation Plan

MCPA Award of Excellence: M-14 Reconstruct – Plymouth Township, Wayne County

ACEC/MSPE Engineering/Surveying Excellence, Award of Merit for Engineering: I-94 Rouge River to Wyoming Avenue Reconstruction

NAPA Award: I-94 from Masonic to M-29 project

2006

AASHTO President's Transportation Award in Planning: Michigan Travel Counts Program

Transportation Planning Excellence Awards: Honorable Mention, Michigan Travel Counts Program

NPHQ Making a Difference Silver award for Public Communications: "Line Drive Home" maps and campaign

AASHTO President's Transportation Award for Highways: FieldManager Administration Team

AASHTO/NTPAW: Skill Excel Award production without consultation, Best Other Print Publication, and Best Web site without consultation: MDOT Celebrates 100 years of transportation 1905-2001, Public Information Activities

MCPA Award of Excellence: I-94 from US-24 to Wyoming Avenue Reconstruction, Wayne County

Michigan Section, ASCE Outstanding Civil Engineering Achievement Award: I-94 Rouge River to Wyoming Avenue Reconstruction

National Council of Structural Engineers Association Outstanding Project Award, Bridges and Transportation Structures Category: I-94 Modified Tied-Arch Bridge

ACEC/MSPE Engineering/Surveying Excellence, Honorable Conceptor Award of Engineering: I-94 Modified Tied-Arch Bridge

MDOT GIVES BACK

The caring spirit of MDOT employees shines throughout the organization. It is what fuels our desire to get every person home safely. That same caring spirit is exemplified throughout the department as employees consistently and quietly open their hearts to help others through generous acts of kindness.

MDOT employees regularly give of their time, money, and talents to serve and support volunteer programs. MDOT staff annually support two very visible State of Michigan-sponsored charitable events – the State Employees Combined Campaign (SECC) and the Fall Harvest Gathering. In 2009, MDOT staff donated \$124,189 to the SECC, with donations supporting charities throughout Michigan. MDOT's participation in the annual statewide Harvest Gathering Program provided \$9,075 and 3,810 pounds of food to local food banks in 2009.



Southside Community Kitchen
MDOT Donation

The silent auction and “Souper Luncheon” to benefit the Southside Community Kitchen in Lansing, is an annual MDOT tradition that has raised \$93,114 since 1991. Last year alone, the event finished with a record-breaking total of \$9,418.



Silver Bell's In The City Parade,
MDOT Snow Plow

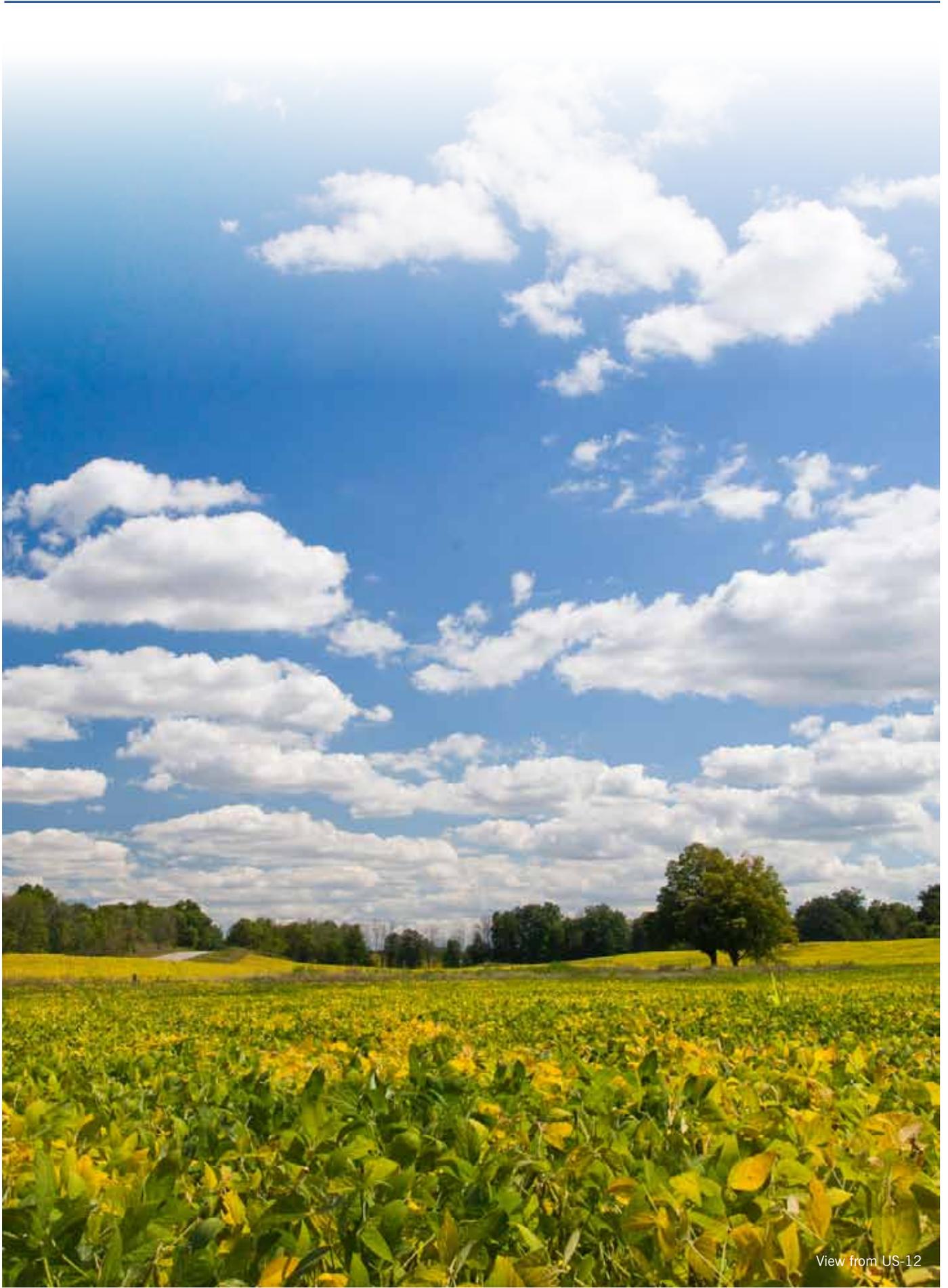
Throughout the state, MDOT employees annually coordinate and promote fundraising events, on their time and on their dime. The money raised from these events, totaling more than \$50,000 every year, benefit local members/organizations of communities statewide. A few of the beneficiaries of these events include:

- **St. Vincent's Angel Tree Program**
- **Family Adoption Programs**
- **Local Foster Care Programs**
- **Mid-Michigan Food Bank**
- **Doctors Without Borders**
- **Care Packages to Troops in Afghanistan**
- **Local Soup Kitchens**
- **Pediatric Units at Local Hospitals**
- **Valentines for Veterans**
- **Silver Bells in the City Parade**
- **American Heart Association**
- **Make-A-Wish Programs**
- **Scholarship Funds**
- **American Red Cross**
- **American Breast Cancer Program**
- **Relay for Life**
- **Leukemia/Lymphoma Society**

That willingness to make a difference is exemplary of the public service commitment MDOT employees demonstrate every day.



MDOT Blood Drive



View from US-12



**Providing the highest quality
integrated transportation services for economic
benefit and improved quality of life.**