

**Michigan Department of Transportation**  
**Report to the Legislature**  
**Section 393 of PA 84 of 2015**

This report fulfills the Michigan Department of Transportation (MDOT) obligations under Section 393 of PA 84 of 2015 as shown below.

**Section 393. (1) The department shall promote best practices for public transportation services in this state, including, but not limited to, the following ... (see below)**  
**(2) The department shall report on efforts taken to implement this section as well as section 393 of article XVII of 2011 PA 63. The department shall complete and submit the report to the state budget director, the house and senate appropriations subcommittees on transportation, and the house and senate fiscal agencies on or before March 1, 2016.**

Similar language was included in 63 PA 2011 and PA 252 of 2014. The specific best practices identified in the boilerplate in all three years are listed below and for each, MDOT provides a report on:

- Efforts MDOT undertook between Fiscal Years (FY(s)) 2012 and 2015 in response to the boilerplate requirement in 63 PA 2011 and PA 252 of 2014.
- Efforts currently underway in response to the boilerplate requirement in PA 84 of 2015.

**Best Practice: Transit vehicle rehabilitation to reduce life-cycle cost of public transportation through mid-life rehabilitation of transit buses.**

**Efforts Completed FYs 2012-2015**

1. MDOT provides financial, planning, and technical support to the Michigan Public Transportation Association (MPTA) in their delivery of the annual Transit Vehicle Maintenance Seminar (TVMS). The TVMS provides public transportation technicians and mechanics the opportunity to learn hands-on practices with the latest technology and equipment and is the primary venue by which MDOT supports training and technology transfer on bus maintenance issues.

Midwest Bus Corporation has been an active vendor supporting the TVMS since 2010. Midwest Bus Corporation is the largest re-manufacturer of transit buses in the United States. The Owosso, Michigan headquarters has over 70,000 square feet of manufacturing space with a 35 coach production capability. Their facility is equipped to perform all aspects of bus repairs. The 2015 TVMS was held June 22-24, in Higgins Lake, Michigan. MDOT requested that the agenda include a presentation from Midwest Bus Corporation on the pros and cons of transit bus rehabilitation/mid-life overhaul. An invitation to present was made to Midwest Bus, but they did not take advantage of the offer.

2. When transit agencies opt to use federal funds for bus rehabilitation, MDOT has provided the 20 percent match for these projects. For example, the Suburban Mobility Authority for Regional Transportation (SMART) and the City of Detroit received federal funds for bus overhaul in 2013, Clare County used federal Surface Transportation funds for rehabilitation of buses in 2014 and the Flint transit agency allocated \$80,000 of Section 5307 funds for the rehab of buses.

### **Efforts Underway in FY 2016**

3. As noted under item #1, MDOT requested that Midwest Bus Corporation be invited to the 2015 TVMS to present on the pros and cons of transit bus rehabilitation/mid-life overhaul. They did not accept the offer. MDOT will consider asking for a presentation at the 2016 TVMS.
4. MDOT solicited proposals from Michigan colleges/universities that provide vehicle maintenance curriculums to develop a fact sheet to assist transit agencies in determining when it is cost effective to perform rehab/mid-life overhaul on a bus. A proposal from Kettering University was accepted and they are developing a fact sheet that will include a description of the elements of a rehab/mid-life overhaul as well as important elements to consider for each size bus when determining whether or not a rehab is financially prudent. Once the fact sheet is available, MDOT will review it with the two state transit associations to determine the next steps for MDOT and the industry.

**Best Practice: Cooperation between entities using transit, including school districts, cities, townships, and counties with a view to promoting cost savings through joint purchasing of fuel and other procurements.**

### **Efforts Completed FYs 2012-2015**

5. MDOT sponsors training for Michigan transit agencies to make them aware of the detailed federal regulations that govern their procurements. The trainings have all addressed the option of joint purchases and the assignment of contract rights such as “piggyback” contracting and the assignment of options. While there can be significant benefits to joint purchasing with other local governments, these governments may not be subject to the detailed procurement regulations that govern the Federal Transit Administration (FTA) funded procurements. Transit agencies need to be keenly aware of both the benefits and possible pitfalls of joint purchasing with entities that are not governed by FTA regulations. As part of its presentation at the annual Rural Transit Managers Workshop in April 2015, MDOT provided information on the benefits of partnering with other local agencies in the community for joint use of transit agency facilities or equipment highlighting the need for transit agencies to comply with the FTA regulations regarding incidental use by other agencies of assets purchased with FTA funding.

6. In cooperation with the Michigan Department of Technology, Management and Budget (DTMB), MDOT executes state bus contracts that are used by Michigan transit agencies, primarily rural agencies, to purchase vehicles. The state contracts provide economies of scale, ensure compliance with Federal and State procurement requirements and save time by eliminating the need for individual agencies to process bids for buses, which they may only procure buses once every several years. Currently, MDOT has five bus contracts. Three contracts providing options for small light duty buses and small buses from three different vendors and two contracts providing two different types of All Purpose Vehicles (APVs). Two additional contracts providing medium duty buses will be awarded soon.
7. MI DEAL is an extended purchasing program which allows Michigan local units of government to use state contracts to buy goods and services. Membership is open to cities, townships, villages, counties, school districts, universities, community colleges, and non-profit hospitals. Local governments benefit directly from the reduced cost of goods and services. There are over 400 contracts available to MI DEAL members. Transit agencies used these contracts up until October 2014 when, based on an FTA training, MDOT determined all MI DEAL contracts (other than buses and accessible vans) were not in compliance with the most recent FTA regulations. All transit agencies were notified of the determination and are no longer allowed to use MI DEAL contracts with FTA funds. As part of its presentation at the annual Rural Transit Manager Workshop in April 2015 MDOT discussed procurement options for transit agencies that previously used MI DEAL, such as joint procurements just within the transit community. Transit agencies were asked to share their best practices.
8. MDOT has provided the required 20 percent match for several fueling stations that benefit the transit agencies, other transportation providers, and the general public. The Flint Mass Transportation Authority (MTA) has compressed natural gas (CNG), propane, and hydrogen fueling at its Grand Blanc facility. The Genesee Intermediate School District uses the propane fueling and MTA plans to open the facility to the public after it evaluates its internal needs. The Blue Water Area Transportation Commission (Blue Water) has four CNG fueling facilities. Blue Water partnered with Marine City, Allenton Collision (a private for-profit company) and Cawood Auto (a private for-profit company) for three of the locations. The three outside entities allowed Blue Water to lease a portion of their property for the placement of a CNG refueling station. All three only charged a small fraction of the standard price for leased property – they are partners and proponents of CNG fuel. The fueling facilities are used by another transportation provider and are open to the public. Both the Roscommon County Transportation Authority (RCTA) and the Twin Cities Area Transportation Authority (TCATA) now have propane fueling stations. TCATA has had some discussions with the City of Benton Harbor about utilizing the station and RCTA is letting other public agencies know the facility is available for use.
9. MDOT hired a consultant to identify cost saving practices used by the Michigan transit community and across the country. Based on guidance from MDOT and transit agencies, cost savings best practices were documented in the following areas: management

practices, scheduling/dispatching, and assessing service design. A cost savings toolkit was prepared and placed on MDOT's website as a specific resource for transit agencies and MDOT made transit agencies aware of the toolkit. The toolkit includes case studies of the best practices and can be viewed on MDOT's website at:

[http://www.michigan.gov/mdot/0,4616,7-151-9625\\_21607-293637--,00.html](http://www.michigan.gov/mdot/0,4616,7-151-9625_21607-293637--,00.html). One best practice document is an example of cooperation between entities (Non-profit Vehicle Maintenance Program), and can be seen at:

[http://www.michigan.gov/documents/mdot/NonProfitVehicleMaintenance\\_TARC\\_\\_Kentucky\\_409364\\_7.pdf](http://www.michigan.gov/documents/mdot/NonProfitVehicleMaintenance_TARC__Kentucky_409364_7.pdf).

10. When DTE approached DTMB about possible private-public partnerships for CNG fueling stations, DTMB came to MDOT to determine possible transit agency interest. Given the size of the bus fleet that would be required to make such a partnership feasible, MDOT contacted SMART. MDOT facilitated an initial dialogue between SMART and DTE officials, which continued for several months between the two parties. A specific proposal was submitted to the SMART Board, which would have required financial investment from DTE and SMART as well as a long term obligation from SMART to ensure a level of CNG consumption from DTE. MDOT offered a small grant to SMART to off-set a portion of their costs. If accepted, the proposal could have resulted in construction of a CNG fueling station at a SMART maintenance garage which could have been accessed by other public and private fleets. However, the SMART Board did not opt to obligate itself to CNG and the DTE requirements and chose to continue to evaluate a variety of alternative fuel options for its fleet.

### **Efforts Currently Underway**

11. The most recent federal transportation authorization – Fixing America's Surface Transportation or the FAST Act has new provisions for cooperative transit procurements. As FTA releases more details on these provisions, MDOT will determine how the FAST Act offers additional opportunities for the state of Michigan and/or individual Michigan transit agencies. MDOT will engage DTMB and the transit industry (via the two associations) to ensure we are making effective use of the new federal provisions.

**Best Practice: Coordination of transportation dollars among state departments which provide transit-related services, including the Department of Human Services (DHS) and the Department of Community Health. Priority should be given to use of public transportation services where available.**

#### **Efforts Completed FYs 2012-2015**

12. MDOT's Office of Passenger Transportation's Administrator sat on a multi-agency workgroup formed by DHS to identify and address transportation issues facing DHS Partnership. Accountability. Training. Hope. (PATH) clients. Based on its participation in the DHS PATH workgroup, MDOT contacted the Community Transportation Association (CTAA) (a national transit association) for technical assistance. MDOT funded CTAA to come to Michigan to provide mobility management training for transit agencies, DHS caseworkers, and Workforce Development Agency caseworkers. There were eight regional meetings that covered the entire state. Staff from DHS, MDOT, transit agencies, and Michigan Works! attended the trainings which provided an opportunity for the social service agency caseworkers to learn what transit services were available in the community and gain skills in developing transportation plans for their clients that included making use of transit when possible.
13. Upon the request of the Michigan Department of Education (MDE), in 2013 and 2014, MDOT participated in the development of a training video for school bus fleet managers on the role transit can play in pupil transportation. While there are strict federal regulations that prohibit transit agencies from providing school transportation, there are opportunities for transit to serve students – as it would any member of the public – especially in areas where school bus service has been eliminated. The federally acceptable options for making use of transit services to serve students were detailed out in the training video. In 2015 MDE asked us to participate on a second training video to update and reiterate state and federal regulations that pertain to school bus operators. In the video we again state potential ways for school systems to coordinate with public transit agencies.
14. MDOT provided financial and technical support to a newly created non-profit organization, the Michigan Transportation Connection (MTC). Funding was provided for a technology project that would assist the MTC increasing the ability of local transit agencies to provide Non-Emergency Medical Transportation (NEMT) in particular when funded by Medicaid. Increasing the use of transit to meet Medicaid NEMT needs can make more effective use of the existing state, local, and federal investment in transit.

15. On behalf of the Michigan Association of United Ways (MAUW) MDOT applied for and received a Veterans Transportation and Community Living Initiative (VCTLI) grant from the FTA. MAUW used the funds to improve the transportation information within their 2-1-1 system. Additional 2-1-1 call center improvements will provide technology improvements that will assist local social service agencies to access transit as a transportation option for their clients.
16. MDOT sponsors a commuter vanpool program which operates under the moniker MichiVan. MichiVan is operated by vRide, Inc. (vRide). By the end of FY 2014, MichiVan supplied 451 fully insured passenger vans through vRide to commuter groups. The MDOT contract with vRide off-sets a portion of the cost to the vanpool participants, however, members of a vanpool still pay a monthly fee and cover the cost of gasoline, and as such vanpooling is not necessarily a financially viable option for very low income workers. Based on its work with the DHS PATH workgroup (described under item #12 above), MDOT suggested a demonstration project in which MDOT and DHS jointly funded the passenger costs of being in a vanpool for DHS clients. One vanpool started operating in Saginaw County under this demonstration project and continues to operate. Due to the limited applications, DHHS decided to not pursue additional vanpools under this demonstration.
17. The Michigan Departments of Community Health, Corrections, Human Services, and Transportation, and the Strategic Fund in the Michigan Department of Treasury each had boilerplate in their portions of the FY 2015 omnibus budget bill that required the agencies to form a workgroup to evaluate and respond to this question: "How can the State maximize its services and funding for transportation for low-income, elderly, and disabled individuals through consolidating all of the current transportation services for these populations under one department." The workgroup was formed through a request from the State Budget Office Director, John Roberts to each department director asking for the director to appoint members from their department. The report was filed by MDOT prior to March 1, 2015, deadline.

### **Efforts Currently Underway**

18. On behalf of MDOT, Michigan State University surveys Michigan transit agencies annually to determine the level of adoption of certain industry best practices. The first annual report of the survey results was posted on MDOT's website in February 2016. The report indicates that 92 percent of the Michigan transit agencies meet at least annually with other providers to discuss service coordination issues and nearly half of the agencies have quarterly coordination meetings.

19. As noted under item #15 above, on behalf of MAUW MDOT applied for and received a VCTLI grant from FTA. MAUW is using the funds to improve the transportation information within their 2-1-1 system. Additional 2-1-1 call center improvements will assist local social service agencies to access transit as a transportation option for their clients. MDOT continues to work with MAUW to ensure the 2-1-1 call center is a useful tool to both local transit agencies and social service agencies to help people access transportation services. The FAST Act calls for a new federal discretionary pilot program for innovative coordinated access and mobility which will be open to Section 5310 recipients (of which MDOT is one). According to the initial FTA guidance, this program will assist in financing innovative projects for the transportation disadvantaged that improve the coordination of transportation services and non-emergency medical transportation (NEMT) services, such as projects that create or increase access to community One-Call/One-Click Centers, etc. When FTA releases a Notice of Funding Availability for these grants, MDOT will review it with MAUW to determine if a grant application should be submitted to continue to improve the transportation functionality of Michigan's 2-1-1 service.

In addition, as part of the VTCLI grant obligations, MAUW needed to ensure that updated "transit-human services coordination plans" were in place throughout the state. MDOT has been guiding MAUW's planning consultant in developing "transit-human services coordination plans" for each Prosperity Region. The plans will identify current transit services, regional (i.e., cross-county) transit needs and barriers and include draft strategies to overcome these barriers within each region. Once the plans are completed, MDOT will assist Regional Planning Agencies and Metropolitan Planning Organizations determine if regional action plans should be developed to address high priority needs.

20. Under the FAST Act, there are several new initiatives aimed at FTA's Section 5310 program. The Section 5310 program funds transit services aimed at persons with disabilities and senior citizens and often the services supported with Section 5310 funds are supported by social services funding as well (such as federal or state aging program dollars). New provisions include a requirement for FTA to develop a best practices guide for recipients of FTA Section 5310 funding and for the federal interagency transportation Coordinating Council on Access and Mobility (CCAM) to create an updated strategic plan on transportation coordination across federal agencies as well as a cost-sharing policy. Once the best practices manual, the CCAM strategic plan and the CCAM cost-sharing policy are available MDOT will evaluate these new tools to see if they can be used to provide assistance to transit and social service agencies in Michigan that receive Section 5310 grants from MDOT to help improve coordination across state and federal funding programs.

21. For the last 10 years, MDOT entered into intergovernmental agreements with the Michigan Department of Health and Human Services and the Michigan Department of Talent and Economic Development (workforce program) to provide financial support to the Flint area's transit agency – MTA. MTA has long standing, successful transit services designed to provide financially-disadvantaged workers from the Flint area access to jobs throughout southeast Michigan. When changes at the federal level significantly reduced the funds available to MTA, the three state agencies formed a unique partnership to pool resources to help MTA continue the service.

**Best Practice: Promotion of intelligent transportation services for buses that incorporate computer and navigation technology to make transit systems more efficient, including stoplight coordinating, vehicle tracking, data tracking, and computerized scheduling.**

#### **Efforts Completed FYs 2012-2015**

22. MDOT provided financial, technical, and planning assistance to MPTA to deliver an annual transit meeting each August. The annual meeting includes a Vendor Expo at which transit agencies and MDOT staff are able to see what is available in the marketplace and talk to other transit agencies that have purchased different types of equipment. There are several vendors of intelligent transportation services that routinely participate in the vendor show. Some vendors that attended the 2014 Vendor Expo are Crystal Computer Support, Inc., PCTrans, RouteMatch Software, and Trapeze Group. The 2015 Vendor Expo participants included: Angel Trax, Apollo Video Technology, Avail Technologies, Byte Jumper Computers, Ecolane, EnGraph, Excels Mobile Video Solutions Inc., Mobilitat, PCTrans, Radio Engineering Industries, RouteMatch Software, Syncromatics, and TripSpark Technologies. MDOT also supports the annual TVMS and while not information technology, this event helps highlight emerging bus technologies. Represented at the 2015 TVMS were XL Hybrids, a manufacturer of electric drive systems and Roush Propane which focuses on low emissions bus technology.

23. As noted under item #9 above, MDOT hired a consultant to look at cost saving practices both in Michigan's transit community and across the country. A cost reduction toolkit was prepared and published on MDOT's website as a resource for transit agencies. One of the case studies highlighted improved dispatching through technology. It can be viewed at: [http://www.michigan.gov/documents/mdot/ImprovingDispatchingThruUseOfTechnology\\_CARTS\\_TX\\_409400\\_7.pdf](http://www.michigan.gov/documents/mdot/ImprovingDispatchingThruUseOfTechnology_CARTS_TX_409400_7.pdf).

24. MDOT makes application for federal funds to support technology projects initiated by rural transit agencies. MDOT has received and passed through federal grants for Automated Vehicle Locators (AVL), computerized dispatch systems, electronic fareboxes, and Mobile Data Terminals (MDT) for many rural agencies. Twenty rural technology projects were funded by MDOT with federal ARRA funds in FYs 2010 and 2011 and their ongoing operations and use is supported with annual funds MDOT provides to rural agencies. In FY 2012, MDOT funded 12 additional rural technology projects; four in FY 2013; three in FY 2014 and one in FY 2015. In 2015, the Regional Transit Authority released the results of a preliminary study on seamless farecard integration for the region which was funded with a federal/state grant MDOT awarded to the Detroit People Mover.
25. In the coming years, the application of Intelligent Transportation Systems (ITS) will be a significant aspect of the growing use of Bus Rapid Transit (BRT) in Michigan. BRT is an enhanced bus transit mode that provides faster, passenger-friendly service. It includes improvement to the infrastructure, vehicle road use, and stops/stations; use of cleaner, quieter and lighter vehicles; and integrating an amalgam of ITS technologies. MDOT has supported the implementation of BRT in Michigan by providing the match to federal funds as well as state operating assistance for The Rapid's Silver Line in Grand Rapids, the state's first BRT line. MDOT has also provided planning funds for BRT feasibility studies being conducted by the Capital Area Transportation Authority, the Ann Arbor Area Transportation Authority, the Southeast Michigan Council of Governments, the Regional Transit Authority of Southeast Michigan and an additional BRT line being planned by The Rapid (the Laker Line).
26. MDOT hosted the ITS World Congress in Detroit in 2014 which brought ITS innovations from around the world to Michigan. Hands on demonstrations were provided along with conference sessions to share with participants the applicability and benefits of ITS in many different facets of the transportation industry. Many transit specific applications were demonstrated and discussed with thousands of participants including public transit stakeholders from around Michigan.
27. MDOT sought assistance from FTA in identifying readily available technical assistance materials (fact sheets, manuals etc.) on ITS topics that are appropriate for small to medium sized bus systems. MDOT handed out and highlighted selected materials in its presentation at the August 2015 annual transit meeting.

### **Efforts Currently Underway**

28. On behalf of MDOT, Michigan State University surveys Michigan transit agencies annually to determine the level of adoption of certain industry best practices. The first annual report of the survey results was posted on MDOT's website in February 2016. The report indicates that 47 percent of the Michigan transit agencies pursued at ITS project in the past year.

29. As noted under #15, the MAUW 2-1-1 call center is a significant technological advancement that can help transit agencies match riders with available rides. MDOT will continue to work with MAUW to sustain and grow the transportation functionality of Michigan's 2-1-1 service.
30. MDOT will continue to work with the Capital Area Transportation Authority and The Rapid on their planned BRT projects on MDOT right-of-way. As noted under item #25 above, ITS is a significant aspect of BRT.
31. Michigan's public transportation system includes intercity bus. MDOT supports the intercity bus network with CTF and federal funds, through both service contracts and capital grants to the two primary carriers in Michigan -- Indian Trails and Greyhound. With Indian Trails in the lead, MDOT has been working with both carriers to add GPS to their motorcoach fleet including those motorcoaches that are acquired with MDOT grant assistance. The GPS assists the carriers in their operations and also benefits MDOT in that the data will be available to us to help us monitor those portions of the intercity bus network that MDOT supports with state and federal funds.