

## **Information from the CAC Intermodal Passenger Subcommittee in Response to the TF2 Request Regarding Reforms, Efficiencies and Best Practices**

*The TF2 asks that you report on the steps transportation agencies have taken to streamline operations, additional measures that agencies or legislative bodies could adopt to make better use of existing resources, and best practices from around the state, region, or country that might provide new or innovative approaches to the management of our system and its resources.*

### **Introduction**

The Transit Authorities and the State of Michigan have been working together to coordinate on-going strategies to maximize limited resources and improve public transit services in Michigan. The largest gain in transportation efficiencies is the provision and maximization of public transit use. It is critical during this time of limited revenues that the public transit community provide the most benefit to the traveling public through the provision of high quality public transit services, especially during a time when ridership is increasing exponentially.

### **Steps the Michigan Department of Transportation and the Transit Authorities Have Taken to Streamline Operations**

#### **Local Transit**

The Michigan Department of Transportation and Michigan Public Transit Association, in conjunction with its members, encourage continued streamlining and innovative delivery of public transit services. This has been accomplished through a number of measures, including:

1. Regionalization of transit services utilizing existing resources. This has resulted in greater cooperation within and across agency jurisdictional boundaries.
  - Streamlining of routes and service delivery between the Detroit Department of Transportation and SMART.
  - Expansion of job-related regional transportation services between Genesee County and Southeast Michigan.

- Broadened student transportation in Kent County, Ingham County, Genesee County, and other areas including rural counties, particularly in response to higher education, charter schools, and school of choice needs.
  - MDOT has funded regional coordination studies and demonstration projects that allow transit agencies to determine the effectiveness of forming a regional authority to minimize their overhead and administration costs. These studies and demonstrations have led to several rural, multi-county demand response agencies.
2. Creative use of alternative energy sources.
- Mass Transit Authority in Flint, in cooperation with Kettering University and Michigan State University, has been heavily involved in researching future public transportation energy sources, such as hydrogen fuel cell technology.
  - The Bay Area Transportation Authority in Traverse City is a leader in the use of wind generated hybrid electric power.
  - The Rapid in Grand Rapids and Bay Area Transportation Authority in Traverse City have been recognized nationally for their incorporation of LEED-approved green building technology.
  - Local Transit Authorities have purchased alternative fuel and hybrid electric buses resulting in lower fuel costs, higher vehicle fuel efficiency, and reductions in vehicle emissions. The Capital Area Transportation Authority was the first transit system in the State to add 40 foot diesel electric hybrid buses to their fleet. The Ann Arbor Transportation Authority now operates 20 hybrid-electric buses with 7 additional buses on order, a higher percentage of their fleet than any urban operator in the nation. The Advanced Technology Hybrid buses are 30% to 40% more fuel efficient than the older buses scheduled to be replaced.
3. Training and education programs for state public transit agencies, some previously provided only by the Michigan Department of Transportation, which are now coordinated and offered by the Michigan Public Transit Association/MASSTrans for members and all transit agencies throughout Michigan. These programs are supported by, and overseen by the Michigan Department of Transportation.
- Rural Transit Assistance Program (RTAP)
  - Passenger Service and Safety (PASS) Trainer Certification
  - Transit Vehicle Maintenance Seminar
  - Coordinated Human Services Agency/Public Transportation Training
  - Rural Transit Manager Workshop
  - Small Bus Roadeo

- Frontline Employee Training
  - Michigan Public Transportation Annual Conference
4. The Michigan Public Transit Association has taken the lead on researching future use of essential national and state highway corridors for public transportation.
  5. The Michigan Public Transit Association has developed a draft Public Transportation Agency Self-Accreditation Program to be used as a model for maximizing return on public transit investment in agencies throughout Michigan.
  6. MDOT uses asset management principles to allocate available federal funds for replacement of rural transit vehicles to extend the life of the vehicles and maximize the limited funding available for capital improvements.
  7. MDOT provides assistance to Michigan transit agencies to ensure implementation of the new federal requirements for Coordinated Plans that encourage coordination in transportation services between local transit and human service agencies. Additional federal funding is also provided. The Capital Area Transportation Authority is developing a Regional Coordination Study with community leaders representing health, human, and employment interests to coordinate services with multiple transit systems in order to facilitate seamless public transportation across multiple jurisdictional boundaries.
  8. MDOT issues state contracts for the most commonly purchased demand response vehicles, generally leading to a lower purchase price than a single agency would receive for the same vehicle. In addition to the state vehicle contracts, transit agencies have access to the State of Michigan's MIDEAL Program for savings on various commodities used in transit services.
  9. Most transit agencies use local transit millages to provide the local share of operating costs. Transit agencies have to ask the voters on an ongoing basis for renewal (or increases) in their local funding support, which creates an environment of ongoing taxpayer oversight of the agency. The majority of millage issues are approved by Michigan voters – indicating satisfaction with agency performance. According to the Michigan Public Transit Association, “local millages are passed at more than an 80% approval rate, promising expanded and improved service.” For example, voters in the Grand Rapids metropolitan transit district have approved three millages in the past seven years to expand regional bus service.

10. Some transit agencies have formed insurance pools and fuel purchasing cooperatives to improve their purchasing power. According to testimony given to the House Standing Committee on Transportation (Public Transit Subcommittee), various transit agencies reported cooperative fuel purchase agreements with school districts and local units of government to help save on fuel costs.
11. Some transit agencies have implemented computerized dispatching systems to improve efficiencies in dispatching demand response vehicles. The Flint Mass Transportation Authority improved transit services and efficiencies through the use of intelligent transportation system technologies, such as Automatic Vehicle Locator Systems, Interactive Voice Response System, and Mobile Data Terminals. The Ann Arbor Transportation Authority has implemented real-time vehicle location information system called RideTrak via the internet and cell phones.
12. Some transit agencies have extensive vehicle rehabilitation programs to extend the service life of vehicles beyond the dates when federal funds could be used for vehicle replacement. In Genesee County, the mid-life rehabilitation of transit buses extended the life of the buses by 12-20 years. This allows the transit agency to focus federal funds on other capital needs or operational expenses (when possible).
13. Some transit agencies have interlocal agreements, which allow them to move passengers from their local service area to the other service areas, eliminating the need for multiple transfers or duplication of trips while making cross-county trips, such as trips to regional health centers. The Detroit Department of Transportation implemented a cooperative transfer agreement with SMART, Blue Water Area Transit, and Transit Windsor that allows riders to travel between the United States and Canada using public transportation at minimal cost.
14. Some local entities bid out transit services, thereby encouraging competition by providers, improving services and reducing costs. According to the Ann Arbor Transportation Authority, “nearly half of the fares collected come from the University of Michigan, Eastern Michigan University, Ann Arbor Downtown Development Authority, Ann Arbor Public Schools, Pfizer, and other employers.”

15. The Ann Arbor Transportation Authority and SMART routes are available on Google Transit, providing new passengers and easy, well recognized way to identify bus routes to their destinations. The Detroit Department of Transportation and other agencies will soon be adding this service.
16. Many transit agencies offer or are experimenting with new innovative fare cards. Providing passengers an attractive option for prepaying their bus fare and allow for faster boarding times and decreases the effort of managing cash and change at the end of the day. SMART is experimenting with rechargeable, contactless smart-cards that allow for even faster boarding and more convenient monthly payment options.
17. Many transit agencies offer express or limited-stop bus routes, which not only get riders to their destinations quickly and conveniently, but also deliver more passengers longer distances in less time and with less wear and tear on buses.

### **Rail Passenger**

1. MDOT and Amtrak increased the use of automated ticketing system to improve customer access and reduce costs.
2. MDOT, Amtrak, and local transit agencies work together to develop multi-modal passenger facilities to improve connectivity between modes and increase efficiency.
3. MDOT works with local governments to support ongoing marketing of rail passenger services to increase service awareness, usage, and passenger revenues.
4. The existing rail infrastructure is shared by freight providers and AMTRAK to maximize the use of the facilities and improvement investments. (One tradeoff of this efficiency is that it creates competition for the use of the infrastructure between freight rail and passenger rail.)
5. MDOT participates as a member of the Midwest Regional Rail Initiative and the States for Passenger Rail Coalition to coordinate on technical and policy issues.
6. Through the increasing use of new technology, such as incremental train control systems and active barriers at crossings, train speeds have increased, which has improved service delivery and related operational efficiencies.

### **Intercity Bus**

1. MDOT competitively bids operating contracts to encourage competition by providers, to improve service, and to optimize state/federal subsidies. In

addition, the contracts are rebid every two to five years to maximize the service value.

2. Annual performance reviews of existing routes are conducted at a minimum by MDOT and contract carriers, in order to maximize the communities served and decrease route miles.
3. MDOT encourages the development of multi-modal passenger facilities (including intercity and local buses) to improve connectivity between modes and reduce costs.
4. MDOT coordinates with other states to maximize Michigan riders' access to the regional/national passenger transportation network.
5. MDOT conducts annual inspections of state vehicles used by service providers to ensure the safety of the motoring public.

### **Recommended Reforms**

1. Maintain strong public role in providing transit to maximize access for residents, visitors, and employees. For example, the Ann Arbor Transportation Authority provides a variety of public involvement opportunities including monthly board meetings, listening sessions for service changes, a telephone hotline (website and email) and various meeting venues to solicit and share information.
2. Stabilize funding for transit services to facilitate even more efficiencies and maximum use of the system through longer term planning.
3. Increase public funding for passenger transportation and eliminate the "Win-Lose" funding structure through a mechanism that allows funding support to increase as ridership increases.
4. Develop and adopt policies, programs and funding incentives that support local transportation agencies to increase their role as mobility managers.

From the American Public Transportation Association (May 2008) Mobility Management -- A New Role for Public Transportation: *"Several years ago a series of studies were undertaken through the Transit Cooperative Research Program (TCRP) to identify what services future consumers of local transportation would want. TCRP's New Paradigms project, as it became known, laid out a new vision for transit operators. It identified a need for agencies to move into a broader transportation planning role in their communities — to serve as a single source for coordinating a full range of mobility options and informing customers accordingly.*

*Mobility management involves creating partnerships with transportation providers in a community or region to enhance travel options, and then developing means to effectively communicate those options to the public. With this approach, resources can be coordinated efficiently, customers are able to make better decisions, and the focus is on enhancing customer service. ... From a business perspective, mobility management offers greater efficiency in the use of transportation resources, with potential cost savings and increased service effectiveness — a combination that can be used to reduce bottom line operating costs, or increase services, or both.”*

Mobility management efficiencies can be achieved through the following strategies:

- Foster coordination between transit and human service agencies;
- Implement pay for performance compensation incentive programs;
- Develop incentives to encourage asset management programs and cost containment programs (i.e. purchasing pools);
- Increase the use of ITS technologies to achieve the coordination of multiple service providers, and to provide customers with real-time information;
- Improve regulatory, traffic management, and land-use policies that support the effective delivery of transit services; and
- Increase the use of smart card technologies that allow customers a seamless fare medium used by several service providers.

## 5. Regionalization

There are advocates for state laws or policies that encourage or require more regional approaches to transportation planning and delivery, including public transportation. Legislation introduced in the past to create a new regional authority in the Detroit Metropolitan area is one example of this. Another area of opportunity would be the promotion of regional coordination with commercial developers to foster high density multi-use development around transit routes (i.e. Transit Oriented Development).

## **Recommended Best Practices**

1. Continue to advance the principles of the Michigan Transportation Plan which calls for:
  - Integrated corridor based approach to planning and operations.

- Leveraging funding by looking for opportunities to improve other modes with each project investment.

## 2. Encourage Innovation

*From Innovation At Transit Systems, October 2005, Center for Urban Transportation Studies, University of Wisconsin – Milwaukee. Prepared for U.S. Department of Transportation. Federal Transit Administration: “In summary, the case studies findings, survey results, and the literature review [conducted for this report] show that the two key elements to bringing about change or an innovation to an agency are having a champion to pursue the innovation and have funding available for the project. ... results also reveal that it takes more than a champion and money to implement an innovation. Agencies should create conditions necessary where champions can emerge and are encouraged. This means a willingness to take risks, a tolerance for failure, an ability to clearly explain the innovation, and ways to measure its success.*

*Transit agencies, state and federal agencies should establish a separate innovation function or set it up within an innovation office. Personnel should be dedicated to finding the various transit innovations occurring throughout the country.... The main goal of the innovation office needs to be gathering and disseminating information for better understanding of innovation implementation. In addition, the innovation office needs to identify potential champions at various transit agencies so they can encourage them and make it easier to overcome resistance to change, help transit officials understand that change requires persistence, seek out funding to cover experimental programs, and create an atmosphere conducive to change.”*

*From the National League of Cities: “NLC encourages the use of innovative technologies and demonstration projects that are specific to the needs and requirements of each city to further enhance mass transit.”*

## 3. Ensure state matching funds for all federal capital allocations and decrease the State’s donor status for public transit funding.

*From the National League of Cities: “To provide a viable alternative to the automobile, public transportation services need to be of quality and frequency if they are to attract a significant number of passengers, and this can only be accomplished with an increased commitment of public funds for essential equipment, staff, and maintenance. Because it is unlikely that public transportation will ever be self-supporting, transit should not be measured exclusively in terms of revenue generated and should continue to be subsidized by a partnership of federal, state and local governments.”*

4. Stabilize and increase federal passenger rail funding and ensure state matching funds.

*From the States for Passenger Rail Coalition: “Many major American cities have no passenger rail service at all. Where service exists, travelers face overcrowded trains, stations, and parking facilities. Trains wait to pull into stations. Switching centers are chokepoints. In many parts of the network, bi-directional lines run on single tracks, and the turn-out sidings are too short to accommodate the long freight trains. Scheduling the mix of faster moving passenger trains and longer, slower freight is problematic. Of Amtrak’s delays in April 2008, 79% were due to host railroad (freight or commuter) delays. These delays are in large part a result of operational bottlenecks that can only be addressed by significant investments in new track and signal infrastructure designed to address both freight and passenger capacity needs. At least 50% of the 76,000 bridges owned by the freight railroads were built before 1920, and catastrophic failures have been occurring on railroad bridges at the rate of two a year. Rusting track and sidings, wooden crossties, antiquated signaling and traffic control systems, and congested switching yards all contribute to costly, inefficient transport of people and goods. A dedicated 80–20 federal–state matching program and 30-year tax credit bonds will enable the states to provide reliable passenger rail service—the most energy- and space-efficient mode of travel for intercity corridors.”*

5. Maximize the use of various information technology tools in the delivery of public transportation services and operations. For example:
  - Implement the use of uniform smart card fare system within metropolitan regions and possibly throughout state;
  - Install the “next buses or next train” technology that provides immediate feedback;
  - Implement the use of geographic information systems (GIS) for planning purposes; and
  - Implement the use of computer assisted dispatching to improve transit services and operation efficiencies.