Michigan Department of Transportation



Project OR14-003 Synthesis of Methods for Procurement and Developing Transit Vehicle Specifications

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| 16. Abstract The Michigan Department of Transportation (MDOT) has the objective to thoroughly assess its transit vehicle specification and procurement program in order to compare best practices from peer states and identify recommendations for improved efficiency. The research conducted during this study includes a review of current MDOT methods and challenges, a summary of corollary processes at a group of peer states, and a comparison of peer state methods to MDOT's needs and challenges. Finally, a series of recommendations for improving MDOT's vehicle specification and procurement processes was developed | | | | | |
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1.0 EXECUTIVE SUMMARY

The Michigan Department of Transportation (MDOT) has the objective to thoroughly assess its transit vehicle specification and procurement program in order to compare best practices from peer states and identify recommendations for improved efficiency. The research conducted during this study includes a review of current MDOT methods and challenges, a summary of corollary processes at a group of peer states, and a comparison of peer state methods to MDOT's needs and challenges. Finally, a series of recommendations for improving MDOT's vehicle specification and procurement processes was developed. Each of the steps above is documented in separate technical memoranda, and summarized here in this final report.

MDOT Vehicle Specification and Procurement Process

The first phase of the study summarized the existing vehicle specification development and procurement processes at MDOT. Like many other state DOTs, MDOT manages the solicitation and selection of vendors to provide transit vehicles under the state procurement contract on behalf of the local transit providers (primarily small urban and rural agencies). Unlike most other states, MDOT provides the full match of federal funding, meaning that local agencies do not have a local funding obligation.

Five state contracts have been issued for various vehicle types. They include:

- minivans with ramp
- full-size mobility/conversion vans
- light-duty small buses
- small buses
- medium buses

MDOT develops specifications for the transit vehicles listed above. Due to the fact that these vehicles are operated by local agencies, MDOT works with an ad-hoc group of transit agency advisors to establish these vehicle specifications. Working with this group, called the Vehicle Equipment Advisory Team (VEAT), MDOT jointly establishes specifications for transit agency vehicles, which are then purchased via contracts released by the State's Department of Technology, Management and Budget (DTMB).

Peer State Review of Vehicle Specification and Procurement Processes

The second phase of the study was to review the "best practices" of peer states to compare them to those of the State of Michigan DOT. The focus was to specifically address the specification development and procurement processes utilized by nine peer states. These states selected to be part of the peer group were: Florida, Indiana, Iowa, Minnesota, North Carolina, Ohio, Pennsylvania, Utah, and Wisconsin.

Interviews were conducted with the participating staff of the respective peer state DOTs. The interviewees were individuals whose duties included oversight of that state's vehicle specification development and procurement process. A comprehensive matrix was then developed to provide a comparison of state DOT vehicle specification and procurement characteristics and processes.

The experiences communicated from these peer state representatives provided valuable insight into how MDOT may be able to improve its current processes, adopting new and improved ways of efficiently working with transit providers and potential vehicle vendors. The results of the study may provide increased

opportunities for public transit system members to obtain competitive pricing contracts, while providing an improved procurement system that benefits both MDOT and the local public transit agencies.

Recommendations for MDOT

The third and final phase of the study synthesized the results of the preceding studies to develop five key recommendations for improving MDOT's current practices. Recommendations were based on the analysis of MDOT's current processes, the specifications and procurement processes of the participating nine peer states and findings and potential recommendations with MDOT staff.

Specific areas of focus for recommendations to MDOT include: contracting and procurement, specification development and inspections, and local agency information and outreach. The set of recommendations are as follows:

- 1. **Extend contract timeframes** to reduce the need to re-generate the specifications-development and procurement processes for each vehicle type every three years.
- 2. **Shorten vehicle delivery timeframes** to match those of peer states, where vehicle delivery times written into the procurement contracts are generally more compressed.
- 3. **Collaborate with third parties (universities and consultants)** to get additional support for aspects of the procurement process.
- 4. **Gather additional direct feedback from local agencies** regarding the effectiveness of the state's vehicle procurement program and any issues they are experiencing.
- 5. **Improve online and print communications** for explaining the processes and benefits of the stateadministered program.

2.0 MDOT VEHICLE SPECIFICATION AND PROCUREMENT PROCESS

Specification Development and Establishment of Vehicle Contracts

MDOT's Office of Passenger Transportation (OPT) develops vehicle specifications for use in state procurement contracts for buses and vans. Local transit agencies develop vehicle specifications when procuring vehicles locally.

In preparing vehicle specifications, the OPT convenes the Vehicle Equipment and Advisory Team (VEAT) to assist during Step 1 of the process (see Figure 2-1 below). The VEAT is comprised of OPT staff as well as transit agency managers and mechanics who are interested in participating. The VEAT provides input for the specifications for small buses, medium buses, and accessible/modified vans, using the previous specifications as the basis. Incorporating the VEAT's input, OPT drafts the vehicle specifications. Once the specifications are drafted, vendors have the opportunity to comment on them through a Request for Information (RFI) that is posted on the Buy4Michigan online system before the bids are solicited.

After the specifications are finalized (approximately a five month process from start to finish), bids are solicited through Buy4Michigan (Step 2). Vendors are evaluated and selected based on best value: a technical review of the proposal and costs. All vendors that meet the bid requirements will be awarded a contract; however MDOT will only reimburse transit agencies up to the cost of the lowest bidder (awarding to all vendor and funding could change based on the contract). The evaluation and selection process lasts approximately one month (Step 3). Approximately four months after the contract is awarded, a pilot inspection of the vehicle takes place, a process that involves OPT staff as well as a representative from a "pilot" transit agency that volunteers to receive the first vehicles delivered under the contract (Step 4). The inspection is usually performed at the factory and lasts one week. Following the inspection and approximately 6 months after the contract is awarded, transit agencies place orders for vehicles through the MiDEAL extended purchasing system contingent upon the necessary procurement steps being completed (Step 5). The entire process takes about a year to complete. Figure 2-1 outlines the general process and timeline described above.

Contract terms for each vehicle type are typically two years with the option for a one-year extension, meaning that specifications for each vehicle type are developed every three years. Table A-1 in Appendix A lists the contracts and specifications according to vehicle type as well as upcoming contract and specification revisions.



Figure 2-1: Specifications Development Process and Timeline

Overview of the Procurement Process

Transit agencies in Michigan have the choice to either purchase vehicles using the contract that results from the state procurement process, or procure them locally (both of these processes are explained and diagramed below). The state-led process is intended to make the process more efficient and cost-effective for local transit agencies by developing transit vehicle specifications for the entire state and completing the bidding and vendor selection process. By negotiating a price with vendors based on bulk purchasing, transit agencies save money. The other option is for transit agencies to procure vehicles locally. By procuring vehicles through the local process, transit agencies have more flexibility in developing the vehicle specifications according to their needs, but the process may take longer and does not provide economies of scale. Nearly all procurements occur through the state-led process.

Whether a transit agency is procuring vehicles through the state-led or local process, it must indicate its intent to purchase vehicles during its annual application submitted in early spring. This request is reviewed by OPT and is subject to funding availability from the annual Federal Transit Administration (FTA) and state allocations. Due to the federal and state budget timeframes, it takes approximately 18 months from when the agency submits its annual application to when the transit agency receives its authorization to proceed and the funding amount for vehicle procurement. Typically, this authorization occurs in August or September (prior to the beginning of the state's fiscal year on October 1).

State-Led Procurement

In the state-led procurement process, local transit agencies purchase transit vehicles off of the state contracts developed by the OPT. The purchases are facilitated through the MiDEAL extended purchasing system. Figure 2-2 describes the stateled procurement process graphically while Table A-2 in Appendix A describes each of the five main steps. This information is based off of the "Guidelines for MiDEAL Purchasing Program" published June 2011. When a state contract is in place, the process takes approximately eight months to complete, from when the agency receives MDOT authorization for proceeding with vehicle procurement to the final delivery of vehicles.



Local Procurement

MDOT published "Guidelines for Local Vehicle Purchase on State Administered Grants: Checklist for Purchase" in July 2013. These guidelines inform agencies of the procurement process and necessary documents that accompany each of the six main steps. Figure 2-3 shows the process graphically. Table A-3 in Appendix A describes each step and the accompanying documents. The process is generally uniform for all transit agencies with the exception that self-certified agencies do not have to go through an MDOT review of their bid/solicitation packages. The process takes approximately 16 months to complete, from when the agency receives MDOT authorization for proceeding with vehicle procurement to the final delivery of vehicles.



3.0 PEER STATE REVIEW

Based on findings from analyzing MDOT's vehicle specification and procurement process, a peer state review was conducted to determine ways MDOT can improve its processes. Through consultation with MDOT staff, criteria categories were developed to assess creative approaches participating states utilize as a way to provide a comprehensive and comparative look at vehicle specification development and procurement processes (see Table 3-1 for a peer comparison matrix and Table B-1 in Appendix B). Questions were designed to provide a baseline of feedback that synthesizes answers with respect to how each specification and procurement process are addressed in Section 4.0 Recommendations.

Each state DOT is unique in their respective approach. The objective was to collect relevant data and identify both commonality and process development that MDOT may want to consider. This articulates the data gathering process and the answers received from state DOT contacts. It is important to note that just because a program works well for a state DOT, not every initiative would be a "best fit" for MDOT or other DOTs.





Overview of Findings

Specification Development and Procurement Responsibility

As noted, each state DOT is unique in its respective approach to the specification process. Some state DOTs, such as Florida, currently rely on a designated technical committee and utilize input from both transit operators and vendors to develop specifications for vehicles. Iowa also convened a committee of transit managers to provide input into their process. Minnesota relies on written communication to track necessary information from their ADA Accessibility Advisory Committee. North Carolina reaches out to transit agency staff members, private consultants and the Institute for Transportation Research (ITRE) staff at NC State University to gather feedback. Pennsylvania involves the Pennsylvania Public Transportation Association (PPTA). Utah uses an in-house Public Transit Team (PTT) to develop transit specifications for public transit vehicles. Likewise, the Wisconsin DOT develops their specification in-house.

Specification Development and Procurement Process Timeline

Participating state DOTs are also unique in their approach to the procurement process. Each state has a varied amount of renewable options to extend the vehicle purchases. The number of available staff to oversee this process often makes a difference in the timeline.

Vehicle Types

Though most of the urban transit providers conduct their own vehicle procurements, all of the state DOTs contacted assist the rural and small urban public transit providers with purchasing vehicles. There are many types of body-on-chassis/cutaway type vehicles that are the mainstay of this process. There are varied types of seating configurations, lift placements, fuel sources and many other options that are included in the specifications. Each state DOT was careful to develop generic specifications that can be bid on by multiple vendors.

State Financial Investments

Each state DOT funds public transit differently. Regarding the state and local match for the vehicle procurement process, Michigan has the most attractive alternative in the amount of local dollars needed to purchase transit vehicles.

Pilot Inspections

Each state DOT handles vehicle inspections for their pilot bus in varying ways. When pilot inspections are conducted, it is usually the respective state DOT staff that provides the "handson" inspection of the rolling stock. The Florida DOT has an independent committee that provides their pilot program inspections.

Consultant/University Involvement

Of the peers, only Florida and North Carolina currently work with universities. The Florida DOT vehicle specifications and procurement program is a collaborative effort involving the University of South Florida's Center for Urban Transportation Research. North Carolina currently utilizes the Institute for Transportation Research (ITRE) as a resource for the procurement of on-board cameras. Ohio DOT has used consultants on an as-needed basis to develop specifications or to conduct vehicle inspections.







Indiana





Iowa







North Carolina







Pennsylvania



Utah



Wisconsin

Table 3-1: Peer Comparison Matrix

| Criteria | Michigan | Florida | Indiana | lowa | Minnesota |
|---|--|--|--|---|---|
| RESPONSIBLE ENTITY | SPECIFICATION MDOT OPT PROCUREMENT - DTMB | SPECIFICATION TRIPS PROCUREMENT TRIPS | SPECIFICATION INDOT OFT PROCUREMENT INDOA | SPECIFICATION Iowa DOT PROCUREMENT Iowa DOT Purchasing Section | SPECIFICATION MnDOT OFT PROCUREMENT Office of Administration and Office of Transit |
| PROCURED ANNUALLY (EST.) | 60 - 100 | 200 | 70 – 90 | 40 - 60 | 30 - 100 |
| FUNDING ALLOCATION | 80% Federal 20% State | 80% Federal 10% State 10% Local | 80% Federal 20% Local | 85% Federal 15% Local | 80% Federal 20% Local |
| THIRD-PARTY INVOVLEMENT | None | University of S. Florida (CUTR) | None | None | None |
| SPECIFICATIONS I | DEVELOPMENT | ¹ Estimated time | from initiating specifica | itions development to f | finalization. |
| FREQUENCY* | 3 years | 5 years | 2 - 4 years | 2 – 3 years | 1 year |
| LENGTH OF PROCESS ^{1*} | 5 months | 1 - 5 months | Up to 12 months | < 1 month | < 1 month |
| PILOT INSPECTIONS | Pilot inspections by OPT and transit agency | Pilot inspections by TRIPS | None | Pilot inspections by local agencies | Pilot inspections by local agencies |
| PROCUREMENT P | ROCESS ² Estima | ated time from posting | the bids to finalizing a | contract (does not incl | ude vehicle delivery). |
| LENGTH OF SELECTION PROCESS ^{2*} | 2 months | 6 – 8 months | 6 – 9 months | 2 – 3 months | Up to 4 months |
| VEHICLE DELIVERY* | 7 months | 5 months | 3 - 6 months | 8 - 12 months | 3 - 6 months |
| SELECTION METHOD | Technical Review + Price | Technical Review + Price | Technical Review + Price | Technical Review + Price | Technical Review |
| NUMBER OF VENDORS | All vendors with responsive and responsible bid | > 1 vendor per vehicle type | 1 vendor per vehicle type | 5 vendors per vehicle type | All vendors with responsive and responsible bid |
| LENGTH OF CONTRACT | 2 years + 1 year renewable option | 1 year + 4 one- year renewable options | 2 years | 2 years + 1 year renewable option | 1 year |

Table 3-2: Peer Comparison Matrix (cont'd.)

| Criteria | N. Carolina | Ohio | Pennsylvania | Utah | Wisconsin |
|---|--|---|--|---|--|
| RESPONSIBLE ENTITY | SPECIFICATION NCDOT PTD PROCUREMENT NCDOA Division of Purchase and Contract | SPECIFICATION ODOT OFT PROCUREMENT ODOT Office of Contracts | SPECIFICATION PennDOT BPT PROCUREMENT DGS | SPECIFICATION UDOT PTT PROCUREMENT UDOT Procurement Services | SPECIFICATION WisDOT Transit Section PROCUREMENT WisDOT Purchasing Section |
| PROCURED ANNUALLY (EST.) | 150 - 175 | 50 | 200 | 8 - 10 | 60 |
| FUNDING ALLOCATION | 80% Federal 20% Local | 80% Federal 20% Local | 80% Federal 16.6% State 3.3% Local | 80% Federal 20% Local | 80% Federal 20% Local |
| THIRD-PARTY INVOVLEMENT | Institute for Transportation Research and Education | Third-party contractor for vehicle inspections | None | None | None |
| SPECIFICATIONS | S DEVELOPMENT | ¹ Estimated tim | e from initiating specifi | cations development to | finalization. |
| FREQUENCY* | 2 – 3 years | 2 years | 3 years | 3 years | 1 year |
| LENGTH OF PROCESS ^{1*} | 1 - 2 months | 1 - 3 months | 1 - 2 months | 6 months | 3 - 4 months |
| PILOT INSPECTIONS | Pilot inspections by PTD | None | Pilot inspections by BPT for each purchase order | None None | |
| PROCUREMENT | PROCESS ² Estir | mated time from postir | ng the bids to finalizing | a contract (does not inc | lude vehicle delivery). |
| LENGTH OF SELECTION PROCESS ^{2*} | 3 months | 3 months | 5 – 6 months | 1 – 2 months 4 – 5 mor | |
| VEHICLE DELIVERY* | 3 - 4 months | 6 months | 5 months | 4 months 4 - 6 mo | |
| SELECTION METHOD | Technical Review + Price | Price | Price | Technical Review + Price Price | |
| NUMBER OF VENDORS | > 1 vendor per vehicle type | 1 vendor per vehicle type | 1 vendor per vehicle type | > 1 vendor per vehicle type 1 vendor pr vehicle type | |
| LENGTH OF CONTRACT | 3 years + 2 one- year renewable options | 2 years | 1 year + 4 one- year renewable options | 5 years | 1 year + 1 year renewable option |

4.0 RECOMMENDATIONS FOR MDOT

A series of five recommendations were developed based on the data and analysis collected throughout the MDOT and peer state vehicle specification and procurement process studies, as described in Section 2.0 and Section 3.0 above. Recommendations focus on contracting and procurement, specifications development and inspections, and local agency information and outreach. These are described in further detail below and include background information, additional considerations, and implementation strategies. Appendix C provides a matrix of the recommendations considered for MDOT.

Extend Contract Timeframes

Recommendation

MDOT may want to consider lengthening the duration of its contracts with vehicle vendors. The lengthening of the current contract period from two years with a one-year renewable option (3 years total) to three years with two one-year renewable options (5 years total) could result in administrative savings and provide a potential reduction in unit cost for vehicles.

Background

The vehicle specification and procurement processes of nine peer states were compared to those of MDOT and are described in more detail throughout Section 3.0. The peer states vary in terms of their respective contract length and renewable options. The total duration of vehicle contracts ranged from one year to five years and the average length was 3.3 years, which compares to MDOT's total length of three years. In review of the nine peer states, five states have renewable options written into their respective contracts.

Considerations

There are several considerations in determining whether extending contract timeframes would be beneficial to MDOT. Vehicle manufacturers must account for the increase in the cost of materials and labor throughout the duration of the contract, thus an escalation percentage is usually assigned to the bid amount. The result of this increase would be greater over a longer contract and would therefore be factored into the cost per vehicle, effectively raising the price. However, a longer contract timeframe would likely involve a larger number of vehicles and therefore a savings due to an economy of scale. Manufacturers will often offer a lower price per vehicle when the volumes are higher. This discount would be greater in comparison to the increase due to materials and labor over the contract timeframe. This could translate into significant savings for MDOT, which currently funds 20 percent of the vehicle purchase. In addition to the cost savings, MDOT would not have to revise vehicle specifications as often, saving both staff resources and time.

Implementation

Implementing longer vehicle contracts would be an internal OPT decision made in consultation with the Department of Technology, Management, and Budget (DTMB), which assists with vehicle contracts. Longer contract timeframes would be extended when specifications and bids are revised for each specific vehicle type. Currently, the specifications for modified minivans are being revised and expected to be finalized in May 2014. The contract timeframe is expected to follow this recommendation (3 years with 2 one-year renewable options). Following the modified minivans, the next contract to be renewed will be for the medium buses.

Shorten Vehicle Delivery Timeframes

Recommendation

MDOT may consider reducing the timeframe for vehicle delivery stipulated in vehicle contracts from the current 210 days (7 months) to 150 days (5 months).

Background

The vehicle delivery timeframes of the nine peer states were compared to MDOT's timeframe of 210 days (7 months). The timeframes ranged from 90 days (3 months) to 360 days (12 months). The average was 5.3 months or about 160 days. Delivery timeframes depend on several factors that include the vehicle chassis availability, manufacturer's workload and level of customization or add-ons to the vehicle. The key factor that determines delivery timeframe is the availability of chassis. When chassis are available vehicle delivery timeframes can be much shorter, and for some peer states, the timeframe can be as short as 90 days. Reducing delivery timeframes assist transit agencies in obtaining the rolling stock more quickly that they need in order to provide transit service. Delivery timeframes would be reduced by stipulating shorter timeframes in vehicle contracts.





Considerations

In determining whether or not to shorten delivery timeframes, cost must be considered. Vendors may charge more in order to guarantee a faster vehicle delivery. This charge may be reasonable considering the benefit to transit agencies and riders around the state. The respective vendor may also increase the per-unit cost to cover the late delivery fee that MDOT currently has in place in order to cover any unanticipated delay.

Implementation

Shortening vehicle delivery timeframes would be an internal OPT decision that could be implemented when specifications and bids are revised for each specific vehicle type. The contract language could stipulate that delivery must occur within 150 days of chassis availability to ensure acceptability to the vendors. The next opportunity for implementing shorter vehicle delivery timeframes would be for the modified minivans, whose specifications are currently under revision and expected to be finalized in May 2014. Transit agencies could be surveyed about this change, and favorable feedback would be expected since agencies would receive a quicker delivery of the vehicles.

Collaborate with Universities and Consultants

Recommendation

MDOT may look to establish partnerships with universities or consultants to assist with aspects of the vehicle -procurement process, such as development of vehicle specifications or conducting inspections (during pilot builds or upon vehicle delivery).

Background

MDOT staff oversees the development of specifications, the selection of vendors, and the delivery of vehicles based on the vendor contracts. In some cases, these efforts are supplemented by voluntary involvement from representatives of local agencies in the state. Throughout this process, there are points where additional staff resources or technical expertise could potentially be useful to MDOT or help the process occur more efficiently. According to MDOT staff input, this is particularly true of the lengthy inspections processes that occur when vendors are developing initial versions ("pilot builds") of the transit vehicles specified in the state contract. Currently transit agency representatives from around the state assist with these inspections, but they still require substantial OPT staff involvement.

Other states have contracted or entered partnerships with third parties to assist in the vehicle specifications development and procurement processes. These third parties generally have included in-state university research centers, although some states (e.g., Ohio) contract with a private consultant to perform tasks such as vehicle inspections. The State of Florida has the most comprehensive partnership of any of the peer states researched for this study, as they work directly with the Center for Urban Transportation Research (CUTR) at the University of South Florida to collaboratively hire staff that develop vehicle specifications and inspect every vehicle ordered through the state prior to its delivery to the local agency.

Considerations

Partnerships with local in-state universities are dependent on those universities having programs and academic research interests that allow them to provide valuable technical resources. Within the State of Michigan, there is not a research institute that is specifically focused on transit and transit vehicles as exists in some other states. Partnership with in-state institutions may then require significant effort from both MDOT and the university to develop the resources needed to benefit both organizations. On the other hand, consultants could provide valuable technical assistance in a variety of roles, but would require clear definition of their role and the services would come at a cost to the agency.

Implementation

To further explore whether it would make sense to develop partnerships with third parties to assist in aspects of the vehicle procurement program, MDOT should identify the areas where assistance could be provided, document the existing resources (staff time, expenses) devoted to those functions, and identify any issues associated with their execution. For example, if MDOT were to consider partnerships related to conducting "pilot build" inspections, the annual amount of time spent conducting those functions should be quantified. If this ends up totaling weeks of effort (rather than months), then it is likely that contracting with a private consultant may be a more realistic option to consider for those services. Developing a task-order contract with a consultant would allow MDOT the flexibility to bring in those services on an as-needed basis, but would require additional cost. This cost could be based on the costs in the vehicle procurement contracts, as the vendors typically incorporate the cost of pilot-build inspections.

Gather Additional Direct Feedback from Local Agencies

Recommendation

MDOT could proactively gather additional information from local agencies, the ultimate end users of the vehicle procurement program, about the procurement and specifications development processes in an effort to continually monitor the effectiveness (and benefits) of the program. **Background**

MDOT currently offers agencies a chance to volunteer to participate in the Vehicle Equipment Advisory Team (VEAT), a group that meets on a recurring basis at the beginning of each new contract cycle when changes to specifications are being considered. This group gathers in person, generally at an MDOT facility in the Lansing area, to offer input on changes needed to the specifications for that particular vehicle type. The VEAT has successfully integrated the input of local agency volunteers during past procurement cycles, but only attracts a modest proportion of the overall set of local agencies in the state. In addition, the VEAT is primarily established to guide the specifications development process for a particular vehicle type, as input is not solicited regarding the vehicle procurement program as a whole.

Other state DOTs have more proactively sought the input and feedback of local agencies via online survey tools (e.g., Utah) or direct meetings/listening sessions hosted at multiple locations throughout the state (e.g., Ohio). These types of approaches could potentially allow MDOT to gain a better understanding of how the vehicle procurement process is working for local agencies, and perhaps even provide some testimonials regarding the value of the program for local transportation needs.

Considerations

While it is important for MDOT to take a "customer-oriented" approach to delivering services, it is also the case that the agency is constrained in its ability to make changes to many important aspects of the vehicle procurement program (such as the State level of funding or FTA regulations regarding procurement). Direct outreach and input-gathering should also include an educational component that ensures that local agencies understand the full context of the program and limitations that MDOT has in administering it.

Implementation

MDOT could consider a variety of potential approaches for gathering additional feedback from local agencies:

- Low-cost online survey tools such as SurveyMonkey could be utilized to distribute quick surveys to local agencies statewide
- Industry events such as the annual MPTA Conference could be utilized as an opportunity to gather direct feedback from wide array of local agencies that are already in the same place.

The subject(s) of the types of efforts described above is another key element of the implementation considerations. MDOT may want to periodically gauge "customer satisfaction" with the program and probe for areas where satisfaction levels could be improved. Alternately, there may be topical areas that would not be recurring but could feed directly into the agencies' strategic planning for the year (e.g., sufficiency of the types of vehicles offered under state-administered program).

Improve Online and Print Communications

Recommendation

MDOT may consider improving online and print communications to work more effectively with local transit agencies and promote the Office of Passenger Transportation's role in public transportation. This would involve improving the website and developing a Vehicle Procurement Operations Manual.

Background

All of the peer states surveyed have websites that serve as the central location for disseminating information about the vehicle specification and procurement processes. These websites vary widely in terms of their design and content. There are elements from these sites that MDOT may consider incorporating to improve its own website. Table 4-1 below compares these elements across the nine peer states and MDOT.

| ELEMENT | МІ | FL | IN | IA | MN | NC | ОН | PA | UT | WI |
|--------------------------------------|--------------|----|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| DESIGN | | | | | | | | | | |
| Part of State DOT website | \checkmark | X | \checkmark |
| Social media integration | ✓ | x | ✓ | ✓ | x | x | ✓ | x | ✓ | X |
| CONTENT | | | | | | | | | | |
| Specifications process | ✓ | x | ✓ | x | x | x | ✓ | x | × | x |
| Procurement process | ✓ | X | ✓ | ✓ | ✓ | X | ✓ | ✓ | ✓ | ✓ |
| Current specifications and contracts | ~ | ✓ | ✓ | × | × | × | ✓ | × | × | ~ |
| FAQs | X | X | X | X | X | X | X | X | X | X |

Michigan – http://www.michigan.gov/mdot/0,4616,7-151-9625_21607---,00.html Florida – http://www.tripsflorida.org/

Indiana – http://www.in.gov/indot/2436.htm

lowa - http://www.iowadot.gov/transit/

Minnesota – http://www.dot.state.mn.us/transit/

North Carolina - http://www.ncdot.gov/nctransit/

Ohio – http://www.dot.state.oh.us/Divisions/Planning/Transit/ Pennsylvania –

http://www.dot.state.pa.us/Internet/Bureaus/pdBPT.nsf/ Utah -

http://www.udot.utah.gov/main/f?p=100:pg:0:::1:T,V:3198, Wisconsin – http://www.dot.state.wi.us/localgov/transit/

Design

The State of Michigan DOT and all of the peer states' websites are associated with the state DOTs except for Florida's. In the case of Florida the website is separate because the Transit Research Inspection Procurement Services (TRIPS) program is a collaborative effort by the Florida Department of Transportation (FDOT) and the University of South Florida's Center for Urban Transportation Research (CUTR).

Content

MDOT currently provides information about the specifications and procurement processes as well as the current specifications and vehicle contracts on its website whereas many peer states do not. MDOT is already ahead in this regard and could go even further by posting Frequently Asked Questions (FAQs) related to the OPT's role, specifications, and procurement processes. These FAQs may lessen the staff burden in responding to individual questions from around the state. In order for the FAQs to be useful they would need to be updated on a regular basis. MDOT may also improve how it displays the current state vehicle contracts. Summary information about the status of the contract and the timeframe could be displayed in a table so that a visitor would not have to open each contract to determine which ones are active.

In addition to online content, MDOT may consider developing a Vehicle Procurement Operations Manual that would detail the OPT's role in transit vehicle specifications development and vehicle procurement as well as its processes. This manual would be a central document used by transit agencies and those interested in the OPT. This one, succinct document could assist new staff by providing a general overview of the specification and procurement processes. The document would also help communicate OPT's function to other state agencies and the public. Vehicle contracts and other documents that are subject to frequent changes would remain independent. The manual would be posted online for download. The OPT's peer in Florida, TRIPS, has developed a similar manual.

Considerations

These recommendations for improving online and print communications should be considered in terms of the latitude OPT has in implementing them and the effort that would be required. Some of these recommendations may require approval and assistance from other state offices and departments while others could be accomplished by OPT staff.

Posting FAQs and developing a Vehicle Procurement Operations Manual could likely be accomplished by OPT staff or a consultant and require minimal coordination with external offices. This document would need to be updated to reflect any new policies, and distributed to all the public transit agencies.

Implementation

The Vehicle Procurement Operations Manual could be written by OPT staff and/or a consultant. This effort could be initiated at any time. This manual would require staff resources to develop and update it, but it may also save staff time by decreasing requests for information by locating an overview of the OPT and a description of the vehicle procurement processes in a central location. The manual may also benefit the OPT by communicating the office's role and value in the state.

Most of the online communications improvements, which include posting FAQs and enhancing the way vehicle contracts are displayed, could be implemented by OPT staff in cooperation with the website staff. These two improvements would likely require limited staff resources.

As these recommendations are implemented, they should be communicated to transit agencies so that the agencies can stay informed and take advantage of OPT's improvement initiatives.

Appendix A CURRENT MDOT PROCESSES

Table A-1, Table A-2, and Table A-3 are discussed in more detail throughout Section 2.0. Table A-1 lists the contracts and specifications according to vehicle type as well as upcoming contract and specification revisions. Table A-2 describes each of the five main steps for state-led procurement. Table A-3 described each step in the local procurement process and includes links for reference documents.

| VEHICLE TYPE | CURRENT CONTRACT/ SPECIFICATIONS TERM | VENDORS SELECTED | UPCOMING CONTRACT/ SPECIFICATION REVISION |
|--|---|---|--|
| Minivans with ramp | <u>Open</u> 06/01/2011 - 05/31/2014 | <u>Dealer:</u> Mobility Transportation Services <u>Manufacturer:</u> EIDorado National | In development |
| Full-size mobility/conversion vans | <u>Open</u> 06/01/2011 - 05/31/2014 | Dealer: Mobility Transportation Services <u>Manufacturer:</u> Ford Motor Company, Mobility Transportation Services | In development |
| Small Class of Bus | <u>Open</u> 03/26/2014 - 03/25/2017 | <u>Dealers:</u> Hoekstra Transportation Mobility Transportation Services Shepherd Brothers <u>Manufacturers:</u> ElDorado National Champion Bus Coach & Equipment | March 2016 |
| Medium buses | <u>Open</u> 12/07/2012 - 12/06/2014 | Dealer: Hoekstra Transportation <u>Manufacturer:</u> ElDorado National | June 2015 |

Table A-1: Current Vehicle Types and Specifications

Source: MDOT State Vehicle Contracts and Procurement, http://www.michigan.gov/mdot/0,4616,7-151-9625_21607-34189--,00.html

| STEP | TIME | TRANSIT AGENCY ROLE | MDOT ROLE |
|--|--|--|--|
| 1) MDOT Authorization and Procurement Packet | Month 0 (Typically August/ September) | Receives authorization and link to the MiDEAL Purchasing Program Vehicle Procurement Packet from MDOT to proceed with procurement utilizing the state-led process. | Authorizes transit agency to proceed with procurement and specifies the funding amount for vehicle procurement. |
| 2) Vehicles ordered using MiDEAL | Month 1 | Purchases vehicle(s) from the vendor using MiDEAL. Supporting documents: New Vehicle Order Form Vehicle Purchase Specification Certification Form | |
| 3) Final Vehicle Inspection and Delivery | Month 7 | Transit agency, or a contracted third party, performs the final vehicle inspections and acceptance of the vehicles. The agency and vendor decide on the location of the final inspection site, but it must occur in Michigan. Prior to requesting repayment from MDOT, the transit agency must enter the vehicle(s) into the PTMS inventory. | |
| 4) Agency requests payment from MDOT | Month 8 | Transit agency forwards required documentation to MDOT requesting payment. The documentation required differs between agencies that are self- certified and those that are not. For detailed instructions, see <i>Vehicle Payment</i> <i>Checklist.</i> (Rev. 11/15/2013) | Receives documentation and processes transit vehicle repayment to transit agency. |

Table A-2: Descriptions of Steps for State-Led Procurement

| STEP | TIME | TRANSIT AGENCY ROLE | MDOT ROLE |
|---|--|---|---|
| 1) MDOT Authorization | Month 0 (Typically August/ September) | Receives authorization and link to the <i>Guidelines for Local Vehicle Purchase</i> from MDOT. Once authorization is received, self- certified agencies may proceed with procurement in Step 3. Non-certified agencies must follow Steps 2a and 2b. <i>Supporting documents:</i> Urban Transit Agency Checklist (Rev. 07/18/13) A-1 Method of Procurement Decision Matrix (Rev. 07/18/13) | Authorizes transit agency to procure vehicles and gives the agency the fully executed MDOT authorization. |
| 2a) Pre- Bid/Solicitation Review and Approval – Stage A | Month 1 | Transit agencies that are not self-certified must submit pre-bid/solicitation documents to MDOT for review unless they are procuring vehicles on an existing contract. Supporting documents: Local Vehicle Checklist, subsection A (Rev. 07/18/13) | Reviews the pre- bid/solicitation documents of non- certified agencies that are procuring vehicles on a new contract. |
| 2b) Post- Bid/Solicitation Review and Approval – Stage B | Month 5 | Prior to making an award or purchase, agencies that are not self-certified must submit post-bid/solicitation and third party contract documents to MDOT for review. <i>Supporting documents:</i> Local Vehicle Checklist, subsection B (Rev. 07/18/13) | Reviews the post- bid/solicitation documents of non- certified agencies that are procuring vehicles on a new contract. |
| 3) Proceed with Procurement | Month 7 | After bid packages and third party contracts are submitted to MDOT and approved, transit agencies may execute the third party contract. | Approves third party contracts and approval from commission audit. |
| 4) Purchase Order | Month 8 | Transit agency may now submit a purchase order to the vendor. | |
| 5) Pre-Award/Post- Award Audits | Month 15 | Pre-award and post-delivery audits are completed by the local agency, which include Buy America provisions, vehicle inspections and road tests. <i>Supporting documents:</i> Local Vehicle | |

Table A-3: Description of Steps for Local Procurement

| STEP | TIME | TRANSIT AGENCY ROLE | MDOT ROLE |
|---|------|--|--|
| | | Checklist, subsection C (Rev. 07/18/13) Attachments A-2 through A-11 (Rev. 07/18/13) | |
| 6) Documentation Month 16 for Repayment | | Once vehicles have been accepted by the transit agency, the agency submits required documentation to MDOT requesting repayment. Supporting documents: Vehicle Payment Checklist (Rev. 11/15/13) | Receives documentation and processes transit vehicle repayment to transit agency. |

Appendix B PEER STATE CONTACT LIST

Table B-1: Peer Contact List

| State | Contact Name | Contact Phone | Contact Email | Contact Department |
|-------------------|------------------------|------------------|-------------------------------|---|
| Florida | Erin Schepers | 850-414- 4526 | erin.schepers@dot.state.fl.us | Manager, Florida TRIPS |
| Indiana | Brian Jones | 317-232- 1493 | bjones@indot.in.gov | Program Manager, Department of Transportation |
| lowa | Renee Shirley | 515-239- 1578 | renee.shirley@dot.iowa.gov | Director of Purchasing, Iowa DOT |
| Minnesota | Kathy Fuller | 651-366- 4190 | kathy.fuller@state.mn.us | Program Coordinator, MnDOT |
| North Carolina | Banita E. Onyirimba | 919-707- 4691 | beonyirimba@ncdot.gov | Procurement Specialist, NCDOT |
| Ohio | Dave Seech | 614-644- 7362 | Dave.Seech@dot.state.oh.us | Transit Manager, Office of Transit |
| Pennsylvania | Robert Zolyak | 717-787- 1210 | RZOLYAK@pa.gov | Projects Engineer, Bureau of Public Transportation |
| Utah | Tim Boschert | 801-964- 4508 | tboschert@utah.gov | Public Transit Team Leader, UDOT |
| Wisconsin | lan Ritz | 608-267- 6680 | ian.ritz@dot.wi.gov | Transit Section Lead, WisDOT |

Appendix C COMPARATIVE MATRIX OF FINDINGS

| Table C-1: Matrix of Fi | ndings and Recomm | endations |
|-------------------------|-------------------|-----------|
|-------------------------|-------------------|-----------|

| Category | Finding | Pros/Cons | Potential Recommendation |
|---|--|---|--|
| Contracts and Procurement | Many peer states have longer contract timeframes with vehicle vendors (up to five years) | Less MDOT staff time spent on recurring contracting process Less likely to have delays in vehicle delivery due to contracting cycles | Yes – because typical MDOT contract uses option year to stay in effect for three years, formalize into three year agreement with option year(s) added. |
| | Some peer states (PennDOT) bundle all vehicle categories into one combined state contract | Would trigger need to update specifications for all vehicle types concurrently | No – More appropriate for MDOT to keep existing staggered contracting cycles rather than updating all vehicle types at the same time. |
| | Many peer states manage to have shorter timeframes for vehicle delivery (as short as three to four months) | Reduces wait for local agencies in getting vehicles May not be feasible for all vehicle types and options? | Yes – explore reducing contract-stipulated timeframe from current (210 days). Could be addressed during RFI process? |
| | Some states have implemented new software packages ("Black Cat") that has simplified management of procurement statewide | Major effort that would likely be driven by overall statewide needs not just transit vehicles | No – State of Michigan has recently implemented new statewide procurement system, not likely to change again. |
| Specifications Development & Inspections | Some peer states have established partnerships with universities to develop vehicle specifications (FDOT, NCDOT) | • Bring in outside expertise to the process and lessen the burden on MDOT staff | Yes – research contacts and potential options for working with state universities. |
| | Some peer states utilize university partnerships (or outside consultants) to assist with pilot builds and/or vehicle inspections (FDOT, ODOT) | • Bring in outside expertise to the process and lessen the burden on MDOT staff | Yes – research options for contracting with universities or contractors to conduct inspections. |
| Local Agency Information / Outreach Methods | Many peer states (UDOT, ODOT) directly engage local agencies on-line or in person to survey and get feedback on specifications and procurement processes | More direct customer- oriented practices may help uncover ways to improve process May get feedback on (and set expectations for) changes that MDOT has no authority to implement | Maybe – could be undertaken on as-needed basis at a low cost by using on-line survey tools or existing industry events (e.g., MPTA Conference) |
| | Many peer states have more user-friendly website and complementary materials (brochures, manuals, etc.) that facilitate a better understanding of the state-led procurement process. | More user-friendly information would particularly help those new to the MDOT process and communicate agency's utility | Maybe – would not imply or address changes to the specifications development and procurement processes, but may improve usability of the program. Could utilize information from this study to develop graphics. |