

# PERFORMANCE MEASURES FOR MOBILITY MANAGEMENT PROGRAMS

Jon E. Burkhardt and Joohee Yum  
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In order to be able to assess progress in the implementation of mobility management programs, a system of performance measures must be established. We are proposing a series of measures that will enable FTA and APTA to track progress over time.

The measures are divided into two groups: those that express progress at the national level and those that express progress at the local level. (Progress at the state level could be measured using the same metrics proposed for the national level.) The local measures can be used to build a data base for additional state or national level measures.

The development of performance measures needs to be seen as a process that occurs over time. One consequence of this perspective is that initial data collection steps will focus on **program outputs** (such as increased rides, increased service span, higher service quality, and others) with the expectation that these outputs will later be used to measure **program outcomes** (such as improved access, increased mobility, increased customer satisfaction, decreased isolation, and others).

A key issue that needs to be addressed is that of who will collect, record, and distribute the information required to make performance assessments. This issue should be addressed in the near future to ensure that baseline data are in place. APTA, FTA, and other key stakeholders should meet in early 2011 to make these decisions. For the moment, we will refer to the potential lead national agency or organization as the Center for Mobility Management Performance Measurement.

## NATIONAL PERFORMANCE MEASURES

### Proposed Measures

The proposed national performance measures are the following:

- Annual Federal funding spent on mobility management activities.
- The existence of a national strategic plan for augmenting the implementation of mobility management activities. The strategic plan of the Partnership for Mobility Management may have already fulfilled this requirement; this needs to be confirmed.
- The existence of a national Mobility Management Technical Assistance Center that creates technical assistance tools and ensures a support system to assist mobility management networks by providing the following services:
  - Creating and disseminating Useful Practice Materials
  - Recognizing and rewarding good Mobility Practices and Managers
  - Certifying Mobility Managers

- Offering Training for Mobility Managers
  - Creating and disseminating Supporting Materials for Mobility Managers
  - Disseminating Performance Indicators (such as those described in this memorandum) that Track Key Mobility Management Activities.
- The number of States in which State Departments (Transportation or non-DOT departments) are providing funds for mobility management activities.
  - The number of States in which State Departments (Transportation or non-DOT departments) are providing technical assistance for mobility management.
  - The number of urbanized areas where centralized multi-modal transportation Information & Referral call centers are established.
  - The number of non-urbanized areas where centralized multi-modal transportation Information & Referral call centers are established.
  - The number of Transit Systems (APTA members) that employ staff as Mobility Managers. (This factor will need to be concisely defined in order to eliminate any confusion about who is or is not performing the duties of mobility managers.)
  - The percentage of urbanized communities receiving FTA funding where transportation programs have staff involved in mobility management programs.
  - The percentage of non-urbanized communities receiving FTA funding where transportation programs have staff involved in mobility management programs.

## **Data for National Performance Measures**

As mobility management is a relatively new function, there are few established data bases that could populate significant performance measures. FTA is now collecting information that describes the use of their funds for mobility management purposes. The Center for Mobility Management Performance Measurement could easily collect data on the national strategic plan (which now exists in preliminary form) and the activities of the national Mobility Management Technical Assistance Center.

Surveys will need to be conducted to obtain the data needed for assessing the performance measures involving states and localities. For collecting data on the primary national performance measures that are proposed, two kinds of surveys are needed: the first is of state DOTs (or similar state agencies, depending on the state); the second survey is of APTA members. Some of the data for potential secondary performance measures could also involve surveys of FTA regional offices. Some data collected at the local level could be used to create performance measures at the national level.

Table 1 shows the proposed national performance measures and offers commentary on each. Some of the data elements needed are available now, but special surveys will need to be implemented to obtain data on many of the factors of interest. Key issues include who will fund the data collection and who will collect the data.

**Table 1:  
TRACKING NATIONAL MOBILITY MANAGEMENT PERFORMANCE MEASURES**

<i>Performance measure</i>	<i>Source</i>	<i>Comments</i>
Amount of annual Federal funds spent on mobility management	Federal Transit Administration	Should be easy for FTA to track
Updated national strategic plan for implementing MM	FTA or other source	Have to decide who will track this and who will do the updates
A MM TA Center exists and offers services listed on pages 1 and 2 above	Who should do this?	Should be easy to track, but service by service tracking would require more detail
Number of State Departments providing funds for MM activities	Survey of the states	Will FTA fund this effort? Who will collect the data?
Number of State Departments providing TA for MM activities	Survey of the states	Will FTA fund this effort? Who will collect the data?
Number of I & R call centers in urban areas	Survey of urban areas plus FTA data	Will FTA fund this effort? Who will collect the data?
Number of I & R call centers in non-urban areas	Survey of nonurban areas plus FTA data	Will FTA fund this effort? Who will collect the data?
Number of APTA member transit systems that employ mobility managers	APTA will need to survey its transit authority members	Will FTA fund this effort? If not, who else would provide financial support?
% of FTA-funded urban areas where programs employ mobility managers	FTA needs to support a data collection effort	Who will collect the data?
% of FTA-funded non-urban areas where programs employ mobility managers	FTA and the states need to support data collection efforts	Will FTA fund this effort? Who will collect the data?

## LOCAL COMMUNITY TRANSPORTATION PERFORMANCE MEASURES

Multi-faceted performance data are required to evaluate mobility management activities at the community level. Mobility management activities are planned to result in greater efficiency and productivity in delivering transportation services, simplified access to those services, and services offering greater choice, quality, and mobility. To determine if such goals are to be met, we need to develop performance measures that pertain to the internal operations of the lead agency for mobility management in the community and to the overall operations of all transportation activities in the community.

### Performance Measures for the Lead Agency

#### *Measures of Program Inputs and Outputs*

Program inputs and outputs are the first kinds of data to be collected. While a variety of agencies could collect such data, it makes sense to have these data collected **internally** by the lead agency for mobility management because such data can also support other management functions. Information on these factors is routinely collected now, but the results are not now commonly used to measure progress towards mobility management.

To monitor trends over time, several years of data entry points are needed. One can monitor whether the values are increasing or decreasing during the time period. After the monitoring process has been established for some time, explanations of the directions of change would also be needed.

- Number of rides provided
- Number of persons transported
- Number of vehicles operated
- Population of the transportation service area
- Geographic size [square miles] of the transportation service area
- Overall annual agency budget
- Annual mobility management expenses
- Number of paid staff hours per month used for MM
- Number of volunteer hours per month used for MM
- Number of FTEs whose sole responsibility is MM.

#### *Measures of Program Activities*

It is also important to measure the activities of the lead mobility management agency. This includes services offered by the lead agency or organized and supervised by the lead agency and provided by other agencies. The list of mobility management services is expected to change as new activities are added or merged into other functions.

The performance measures to be used would include:

- What transportation services do you provide? List all services. A greater number of services provides greater choice for travelers, but adopting mobility management principles would suggest that not all transportation services should be offered by one provider.
- What transportation services do you offer through contracts with other agencies? List all services. Again, a greater number of services provides greater choice for travelers, and if multiple transportation providers are offering the services and those services are organized or supervised by a lead agency, this suggests that mobility management principles are being followed.

The list of transportation services and activities can be a way of expressing the range of travel options available to potential travelers. This range should include the following:

- Fixed Route Transit
  - FR bus (regular/route/commuter/express; operate/contract)
  - Subscription bus
  - Route Deviation
  - Rail (LRT/HR/Commuter; operate/contract)
- Demand Response
  - General public DR
  - ADA complementary paratransit
  - “Beyond ADA” complementary paratransit
- Other Modal Program Responsibilities
  - Carpool matching
  - Vanpool program
  - Taxi vouchers
  - Other taxi programs
  - Hourly car rental / car sharing
  - Bicycle sharing
  - Medicaid bus passes
  - Highway planning / joint development projects
  - Travel training
  - Volunteer Drivers
  - Coordinated training
  - Coordinated maintenance
  - Coordinated purchasing
  - Traffic signal coordination
  - Emergency road services
  - Emergency medical transportation
  - Traveler/road information
  - Other modal program responsibilities
- Demand Management Programs/Tools
  - Telecommuting
  - Flexible Hours
  - HOV

- HOT
  - TOD
  - Congestion pricing
  - Joint development
  - Parking administration
  - Other demand management tools (which are yet to be determined: real-time information on parking meter availability would be an example of a possible demand management tool to be considered).
- Information services on travel options that are available, including
    - Lists of services
    - Eligibility requirements
    - Costs
  - Trip planning services for individuals and their individual trips, including
    - Walking distances to transit pick-up locations
    - Service times and schedules
    - Travel times
    - Fares and discount opportunities.

## Data for Local Lead Agency Performance Measures

Mobility managers, be they transportation providers or other agencies, need to collect a variety of data to help them keep track of their performance. Internally, each agency should be responsible for reporting data on transportation inputs and outputs, including such factors as expenses and trips. Additional data are generally collected by most transportation providers. Agencies could customize their existing data reporting system (i.e., software) to reflect new performance measures if necessary. This approach may require staff training at the beginning but will save time and resources in the long run.

Table 2 provides a list of simple performance measures that can be used on an agency-by-agency basis. As noted, much of this information is now being collected by transportation providers and other agencies, and could be readily applied to measuring progress towards the objectives of mobility management.

## Performance Measures for the Community as a Whole

Performance measures to be collected **for the community as a whole** are shown below. These measures will help the lead mobility management agency in the community assess their mobility management progress in the context of the broader range of transportation activities being conducted in the community. In order to address these measures, the lead mobility management agency will need to have an up-to-date inventory of all public and specialized transportation activities in the community. This would require contacts with the following kinds of agencies:

**Table 2:  
TRACKING LOCAL COMMUNITY MOBILITY MANAGEMENT PERFORMANCE MEASURES**

<i>Performance measure</i>	<i>Source</i>	<i>Comments</i>
Number of rides provided	Transportation providers, NTD, and other sources	Typical transit system info; should be easy to track from existing data sources
Number of individual persons transported	Transportation providers	Not typically collected by transit operators, but should be relatively easy to track
Number of vehicles operated	NTD and other sources	Should be very easy to track from existing data sources
Geographic size in square miles of the transportation service area	Transportation providers	Typical transit system info; should be easy to track from existing data sources
Overall annual agency budget	Transportation providers	Typical transit system info; should be easy to track from existing data sources
Annual mobility management expenses	Transportation providers	Should be easy to track from existing data sources
Number of paid staff hours per month used for MM	Transportation providers	Should be easy to track from existing data sources
Number of volunteer hours per month used for MM	Transportation providers	Should be possible to track from existing data sources
Number of FTEs whose sole responsibility is MM	Transportation providers	Should be possible to track from existing data sources
List of transportation services provided by the lead agency	Lead transportation provider	Should be possible to track; may need new data collection effort
List of transportation services supervised or organized by the lead agency	Lead mobility management agency	Should be possible to track; may need new data collection effort

- Public transit agencies serving members of the general public.
- Human service agencies serving seniors, persons with disabilities, individuals with low income, Medicaid clients, and any other persons with special travel needs.
- Workforce development agencies serving persons seeking jobs and organizations seeking employees.
- Other agencies, including agencies staffed by volunteers, which provide or purchase transportation services.

The performance measures to be used would include:

- What % of the community's transportation funds do you supervise? (Use a count of vehicles if information on funds is not available.)
- What % of the community's transportation vehicles do you dispatch?
- What % of the local transportation operators participate in mobility management activities?
- What % of the local transportation purchasing agencies participate in mobility management activities?
- What % of the community's transportation funds are currently outside of your scope of activities?

The following measures are less quantitative. The list will change as new activities are developed over time.

- Which agencies that provide or purchase transportation do you work with under signed agreements to provide or promote mobility management? List all agencies.
- Which agencies that provide or purchase transportation do you work with under informal arrangements to provide or promote mobility management? List all agencies
- Which mobility services are provided by others in your service area that are not part of ongoing mobility management activities? List all services.

Performance measures for community-wide mobility management improvements are shown in Table 3.

For the community-wide statistics, all transportation providers and purchasers in a community should report their activities to the lead mobility management agency. At the beginning of mobility management projects, the lead agency can invest staff time to create a simple spreadsheet to track ongoing activities. All progress reports should be updated at designated times and the results should be shared among all participants.

Like all requests for performance reporting, this request may need some salesmanship to succeed. One of the tasks of the lead mobility management agency should be that of convincing transportation providers and purchasers in the community of the value of having an accurate and organized accounting of all transportation services available to local residents. Such information is the foundation of the successful management of each transportation provider or purchaser; such information is also vital to the overall management of community transportation resources in a systematic and efficient manner.

**Table 3:  
AGGREGATE MEASURES OF COMMUNITY MOBILITY MANAGEMENT PERFORMANCE**

<i>Performance measure</i>	<i>Source</i>	<i>Comments</i>
% of the community's transportation funds supervised	Special data collection effort within the locality required; this may take some effort	Need to ensure that all transportation providers and purchasers in the community are tracking all of their transportation expenses
% of the community's transportation vehicles dispatched by the lead agency	Special data collection effort within the locality	Need to ensure that all transportation providers and purchasers are tracking all of their vehicles
% of the local transportation operators participating in mobility management activities	Special data collection effort within the locality	Should be relatively easy to determine
% of the community's transportation funds currently outside the scope of MM activities	Special data collection effort within the locality required; this may take some effort	Depends on the validity and thoroughness of the inventory of local transportation funding
List of agencies formally involved by written agreement in mobility management activities	Special data collection effort within the locality	Should be easy to track from existing data sources
List of agencies informally involved in mobility management activities (no formal agreements involved)	Special data collection effort within the locality	Should be easy to track from existing data sources
List of mobility services provided in the service area that are not part of ongoing mobility management activities	Special data collection effort within the locality	May not be readily available but should be relatively easy to track from existing data sources

## MEASURING PROGRESS TOWARDS EMBRACING MOBILITY MANAGEMENT

Table 4 shows a number of ways to track progress towards embracing mobility management. Many authors have suggested that a “paradigm shift” is needed before organizations can be said to truly embrace the philosophy of mobility management. This will involve changing many long-established business practices, but such changes will help transportation providers adopt the more up-to-date business practices that have been adopted by business leaders in other fields like aviation, freight and package delivery, and European transit providers. The dimensions on which change should be measured include the following:

- Modal options: from operating a single travel mode to satisfying individual trip needs with many possible modes of travel.
- Geography: from serving just one (or parts of just one) jurisdiction to serving the entire community (which may be a metropolitan region).
- Customer and trip focus: from serving one kind of customers or one kind of trip purpose to serving all kinds of customers and trip purposes.
- Financing and assets: from paying for and managing one’s own assets to allocating the costs of the use of shared assets of all transportation providers in the community.
- Management and partnerships: from managing one transportation provider or mode to managing a partnership of all transportation providers in the community.
- Customer access: from requiring that a customer access each transportation provider separately to establishing one centralized service where the customer can call to access any or all transportation providers in the community.
- Management responsibility: from being responsible for only that portion of a trip that is served by one mode to managing a customer’s entire trip from origin to destination using all modes needed to make the O-D connection.
- The overriding goal of operations: from operating an efficient service to providing high-quality services to all customers for all trips.
- Overall mission of employees: from that of serving the transportation organization to that of serving the customers.

Table 4 provides a graphical representation of how each of these factors might be documented for an individual transportation provider or a community. Progress on each factor can be individually tracked over time and an overall assessment developed from the combination of all factors. This presentation can also assist in determining where substantial progress has been made and where additional efforts should be placed.

Table 4:

**MEASURING ACTIVE ENGAGEMENT IN MOBILITY MANAGEMENT**

<i>Factor</i>	<i>Status quo operations</i>	<i>Mobility management operations</i>
<b>Modal options</b>	Operating a single travel mode	Offering multiple trip options and modal choices
<b>Geography</b>	Serving just one political jurisdiction	Serving the entire commuting region
<b>Customers &amp; trip purposes</b>	Serving one kind of customers or on kind of trip purpose	Serving all kinds of trip purposes and customers
<b>Financing &amp; assets</b>	Paying for owned assets	Allocating the costs of using shared assets
<b>Management / Partnerships</b>	Managing one travel mode or provider	Coordinating multiple providers and partnerships
<b>Customer Access</b>	Customers call each provider separately	One call number to multiple providers
<b>Responsibility</b>	The portion of the trip served by one mode	The entire trip from origin to destination
<b>Primary Goal</b>	Service efficiency	Service quality
<b>Primary Mission</b>	Serving the organization	Serving the customer

## **NEXT STEPS**

These initial thoughts on performance measures for mobility management activities need to be reviewed and accepted by FTA and APTA staff and APTA's Mobility Management Committee. After that, a proposed schedule for implementing the performance measures needs to be developed.