



ASSOCIATION OF
METROPOLITAN
PLANNING
ORGANIZATIONS

*AMPO Performance-based Planning and Programming Working Group
Meeting Summary*

Atlanta Regional Commission
229 Peachtree Street, Suite 100
Atlanta, GA 30303
December 12-13, 2018

Attendees

Tameka Macon, Federal Highway Administration
Bill Keyrouze, Association of Metropolitan Planning Organizations
Rachel Roper, Association of Metropolitan Planning Organizations
David D'Onofrio, Atlanta Regional Commission
Kyung-Hwa Kim, Atlanta Regional Commission
Shayna Pollock, Atlanta Regional Commission
Kofi Wakhisi, Atlanta Regional Commission
Todd Lang, Baltimore Metropolitan Council
Michelle Scott, Boston Region Metropolitan Planning Organization
Bob Cook, Charlotte Regional Transportation Planning Organization
Simone Weil, Chicago Metropolitan Agency for Planning
Felix Nwoko, Durham-Chapel Hill-Carrboro Metropolitan Planning Organization
Peter Koepfel, East West Gateway Council of Governments
Jamie Fischer, Georgia Regional Transportation Authority
Parker Martin, Georgia Regional Transportation Authority
Saleem Salameh, KYOVA Interstate Planning Commission
Monique de los Rios-Urban, Maricopa Association of Governments
Nick Lepp, MetroPlan Orlando
Martin Rivarola, Mid-America Regional Council
Natalie Bettger, North Central Texas Council of Governments
Scott Tillman, Regional Planning Commission of Greater Birmingham
Michael Kaczorowski, Regional Planning Commission of Greater Birmingham
Chris Evilia, Waco Metropolitan Planning Organization
Matthew Gaskin, Metropolitan Washington Council of Governments (online)
Andrew Meese, Metropolitan Washington Council of Governments (online)
Dan Blevins, Wilmington Area Planning Council (online)

December 12, 2018:

Welcome and Introduction to Next Round of Association of Metropolitan Planning Organization (AMPO) Performance-based Planning and Programming (PBPP) Working Group Meetings

Bill Keyrouze welcomed everyone to the first of the new round of meetings for the AMPO PBPP Working Group.

Kyung-Hwa Kim welcomed the working group on behalf of the Atlanta Regional Commission.

Bill covered logistics and asked the group to do roundtable introductions.

Introductions and First Impressions of How PBPP is Working in Your Region

Bill asked the group to share their first impressions of how PBPP is working in their regions.

The Maricopa Association of Governments shared that the target setting process helped build strong relationships with their partner agencies especially at the technical level. They found the Federal Highway Administration (FHWA) resources helpful. MAP-21 and the FAST Act helped establish a framework to manage data sources and understand roles and responsibilities for carrying out performance management. Deciding between aspirational and data driven targets was one of the biggest challenges. Data driven targets were ultimately chosen. Data from the National Performance Management Research Data Set (NPMRDS), HERE, and INRIX was used. Using archived data, they built in a cone of uncertainty that created a buffer above and below the future data points citing potential examples of factors such as climate change and the economy. Agency data analytical procedures were supplemented with the CATT Lab's Regional Integrated Transportation Information System (RITIS) tool. This process required some back and forth for quality control and to make refinements and adjustments. No data is perfect.

The next step was incorporating performance management into project selection in order to advance the targets. To do this, they implemented a transparent performance-based tool for project evaluation. Staff, working together with member agencies is able to adjust the weighting of the evaluation criteria based on priorities.

The Mid-America Regional Council shared that they discussed both aspirational and data driven targets, but ended up choosing a middle ground. Communicating the targets and data was identified as a challenge.

MetroPlan Orlando supported the state Federal performance measures targets (safety, travel time reliability, and bridge and pavement conditions). Additionally, MetroPlan Orlando developed nine performance measures matching the goals and objectives of the 2040 metropolitan transportation plan (MTP) to measure the rest of the federal aid system. Their State Department of Transportation (State DOT) will provide the data for measures if MPOs support the state target. They communicate well with their State DOT. Equity was identified as a challenge as they program investments to meet the regional target, but must also consider what is best for each county. Data is also a challenge.

Tameka Macon and Bill shared that the FHWA Office of Transportation Performance Management is interested in identifying metropolitan planning organizations (MPOs) who have set their own targets. A survey on performance management was sent out by the FHWA earlier in the week and will be sent via the AMPO distribution list as well.

Chris Evilia who is the volunteer executive director for the Texas Association of MPOs as well as the Waco MPO shared that target setting was a learning process. He identified communicating the targets—especially the travel time reliability target—to the public and their policy boards as a challenge. He added that it can also be challenging to move the needle in the right direction. He explained that overall coordination with their State DOT went well. For example, their State DOT used State Planning and Research funds to hire the Texas Transportation Institute (TTI) to help with the travel time reliability data. Without this assistance, this performance measure would have been difficult for the small MPOs in Texas. He added that increased coordination for the state targets would be helpful in order to help achieve them.

The Atlanta Regional Commission supported the state targets. They have been discussing performance measures for many decades, but it is still challenging. There is an immense amount of data and a lot of uncertainty and potential technology changes that can affect the future.

The Baltimore Metropolitan Council is a single state MPO, but decided to go with regional targets because the eastern part of their region is significantly different from the western part of the region and Baltimore is much older than other parts of the state. The prescriptiveness of the target setting process was identified as a challenge.

The KYOVA Interstate Planning Commission is a small tri-state MPO. They have three State DOTs, FHWA Division Offices, and Federal Transit Administration (FTA) regions. They received a small Strategic Highway Research Program 2 grant on performance and decision making, which helped them create an action plan that outlines the process for performance measures. They supported the state targets, but requested to be involved in project selection.

The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization would like to adopt MPO targets for now. The potential for aspirational vs. evidence based targets to be confusing to the public was identified as a challenge.

The Charlotte Regional Transportation Planning Organization supported the state targets. They adopted their MTP this year so are looking at how to incorporate more of target setting into the MTP and project selection. They adopted additional targets related to the number of miles of bikeways, sidewalks, and greenways.

The North Central Texas Council of Governments supported the state safety target, but developed their own targets for the others. It took a long time to get some of the data. For the congestion measure, they have staff resources available. State DOTs are traditionally very focused on roads, but MPOs have the ability to go beyond. Correlating projects to progress in meeting performance measures was identified as a challenge.

The Chicago Metropolitan Agency for Planning adopted their MTP in October. They are developing a decision support tool. The variations for the useful life for buses benchmark was identified as a challenge.

The East West Gateway Council of Governments is a bi-state MPO. They mostly set their own targets and are now focusing on resource allocations and outcomes. They commented that a lot of MPOs are struggling with the two- and four-year targets since money is already programmed.

The Boston Region MPO has made good progress, but is working to bring the different pieces of performance management together to allow it to be more cohesive and effective on a systemwide level. They experienced good engagement from both their transit agencies and their policy board.

The Regional Planning Commission of Greater Birmingham has fifty-three municipalities and is one of the largest regions in the state. Their State DOT hired a consultant to assist with performance management. They supported the state targets. The state maintains all major roads. Engaging the policy board and moving the needle in the right direction for the reliability measure was identified as challenges.

The Georgia Regional Transportation Authority works closely with the Atlanta Regional Commission. They identified the transit measure as a challenge.

The Wilmington Area Planning Council identified fitting this into the congestion management process as a challenge.

The Metropolitan Washington Council of Governments coordinates with over a dozen transit agencies. They started early and proactively in getting their partners engaged. This helped provide much of regional data. They developed their own targets, but in some cases, these ended up being similar or identical to the state's.

Chris summarized highlights of what the group shared:

- Most of the agencies here are supporting the state target
- Deciding between a data driven vs. aspirational target is a challenge
- Many found this first round of target setting challenging. However, with this round under their belts, many are hoping to drill deeper into the process next time
- Overall there is room for improvement in the performance management process
- This performance management process can be challenging since many agencies are not owners/operators
- Correlation to investment decisions can be challenging since the timeline for the project delivery process may not align with the timeframe for the targets
- Agencies are looking at facilities beyond what is required
- It may be helpful to look at refining the multimodal and single occupancy vehicle targets. For example, would it be helpful to include multimodal facilities inventories (e.g., sidewalks or bicycle facilities) in target setting?

Bill added that he has been hearing that coordination with partners (e.g., State DOTs) has been challenging. AMPO's good working relationship with AASHTO could be an opportunity to address this.

The working group confirmed that this was a challenge. They explained that the timeline for the measures may have contributed to the difficulties. They also added that coordination/communication with the different offices (e.g., headquarters, districts, and regions) of the United States Department of Transportation (USDOT) can also be challenging.

Bill asked the working group how the performance management process is documented in case of staffing changes.

Monique de los Rios-Urban responded that their information is memorialized on paper through planning agreements.

Todd Lang asked the working group if anyone had gone through a certification review since the performance management process started.

Dan Blevins responded that they were asked about the target setting coordination process and how the measures would be incorporated into their MTP and Transportation Improvement Program (TIP). They

have call out boxes throughout the MTP that highlight the measures as well as a one-page summary of each measure in the appendix.

Michelle Scott responded that they had their certification review in October. At this time, it was transitioning to a risk-based certification process. Their FHWA Division Office was involved in meetings and MPO discussions supporting the target setting process.

Bill then elaborated on the scope of work for this series of PBPP Working Group Meetings. Four white papers will be developed based on the meetings and could highlight case studies, notable practices, challenges, and recommendations. They will be a resource to the MPO community. This is the first of five meetings. Each of the subsequent meetings will focus on one of the USDOT performance measures:

- PM1: Safety
- PM2: Bridge and pavement condition
- PM3: System performance, freight, and CMAQ
- Transit asset management

Saleem Salameh suggested that flow charts be included in the recommendations as they could help streamline the performance management process.

Roundtable Discussion and Identification of Issues on the Four Sets of Performance Measures

Bill led the working group in a roundtable discussion to identify key issues with the four performance measures. He explained that after the roundtable discussion, the working group would break up to discuss each performance measure and the issues in more detail.

The working group identified the following challenges with the safety performance measure:

- Data in general
 - Data quality.
 - It is difficult to know if you are doing an apples to apples comparison.
 - Privacy concerns make it difficult to access data.
 - Additional guidance for first responders for their reporting process especially relating to geocoding crashes and identifying the cause of the accident.
- Data sets and data analysis
 - The vehicle miles traveled data for managed lanes.
 - The data looked at for the safety performance measure only looks at a subset (e.g., fatal or serious injury crashes that include a motorized vehicle) of the entire safety data. In addition, the absence of crashes does not indicate safety—it may just mean people are avoiding certain areas because they are not safe.
 - More data or analysis may be needed regarding distracted driving.
 - Bicyclists and pedestrians are looked at together, but should they be looked at separately? Should exposure data also be looked at? Should facility inventory be included?
- Timelines
 - The different reporting periods and timelines between the performance measures and the data.

- Project development timelines. A project may take a decade to implement so its benefits may not have an impact on the targets for a length of time.
- Revisiting the measures annually
- Challenges specific to small MPOs
- Including the performance measures in the MTP and TIP and showing influence with individual project and through a program of projects.

Kyung-Hwa emphasized that it is important to understand the data.

Jamie Fischer explained that the Atlanta Regional Commission has been careful to communicate that the targets they are setting are based on what they as the MPO can influence. For example, countermeasures that can be incorporated into the design.

Monique shared that they specifically explained that targets were not goals, but what they felt they could reasonably attain with the resources they have available.

Peter asked if it would be helpful to communicate what level of investment was needed to achieve a certain level of progress towards the measures.

The working group identified the following challenges with the bridge and pavement performance measure:

- Are the right things being measured? For example, the project delivery process for bridges is often lengthy, the use of International Roughness Index (IRI) for pavements could drop the condition rating and direct resources towards pavements that are not in need of repair, and are we missing an opportunity to collect data off the Interstate System?
- Does the process incentivize agencies to not do projects in hopes of getting more money by highlighting the need for money for areas in the worst shape?
- Missing data and data accuracy especially off of the National Highway System (NHS).
- Challenges specific to multistate MPOs.
- Looking holistically vs. piecemeal at the performance management process in general
- Communicating the information related to the performance measure

Kyung-Hwa shared that they have developed a more comprehensive tool that looks at their top needs.

Scott Tilman shared that they have an evaluation tool as well.

Peter explained that they are setting different targets for each of their states.

Saleem shared that they are supporting the targets for each of their three states.

Simone Weil added that CMAP offered to collect the non-NHS data through a grant from their State DOT.

Monique explained that they were considering using a level of influence metric to help guide investment decisions. It would show how the same amount of funds invested in a big city would have a different level of impact in a smaller city.

The working group identified the following challenges with the system performance, freight, and CMAQ performance measure:

- Data

- Accuracy of the data sample and therefore concerns with using the data to guide investment decisions
- The need to calibrate the data related to traffic message channels (TMCs). One agency explained that they had to manually clean them up and send the corrections to RITIS.
- Clarification on how managed lanes are being handled. If the lanes are cantilevered over each other, it may be necessary to get the data from the operators of the managed lanes since probes cannot distinguish vertical difference
- The need for regionwide comparative data.
- Are the right things being measured?

Kyung-Hwa explained that they did an analysis a long time ago using HERE data. However, now that INRIX is doing the NPMRDS, it is done already. They have also purchased INRIX Analytics. She added that it would be helpful to know what people have access to and their experiences if they have also purchased INRIX Analytics.

Michelle shared that Boston MPO staff have worked with data from the NPMRDS RITIS websites. Some sections of the site were grayed out to show areas they cannot access (Massachusetts is not currently part of the pooled fund study).

Chris shared that TTI conducted an analysis and helped create a standardized process for the MPOs in Texas.

Since many of these reports are provided to Congress, Bill asked the group to also think about issues or benefits that would help convey the criticalness of programs such as CMAQ.

The working group identified the following challenges with the transit asset management performance measure:

- Are the right things being measured?
- Challenges specific to small agencies.
- Challenges related to not being the direct recipient.
- How does adding additional useful life to buses fit in with this process?
- Collaboration with partners
 - More interaction with the FTA would be helpful
 - Planning agreements between MPOs and transit agencies
 - Clarification on roles and responsibilities
- How is the transit asset management performance measure being linked to the other regional performance measures?
- How performance management is evaluated in the triennial FTA review or FHWA certification review

Shayna Pollock shared that they have developed a tool and are in the process of refining it. She explained that the process helped them become invested in their transit agency's data. She commented that it would be helpful to know if any agencies are looking at regional data outside excel—for example in an enterprise system.

Todd, who sits on one of APTA's committees, shared that FTA is trying to refine the National Transit Database to help provide the data in an easier format than how it is shared and compiled currently.

Chris shared that the target setting process was helpful in educating their stakeholders about what an MPO is.

Todd asked if a specific MPO data sharing agreement is needed with the Tier 1 or Tier 2 plans.

Working Groups on Performance Measures Define Scope of Future Meetings

Bill asked the working group to break up into four groups. The groups each discussed one of the four measures in more detail in order to shape the scope and agenda of the future working group meetings.

Working Groups Report Out on Initial Scope

Bill asked the four breakout groups to provide a summary of the key points of their discussion.

The transit performance measure breakout group summarized their discussion which highlighted the following challenges and areas in need of discussion. They suggested that the transit asset management performance measure be discussed at the last meeting to allow time for the safety performance measure to be implemented.

- Data and analysis
 - Vehicles data
 - National Transit Database/spreadsheets
 - Different by transit agency
 - Is the data correct?
 - No historical trends
 - Is the data comparable within as well as across regions?
 - Transit agencies and MPOs are still learning
 - Currently requires consultant assistance—will this be for long term?
 - Consistent and reliable moving forward?
 - Rushed process this time. Most agencies did not have time to look at different investment scenarios
 - TERM-Lite software can be challenging to use.
- Terminology
 - Definition of useful life is used differently among transit agencies, the transit asset management rule, and asset life/replacement determinations and may not paint accurate picture of vehicle conditions
 - Facility—policies for how vehicles are assessed are changing. How can these be reconciled with investment results for prior years?
- Coordination with partners
 - Partners still do not know each other that well
 - MPOs do not have staff that are transit experts
 - Roles and responsibilities between MPO and transit agency
 - Data sharing difficulties
 - FTA is organized regionally so there is not an office or staff dedicated to each state
 - Challenges for multistate MPOs
 - Triennial reviews for transit agencies and certification reviews for MPOs
 - New relationships? e.g. private sector

- Target setting can be siloed
- Target setting
 - Roles and responsibilities between MPO and transit agency
 - Investment decisions to achieve targets in general and especially for FTA funding categories, which are large and complex
 - Title VI, EJ, and equity.
 - Timeframe: targets are short term while planning and programming are mid- to long-term. For example, it can take two years to get a new bus
 - Timeframe: target setting schedule (180 days) is too short
 - How to tie to MTP goals and objectives
 - Investments: goes beyond federal funding
 - Difficulty for small agencies whose staff must primarily focus on operations instead of planning and programming
 - How is new mobility incorporated?
 - One size does not fit all

The safety performance measure breakout group summarized their discussion which highlighted the following challenges and areas in need of discussion.

- Data and analysis
 - Consistent, reliable, and timely data
 - Additional research on the causes of crashes
 - New technology/modes of transportation
- Target setting
 - Difficult to know the level of investment required to meet targets
 - Communication of targets especially for Vision Zero or aspirational targets or if targets are not met.
 - Analysis of targets
 - Timeframe
 - Role of technology to help achieve targets
 - Factors that MPOs have less influence over through engineering solutions and would require partnerships to change policy (e.g., distracted driving and motorcycle helmet laws)
 - Funding can only be used on certain roads

The pavement and bridge performance measure breakout group summarized their discussion which highlighted the following challenges and areas in need of discussion.

- Pavement
 - Data and analysis
 - Data is based on IRI, which indicates the condition of the roadway surface.
 - Missing data is defined as poor
 - Data collection especially consistency in terms of the sampling process
 - Historical data is limited
 - Data and maintenance for the non-Interstate NHS
 - Target setting
 - Scope is limited to the NHS

- Consistency of metrics for the non-Interstate NHS
 - Pavements on the border of between condition levels
 - Ability to share
- Bridge
 - Data and analysis
 - Should the sufficiency rating be used since it determines eligibility for funding for rehabilitation or replacement
 - Methodology confusing when including bridge deck
 - Forecasting the rate of deterioration
 - Ensuring the process is replicable
 - Target setting
 - Should this performance measure be expanded to other assets—especially those related to technology (e.g., traffic signals and Intelligent Transportation Systems)?

The system performance, freight, and CMAQ performance measure breakout group summarized their discussion which highlighted the following challenges and areas in need of discussion. They organized their report out according to a potential outline of a white paper the working group could develop. They suggested that the working group conduct a survey on needs, challenges, gaps, and lessons learned prior to holding the working group meeting on this measure.

- Data
 - What data is needed? Is it accessible/acquirable? Is it modeled vs. observed?
 - Previous data and analysis (e.g., linear referencing and probe travel time) were expensive and time consuming. Many MPOs still find it challenging to find staff or devote staff time to analysis.
 - Software
 - Wish list items:
 - The FHWA provide data for roadways beyond the NHS
 - Training on data analysis be provided along with an MPO primer that includes an overview guidebook and definitions. Be sure to address issues specific to small MPOs.
- Target setting
 - What is it? Are they appropriate?
 - Should all MPOs be measuring the same things? (e.g., one size might not fit all—should there be differences for large and small MPOs?)
 - Should other measures be considered? (e.g., incident clearing time or incident management for nonrecurring congestion since it is a significant measure of performance)
 - Are the timeframes appropriate?
 - Resolve inconsistencies with the data analytics from the NPMRDS
 - One size does not fit all.
- Communications
 - Communicating the measure to stakeholders, partners, the policy board, ad technical committee
 - Wish list item:

- As part of the MPO primer, include a section on communication

December 13, 2018:

Recap of the Previous Day

Bill provided a recap of the previous day's discussions.

Working Group Refines Scope of Future Meetings Based Upon Feedback

Bill led the group in a discussion to further refine the scope of future meetings as well as determine the structure of the meetings and recommendations. He shared that the scope of work runs through July 2020.

- PBPP Working Group meetings
 - 1.5 days each on a Tuesday/Wednesday or Wednesday/Thursday
 - Attendees: Since coordination was a key issue, we can invite AASHTO, APTA, FHWA, FTA, transit providers, and State DOTs if the working group feels that is appropriate.
 - Meeting 1 (March/April 2019): Safety
 - Meeting 2 (September 2019): Pavement and bridge
 - Potential opportunity to combine with the AMPO Annual Conference
 - Meeting 3 (February 2020): System performance, freight, and CMAQ
 - NCTCOG volunteered to host and invite the TTI
 - Meeting 4 (May 2020): Transit asset management
- White papers
 - Audience: practitioners as well as USDOT
 - Ensure the content is helpful to MPOs of all sizes—perhaps break it down by the size or structure of MPOs
 - Purpose: assist MPOs in carrying out performance management
 - Content: the outline for each could be drafted in real time during the meetings
 - Challenges and gaps with existing measures
 - Recommendations and successes in terms of existing resources (e.g., best practices, case studies, guidebooks, and templates specific to each performance measure and also communicating performance)
 - Recommendations that require changes to federal requirements or legislation
- Survey on the measure being discussed sent prior to each meeting—keep it short enough to ensure a good response rate
 - Questions to focus on process:
 - What was your level of comfort with the performance measure?
 - When did your DOT give you their target information?
 - When did you adopt your target?
 - Why did you either support the state target or set your own?
 - If you supported the state target, what does that mean?

- Who owns/operates the infrastructure? How much of your NHS is owned by someone other than the State DOT?
- Are you developing additional performance measures for other topics? (e.g., equity or accessibility) If so, how are you breaking them out for the federal measures and how are you looking at together?
- How did you formally adopt the targets?
- How are you tying the targets to programming and investment decisions?
- Can we tie into the survey being conducted by the FHWA Office of Transportation Performance Management?
- Timeline:
 - Send six weeks prior to meeting and leave it open for four weeks
 - Process for one week
 - Send results to working group one week prior to meeting

Kyung-Hwa added that somewhere in these meetings it would be helpful if MPOs could share their experiences with using data vendors.

Martin shared that they developed a synthetic model with Sidewalk Labs. They were the first region in US to do this.

Kofi Wakhisi asked the working group about their relationships with Bird or Lime?

Peter responded that the city of St. Louis required Lime to provide some data as part of an agreement to operate in the city. It seems like they are used significantly for joy riding.

Bob agreed that the scooters seem to be used for joy riding. Their data showed 400,000 trips in just under 12 months.

Nick pointed out that a request for proposals has been issued for National Cooperative Highway Research Project (NCHRP) 08-121: Accessibility Measures in Practice: Guidance for Transportation Agencies.

Bill added that there was legislation to create a pilot program within the Office of the Secretary at the USDOT to look at accessibility measures.

Natalie brought up new datasets. For example, what category does mobility as a service fall into for the National Household Travel Survey and American Community Survey?

Monique added that connected and automated vehicles have the potential to provide additional data.

Michelle added that it might be helpful to have data related to reliability for transit vehicles, distinct from data for all vehicles. This would support information the MPO could use to evaluate impacts of dedicated bus lanes.

Kofi added that they would like to explore potential data exchange models

The working group agreed that a resource that lists the targets for each agency would be helpful. Perhaps that could be part of the survey?

Wrap-up and Next Steps

Bill summarized the next steps and wrapped up the meeting. He asked the group to share any resources they have related to performance management. Matt Hardy from AASHTO developed a Transportation Performance Management portal and offered to build an MPO tab. We just need to help him populate the resources. It will be organized by keyword. Once we the initial page up and running, agencies can add things to the portal directly.

- Next steps
 - Determine the date and location of the next working group meeting, which will cover the safety performance measure
 - Develop a draft survey for the meeting
 - Coordinate with the FHWA's Office of Transportation Performance Management on the results of their survey

Bill thanked the working group and the Atlanta Regional Commission for hosting. AMPO is looking forward to the next four meetings!