

Charlottesville-Albemarle: Small MPO Implements a Quantitative Process

A New Process

The Charlottesville-Albemarle Metropolitan Planning Organization (CA-MPO) is a leader in transportation performance management because it uses performance measures to guide its transportation investments. CA-MPO is a small MPO with just two full-time staff members responsible for everything from the regional travel demand model to the long range Metropolitan Transportation Plan (MTP). While the transition to a more quantitative, performance-based planning process required work on the part of the staff and the community, both agree that the process resulted in a robust plan that will lead to a more effective transportation system.

Development of Performance Measures

At the beginning of the transition to a quantitative performance-based planning process, CA-MPO and the community developed a set of regional goals and objectives. CA-MPO used these goals and objectives to develop performance measures that reflect the region's priorities.

The MPO staff quickly discovered that there are functional limitations to performance measures: there is not enough data or time to develop a quantitative performance measure for some regional priorities (e.g. the Americans with Disabilities Act compliance of pedestrian infrastructure). Because of these limitations, the community was concerned that the quantitative performance measures would not be able to

KEY ACCOMPLISHMENTS

- Charlottesville-Albemarle MPO engaged stakeholders in a conversation to develop a new, more quantitative performance-based planning process.
- Charlottesville-Albemarle is formalizing relationships with data providers to ensure a robust and reliable stream of data.
- Stakeholder engagement and education built support for the process.

accurately capture some of their priorities. Charlottesville-Albemarle MPO educated the community about the benefits of transportation performance management, and together they worked to choose a final set of performance measures that would address the region's goals (below).

Table 1 CA-MPO Performance Measures

Performance Measures	
Congestion	% of roads with poor level of service
Delay	total hours of delay
Mode Share	% by each of the modes
Vehicle Mobility	vehicle miles traveled
Vehicle Crashes	crashes system-wide
Bike Facilities	% of bikeable roads
Access to Jobs	travel time to work
Transit Access	% with transit access
Habitat	habitat impacts
Air Quality	% change in pollutants
Water Quality	% change in pollutants
Flood Plain	impact on flood plain
Historical Sites	encroachment on sites
Land Use	parcels near the project
Env. Justice	transit access
Env. Justice	impact on neighborhoods





Locating Necessary Data

As a small MPO, CA-MPO recognized that it needed to rely on partnerships in order to acquire and maintain the necessary data. After establishing performance measures, CA-MPO worked with other organizations to acquire data. The Virginia Department of Transportation provided much of the safety and traffic data; the local university, non-profit agencies, and other MPOs provided data for several other measures. For the initial phase, CA-MPO acquired most of the data through informal agreements with these organizations.

Because CA-MPO relies on other agencies to provide data, the MPO is developing a data management plan to ensure a reliable stream of data into the future. The data management plan will detail the sources of data, how the data are processed, and where the data is stored once analysis is complete. CA-MPO's data management plan will ensure that its data is high quality, up-to-date, well documented, and well organized. Part of the data management plan will be formal agreements for data sharing with its partner organizations. While the plan is in development, CA-MPO has discussed its needs with its partner organizations to ensure that it continues to receive updates to the data.

Applying Performance Measures

With performance measures defined and the data inputs prepared, CA-MPO successfully implemented a new MTP using a quantitative, performance-based planning process. The MPO used its 16 performance measures to evaluate 35 projects and determine their impacts on the community. The process compared each project outcome against a no-build baseline of existing conditions. By iterating through sets of financially constrained projects, the MPO arrived at a complete MTP that satisfied the region's goals.

Throughout the project scoring process, CA-MPO staff engaged with stakeholders to demonstrate how the final project list was developed and discuss with stakeholders the difference between this performance-based process and previous approaches to project selection. While some locally popular projects were not selected for the final MTP, the collaborative development of the regional goals at the beginning of the process and the measurable aspect of the performance measures garnered community support for the new plan.

Outcomes

In the year since the plan was adopted, CA-MPO staff and the community have been very happy with the new process. When additional projects are proposed for plan amendments, CA-MPO will evaluate them using the same performance measures to ensure that projects added between formal planning cycles are thoroughly vetted. According to CA-MPO, the process keeps purely political projects out of the MTP while allowing reasonable additions to the MTP in the intervening years. The MPO staff is so pleased with the new performance-based process that they plan to use a similar method to update the region's Rural Transportation Plan in the coming year.

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