

Developing Decisionmaker Support for Management and Operations at MetroPlan Orlando

It is not by accident that transportation systems management and operations (M&O) has strong support among MetroPlan Orlando's 19 voting board members. MetroPlan Orlando (MetroPlan) has worked hard over the past 7 years to gain backing for M&O strategies in the region. The MPO's involvement in M&O began around 2003 with a traffic incident management campaign and steadily gained momentum after the MPO board witnessed early successes. Currently, M&O has been institutionalized at the MPO with dedicated annual funding, an M&O subcommittee, and a MetroPlan System Management & Operations Department.

Background

MetroPlan is the MPO for the tri-county Orlando Urban Area in the I-4 Corridor. The MPO board comprises 19 voting representatives from member agencies including Orange, Osceola, and Seminole counties, the five largest cities in the area, and operating agencies. MetroPlan serves approximately 1.8 million residents in an area with a projected population increase of 74 percent by 2030.¹

Reducing congestion is an important issue for MetroPlan board members and a significant concern for the region's residents. Initially the MPO focused on addressing congestion through capacity expansion (e.g., road building projects) but through its work with intelligent transportation systems (ITS), however, it began to look more closely at addressing non-recurring congestion with M&O strategies. MetroPlan discussed with its board members the potential for M&O to address the causes of over 60% of congestion in the region. It emphasized that less than half of congestion is caused by lack of capacity even though much of the MPO's approach to congestion was increasing capacity. A graph showing sources of congestion, similar to Figure 2, was used to motivate discussions with the MPO board members on the need for M&O. This helped to successfully make the case for M&O.

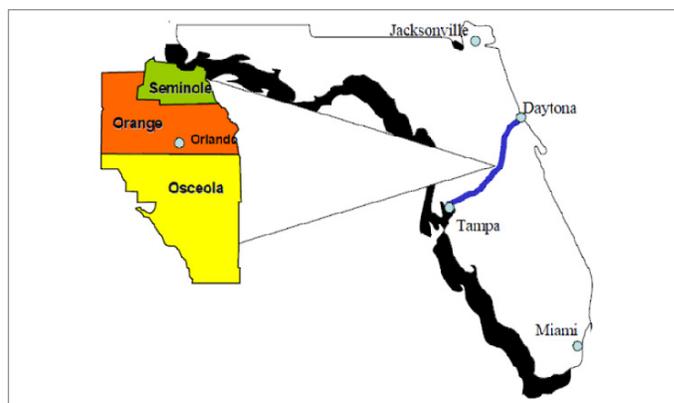


Figure 1. Map of the MetroPlan planning area.
Source: MetroPlan Orlando.

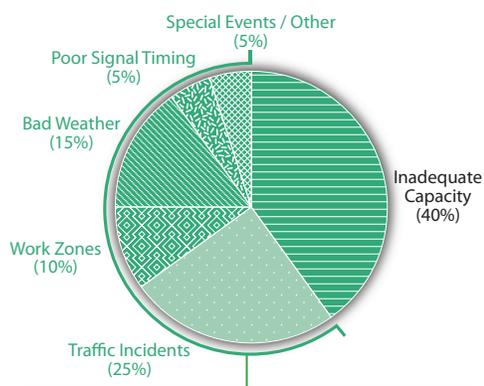


Figure 2. Sources of congestion.
Source: Federal Highway Administration.

¹ MetroPlan Orlando, Final Adopted 2030 Long Range Transportation Plan: Overview, 2010. Available at: http://www.metroplanorlando.com/site/upload/documents/2030LRTPOverview_FinalAdopted.pdf.



Focus First on “Easy Wins”

At the same time that MetroPlan was focusing on M&O to address non-recurring congestion, the MPO board chair and Orange County Commissioner was introduced to the benefits of traffic incident management (TIM). The Commissioner and the MPO held a Traffic Incident Management Forum in July 2003 with over 150 participants from local law enforcement, fire and rescue, transportation agencies, towing and recovery companies, the media, and others. This forum brought together TIM stakeholders to explore ways to clear incident scenes more quickly and motivated greater interagency collaboration. This multi-agency forum led to a major public education campaign, “Move it – Yes You Can” to promote awareness of the quick clearance law in Florida. This included billboards and public service announcements.

Building on the recent success of the traffic incident management campaign, the next MetroPlan board chair led a multi-agency, multimodal campaign in 2005 called Worst First that focused on addressing the 10 worst behaviors leading to incidents and the 10 worst locations for safety. The campaign took a three-prong approach to addressing the safety issues: engineering, enforcement, and education.



Figure 3. MOVE IT billboard showcasing Commissioner and law enforcement support for TIM. Source: MetroPlan Orlando

Leverage National Campaigns and Self-Assessments

In 2005, the National Transportation Operations Coalition (NTOC) released the National Traffic Signal Report Card revealing that overall the U.S. received a D- when it came to traffic signal management, operation, and maintenance. MetroPlan presented the results of the national report card as well as the results from the Orlando region to the MPO board to highlight this opportunity to make a significant improvement to transportation operations. It demonstrated the potential that traffic signal management could have on performance measures such as levels of service, vehicle travel time, and overall cost savings, which attracted the attention of board members and citizens alike. This caused the region’s committee of mayors to approve an action that made traffic signal retiming the top priority for the transportation improvement program (TIP). The committee of mayors helped to obtain half of the funding for the traffic signal program through a Florida Department of Transportation Incentive Program (TRIP).

Showcase Measureable Results

MetroPlan conducts before and after studies on all of the traffic signal retiming projects and collects data on measures such as travel time, speed, and fuel consumption. It also monetizes the value of the improvements to clearly demonstrate the impact that signal management has on the travelers’ costs and to show that dollars spent on traffic signal management are dollars well spent. For example, it estimated a savings of \$21,091 for each AM peak hour and \$40,110 for each PM peak hour over 14 corridors following signal timing projects totaling approximately \$816,000.² Monetary savings are based on the number of hours of saved and the average wage per hour in the region.

² Hill, Eric, “Integrating Operations into a Metropolitan Transportation Plan.” Presentation at the National Transportation Operations Coalition’s Talking Operations Webinar, January 25, 2010. Available at: http://www.ntoctralks.com/web_casts_archive.php.



It highlighted that after 27 peak hours, the benefits of the signal timing projects exceeded the costs. The monetary benefits of recent traffic signal retiming projects are presented annually to the MPO board.

Institutionalize M&O at the MPO

As a result of successfully elevating the role of M&O in addressing mobility and safety concerns, MetroPlan Orlando moved to institutionalize M&O through the formation of an M&O subcommittee and a Systems Management & Operations Department with dedicated staff in approximately 2006. Prior to gaining widespread support for M&O, the MetroPlan board had developed a dedicated pool of funds for ITS projects (including M&O). It was difficult to compare ITS and M&O projects with other projects so the board established a separate program to fund ITS and M&O projects at \$2 million a year. Following 2005, the funding level was doubled to \$4 million per year. The MPO board has continued to fully support this use of funds and views it as money well spent.

Lessons Learned

MetroPlan emphasizes the importance of obtaining one or two champions on the MPO board that either have an interest in technology or engineering and have a desire to demonstrate leadership. MetroPlan's success in championing M&O has been a direct result of educating leaders on the benefits of M&O. Additionally, collaboration with a variety of stakeholders and the public has been an important means for making significant improvement in operations and increasing the visibility of the successes. Lastly, MetroPlan has learned that demonstrating the monetary value of implemented M&O strategies is important in maintaining and increasing support for a strong, results-oriented program in its region.

References

Telephone interview with Eric Hill, Director of Systems Management & Operations, MetroPlan Orlando, September 1, 2010.

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MetroPlan Orlando, Tracking the Trends 2008: A Report on Transportation System Performance and Related Indicators in the Orlando Metropolitan Area, April 2009. Available at: http://www.metroplanorlando.com/site/upload/documents/TrackingTrends_2008.pdf.