metroplan orlando
A REGIONAL TRANSPORTATION PARTNERSHIP

Traffic Signal Retiming Working Group

MEETING NOTICE - Agenda

DATE: March 17, 2026

TIME: 10:00 am - 12:00 pm

LOCATION: MetroPlan Orlando Conference Room

I. Welcome – Mr. Lenny Barden, Vice Chairman, Transportation Systems Management and Operations (TSMO) Committee

II. Objective – Mr. Eric Hill, MetroPlan Orlando Staff

To streamline optimization and evaluation of the MetroPlan Orlando traffic signal retiming program.

III. Review/Discussion – Traffic Signal Workshop on January 20, 2026, Mr. Eric Hill, MetroPlan Orlando Staff

IV. Discussion – All

V. Tactics – Mr. Eric Hill, MetroPlan Orlando Staff

a. Retiming selection
b. Evaluation
c. Data Analysis and Collection

VI. Strategies – Mr. Eric Hill, MetroPlan Orlando Staff
a. Research
b. Legislation
c. Innovation

VII. Discussion – All

VIII. Action Steps

a. FY 24-25; FY 25-26 Evaluation
b. FY 26-27 Corridors and Intersections
c. Meeting cadence

IX. Public Comments

X. Adjournment

In accordance with the Americans with Disabilities Act (ADA), if any person with a disability as defined by the ADA needs special accommodations to participate in this proceeding, he or she should contact Ms. Lisa Smith, MetroPlan Orlando, 250 South Orange Avenue, Suite 200, Orlando, Florida, 32801 or by telephone at (407) 481-5672 x307 at least three business days prior to the event.

Persons who require translation services, which are provided at no cost, should contact MetroPlan Orlando at (407) 481.5672 x307 or by email at rachel.frederick@metroplanorlando.gov at least three business days prior to the event.

As required by Section 286.0105, Florida Statutes, MetroPlan Orlando hereby notifies all interested parties that if a person decides to appeal any decision made by MetroPlan Orlando with respect to any matter considered at such meeting or hearing, he or she may need to ensure that a verbatim record is made to include the testimony and evidence upon which the appeal is to be based.

MetroPlan Orlando Traffic Signal Workshop

Tuesday, January 20th, from 2:00 PM to 3:30 PM, Virtual

Meeting Objective

To provide a review and discussion of the MetroPlan Orlando traffic signal retiming program, including:

- The methodology for assessing traffic signal operations and performance;
- An overview of innovations in traffic signal systems; and
- Considerations for enhancing the framework for the traffic signal retiming program.

Attendees

- Christina Colon – Osceola County, Committee Chair
- Eric Hill – MetroPlan Orlando
- Jason Sartorio – MetroPlan Orlando
- Lisa Smith – MetroPlan Orlando
- Rachel Frederick – MetroPlan Orlando
- Arturo Perez – Seminole County
- Adam Mendenhall – City of Sanford
- Arisse M. Caba – City of Orlando
- Ashley Cornelison – City of Kissimmee
- Aslesh Lagishetty – City of Saint Cloud
- Brian Sanders – Orange County
- Cedric Moffett – Orange County
- Charles Lattimer – CATT Lab
- Christopher Dew – Metric Engineering, Inc.
- Dalita Singh – Central Florida Expressway Authority
- Demily Santiago – City of Oviedo
- Doug Jamison – LYNX
- Eduardo Benoliel
- Gary Yeager – Osceola County
- Gus Castro – City of Orlando
- Harrison Forder – Kimley-Horn & Associates, Inc.
- Hazem El-Assar – Orange County
- Humberto Castillero – Orange County
- Isaiah Sadler – City of Orlando
- Jared Wall – Kimley-Horn & Associates, Inc.
- Jean Sanchez – City of Apopka
- Jeremy Dillmore – FDOT District 5
- Jorge Jimenez – Seminole County
- Kasey Martin – Seminole County
- Kenna Henry – City of Casselberry
- Lenny Barden – City of Altamonte Springs
- Nabil Muhaisen – City of Orlando
- Nick Spatola – Faller Davis & Associates, Inc.
- Parker Epler – Coke Consulting
- Patrick Eklin – Metric Engineering, Inc.
- Peter Crespi – City of Winter Springs
- Rob Balmes – Marion County
- Robert Fitzgerald – Seminole County
- Sarah Mastison – Wade Trim
- Shaun Quayle – INRIX
- Shad Smith – City of Longwood
- Sydney Boswell – City of Lake Mary
- Terrilyn Rolle – City of Winter Springs
- Tonya Moore – Town of Windermere
- Tony Nelson – Osceola County
- Tammy Reque – City of St. Cloud

- Zach Parisi – Faller Davis & Associates, Inc.
- Zong Tian – University of Nevada
- Alex Morgan – Kittelson & Associates, Inc. (Kittelson)
- Leyi Zhang – Kittelson

Meeting Summary

Strong support to keep the Signal Retiming Program, but continue to evolve it by:

- Providing more coordination between agencies when corridors cross multiple boundaries
- Streamlining data collection to reduce retiming costs
- Expanding the goals of the retiming program and managing conflicting goals
- Stopping retiming oversaturated corridors and considering alternative intersection designs or retiming for off-peak times

Detailed Meeting Notes

TSMO Committee Chair, Christina Colon, began the meeting and opened a brief discussion for attendees to give feedback on the Signal Retiming Program. The following summarizes the discussion:

- Strong overall support for the signal retiming program. There have been strong improvements to signal timing throughout the region as a result of this program.
- Multi-agency coordination is a major strength of this program and should continue.
- After many years of retiming, incremental benefits are smaller. Not all corridors can continue to improve meaningfully through retiming alone.
- Potential to explore alternative data collection methods to reduce the cost of retimings. is the largest cost driver of retiming projects. Improving cost-effectiveness would strengthen the benefit–cost (B/C) ratio.
- Desire to expand evaluation metrics beyond end-to-end travel time, as this does not fully capture the program's value. There is interest in developing a broader performance index along with the B/C analysis. Suggested focus areas included:
    - Safety benefits
    - Coordination benefits
    - Emissions reduction
    - Individual intersections
    - Operational travel speed
- Participants stressed the inverse relationship in retiming for safety (e.g., Vision Zero goals) and vehicle delay. Retiming analyses should recognize safety gains even when delay increases.
- Interest in standardizing data, metrics, and methodologies across jurisdictions.
- Oftentimes, the same corridors are being chosen for signal retiming every 3-5 years. There is a desire to evolve how corridors are chosen for retiming, as highly saturated corridors may not benefit from retiming alone. Suggested ideas include:

    - Conduct an analysis to understand which corridors may not benefit from signal retiming; align these corridors for other congestion improvement projects where possible.
    - Choose other corridors that may benefit from signal retiming.
    - Consider benefits outside peak hours on congested corridors.
- Consider ways to make other signal technology upgrades, beyond signal retiming, as maintenance provides one of the highest returns on investment.
- Interest in expanding the use of ATSPM and other technologies for real-time monitoring and better data.

Eric Hill then gave a brief presentation on the history of the Signal Retiming Program and results from the FY 23/24 Signal Retiming Evaluation Study. The following summarizes the presentation:

- Signal retiming has the opportunity to improve traffic flow, reduce driver delay at intersections, reduce speeding, and improve bicyclist and pedestrian safety and comfort.
- The overall B/C ratio for the FY 23/24 program was -0.4. The B/C ratio for the program has been steadily declining since the program began in 2010. This analysis points to the effectiveness of the program's ability to retime signals well.
- Recent feedback on the program from the TSMO Committee included looking at emerging technologies, prioritizing improvements for Vulnerable Road Users, studying and improving freight movements, studying test vs. control roadways, and conducting a knowledge transfer workshop.

Jeremy Dillmore from FDOT District 5 (D5) shared a presentation on innovations in traffic signal platforms they're using at FDOT. The following summarizes the presentation:

- FDOT D5 is currently using the following technologies:

Technology	Data Source	Notes
Miovision/TrafOps ATSPM*	Traffic Signal & Probe Vehicles	Tells you data quality issues, but you have to correct them
ClearGuide (Iteris)	Traffic Signal & Probe Vehicles	Doesn't fuse data but has good reporting
iNET (Parsons)	Traffic Signal & Probe Vehicles	
INRIX IQ Signal Analytics	Probe Vehicles	Using only probe data takes longer periods to be valid
Axiliion	Traffic Signal	Can only work on 10 signals at a time
FlowLabs	Traffic Signal	Fuses data but not great reporting

**Not Miovision One*

- Each of these technologies utilizes different data sources, including:
    - Traffic signals that are connected online. This relies upon good maintenance and requires hardware and good metadata, but it samples all cars that pass through the intersection.

    - Probe vehicles don't require traffic signals to be connected online, which provides more intersection data, but has a smaller sample size, which may overrepresent affluent vehicles.

- Signals in the MetroPlan Orlando area are some of the best-timed and maintained signals. Many corridors are oversaturated, and signal retiming will have a marginal return.
- Maintenance improvements and lower-volume-to-capacity corridors will be the most significant returns on investment.
- FDOT is currently using FlowLabs and is focused on the scale and accuracy of the TMC information to reduce data collection.
- Suggested to evaluate first if a corridor will benefit from retiming, or if it will benefit more from better maintenance and/or other improvements.

Dr. Zhong Tian from the University of Nevada then gave a presentation on a streamlined approach to signal retiming optimization and performance evaluation. The following summarizes the presentation:

- Dr. Tian has developed a software called WaySync that manages signal timing data, optimizes it with or without traffic volumes, diagnoses potential timing issues, and evaluates the quality of the signal retiming.
- Suggested to consider retiming for off-peak conditions, provide more consistency between signal timing plans and field operations, and evaluate using a quality score or index approach. Suggested to continue using connected vehicle (CV) data for evaluation.
- Shared a demonstration of his software, WaySync, which provides overlays trajectories with time-space diagrams from the signal timing plans to make detailed changes to retiming plans.
- MetroPlan Orlando will share the signal timing plans for Old Winter Garden Road and Orlando Avenue for Dr. Tian to be able to evaluate these plans using his software.

MetroPlan Orlando TSMO Committee Meeting Signal Retiming Program Discussion

Friday, January 23rd, from 8:30 AM to 10:00 AM, MetroPlan Orlando Board Room

Meeting Objective

To continue the discussion from the Traffic Signal Workshop on Tuesday, January 20th.

Meeting Summary

TSMO Committee Chair, Christina Colon, ended the TSMO Committee meeting by continuing the discussion from the Traffic Signal Workshop on Tuesday, January 20th. The following summarizes the discussion:

- Streamline data collection using alternative and more cost-effective technologies.
- Expand performance measurement beyond B/C ratio. Consider using an index approach.
- Conduct an analysis to identify where oversaturated corridors are that may not benefit from retiming. Eliminate oversaturated corridors from retiming consideration and pursue larger-scale solutions when needed.
- Support for retiming outside traditional AM and PM peak periods, including midday, evening, and weekends. Recognition that different time-of-day strategies may still deliver benefits even on constrained corridors.
- Strong emphasis on aligning retiming decisions with Vision Zero safety goals, knowing that corridor efficiency does not always improve safety.
- Interest in using signal timing to manage speeds to posted limits, even if this increases delay.
- Opportunity for stronger coordination between agency partners with data collection.
- Proposal to form a Signal Retiming Subcommittee to continue focused discussion and develop recommendations. Subcommittee would include up to three representatives per county, plus MetroPlan support. The following individuals volunteered:
    - Christina Colon – Osceola County, Committee Chair
    - Cameron Crandell – City of Saint Cloud
    - Robert Fitzgerald – Seminole County
    - Charlie Wetzel – Seminole County

- Lenny Barden – City of Altamonte Springs
- Hazem El-Assar – Orange County
- Isiah Sadler – City of Orlando
- Alyssa Eide – City of Maitland
- Gary Yeager – Osceola County