



# Advisory Meeting Summary “Traffic Signals Everywhere”

Location: Virtual

Date: Wednesday, December 6, 2023, 5:00 to 6:00 pm

## About UpNext North Jersey

UpNext North Jersey (UpNext) is an advisory group that engages young North Jersey residents in a dialogue with the North Jersey Transportation Planning Authority (NJTPA). The NJTPA seeks to better understand the values and needs of this demographic group regarding key transportation issues. The NJTPA provides UpNext members with unique opportunities to learn about and discuss timely topics related to regional planning and public policy, develop a network of peers who share similar interests, and engage with regional thought leaders and decision-makers.

The Public Outreach and Engagement Team (POET), part of the Voorhees Transportation Center at Rutgers University, worked with the NJTPA to plan and conduct this virtual advisory meeting about transportation technology with a specific focus on traffic signals. This meeting addresses a significant topic of the NJTPA's next Long Range Transportation Plan (LRTP).

## Overview of the Traffic Signals Everywhere Virtual Meeting:

The UpNext North Jersey advisory meeting was held on December 6, 2023. UpNext members were joined by Andy Kaplan, Manager of Planning for Transportation Technology and Operations at the NJTPA, who presented on traffic signals and their role in transportation infrastructure. Topics include fundamentals of traffic signals, traffic signal technology, and questions of jurisdiction. This was followed by an interactive Q&A where UpNext members asked about a variety of topics including traffic calming, complete streets, and transit.

## Agenda:

5:00 to 5:05pm - Welcome and Introduction, NJTPA and POET staff.

5:05 to 5:30pm - Presentation: Traffic Signals Everywhere – But Where Exactly, and How Do They Work? By Andy Kaplan

- Fundamentals of traffic signals
- Traffic signal warrants, types of traffic signals and applications, equipment
- Detection technology, signal operation
- Inventory of traffic signals, including jurisdictional questions with examples from New Jersey

5:30 to 6:00pm - Q&A Session

## Feedback:

UpNext Members shared positive feedback about the event, especially Mr. Kaplan's knowledge about the subject and ability to answer specific questions about different New Jersey locations. Members enjoyed being able to connect the topic of traffic signals to other transportation topics, including complete streets and active transportation.

## Q&A Summary:

The Q&A session covered topics such as traffic calming, pedestrian safety, traffic data, roundabouts, and the maintenance cost of traffic signal systems. Key points included discussions on the ubiquity of traffic signal technology, data transmission to operations centers, the role of signals in Complete Streets implementation, and the effectiveness of pedestrian buttons. The session also touched on opinions regarding roundabouts, the average annual cost of traffic systems, consideration for traffic calming in signal planning, and alternatives for cities facing high system costs. Overall, the meeting provided valuable insights into the intricacies of North Jersey's transportation system, offered by a recognized subject-matter expert in the field.

In summary, this advisory meeting provided engaging insights, from a recognized subject-matter expert, into a critical, yet behind-the-scenes component of North Jersey's transportation system.



**UPNEXT  
NORTH  
Jersey** **ADVISORY MEETING**

### **Traffic Signals Everywhere - But Where Exactly, and How Do They Work?**

**Wednesday, December 6, 2023, 5 p.m.**

Traffic Signals are prevalent. They are engineered systems located at high volume, high conflict, and high stress intersections, and are designed to provide safe and orderly traffic control to all users. However, they are expensive to install and maintain. The location and equipment ownership (jurisdiction) has an impact on potential external funding for improvements, and as such the financial burden placed on communities due to this asset.

Building on your knowledge that "red means stop" and "green means go," this conversation will provide an overview of how Traffic Signals are engineered, and how as an asset class, some gaps and opportunities for better management and investment regionally.

**Featuring**  
**Andy Kaplan**  
**Manager, Planning for Transportation**  
**Technology and Operations**



**NJTPA**  
NORTH JERSEY  
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PLANNING AUTHORITY