



# ACTIVE TRAFFIC MANAGEMENT (ATM)

## ATM

### What is an Active Traffic Management (ATM) system?

An ATM system provides the ability to dynamically manage congestion based on prevailing and predicted traffic conditions.

### What will it look like?

The Project Neon ATM system will feature full-color, high-resolution dynamic message signs over the freeways that will provide real-time information to motorists about alternate routes, incidents, and traffic restrictions.



### How will it help drivers?

The message signs will be far more sophisticated than the existing dynamic signage, and can be programmed to inform motorists of specific lane closures and blockages that occur with traffic accidents or construction. Signs will show the status of every lane as motorists approach the I-15/U.S. 95 "Spaghetti Bowl" Interchange that sees 300,000 vehicles daily and 25,000 lane changes per hour.



### HOW IT WORKS:

The ATM system will provide advanced warning and clear direction that optimizes driver expectations through a well-defined notification system before, during, and after construction. Seamless display signs will span all lanes and provide lane-specific variable speed limits, lane control, and other messages.



### THE BENEFITS:

- Improved trip reliability
- Increased traffic movement
- Reduced incidents
- Reduced travel time, more consistent travel time through the corridor, increased safety
- Improved traveler information, increased detail and accuracy of posted travel times
- Consistent, reliable information
- Potential to reduce the number and severity of crashes
- Increased support of work zone management via advance messages that allow for improved traffic movement and reduced crash rates in work zones

### Early Construction ATM System



### WHAT DRIVERS CAN EXPECT:

As a part of Project Neon, 12 Early Construction ATM signs will be installed and operational before there are any construction-related traffic impacts to the freeway, which will provide a valuable traffic management tool during construction. Full-color dynamic message signs will seamlessly span all lanes and be located for optimal sight distance at approximately half-mile spacing. Strategic placement of ATM signs will disseminate lane-specific and traveler information as vehicles travel the highway.



Updated May 2016



# THE PROJECT NEON ATM SYSTEM

## WHAT IT DOES...

**COLLECTS DATA:** ATM detectors throughout the corridor will collect average speeds for each lane of travel, allowing the ATM system to accurately pinpoint incidents and congestion and actively manage traffic around any incidents and work to reduce the severity and duration of the congestion. From this data, the signs provide driver information on speed, lane status, and road status including traffic flow.

**WATCHES TRAFFIC:** CCTV Camera coverage will allow ATM operators to identify and confirm incidents and congestion.

**PROVIDES WARNINGS:** The ATM system will warn motorists of problems ahead and direct traffic to alternate lanes where available.

**IMPROVES YOUR COMMUTE:** The system will work to see which lanes are less congested, help reduce motorist speed when appropriate and reduce the chance of incidents due to differences in traffic speed.

## FEATURES

### MOTORISTS ARE ALERTED OF UPCOMING TRAFFIC ISSUES

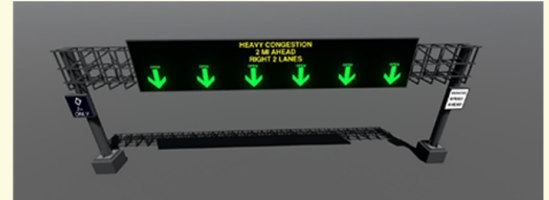
- The Project Neon ATM system will warn those on the highway of problems ahead and will direct them to alternate lanes where available.
- When incidents occur and traffic ahead is slowing down, the ATM system will let drivers know in advance of the incident so they can reduce speed to avoid secondary crashes.

### TRAFFIC LANE MANAGEMENT

- The Project Neon ATM system will use variable traffic signs and lane use control to direct traffic to specific lanes based on varying traffic demand.
- The system is focused on reducing issues from merges at major interchange ramps.
- By effectively utilizing available roadway capacity and managing traffic flows, the ATM system reduces congestion and crashes.

### DYNAMIC RAMP METERING

- Ramp meters will turn on during congestion or turn off in times of no congestion.
- Meters will improve traffic flow by only utilizing ramp meters in real-time during congestion periods.



### VARIABLE SPEED LIMIT SIGNS

- Variable speed limit notices will be provided on displays for each entrance ramp.
- The system will dynamically and automatically reduce posted speed limits approaching areas of congestion, incidents, or special events.
- Variable speed limits can reduce the onset of highway congestion.
- The ATM system aims to maintain flow, provide advanced warning to travelers of congestion ahead, and reduce risk of crashes.