

# Dynamic Lane Use Control

Actively manage roadway operations by regulating lane use with dynamic signage.



## TRANSPORTATION NEEDS ADDRESSED

- Capacity and Demand
- Travel Time
- Reliability
- Mobility
- Safety
- Incident Response
- Environmental Impact

## COST MAGNITUDE

CAPITAL COST



OPERATION AND MAINTENANCE COST



## HOW WILL THIS HELP?

- Reduces secondary and end-of-queue crashes.
- Ease congestion by improving system efficiency.

## HOW DOES IT WORK?

- Dynamic message signs display current lane-use information.
- Telecommunications to enable remote control from an operations center.
- Example, a dynamic sign can be used in advance of a crash location to close the affected lane and direct traffic to merge.

## WHEN TO CONSIDER THIS STRATEGY

- FREEWAY OR EXPRESSWAY CORRIDORS WITH RECURRING CONGESTION.
- FREEWAY OR EXPRESSWAY CORRIDORS WITH HIGH SECONDARY CRASH RATES.

## COMPLIMENTARY STRATEGIES

- DYNAMIC LANE USE CONTROL
- DYNAMIC SPEED LIMIT
- HARD SHOULDER RUNNING
- INTEGRATED CORRIDOR MANAGEMENT
- PAVEMENT MARKINGS
- SIGNING
- TRAVELER INFORMATION
- QUEUE WARNING
- MANAGED LANES
- BUS ON SHOULDER
- INCIDENT MANAGEMENT

## CONSIDERATIONS

- + REQUIRES TRAFFIC INFORMATION TO OPERATE THE STRATEGY. DATA REGARDING MAXIMUM CAPACITY OF UPSTREAM LANES, TRAFFIC VOLUMES AND TRAVEL SPEEDS ON HIGHWAY LANES, AND INCIDENT PRESENCE AND LOCATION ARE ESSENTIAL.
- + DURING PLACEMENT, CONSIDER SPECIAL GEOMETRIC CHARACTERISTICS AND DRIVER DECISION POINTS.
- + CONSIDER CATWALKS OR OTHER MEANS OF MAINTAINING EQUIPMENT WHILE LIMITING LANE CLOSURES.
- + CONSIDER PROVIDING ADDITIONAL STATIC SIGNING.
- + ADDRESS THE NEED FOR SOFTWARE ENHANCEMENTS.