

Dynamic Lane Reversal

To increase directional roadway capacity to accommodate changes in traffic demand.



TRANSPORTATION NEEDS ADDRESSED

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

HOW WILL THIS HELP?

-  Improves travel time reliability by reducing delay due to bottlenecks.
-  Facilitate directional traffic flow for planned events and emergency evacuations.
-  Effective in providing additional roadway capacity without roadway widening.

HOW DOES IT WORK?

-  Typically deployed on bridges and highways to provide an extra lane, whether inbound or outbound, for peak period traffic.
-  Transportation management personnel are needed to activate the dynamic lanes, and law enforcement officers are needed to ensure safe reversal and motorist compliance.
-  Suggested tools for this strategy include dynamic message signs to communicate lane use to motorists, as well as CCTV and traffic sensors to monitor operations.

COST MAGNITUDE

CAPITAL COST



OPERATION AND MAINTENANCE COST



WHEN TO CONSIDER THIS STRATEGY

-  CONGESTED ROADWAYS WITH HIGH DIRECTIONAL VOLUME SPLITS DURING PEAK PERIODS
-  ROADWAYS WITH HIGH SEASONAL TRAFFIC DEMANDS, I.E. BEACH TRAFFIC

COMPLIMENTARY STRATEGIES

-  DYNAMIC LANE USE CONTROL
-  MANAGED LANES
-  INTEGRATED CORRIDOR MANAGEMENT
-  TRAFFIC SURVEILLANCE
-  HOMELAND SECURITY PREPAREDNESS

CONSIDERATIONS

- + ENABLE EMERGENCY PERSONNEL TO RESPOND TO INCIDENTS ON A FACILITY WITH LIMITED ACCESS.
- + ADDRESS THE NEED FOR MONITORING AND PROPER DEPLOYMENT/CLOSURES DURING DIRECTIONAL CHANGES.
- + PROVIDE SIGNS AND MARKINGS TO INDICATE TRAFFIC DIRECTIONALITY.
- + PROVIDE FOR ENFORCEMENT AND TOLLING (IF REQUIRED).
- + ADDRESS THE NEED FOR SOFTWARE ENHANCEMENTS.