

### Intersection Improvements



#### Traffic Signal Infrastructure

Install flashing yellow arrow signals, high visibility signal backplates, pre-emption, controller and cabinet upgrades, communication improvements, and mast arm upgrades.



#### Traffic Signal Operations

Modify signal phasing during a detour event, adjust left-turn signal phasing, implement right-turn overlaps, adjust signal displays and/or phasing, optimize signal timing, and install communications to provide remote signal control capabilities.



#### Automated Traffic Signal Performance Measures (ATSPM)

Install ATSPM technology along arterial routes to collect and analyze data and provide performance-based operations as well as implement traffic responsive operations along detour routes during a detour event.



#### Signing and Marking

Install signing and marking enhancements such as "No Turn on Red", pedestrian warning signs, advisory signs, and static lane control signs.



#### Geometric Improvements - see ① in example figure

Restripe approach to provide additional turning lanes, install turn lanes, extend/restripe turn lanes, and construct limited sections of widening.



#### LED Blank Out Signs - see ② in example figure

Install LED Blank Out signs to temporarily adjust lane assignments or restrict turning movements. This may require modifications to signal phasing and operations during a change in lane assignments. Install LED Blank out signs to temporarily adjust lane assignments or restrict turning movements when volumes or demand changes due to detouring of traffic or other special event.

### EXAMPLE\* Arterial Incident Plan for Detour Route



\*Example detour route is provided for illustrative purposes only and elements of the route may change.

### Arterial Improvements



#### Detour Route Guidance

Install pavement markings (e.g. route shield) and post mounted guide signs to direct traffic to/from I-95, install warning signs (e.g. curve, intersection) where crash patterns exist.



#### Access Management - see ③ in example figure

Consolidate driveways, install raised medians or centerline barrier devices, and implement turn restrictions to reduce.



#### Changeable Message Signs (CMS)

CMS inform drivers of incident conditions ahead, and can be used to help manage detours.



#### CCTV Cameras

Detect incidents and provide visual verification and situational awareness of incidents on arterial routes that helps facilitate improved emergency response.



US 1 at Featherstone Road, looking north