



Advanced Incident Response

INTELLIGENT TRANSPORTATION SYSTEMS IN THE PORTLAND METROPOLITAN REGION

Sensors and cameras help ODOT rapid-response teams limit delay after a breakdown or fender-bender.

BENEFITS

Mobility: Responders help clear crashes and other incidents quickly, keeping traffic moving.

Safety: Shorter response time reduces the likelihood of secondary crashes due to distracted driving.

Cost effectiveness: It is much cheaper to preserve capacity by clearing incidents quickly than to build a new lane.

More than half of congestion can be attributed to “non-recurring” sources, including incidents, weather, construction, special events and traffic signals. An incident on the highway – from a mechanical breakdown to a fender-bender – quickly disrupts traffic, especially during a peak period. It also creates a safety risk as passing drivers “rubberneck” trying to catch a glimpse of the scene, sometimes leading to a secondary crash.

ODOT’s incident response team is intended to limit the duration of such incidents in order to minimize their impact and restore freeway operations to normal as quickly as possible. Incident response trucks are dispatched by operators who use real-time traffic data and Closed-Circuit TV (CCTV) camera feeds to detect and verify incidents on area freeways. The trucks carry basic repair tools and traffic control equipment as well as variable message signs and a communications system.

By detecting and clearing incidents quickly, the incident management program keeps traffic moving and helps avoid secondary crashes. For a congested freeway, this kind of operational strategy preserves the capacity of the existing infrastructure, which can offset some or all of the need to build additional lanes.

The incident response solution may be low-tech but ITS devices play an important supporting role. For example, when a breakdown causes traffic to slow down, the traffic sensors that ODOT has installed in the pavement detect the change and alert one of the



Detectors in the pavement, cameras along the freeway and central operations centers enable incident detection.

operators in the dispatch center. The operator can then use a CCTV camera to verify that an incident has occurred and determine the appropriate response. A flat tire may require only an incident response team truck but a collision is likely to require a police car and, possibly, a fire truck or ambulance. At the same time, the dispatch operator can post information on the variable message signs to alert other drivers.



ODOT’s incident response trucks clear incidents safely and quickly.

For more information, visit
www.metro-region.org

