



DYNAMIC REROUTING



WHO



CITY/STATE

HURDLES



SPEED/FLOW MONITORING SYSTEM (ITS) DEPLOYMENT

More Information: tti.tamu.edu/policy/how-to-fix-congestion

Description

Dynamic rerouting is an active traffic management strategy that gives drivers alternate highway routes when their normal route is blocked or severely congested due to:

- Incidents.
- Special events.
- Other unusual traffic conditions.

The alternate route is chosen based on traffic conditions along nearby highways. Alternate route information is provided using:

- Hybrid guide signs.
- Dynamic message signs.
- Broadcast media.
- Mobile communication.

This strategy benefits drivers by shortening their travel time and keeping the congested corridor from becoming more crowded.

Target Market

Dynamic rerouting works well on busy highway and major street networks with viable alternate routes. It can be implemented quickly in regions with traffic management centers and

existing intelligent transportation systems (ITSs). The strategy pairs well with speed harmonization and temporary shoulder use.

How Will This Help?

- **Reduces congestion** by shifting traffic to alternate routes.
- **Maximizes efficiency and capacity** by spreading traffic across the network.
- **Increases safety** by decreasing the likelihood of secondary car crashes.
- **Lowers pollution** in the area.
- **Lowers energy consumption.**
- **Increases productivity** by reducing delays and downtime.

Implementation Issues

An effective implementation of dynamic rerouting along a freeway/highway requires a parallel corridor with enough capacity to serve as an alternate route with minimum negative impacts. The concept requires operational knowledge of the status of the road network, typically through ITSs and a regional

SUCCESS STORIES



Texas

TxDOT provided **dynamic rerouting messages** using portable solar-powered monitors, signs, and cameras in a **smart rural work zone system** on IH 35 in Hillsboro.



Europe

Several nations in Europe, including the Netherlands and Germany, have found that **dynamic rerouting can improve overall system performance by 5%**, increasing when a reason is given, **with some corridors showing up to 40% improvement.**

traffic management center that manages the system. Ample sensor and sign infrastructure that provides reliable alternate route information is required.

