



TRAFFIC MANAGEMENT CENTERS



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

Description

Traffic management centers (TMCs) serve as the mission control for an urban area's major street and highway network. This one location:

- Monitors traffic signals, intersections, and roads.
- Proactively deploys traffic management strategies to reduce congestion.
- Coordinates state and local authorities during special events, emergencies, or daily stop-and-go traffic.
- Monitors cameras, sensors, and other technology to alert authorities and drivers (via dynamic message signs or website) about problem areas.

TMCs may not always be the first detector of crashes and stalled vehicles that cause traffic jams, but they are always an important information source. TMCs help reduce crashes and save drivers time, money, and fuel. Representatives of law enforcement, fire and emergency management services, and local transit agencies are often located at TMCs in order to improve multiagency response.

Exceptional TMCs reach across city boundaries in a large urban area to collect information on the entire road network. Using a complete network picture, TMCs can:

- Proactively identify weak areas.
- Suggest solutions to state or local agencies.
- Communicate solutions or information to drivers and transit riders in real time.
- Study longer-term congestion reduction strategies.

Target Market

TMCs should monitor the freeway/major street network and transit in urban areas. Cameras and message signs monitor and communicate traffic conditions on freeways, highways, and other major surface streets in the region.

How Will This Help?

- **Reduces delay caused by stalled vehicles or incidents** by continuously monitoring the network via cameras or sensors and deploying traffic management strategies as needed.

SUCCESS STORIES

Utah: CommuterLink monitors all major roads in Utah. **Since the TMC was deployed along with other ITS strategies,**

freeway speeds ▲ 20%

intersection delays ▼ by 27%

Minnesota: Minnesota's DOT developed an Advanced Traffic Management System, which was deployed in various TMCs. The system monitors and controls dynamic message signs, traffic cameras, lane controls, dynamic shoulder lane, etc., and provides congestion information for local arterials automatically.

- **Alerts approaching vehicles to problem areas** by updating message boards and web information.
- **Provides information on alternate routes,** lessening the effects of bottlenecks or incidents.

Implementation Issues

TMCs require significant funds to start and maintain operations, which can limit their deployment. Also, cities may not want to hand over certain tasks, such as signal timing, to a TMC, limiting its effectiveness.

