ACCELERATION / DECELERATION LANES

Description

Acceleration/deceleration lanes (also known as speed change lanes) provide drivers with an opportunity to speed up or slow down in a space not used by high-speed through traffic. On freeways and some major streets, the speed change between the mainlanes and the adjacent streets can be substantial and cause stop-and-go traffic and more collisions for the main vehicle flow. Dedicated acceleration lanes allow cars that have turned onto the main road to speed up to match the flow of traffic.

Target Market

- Freeway ramp areas between entrances and exits.
- Major streets with fast speeds and high turning volumes.
- Freeway interchange ramps.

Speed change lanes reduce congestion in areas where drivers are required to make dramatic speed changes because of turns or merges.

How Will This Help?

- <u>Increases traffic flow and speed</u> on freeways and major streets.
- <u>Increases intersection capacity and efficiency</u> by adding lanes for turning at intersections
- <u>Improves safety.</u>
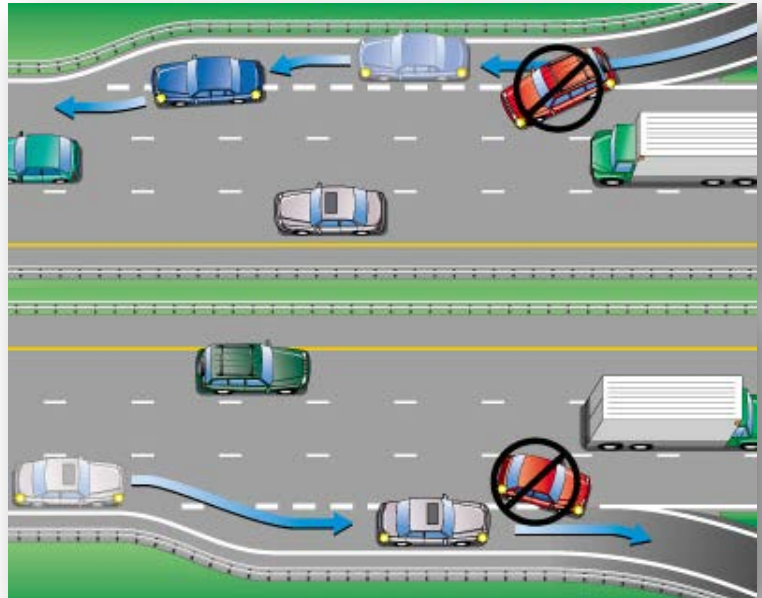
Ministry of Transportation, Canada

Cost:	●●●○○
Time:	**Moderate**
Impact:	**Spot**
Who:	**City/State**
Hurdles:	**Right-of-way, Institutional**

Success Stories

- **US 290 Northwest Freeway, Houston**
  Auxiliary lanes were added to several locations along US 290 resulting in the removal of several traffic bottlenecks.
- **IH 394 Freeway, Minneapolis**
  Among several low-cost improvements, a westbound auxiliary lane at Louisiana Ave. almost eliminated evening peak congestion and increased traffic volume handled by 10 percent.

Implementation Issues

Lane space and right-of-way are the primary design issues. Converting the current shoulders to useable lanes may require adding width (possibly requiring acquisition of right-of-way and higher costs) and pavement structural strength.

The most significant implementation barrier is often the assignment of institutional responsibility. There are few DOTs with any staff assigned to look for locations where low-cost treatments can be installed. The contributions that acceleration/ deceleration lanes might make are overlooked in favor of larger or more sophisticated programs.

mobility
INVESTMENT PRIORITIES