

INTERSECTION TURN LANES

Description

Turn movements at street and driveway intersections, especially movements that are made from lanes that are shared with through traffic, cause delays and adversely influence safety.

Common reasons for the installation of a turn lane to improve an intersection include:

- Speeds are too high to turn safely to or from a roadway.
- There is a pattern of crashes involving turning vehicles, or rear-end, sideswipe, or weaving crashes when through-vehicles conflict with queued vehicles.
- Drivers have to wait a long time to make a turn.
- There is a high number of turning vehicles.

How Will This Help?

- Decrease congestion and maximize the available capacity by allowing a smoother flow of traffic.
- Increase safety through fewer collisions.



Cost:	●●●○○
Time:	Short
Impact:	Spot
Who:	City/State
Hurdles:	Right-of-Way

Success Stories

- An FHWA study showed adding left-turn lanes reduced crashes between seven and 47 percent in urban areas and 18 to 48 percent in rural areas.
- A synthesis of research on this topic found a 25 percent increase in capacity, on average, for roadways that added a left-turn lane.

Implementation Issues

Lane space and right-of-way are the primary issues with adding turn lanes and/or acceleration/deceleration lanes. Converting the current shoulders to useable lanes may require adding pavement width and structural strength. If the shoulder cannot be used, the road will need to be widened, possibly requiring additional right-of-way and higher construction costs. Complex, dated, or elevated designs make it more difficult and costlier to add these lanes. Right-of-way constraints at intersections may ultimately require a complete rebuild or alternative design.