



The Institute of Transportation Engineers
Traffic Engineering Council
presents TIPS on



Turn Lanes

Why are turn lanes used?

Turn lanes at intersections are used primarily to separate turning traffic from through traffic. With turn lanes, vehicles waiting to turn are removed from the through lanes thereby reducing delay to through traffic. Turn lanes can also be used by vehicles as a deceleration area when leaving the major street.

By removing turning vehicles from the through lane, turning lanes can also improve safety. Studies have shown that providing turn lanes for left-turning vehicles can reduce accidents by an average of 32.4 percent. Personal injury accidents involving left-turning vehicles can be decreased by as much as 50 percent. Intersection channelization projects have been shown to produce an average benefit/cost ratio of 2.31.

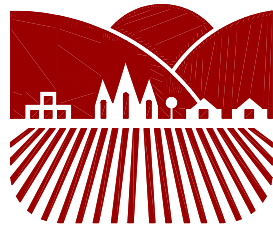
Although, the treatment of right-turning vehicles is generally less critical than left-turning vehicles, separating right-turning vehicles from other traffic can significantly

affect operations at an intersection. By adding a separate right-turn lane at a signalized intersection, the delay experienced by drivers on an approach can be reduced. At unsignalized intersections, right-turn lanes can serve to safely remove turning vehicles that are decelerating from the through traffic lanes.

Turn lanes at major driveways can also improve efficiency and safety, especially on high volume or high speed roadways.

When turn lanes are added, studies have shown a 52% decrease in rear-end accidents as well as 6% decrease in left-turn accidents.





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