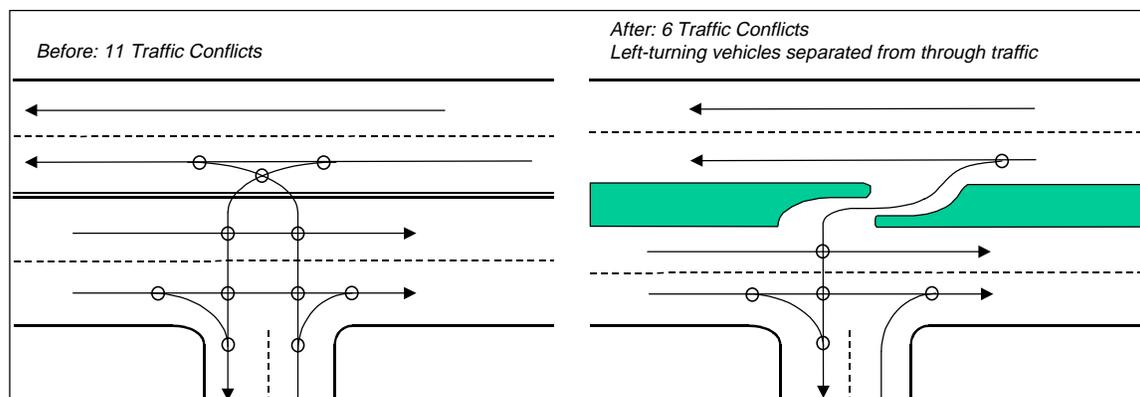


Conflict Points

Conflict points are commonly used to explain the accident potential of a roadway. Access management strategies are typically designed to reduce the number and density of conflict points.

What is a conflict point?

A conflict point is the point at which a highway user crossing, merging with, or diverging from a road or driveway conflicts with another highway user using the same road or driveway. It is any point where the paths of two through or turning vehicles diverge, merge, or cross (see figure below).



The above diagram compares traffic conflict points associated with a driveway on a four-lane undivided roadway and a driveway on a four-lane roadway with a raised median and left turn lane. The installation of the raised median with left turn lane reduces by five the number of conflict points.

Why are conflict points important?

Conflict points are associated with increased levels of roadway accidents. A motorist can safely negotiate only so many conflict points within a given area. Studies have shown that when driveway access to arterial roadways is granted to too many property owners without considering future traffic volumes and roadway classifications, the extra driveways increase the rate of accidents and decrease the efficiency of the roadway. Although this does not appear to be a simple, direct relationship, reducing conflict points has been shown to significantly reduce the accident rate at case study locations (T. J. Simodynes, *The Effects of Reducing Conflict Points On Reducing Accident Rates*, October 1998).

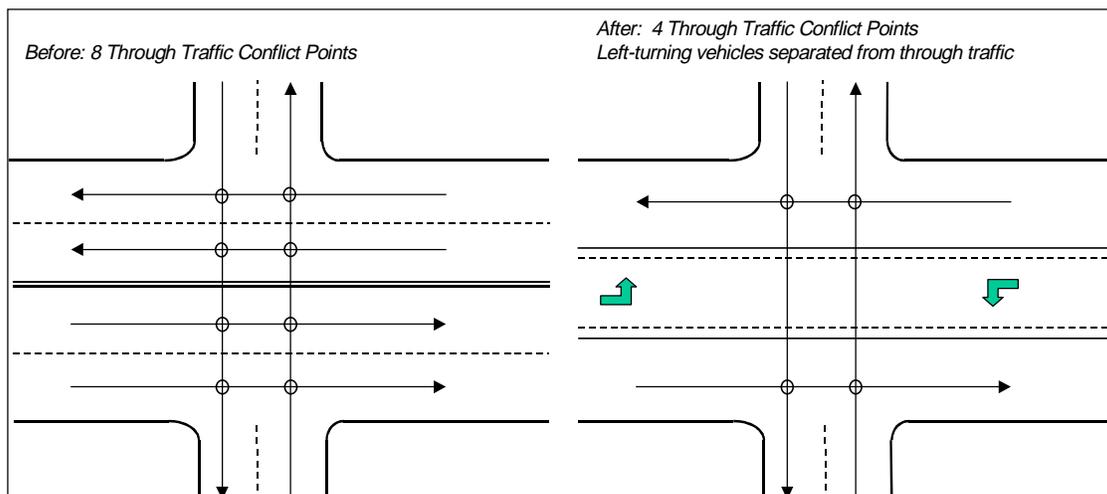
Other safety-related factors include the type of conflict points that are reduced—different types of conflict points have different propensities for accidents. Studies of hundreds of crashes at more than 1,300 driveways in three different communities in Illinois found that left-turning vehicles (exiting and entering) are involved in the majority of driveway-related crashes (Paul Box and Associates, 1998).

How can conflict points be reduced by managing access?

Access management strategies can reduce traffic conflicts

- by limiting the number of conflict points that a vehicle may experience in its travel
- by separating conflict points as much as possible (if they cannot be completely eliminated)
- by removing slower turning vehicles that require access to adjacent sites from the through traffic lanes as efficiently as possible

Common strategies include relocating, consolidating, and eliminating driveways; promoting shared driveways; increasing corner clearance; improving driveway geometrics (radius, width, grade, throat length); prohibiting left turns out of driveways; installing raised medians with left turn lanes; installing two-way left turn lanes; and providing alternative access roads (such as backage roads).



Reduction in through traffic conflict points from conversion of a four-lane undivided roadway to a three-lane cross section.