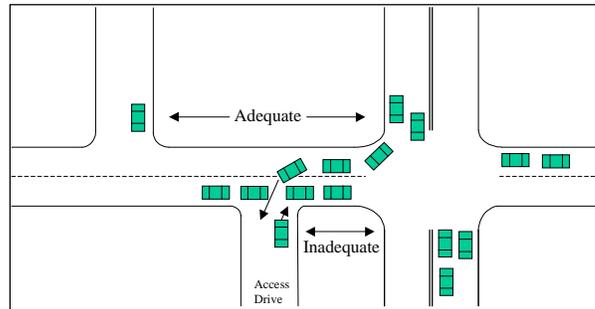


Clearing Driveways Away from Corners

Clearing driveways away from corners is the simplest, yet perhaps the most critical access management treatment.

What is corner clearance?

Corner clearance is the minimum distance required between an intersection and an adjacent driveway along an arterial road or collector street (see figure below).



Why is corner clearance important?

According to National Cooperative Highway Research Report 420, inadequate corner clearance results in traffic flow and safety problems, including

- traffic blocked by vehicles waiting to enter driveways
- right or left turns out of driveways being blocked
- rear-end and broadside collisions caused by inadequate time for motorists to react to vehicles entering and exiting the driveway
- driver confusion about where it is permissible to enter and exit the driveway

What's a reasonable distance between an intersection and the first driveway opening?

Corner clearance standards vary greatly from state to state and city to city. For instance, the standard in Colorado is 325 feet on arterials with 40 mile per hour speed limits; it is 50 feet in Virginia, which is about three car lengths. Most state and local standards range from 75 feet (about five car lengths) to 250 feet (about 16 car lengths). The 250-foot figure corresponds to the minimum distance required to stop a car traveling 35 miles per hour. Ideally, corner clearances on major roadways should be the same as driveway spacing requirements. When this cannot be achieved because of a lack of frontage, the upstream corner clearance should be longer than the longest expected queue at the adjacent intersection.

What other factors are important to corner clearance?

If a corner has a large radius or if there is a dedicated right-turn lane at the corner, the first driveway downstream from the corner should be located farther away from the corner. This extra distance allows drivers to negotiate turns at a higher rate of speed and a greater distance to slow or stop. The Florida Department of Transportation and some cities and counties in Florida have set downstream corner clearance standards higher as a result.

What about in rural areas?

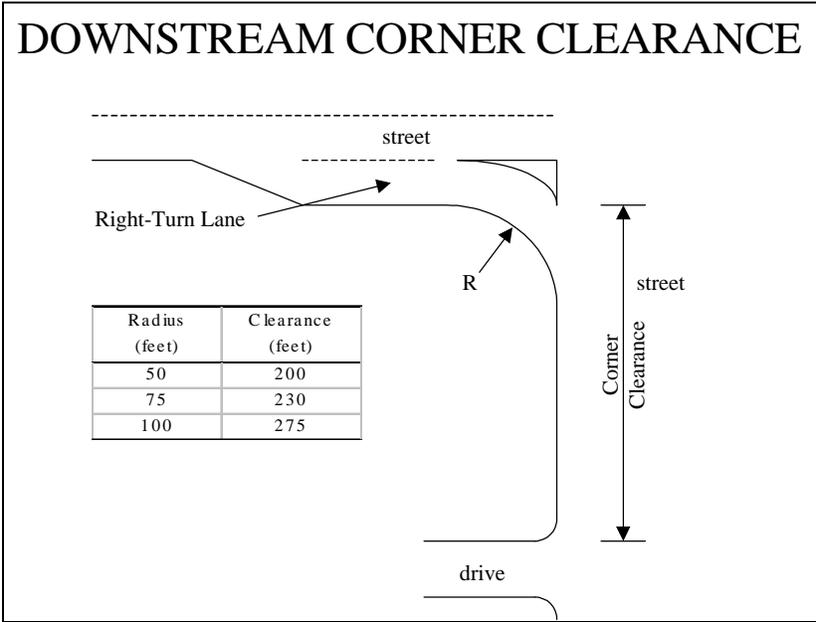
Corner clearance is even more important to maintain in rural areas because travel speeds are higher. The minimum distance it takes to stop a car traveling at 55 miles per hour is 550 feet, while at 35 miles per hour the distance is only 250 feet.



A long corner clearance at a new convenience store on University Avenue in Windsor Heights, Iowa. The first driveway is over 75 feet (five car lengths) from the corner on the left side of the picture.



An insufficient corner clearance can create an operational and safety hazard. This intersection is ranked within the top 100 crash sites in Iowa.



A downstream corner clearance standard from College Station, Texas. It specifies a very long corner clearance where there is a dedicated right-turn lane.