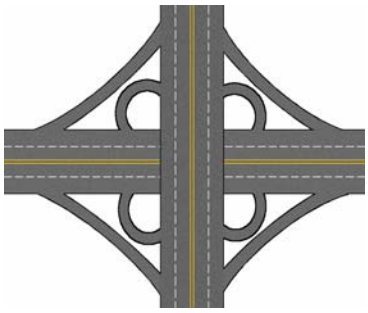
FACT SHEET

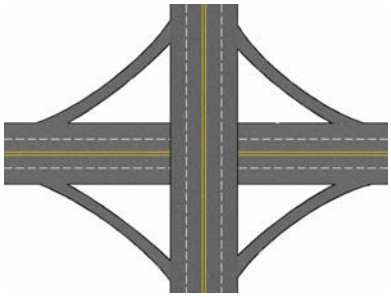
Module 4.4 Strategies for Controlled Access Highways
Freeway Interchanges

Cloverleaf Interchange



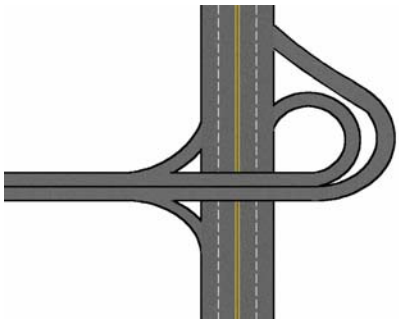
Allows for interchange of two expressways or major roadways with minimal disruption of speed or movement. The cloverleaf usually has entrance and exit weave lanes, since traffic leaves one roadway and enters from another roadway. Curved roadways have banked and flat exits, which lead to braking and steering problems as drivers adjust from high speed to the speed of the exit curve. The curves are often noted by reflector poles, which are frequently knocked down by vehicles that lose traction due to excessive speed on the entry and exit of the curved roadways.

Diamond Interchange



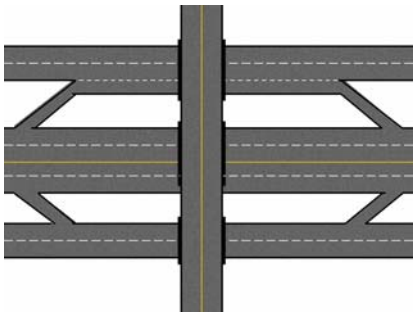
Allows for interchange of a major roadway with a secondary dual or multiple lane roadway. The diamond interchange may have traffic control devices on the intersecting secondary roadway, which allow for left and right turns onto the secondary roadway. The signals may be used to allow left turns from the secondary roadway to the entry ramps of the major multiple roadway. Lane markings may indicate lane position on the approach to the intersection. A diamond interchange will allow the driver to re-enter the entrance ramp by moving across the intersection of the secondary roadway.

Trumpet Interchange



Allows for interchange of secondary two-way streets to a multiple lane roadway with minimal traffic mix. The major function of a trumpet intersection is to replace the T-intersection at the junction of two roadways. These intersections are often found when interstate feeder roads stop at the interstate roadway or loop. For example, Interstate 64 may stop at Interstate 295, since Interstate 64 would direct drivers from a major city to the Interstate Loop (295) or the Interstate (95).

Frontage Road Interchanges



Allows for interchange of vehicles using parallel secondary two-way or one-way roadways and a major multiple lane roadway. Frontage road turnarounds allow drivers to exit a multiple lane roadway and use the opposing frontage road to enter the multi-lane roadway in the opposite direction. They allow dense city traffic flows to mix efficiently with higher speed traffic flows on the multiple lane roadway. Yield rules and roadway markers on the frontage road may vary, depending on the direction of traffic flow.