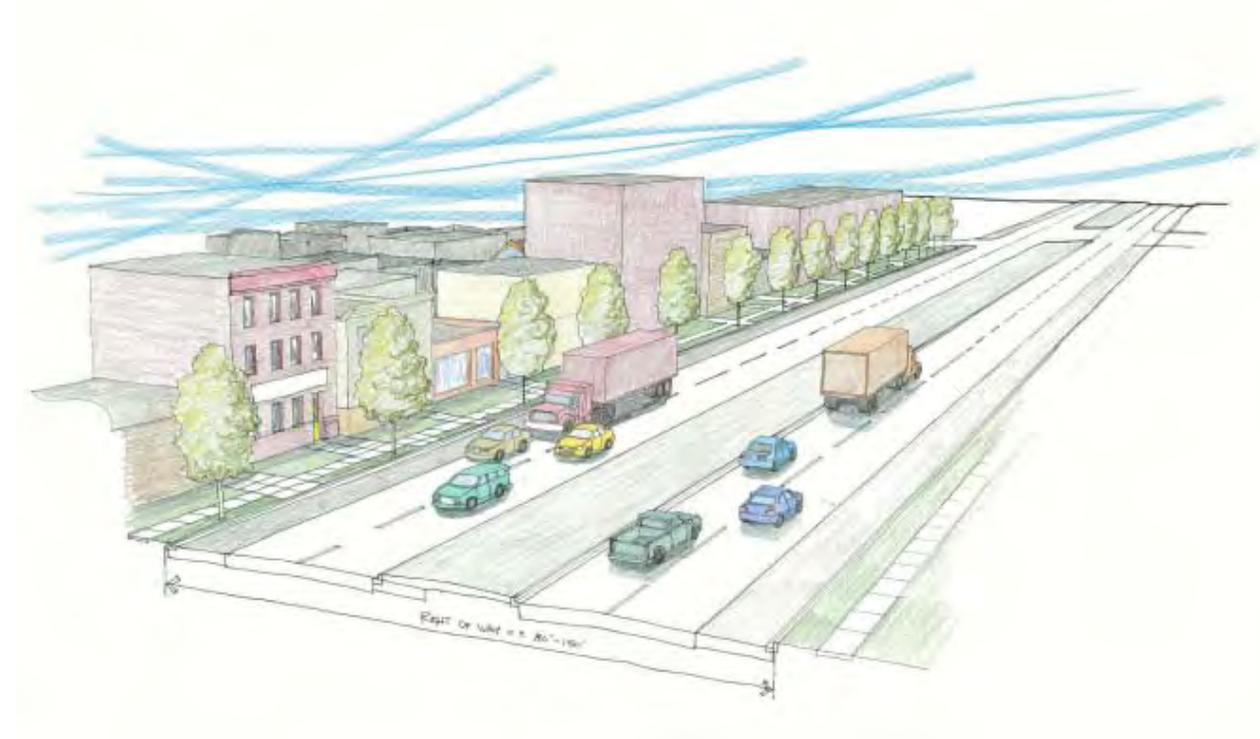


Engineering Terms



Cross Section



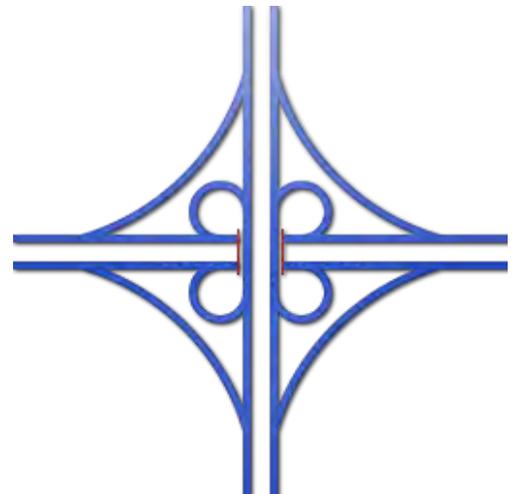
The cross section sketch illustrates right of way width which includes pavement, shoulders, medians, ditches, and other components of a roadway.

Design Speed

A roadway's design speed is the maximum speed that a motor vehicle can be safely operated on that road under optimum driving conditions. Design speed is not the same as posted speed. The posted speed of a roadway is typically lower than the design speed.

Interchange

An interchange is a crossing of two roads that allows traffic on one road to travel over or under the traffic of another road without the need for an intersection. Interchanges are usually used when at least one of the roads is an expressway or freeway. The picture to the right is an example of a clover-leaf interchange.



Engineering Terms



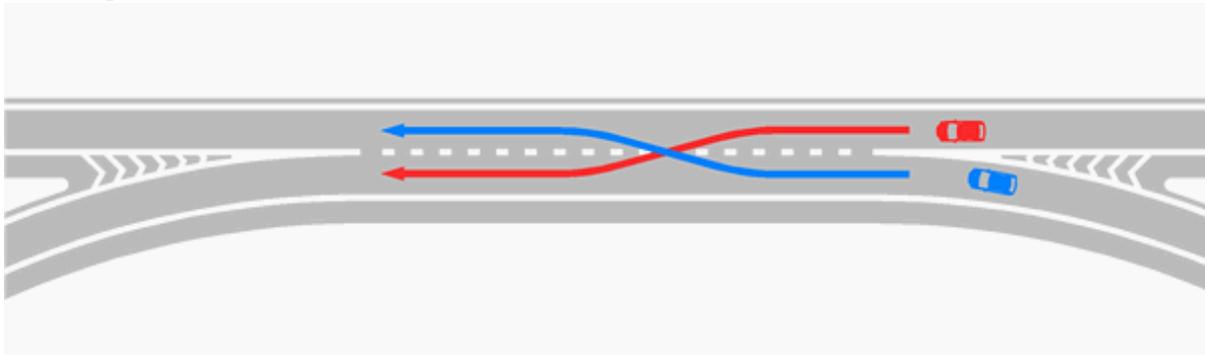
Free Flow

Free-flow is the term used when thru traffic can travel without encountering a stop sign or traffic light. Ramps on the cloverleaf and trumpet interchanges (pictured right) are free-flowing; a driver does not need to stop to exit one road and enter the other.

Arterial

Arterial roadways serve major through movements between centers of activity in the region. Strategic Regional Arterials are wide, multi-laned arterial roadways with managed access that carry a mix of local and regional traffic. Non-freeway arterials are limited in capacity by access points and signalized intersections, even when lanes are added.

Weaving



Weaving is a point of conflict in free-flow interchanges caused by the merging of exiting and entering traffic in the same lane.

Intelligent Transportation Systems (ITS)

The term *intelligent transport system* (ITS) refers to efforts to add information and communications technology to transport infrastructure and vehicles in an effort to manage factors that typically are at odds with each other, such as vehicles, loads, and routes to improve safety and reduce vehicle wear, transportation times, and fuel consumption.

Americans with Disabilities Act (ADA)

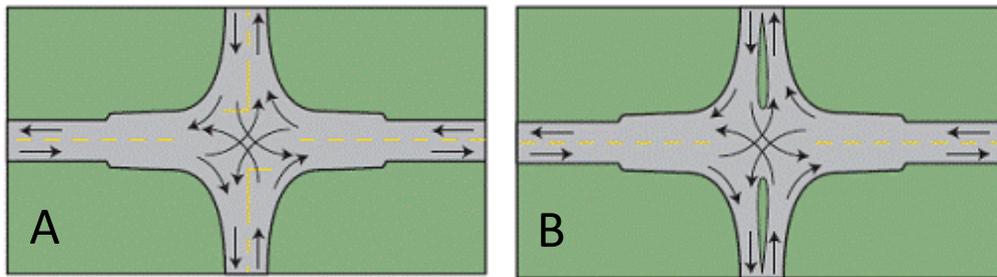
The Americans with Disabilities Act (ADA) has created design guidelines to ensure that transportation facilities are constructed to a set of standards that ensures accessibility for the disabled. Sidewalks are one of the most common pieces of transportation infrastructure, yet if not accessible, they can pose great challenges and danger to anyone in a wheelchair or with crutches. The ADA provides standards to help anyone constructing sidewalks do so in a safe, accessible manner.



Access Management

Access management, when used in traffic and traffic engineering circles, generally refers to the regulation of interchanges, intersections, driveways and median openings to a roadway. Its objectives are to enable access to land uses while maintaining roadway safety and mobility through controlling access location, design, spacing and operation. This is particularly important for major roadways intended to provide efficient service to through-traffic movements.

Channelization



The purpose of channelization is to separate traffic flow from one another with physically (medians, traffic islands) or with roadway markings (paint). Channelization defines driving patterns and indicates which road has priority at a junction. Intersection A shows an intersection without channelization and intersection B shows an intersection with medians separating traffic flows.