



TRAFFIC TIPS

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COMPREHENSIVE SERVICES

Hubbell, Roth & Clark, Inc. is a

professional organization providing comprehensive engineering

services. Our Transportation and Traffic Engineering expertise allow us to address problems of urban traffic congestion, traffic safety, and highway design. We provide assistance in transportation planning, design, operations and Intelligent Transportation Systems. Other services of the firm include:

- ◆ Municipal Engineering
- ◆ Civil & Site Engineering
- ◆ Wastewater Treatment
- ◆ Underground Storage Tank Replacement Engineering
- ◆ Water Treatment & Distribution
- ◆ Industrial Waste Treatment
- ◆ Industrial Engineering
- ◆ Storm Water Control
- ◆ Surveying & Mapping
- ◆ Electrical Engineering

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THE VIRTUES OF ACCESS CONTROL

Traffic engineers have long recognized that limiting roadway access points results in smoother, safer traffic flow. Constantly growing traffic congestion, concerns over traffic safety, and the ever-increasing cost of upgrading our roads, have generated a new interest in managing the access to our highway system.

Access Management is the process that provides access to land development while simultaneously preserving

How does access management work?

A good access management program will:

Limit the number of conflict points at driveway locations

Conflict points are good indicators of the potential for accidents. The more conflict points that occur at an intersection, the higher the potential for vehicular crashes. When left turns and cross street through movements are

restricted, the number of conflict points is significantly reduced.

Separate conflict areas

Intersections created by public streets and driveways represent basic conflict areas. Adequate spacing between intersections allows drivers to react to one intersection at a time, and reduces the potential for conflicts.

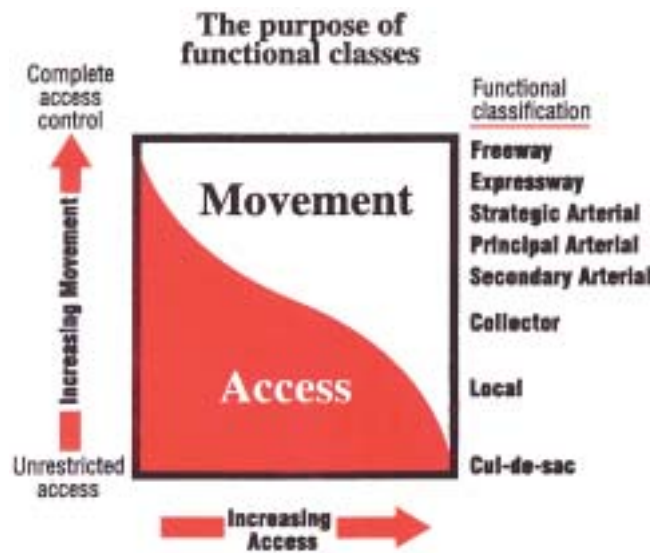
Reduce the interference of through traffic

Through traffic often needs to slow down for

vehicles exiting, entering, or turning across the roadway. Providing turning lanes, designing driveways with large turning radii, and restricting turning movements in and out of driveways allows turning traffic to get out of the way of the following through traffic.

Provide sufficient spacing for at-grade, signalized intersections

Good spacing of signalized intersec-



the flow of traffic on the surrounding road system in terms of safety, capacity, and speed.

Access Management extends the concept of access control to the surface street system. It attempts to balance the need to provide good mobility for through traffic with the requirements for reasonable access to adjacent land uses.

tions reduces conflict areas and increases the potential for smooth traffic progression.

Provide adequate on-site circulation and storage

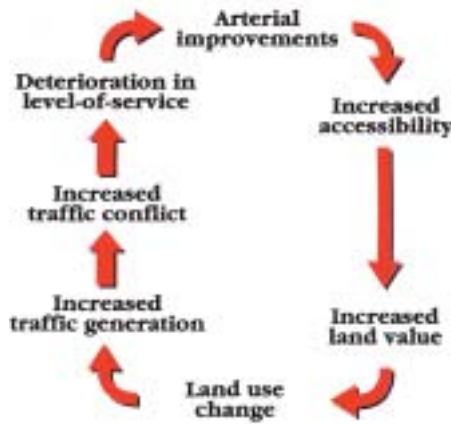
The design of good internal vehicle circulation in parking areas and on local streets reduces the number of driveways that businesses need for access to the major roadway.

Why consider access management?

Poor planning and inadequate control of access can quickly lead to an unnecessarily high number of direct accesses along roadways. The movements that occur on and off roadways at driveway locations, when those driveways are too closely spaced, can make it very difficult for through traffic to flow smoothly at desired speeds and levels of safety.

The American Association of State Highway and Transportation Officials (AASHTO) states that “the number of accidents is disproportionately higher at driveways than at other intersections...thus their design and location merits special consideration.” Studies have shown that anywhere between 50 and 70% of all crashes that occur on the urban street systems are access related.

Fewer direct accesses, greater separation of driveways, and better



driveway design and location are the basic elements of access management. When these techniques are implemented uniformly and comprehensively, there is less occasion for through traffic to change lanes in order to avoid turning traffic.

Consequently, with good access management, the flow of traffic will be smoother and average travel speeds higher. There will definitely be less potential for accidents. Before and after analyses show that routes with well-managed access can experience 50% fewer accidents than comparable facilities with no access controls.

What can access management do for you?

Access management is an obvious strategy in the fight to preserve travel speeds and minimize accidents on our

roadway systems. The real beauty of access management is that it can provide many substantial benefits at relatively low costs. A well-designed and implemented access management program:

- Provides substantial reduction in accident costs
- Maintains the efficient movement of people and goods
- Preserves the public investment in the transportation infrastructure
- Reduces the need to build new roadways
- Protects the value of private investments
- Enhances the environmental and economic vitality of surrounding communities

The list of those that will benefit is substantial. Some of the big winners are:

The traveling public will experience faster and safer travel

Taxpayers will see the transportation infrastructure used more efficiently

Businesses and the private sector will realize lower transportation costs for goods and services as well as expanded market areas

Public agencies and the communities they support will have more resources to expend on community needs.

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