

ACCESS MANAGEMENT

WHAT IS IT?

Access management is the systematic control of the location, spacing, design, and operation of driveways, median openings, interchanges, and street connections to a roadway. The purpose of access management is to provide access to land development in a manner that preserves the safety and efficiency of the transportation system.

WHY IS IT IMPORTANT?

Access management provides a cost effective approach to improve roadway safety and reduce congestion. Failure to manage access creates adverse social, economic, and environmental impacts. Successful access management results include:

- Reduced vehicular crashes and collisions involving pedestrians and cyclists.
- Reduced commute times, fuel consumption, and vehicular emissions as numerous driveways and traffic signals intensify congestion and delays along major roads.
- Less cut-through traffic in residential areas due to overburdened arterials.
- Reduced unsightly commercial strip development.



Vehicles caught in the median from heavy traffic.



Strip development with closely spaced driveways.

SAFETY BENEFITS:

Inadequate access management can result in traffic operation and safety problems, such as blocked movements into and out of driveways, conflicting and confusing turns at intersections, and insufficient distance for vehicle maneuvers. Research suggests that:

- Crash rates increase as the number of driveways per mile increases.
- Crash rates are lower on roadways with a non-traversable median than roads with two-way left turn lanes or no medians.
- U-Turn movements are generally safer than direct left turns and result in fewer accidents resulting in injuries or fatalities.
- Drivers making U-turns experience less delay than drivers making a direct left turn under high volume conditions.
- Medians improve pedestrian safety because they provide a refuge as pedestrians cross the road.



Proper spacing, design, and location of driveways can improve average travel speeds by up to 5 to 10 mph.

Source - Transportation Research Board, Access Management Manual, 2003

ECONOMIC BENEFITS:

Access management helps to preserve long-term property values and the economic viability of abutting development.

- Properly designed entrances shared by multiple businesses allow for more on-site parking, more customer options to access your site, and improved landscaping or other site amenities.
- Frontage roads allow customers to enter and exit businesses conveniently and safely, away from the faster moving traffic on the main roadway.



“Corridors with completed access management projects performed better in terms of retail sales than the surrounding communities.”

Source - Transportation Research Board, Access Management Manual, 2003

ENVIRONMENTAL BENEFITS:

Uncontrolled access can carve up rural landscapes and damage sensitive ecosystems, such as preserves and washes. Additionally, improved traffic flow translates into greater fuel efficiency and reduced vehicular emissions. Efficient traffic movement improves direct air quality because fewer brake dust particulates and emissions from slowing or stopped vehicles are being released into the air.



Fuel savings on a 10-mile urban arterial roadway with ½-mile signal spacing instead of ¼-mile spacing can save up to 575,000 gallons of gasoline a year.

Source - Transportation Research Board, Access Management Manual, 2003

HOW ACCESS MANAGEMENT IS ACHIEVED:

State and local agencies can implement successful access management programs through the systematic application of planning, regulatory, and design strategies that include:

- Providing a specialized roadway system.
- Limiting direct access to major roadways.
- Promoting intersection hierarchy.
- Locating signals to favor through movements.
- Preserving the functional area of intersection and interchanges.
- Limiting the number of conflict points.
- Separating conflict areas.
- Removing turning vehicles from through traffic lanes.
- Using non-traversable medians to manage left-turn movements.
- Providing a supporting street and circulation system.



FOR MORE INFORMATION, PLEASE VISIT:

www.azmag.gov/Transportation/Access_Management
www.accessmanagement.info