Benefits of Access Management

Access management is a set of techniques that state and local governments can use to manage access to highways, major arterials, and other roadways. Several techniques that are designed to increase the capacity of these roads, manage congestion, and reduce crashes include:

- Increasing spacing between signals and interchanges;
- Driveway location, spacing, and design;
- Use of exclusive turning lanes;
- Median treatments, including two-way left turn lanes and raised medians
- Use of service and frontage roads; and
- Land use policies that limit right-of-way access to highways.

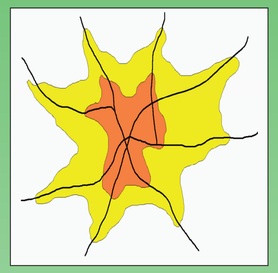
State, regional, and local governments use access management policies to preserve the functionality of their roadway systems. This is often done by designating an appropriate level of access control for each of a variety of facilities. Local residential roads are allowed full access, while major highways and freeways allow very little. In between are a series of road types that require standards to help ensure the free flow of traffic and minimize crashes, while still allowing access to major businesses and other land uses along a road.

System Preservation

Dead end streets, cul-de-sacs, and gated communities force more traffic onto collectors and arterials, impede emergency access and increase the number and length of automobile trips. A connected road network advances the following growth management objectives:

- Fewer vehicle miles traveled
- Decreased congestion
- Alternative routes for short, local trips
- Improved accessibility of developed areas
- Facilitation of alternative transportation modes
- More environmentally sensitive design
- Interconnected neighborhoods foster a sense of community

Economic Trade Area



Access management not only improves roadway safety, it also helps reduce the growing problem of traffic congestion. Frequent access and closely spaced signals increase congestion on major roads. As congestion increases, so does delay, which is bad for the economy and frustrating to customers. Well-managed arterials can operate at speeds well above poorly managed roadways – up to 15 to 20 miles per hour faster. This means more traffic past your door and better exposure for businesses. It also means a more convenient shopping experience for customers.

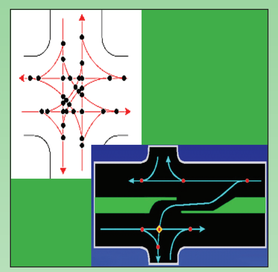
Environmental

Landscaped medians and road right-of-way provide opportunities for aesthetically pleasing landscaped areas and native vegetation. Properly designed landscaped areas reduce road run-off into nearby streams and wetland areas.

In urban areas tree planting reduces the heat-sink affects of asphalt and concrete creating cool sidewalks and pedestrian areas.

In rural areas landscaping can enhance the visual appeal of the roadway and mitigate the effects of roadway construction by replacing trees that may have been removed.

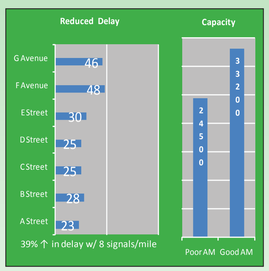
Roadway Safety



Each access point creates potential conflicts between through traffic and traffic using that access. Each conflict is a potential crash. Access management improves safety by separating access points so that turning and crossing movements occur at fewer locations. This allows drivers passing through an area to predict where other drivers will turn and cross, and also provides space to add turn lanes.

If crashes and congestion become frequent on a roadway, people will seek out other routes. Bear in mind that a single crash can tie up traffic and potential customers for hours.

Traffic Operations



Increasing the distance between traffic signals improves the flow of traffic on major arterials, reduces congestion, and improves air quality for heavily traveled corridors. The appropriate spacing between signals for a particular corridor depends greatly upon the speed and flow of traffic, but anything greater than two signals per mile has a significant impact on congestion and safety.

Aesthetics

The aesthetic quality of a community is comprised of visual resources: that is, those physical features that make up the visible landscape including land, water, vegetation and man-made features, i.e. buildings, roadways and structures.

A well-designed highway with good access management can be aesthetically pleasing. It provides the landscape architect greater opportunity in the development of practical and efficient landscape plans. When the number of median openings and driveway connections are reduced, a greater area is generally available for landscaping.

Business Benefits

Studies impacts of access management projects in Florida, Iowa, Minnesota, Kansas and Texas have consistently found that most businesses continue to do well when the project is completed.

- 86% of business show same amount or increase in sales
- Property values increase
- Positive responses from customers and delivery drivers

Source: Florida DOT, North Carolina DOT, TRB, FHWA, CUTR,

Examples of Access Management

Thoroughfare - No Access Management

Access Management Best Practices:

- Connected lots allow customers to travel between stores without using main roads

Access Management Improvements:

- Consolidate and share driveways where possible
- On major roads, limit driveway access to right-in, right-out only
- Utilize landscaped medians to manage access, not two-way left-turn lanes
- Utilize landscaped medians to reduce crashes at driveways and intersections
- Reduce driveways to utilize only minor roads for access
- On major roads, limit driveway access to right-in, right-out only

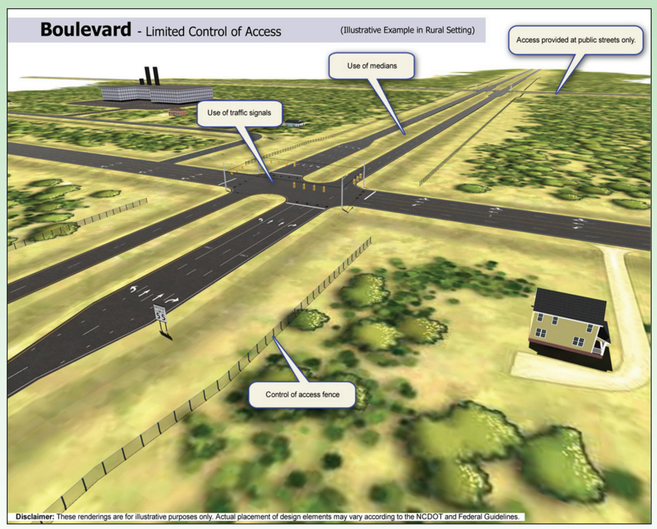
Boulevard - Partial Access Management

Access Management Best Practices:

- On major roads driveway access is limited to right-in, right-out
- Better access management has resulted in a higher posted speed limit

Access Management Improvements:

- Consolidate and share driveways where possible
- On major roads, limit driveway access to right-in, right-out only
- Utilize landscaped medians to manage access, not two-way left-turn lanes
- Utilize landscaped medians to reduce crashes at driveways and intersections
- Reduce multiple driveways for each lot
- Construct frontage roads to provide access to lots



Boulevard - Limited Access Management

Access Management Best Practices:

- Access to lots is limited to minor roads
- Control of traffic at public roads is signalized where appropriate
- Frontage Roads provide access to lots and businesses

Things to Remember

- Each corridor is different
- Local regulations need to be in place
- Communication with property owners is important
- Inner Perimeter Road is a future growth corridor, improvements can be implemented now rather than later