

Ten Ways to Manage Roadway Access in Your Community





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Costly improvements are not always the solution to safety and congestion problems. Roads, like other resources, also need to be carefully managed. Corridor access management strategies extend the useful life of roads at little or no cost to taxpayers. Following are ten ways that you can make the most out of your transportation system.

1

Lay the foundation for access management in your local comprehensive plan.

To assure that your roadways are managed properly, your comprehensive plan needs to address certain key issues. *First*, include goals, objectives, and policies related to access management in the plan. Tailor policy statements to advance the access management principles in this brochure. For example, a policy could be adopted promoting interconnection of adjacent developments along major roadways.

Second, make sure that your local transportation plan classifies roadways according to function and desired level of access control. This hierarchy of roadways is reinforced through roadway design and access standards in your land development code. For example, arterials require a much higher level of access control and different design standards than collectors or local streets. Some roadways require special attention because of their importance, the need for additional right-of-way, or due to significant access problems. These areas may be designated for special treatment in the comprehensive plan.

Third, provide for a greater variety of street types with varying design standards. Options could include access lanes, alleys, variations in on-street parking, and so on. This reduces development costs, promotes compact development, increases opportunities to interconnect streets, and helps save your major thoroughfare system. Many communities have only a few residential street design options that apply whether a subdivision has 8 homes or 80. Lack of design flexibility impedes infill development and results in a monotonous street layout. It can also cause a proliferation of substandard and inadequately maintained private streets.

2

Restrict the number of driveways per lot.

Establish a basic requirement that driveways are limited to one per parcel, with special conditions for additional driveways. Lots with larger frontages, or those with needs for separate right and left-turn entrances, could be permitted more than one driveway, in accordance with driveway spacing standards. Limitations on new driveways may be established using a "corridor overlay" approach, which adds new requirements onto the underlying zoning (see Figure 1). It is necessary to first identify and map the boundaries of all existing lots and parcels along the corridor. Then you could assign one driveway to each mapped parcel by right. This land may be further subdivided, but all new lots would need to obtain access from the existing access point.

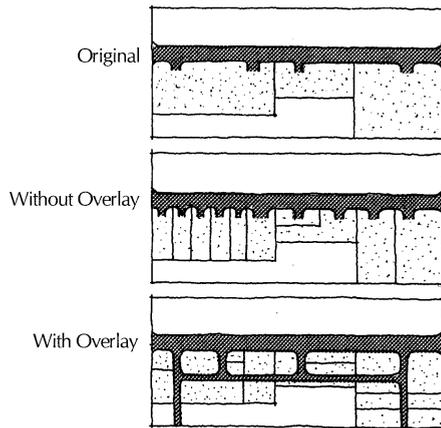
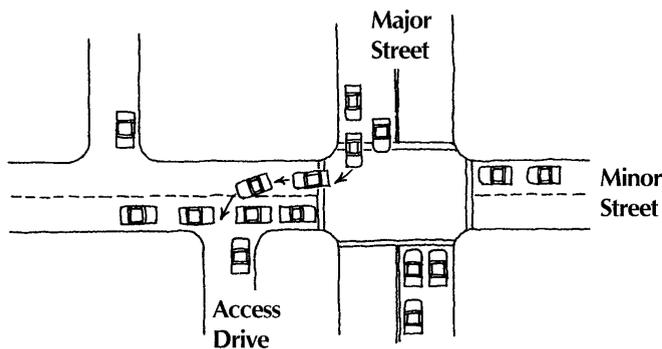


Figure 1. Corridor overlay

3

Locate driveways away from intersections.

Setting driveways and connections back from intersections reduces the number of conflicts and provides more time and space for vehicles to turn or merge safely across lanes. This spacing between intersections and driveways is known as corner clearance. Adequate corner clearance can



Ingress Movement Blocked
Figure 2. Inadequate corner clearance.

also be assured by establishing a larger minimum lot size for corner lots. You could impose conditional use limitations where adequate corner clearance cannot be obtained. This helps assure that corner properties do not experience access problems as traffic volumes grow.

4

Connect parking lots and consolidate driveways.

Internal connections between neighboring properties allow vehicles to circulate between businesses without having to re-enter the major roadway (see Figures 3 and 4). Joint and cross access requirements in your land development code can help to assure connections between major developments, as well as between smaller businesses along a corridor.

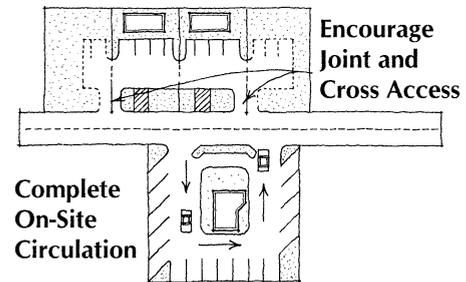


Figure 3. Joint and cross access.

Cross access also needs to be provided for pedestrians. Sidewalks are typically placed far away from buildings on the right-of-way of major roadways, or are not provided at all. Pedestrians prefer the shortest distance between two points and will walk if walkways are provided near buildings. Joint and cross access strategies help to relieve demand on major roadways for short trips, thereby helping preserve roadway capacity. They also help to improve customer convenience, emergency access, and access for delivery vehicles.

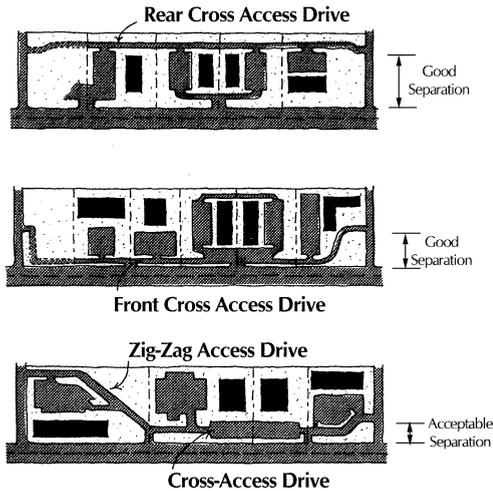


Figure 4. Cross access.

5

Provide residential access through neighborhood streets.

Residential driveways on major roadways result in dangerous conflicts between high-speed traffic and residents entering and exiting their driveway. As the number of driveways increase, the roadway is gradually transformed into a high speed version of a local residential street. Subdivisions should always be designed so that lots fronting on major roadways have internal access from a residential street or lane (also known as "reverse frontage"—see Figures 5 and 6). Minor land division activity can be managed by establishing a restriction on new access points and allowing land to be further subdivided, provided all new lots obtain access via the permitted access point. A variation of this approach is to allow lot splits on major roadways only where access is consolidated. Another step is to prohibit "flag lots" along major thoroughfares. Some property owners subdi-

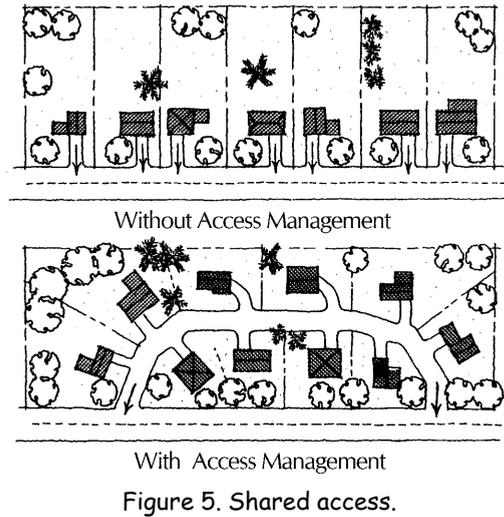


Figure 5. Shared access.

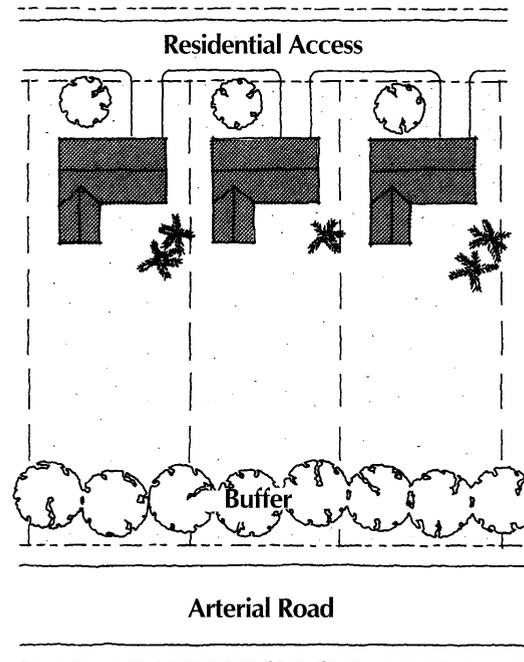


Figure 6. Reverse Frontage

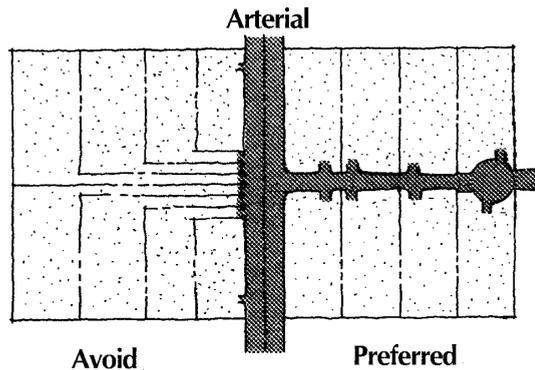


Figure 7. Avoid flag lots.

vide their land into lots shaped like flags to avoid the cost of platting and providing a road. Instead, the flag lots are stacked on top of each other, with the "flag poles" serving as driveways to major roads (see Figure 7). This results in closely spaced driveways that undermine the safety and efficiency of the highway. Eventually, residents may petition for construction of a local public road passing the cost of providing a subdivision road onto the community.

6

Increase minimum lot frontage on major roads.

Minimum lot frontages need to be larger for lots that front on major roadways, than those fronting on local roads. Narrow lots are a problem on major roads because they result in closely spaced driveways. Lots need to be deeper and wider along arterials to allow adequate flexibility in site design and to increase separation of access points (see Figure 8). Assuring an adequate lot size also protects the development potential and market value of corridor properties.

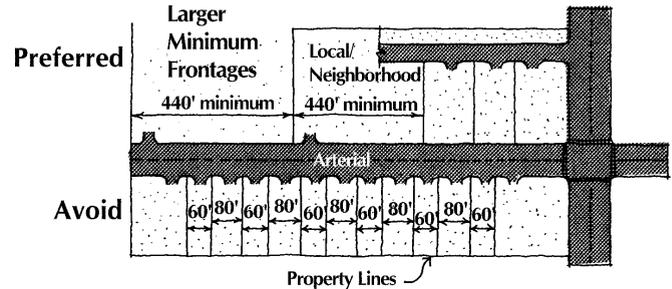


Figure 8. Lot frontage requirements.

7

Promote a connected street system.

As communities grow and land is subdivided for development, it is essential to assure continuation and extension of the existing local street system. Dead end streets, cul-de-sacs, and gated communities force more traffic onto collectors and arterials. Fragmented street systems also 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 walking, bicycling, and use of transit
- reduced demand on major thoroughfares
- more environmentally sensitive layout of streets and lots
- interconnected neighborhoods foster a sense of community
- safer school bus routes

Connectivity can be enhanced by a) allowing shorter blocks (600 ft.) and excluding cul-de-sacs from the definition of intersection; b) requiring stub streets to serve adjacent undeveloped properties; c) requiring street connections to nearby activity centers; d) requiring connections to

or continuation of existing or approved public streets; and e) requiring bicycle/pedestrian access-ways at the end of cul-de-sacs or between residential areas and parks, schools, shopping areas or other activity centers. It is also important to allow a greater variety of street types.

8

Encourage internal access to outparcels.

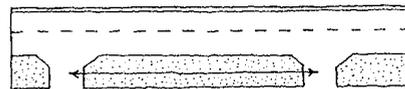
Shopping center developments often include separate lots or "outparcels" fronting on the major roadway. The outparcels are leased or sold to businesses looking for highly valued corridor locations. Access to these outparcels should be incorporated into the access and circulation system of the principal retail center. This reduces the need for separate driveways on the major road, while maintaining overall accessibility to the site. To accomplish this, establish that development sites under the same ownership or those consolidated for development will be treated as one site for the purposes of access management. Then require a unified traffic circulation and access plan for the overall development site.

9

Regulate the location, spacing, and design of driveways.

Driveway *spacing* standards establish the minimum distance between driveways along major thoroughfares (see Figure 9). These standards help to reduce the potential for collisions, as travelers enter or exit the roadway. They also encourage the sharing of access for smaller parcels, and can improve community character by reducing the number of driveways and providing more area for pedestrians and landscaping. The *location* of driveways affects the ability of drivers to safely enter and exit a site. If driveways do not provide adequate sight distance, exiting vehicles may

be unable to see oncoming traffic. In turn, motorists on the roadway may not have adequate time to avoid a crash. Driveway *design* standards assure that driveways have an adequate design so vehicles can easily turn onto the site. Standards also need to address the depth of the driveway area. Where driveways are too shallow, vehicles are sometimes obstructed from entering the site causing others behind them to wait in through lanes. This blocks traffic and increases the potential for rear-end collisions.



Adopt minimum spacing standards for driveways

Reinforce with minimum lot frontage and joint access requirements

Figure 9. Driveway spacing standards.

10

Coordinate with the Department of Transportation.

The Florida Department of Transportation is responsible for access permits along state roadways. Local governments oversee land use, subdivision, and site design decisions that affect access needs. Therefore, State and local coordination is essential to effective access management. Lack of coordination can undermine the effectiveness of regulatory programs and cause unnecessary frustration for permit applicants.

Timely communication is key to an effective review procedure. Begin by establishing a coordinated process for review of access permits along state highways. The state per-

mitting official could have applicants send a copy of the complete permit application to the designated local reviewing official. Prior to any decision or recommendation, the state permitting official could then discuss the application with the local reviewing official.



Property owners also may be required to submit the necessary certificates of approval from other affected regulatory agencies, before a building permit is issued. In Florida, this should include a "notice of intent to permit" from the Florida Department of Transportation where access to the state highway system is requested.

An effective method of coordinating review and approval between developers and various government agencies is through a tiered process. The first stage is an informal meeting and "concept review" period, which allows officials to advise the developer about information needed to process a development application. This includes information on required state and local permits, and any special considerations for the development site.

The concept review provides the developer with early feedback on a proposal, before the preliminary plat or site plan has been drafted. Once the preliminary plan is drafted, it can be checked to determine if additional conditions are required for approval. The final plan that is formally submitted should then require only an administrative review.

Local governments could also request a response from the FDOT prior to approval of plats on the state highway system. Applicants could be required to send a copy of the subdivision application to the state access permitting official. This should occur early in the plat review process, pref-

erably during conceptual review. Early monitoring of platting activity would allow the Department of Transportation an opportunity to identify problems and work on acceptable alternatives.

Intergovernmental agreements or resolutions can facilitate coordination between the state and local governments on access management. These tools can be used to clarify the purpose and intent of managing access along major thoroughfares, roadways that will receive special attention, and state and local responsibilities for advancing access management objectives.

Additional References

- "Model Land Development Regulations that Support Access Management," Center for Urban Transportation Research, 1994.
- Williams, K., Marshall, M. "Managing Corridor Development," Center for Urban Transportation Research, 1996.
- Williams, K., Forrester, R., "NCHRP Synthesis 233: Land Development Regulations that Promote Access Management." Transportation Research Board, Washington, D.C.: National Academy Press, 1996.

Training Opportunities

- "Access Management: Site Planning," FDOT 1997 (A Training Unit), available through Gary Sokolow.
- "Land Development Regulations that Support Access Management," FDOT 1997 (A Training Unit), available through Gary Sokolow.

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