

Land Development and Subdivision Regulations that Support Access Management

Overview

Effective local access management requires planning as well as regulatory solutions. Communities should establish a policy framework that supports access management in the local comprehensive plan, prepare corridor or access management plans for specific problem areas, and encourage good site planning techniques. Land development and subdivision regulations should be amended accordingly and communities may also consider a separate access management ordinance. Access management programs should address commercial development along thoroughfares, as well as flag lots, residential strips, and other issues related to the division and subdivision of land. Comprehensive and subarea plans provide the rationale for access management programs and can serve as the legal basis for public policy decisions.

Communities are increasingly concerned about the effects of development on service costs, community character, and overall quality of life. Yet conventional regulatory practice has played a role in perpetuating land development problems. Nowhere is this more apparent than the cycle of functional obsolescence created by strip commercial development along major arterials. The practice of strip zoning major corridors for commercial use is widespread. The primary reasons are accessibility and the expedience of rezoning highway frontage for commercial use as additional land is needed. Extension of utilities along highway rights-of-way promotes this linear land use pattern, and commercial businesses favor corridor locations because of the ready supply of customers.

Yet as development intensifies, the growing number of curb cuts and turning movements conflict with the intended function of arterials—to move people and goods safely, quickly, and efficiently. Unlike urban downtowns or activity centers, commercial strips are rarely designed for pedestrians or transit. Commercial corridors, residential areas, and office parks are frequently sealed off from each other with walls, ditches, loading docks and a host of other barriers—including the heavily traveled arterials that serve them.

Poorly coordinated access systems force more trips onto the arterial, traffic conflicts multiply, and congestion increases. As the level of service declines, additional lanes, controlled medians, and other expensive retrofitting measures are needed to maintain the capacity of the corridor for regional traffic. Businesses also suffer as accessibility deteriorates. Heavy traffic, difficult left turns, and poor sight clearance at corners deter customers. Businesses may relocate to areas where accessibility is less impaired, vacancies increase, and property values decline. Eventually the corridor is transformed into an

unattractive and confusing jumble of signs, curb cuts, utility lines, and asphalt.

These are not inevitable results of development and growth. Rather, they relate to the lack of adequate land division and access controls and problems inherent in current planning and regulatory practice. This report examines the role of the comprehensive plan in developing an access management program, aspects of current regulatory practice that contribute to access problems, and regulatory techniques that support access management principles.

The Comprehensive Plan

The local comprehensive plan is the policy and decision making guide for future development and capital improvements in the municipality. It analyzes development trends; identifies key planning issues; provides the policy framework; and specifies strategies for carrying out the plan. Purposes of the plan are to:

- promote orderly and efficient development;
- protect property values;
- preserve community character, natural resources, and the environment;
- promote economic development; and
- increase public awareness of the forces of community change.

Local comprehensive plans should establish how the community will balance mobility with access, identify the desired access management approach, and designate corridors that will receive special treatment. This may be supplemented through functional plans, such as an access management or thoroughfare plan, or through subarea plans, such as an interchange or corridor plan.

These plans evaluate long term trends; provide data on traffic accidents and related considerations; and establish the relationship between access management and other community objectives, such as congestion management and transportation level of service. By establishing the relationship between regulatory strategies and public health, safety, and welfare, these plans can serve as the legal basis for access controls.

The comprehensive planning process is an opportunity to increase community awareness of the forces of change and determine a strategic course of action. What level of growth can the community expect? What are the future land use and capital improvement needs? And what type of land development patterns do citizens prefer? Public opinion surveys, town meetings, and visioning workshops may be used to identify citizen concerns and build political support for regulatory change. Citizen dissatisfaction with commercial strips, for example, can be translated into policies for joint access, shared parking, and sign regulation.

When evaluating future land use needs, communities should account for vacancies and surplus land already available for that use (Chapin and Kaiser, 1985). Many communities set aside far more land than required to accommodate reasonable estimates of growth, thereby encouraging scattered development patterns and strip development. It is not uncommon for communities to strip zone the majority of their highway frontage for commercial use. Additional highway frontage should not be planned or rezoned for commercial use where vacant or surplus commercial space is already available. This encourages reuse of existing commercial sites, increases property values in those areas, and is a long term economic development strategy.

The City of Orlando has incorporated these planning and access management principles throughout its comprehensive plan. Orlando's planning and regulatory framework includes mixed-use corridors, rather than commercial strips, and mandatory mixed use with transit access in activity centers. The City limited the supply of commercial areas to encourage reuse, designated cross access corridors with joint access requirements, and adopted a comprehensive access classification and driveway spacing program modelled after Florida Department of Transportation standards. The City also has strong policies and standards relating to bicycle and pedestrian access, including standards for pedestrian streets.

Subdivision Regulations

Subdivision regulations help ensure: proper street layout in relation to existing or planned roadways;

adequate space for emergency access and utilities; adequate water, drainage, and sanitary sewer facilities; and appropriate site design. The subdivision ordinance establishes: the administrative review and evaluation procedure for processing conceptual, preliminary, and final plats; information that must be included on the plat; design principles and standards for lots, blocks, streets, public places, pedestrian ways, and utilities; required improvements, including streets, sidewalks, water, sewer, and curbs and gutters; and financing and maintenance responsibilities.

The subdivision review process should address a variety of issues, including:

- Is the road system designed to meet the projected traffic demand and does the road network consist of hierarchy of roads designed according to function?
- Is access properly placed in relation to sight distance, driveway spacing, and other related considerations?
- Do units front on residential access streets rather than major roadways?
- Does the project avoid areas unsuitable for development?
- Does the pedestrian path system link buildings with parking areas, entrances to the development, open space, and recreational and other community facilities?
- Have utilities been properly placed? (Listokin and Walker, 1989)

State subdivision statutes grant local governments authority to regulate subdivision of land and establish minimum requirements for subdividing and platting. New Jersey's statutory framework is among the most stringent, defining subdivision as the division of land into two or more parcels and provides exceptions only in special circumstances (i.e., a new street will not be required and the lot will be 5 acres or more, but only if the planning official determines it will be used for agricultural purposes). The New Jersey legislature recently took an unprecedented step in strengthening its subdivision requirements. The New Jersey Site Improvement Standards Act of 1993 provides for updating technical provisions of the State's model subdivision and site plan ordinance (1987) and adoption of the ordinance by the state. The requirements will automatically repeal and replace all local subdivision and site plan provisions. The new regulations will also consist of standardized application forms and administrative procedures, and should be completed by 1995.

Yet many subdivision statutes exempt division of land into larger parcels or creation of a small number of lots from review and conformance with subdivision

standards. Michigan has one of the more lenient statutes—exempting creation of parcels larger than 10 acres from local review and allowing successive redivision into four more parcels of 10 acres or less after a ten year period.

Florida's Subdivision Statute

Florida's Plat Act, Chapter 177, F.S. provides local governments in Florida with the authority to regulate the subdivision of land and establishes minimum regulatory requirements. Chapter 177, F.S. defines subdivision as the division or platting of real property into three or more lots or parcels and includes resubdivision or establishment of streets or alleys. Under these requirements, division of land into two lots or parcels is exempt from review.

Although some state subdivision statutes preclude more restrictive requirements at the local level, Chapter 177 establishes minimum requirements "and does not exclude additional provisions or regulations by local ordinance, laws or regulations." (Section 177.011, F.S.) In turn, state growth management requirements mandate local adoption of subdivision regulations and the Florida Model Land Development Code provides a model framework for local subdivision regulation that goes beyond statutory requirements to encourage local review of minor subdivision activity (see Lot Split Requirements).

The practice of allowing unregulated division of land produces results that are contrary to access management and other important public goals. Lots may be created that are unbuildable because they lack sufficient width or depth to meet lot dimension or setback requirements, are in a wetland or floodplain, or have inadequate access to public roads. Buyers may be unaware that the lot has been divided in a manner that is inconsistent with state or local regulations until they are denied a building or driveway permit. At that point the community is often compelled to issue a variance due to the risk of a regulatory takings suit. A streamlined review process for smaller subdivisions and lot splits helps assure that new lots are buildable under the regulatory framework and access is appropriate, without placing an unnecessary review burden on the property owner.

Lot Split Requirements

Lot split regulations provide for local review of divisions of land that would otherwise be exempted from subdivision review. Types of lots that pose special access concerns are flag lots, through lots, and corner lots. A review process for lot splits is intended to prevent

creation of unbuildable lots, excessive flag lots, or other land division patterns that can lead to access problems. It further prevents creation of lots with inadequate or inappropriate access to a public road.

Florida's Model Land Development Code establishes a process for reviewing lot splits, called minor replats. Minor replat is defined as:

“The subdivision of a single lot or parcel of land into two (2) lots or parcels, or the subdivision of a parcel into two or more lots solely for the purpose of increasing the area of two or more adjacent lots or parcels of land, where there are no roadways, drainage, or other required improvements, and where the resultant lots comply with the standards of this Code.”

The Florida Model Land Development Code provides for review by the local Planning Department (and any other local departments); requires information regarding water or sewer service; requires a scaled drawing of the intended division and any principal or accessory structures by a registered surveyor; provides for recording the replat in the official county records; and requires conformance with the following standards:

1. Each proposed lot must conform to the requirements of this Code.
2. Each lot shall abut a public or private street (except as hereinafter provided) for the required minimum lot width for the zoning district/category where the lots are located.
3. If any lots abuts a street right-of-way that does not conform to the design specification provided in this Code, the owner may be required to dedicate one-half the right-of-way width necessary to meet the minimum design requirements.

Once a Minor Replat has been approved, the Code restricts further division unless a development plan (or plat) is prepared and submitted for review. Local regulations should also require proof of lot split approval by the planning commission or zoning administrator before a building permit may be issued.

Residences scattered along state and county roads can be more damaging to the regional transportation network than commercial strips because they may occupy hundreds of miles of highway frontage. Over time such development patterns landlock interior land, school buses must make longer trips, emergency services must cover a wider area, and the cost of extending utilities becomes

Figure 1: Flag Lots on a State Highway

This area in northern Florida was divided into 3 acre lots to avoid subdivision review. The resulting flag lot "plat" creates long term access problems on a state highway and county road. Problems such as this can be prevented with flag lot restrictions and a review process for minor subdivisions and lot splits.

prohibitive. As the number of driveways increase, the highway is gradually transformed into a high speed version of a local road. The safety implications are obvious, as vehicles travelling 55 mph are mixed with residents entering and exiting their driveway.

Yet this development pattern is virtually prescribed by the combination of conventional zoning and unregulated land division. Despite authority to monitor creation of new lots, many communities continue to exempt lot splits. Sarasota County, Florida, for example, goes beyond the exemptions prescribed in statute to exempt lots of 5 acres or larger from review or division of land into two parcels. The division of agricultural land into 5 acre parcels effectively converts it for residential use. Over time the land is subdivided, creating residential strips along rural roadways rather than shared access subdivisions.

Lot split review provides an opportunity to discourage residential stripping of rural highways. Yet flexible zoning can be even more effective in achieving access management and resource management objectives. An innovative approach is the combination of subdivision review with site planning and cluster zoning techniques, proposed by rural landscape planner Randall Arendt. Arendt recommends the following access standard for small rural subdivisions:

“Subdivisions with frontage on state-numbered highways shall be designed into shared access points to and from the highway. Normally a maximum of two accesses shall be allowed regardless of the number of lots or businesses served (Yaro, Arendt, et al. 1990).

In the absence of flexible zoning, a sliding scale or quarter/quarter zoning approach to land division in rural areas is preferable. The former might permit division of one two acre lot per 10 acre parcel, and the latter may permit one nonfarm residential lot per 40 acres of farmland (Misseldine and Wyckoff, 1987).

See Section 18 of the Model Regulations for shared access standards and Section 20 for lot split requirements.

Flag Lots

Local plat maps often reveal lots shaped like flags with long narrow access poles. Flag lots are especially prevalent along lakes, rivers, cul-de-sacs, and rural highways. They are useful as a land division technique in areas where natural features or land division patterns create access problems, but flag lots proliferate in some areas where interior lots should instead be served by a private road. Landowners may stack flag lots when

dividing a parcel to provide interior lots with direct access to a state or county road, thereby avoiding the expense of providing a public or private road. The narrow frontages afford inadequate spacing between driveways and increase safety hazards from vehicles turning on and off the high speed roadway (See Figure 1).

Local land development or subdivision regulations should discourage creation of flag lots, except in unique circumstances. Exceptions could be provided where a site has unique physical constraints, such as wetlands or other natural features, that prevent access via a local street or where frontage requirements create access problems. Moskowitz and Lindbloom (1993) suggest the following flag lot standards:

- a minimum lot area (often at least twice the area allowed in that zone, not including the access right-of-way);
- minimum front, side, and rear yard requirements for primary lot;
- a minimum of 20 feet and maximum of 50 feet for the access right-of-way;
- not more than one flag lot per private right-of-way; and
- a minimum separation distance of at least the minimum frontage requirement of that zoning district. *[Note: Some communities also restrict the length of the access pole.]*

The City of Orlando, Florida, provides for flag lots when deemed necessary to achieve creative planning, to eliminate access to collector or thoroughfare streets, preservation of natural amenities or important historical or archaeological values...but only in residential developments approved in accordance with [site plan review requirements] and provided the following conditions are satisfied:

- no flag lot shall abut more than one other flag lot, nor shall flag lots be double stacked across a common street;
- in no instances shall flag lots constitute more than 10% of the total number of building sites in a given development, or 3 lots (whichever is more);
- the lot area occupied by the flag driveway shall not be counted as part of the required minimum lot area;
- flag lots shall not be permitted whenever their effect would be to increase the number of building sites taking driveway access to a Collector or arterial Street; and
- no flag driveway shall be longer than 150 feet [Section 60.128].

Access requirements in Hillsborough County, Florida's Land Development Code require all lots to have access to a public street through a portion of the lot, through an approved private street, or through commonly owned property [Section 2.5.9.10]. If through commonly owned property and serving more than one lot, the access must be at least fifty feet wide. Additional flag lot standards are provided for rural or semi-rural areas. These allow a single parcel to have a minimum twenty foot access provided it is separated from any other such access by at least the minimum lot width for the district and the access pole is not longer than 800 feet. If an easement access is required, it is subject to a minimum width of 20 feet and can serve no more than one parcel.

See Section 16 of the Model Regulations for flag lot standards.

Private Road Ordinances

Private roads offer an alternative means of access to small subdivisions in rural areas and to lots that are not subject to subdivision review. In the absence of provisions for private roads, common practice is the creation of multiple lots served by a common lot, easement, or multiple easements as in the example of stacked flag lots. The easement then becomes a private unpaved road serving several properties.

Unregulated private roads raise several problems. They may be inaccessible to emergency vehicles or large delivery trucks, placing public safety and private property at risk. Substandard roads deteriorate quickly and without a maintenance agreement, the local government may be called upon to maintain it. Buyers may not be aware of the maintenance issues associated with the road. Narrow rights-of-way may impede placement of utilities and private roads can exacerbate inefficient land development patterns.

These problems can be avoided through private road regulations that address design, construction, joint maintenance agreements, signage, and review. Private roads should be permitted for residential uses only and standards should be tied to lot split (minor replat) or subdivision regulations. Limitations should be placed upon the number of residences that may be served by a single access to a public road. Most communities require a minimum 66 foot right-of-way. Many rural areas do not require paving if the roadway conforms to gravel road specifications, whereas others require paving after the number of dwelling units served exceeds a certain number. Some ordinances provide a sliding scale approach, allowing gravel roads of about 12 feet to 18 feet wide for 2-4 parcels and requiring county road specifications for larger developments (Bloom, 1990).

Figure 2: Reverse Frontage

See Section 21 of the Model Regulations for private road standards.

Single Access Subdivisions

Linear subdivisions served by a single access drive ending in a cul-de-sac may inhibit emergency access and increase traffic congestion during peak hours by providing only one point of ingress and egress. Single access problems may also result in phased subdivisions where additional access is proposed for future phases. If future phases are not built, the remaining subdivision may have insufficient access. Although this is not a problem where only a few dwelling units are served, how many lots is too many?

Average daily trips for residential streets provide a baseline for access and cul-de-sac standards. Listokin and Walker (1989) recommend that when a subdivision on a single access rural road exceeds 20 lots (or 20 dwelling units), it should have at least two access points. The maximum number of dwelling units permitted for residential access streets would be about 50 per loop. A minimum turning radius that accommodates emergency vehicles should be required for cul-de-sacs.

See Section 18(3) of the Model Regulations related to single access subdivisions.

Lot Frontage and Dimensional Requirements

Through lots, also known as double frontage lots, are lots with frontage on two streets. Through lots should be required to obtain access on the street with the lower functional classification. When a residential subdivision is proposed that would abut an arterial, it should be designed to provide through lots along the arterial with access from a local road. These requirements are known as reverse frontage (Figure 2). In either case, the community could require that access rights to the arterial or collector be dedicated to the local government and this restriction recorded with the deed.

Sarasota County, Florida provides that when a new subdivision is created, lots abutting an arterial are prohibited from having direct access to that arterial. Instead, access to these lots must be from an interior local street or frontage street and access rights to the arterial must be dedicated to the County and run with the land (Sarasota County Land Development Regulations, Section B3.3(j)).

Minimum lot frontage requirements are tied to zoning requirements for a district and set the minimum lot width or frontage on a public road. Minimum lot frontage standards should be higher on arterials and collectors to allow for greater spacing between commercial or residential driveways. The frontage requirement will vary depending upon the minimum lot size in that zoning district and other dimensional requirements, such as the width-to-depth ratio. Although driveway spacing standards may be used to limit residential driveways along rural highways, land division controls and higher minimum lot frontage requirements can be more effective in controlling residential strips.

Minimum lot frontage and maximum lot width-to-depth ratios prevent the creation of long and narrow or irregularly shaped lots. Width-to-depth ratios may be included in the local land development code or subdivision regulations. Rural areas may adopt a maximum width-to-depth ratio of 1:4, meaning that parcels with 100 feet of frontage may not be longer than 400 feet. Urban or suburban areas may use maximum ratios of 1:2.5 or 1:3. Width-to-depth ratios should be set higher in coastal areas to account for erosion (Williams, McCauley, Wyckoff, 1990).

See Section 15 of the Model Regulations for reverse frontage requirements; Section 14(1) for lot frontage requirements; and Section 17 for width-to-depth ratios.

Driveway Spacing Requirements

Spacing standards limit the number of driveways on a roadway by mandating a minimum separation distance between driveways. These standards help reduce the potential for collisions as travellers enter or exit the

roadway, encourage sharing of access for smaller parcels, and can improve community character by discouraging haphazard placement of driveways along corridors. Driveway spacing at intersections and corners should provide adequate sight distance and response times and permit adequate stacking space.

Driveway spacing standards should be tied to the state DOT access classification and driveway permitting standards for the state highway system. Driveway spacing standards on other roadways may be tied to the posted speed limit or functional classification of the roadway, with the minimum distance between driveways greater as speed limits increase. Some communities also provide variable spacing depending upon the land use intensity of the site served and that of adjacent sites.

See Sections 5 and 6 of the Model Regulations for recommended driveway spacing standards.

Joint Access

Joint access requirements provide for a unified on-site circulation plan and adequate driveway spacing along developing commercial corridors. Orlando, Florida has a comprehensive program for minimizing curb cuts through joint access and cross access requirements. Joint use driveways and cross access easements must be established wherever feasible and the building site must incorporate a unified access and circulation system. Orlando's cross access standards require:

- a. A continuous linear travel corridor extending the entire length of each block it serves, or at least 1,000 feet of linear frontage along the thoroughfare, and having a design speed of 10 mph;
- b. Sufficient width to accommodate two-way travel aisles designed to accommodate automobiles, service vehicles and loading vehicles in accordance with design requirements;
- c. Stub-outs and other design features that make it visually obvious that the abutting properties may be tied in to provide cross-access;
- d. Linkage to other cross-access corridors in the area.

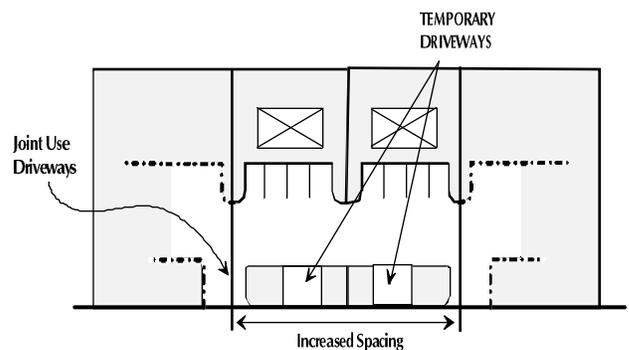
All plats, site plans, and other development must meet these standards on designated thoroughfares and property owners must record an easement with the deed

allowing cross access to and from other properties in that affected area. The property owner must also enter an agreement to dedicate remaining access rights along the thoroughfare to the City and enter an agreement to be recorded with the deed that pre-existing driveways will be closed and eliminated after construction of the joint-use driveway. Cross-access corridors are indicated on the zoning map by dashed or dotted lines and distinguish those portions of the corridor where easements have been recorded.

Standards are included for coordinated or joint parking design and joint maintenance agreements must also be recorded with the deed. These standards are applied to phased development in the same ownership and leasing situations. Where abutting properties are in different ownership, cooperation is encouraged but not required. Only the building site under consideration is subject to the requirements, which are recorded as a Binding Lot Agreement prior to issuing a building permit. As abutting properties are developed or initiate retrofitting requirements then they must abide by the standards (see Retrofitting).

If properties are unable to meet driveway spacing requirements of the Access Management Classification System, the Public Works Director may waive the requirements and provide for less restrictive spacing (see Figure 3). The waiver is based on the condition that joint use driveways, cross access easements, and a unified parking and circulation plan must be established wherever feasible. Where unified access and circulation is not practical, the City may provide a variance.

Figure 3: Joint Access



See Section 7 of the Model Regulations for joint and cross access requirements.

Retrofitting Nonconforming Properties

Land development regulations are not retroactive. Existing properties that do not meet land development requirements must be designated as nonconforming—a process commonly known as grandfathering. Nonconformities may relate to land use or dimensional requirements, as in a nonconforming lot of record. Nonconforming properties may continue in the same manner as they existed before land development regulations were adopted. These requirements protect the substantial investment of property owners and recognize the expense of bringing those properties into conformance.

Yet the negative impacts of nonconforming properties may be substantial. Nonconforming properties may pose significant safety hazards, increase traffic congestion, reduce property values, degrade the environment, or undermine community character. To address the public interest in these matters, land development regulations include conditions or circumstances where nonconforming access features may be brought into conformance. Such conditions may include:

- when new driveway permits are requested;
- an increase in land use intensity;
- substantial enlargements or improvements;
- significant change in trip generation; and
- as changes to roadway design allow.

Opportunities to bring nonconforming features into compliance typically occur after a change of ownership when the costs of required improvements may be amortized in the business loan or mortgage.

See Section 13 of the Model Regulations for retrofitting requirements.

Limiting New Driveways Along Major Roads

An effective method of managing curb cuts in newly emerging commercial corridors is to restrict the permitted number of future driveways to one driveway per existing lot or parcel. This may be accomplished as follows:

1. Identify and map the emerging commercial corridor.
2. Verify the boundaries of all existing lots.
3. Assign one driveway to each mapped parcel.

The assigned driveway would be permitted by right effective upon adoption of the ordinance and map. Parcels with larger frontages could be permitted more than one driveway and additional driveways could be permitted by special use permit. Under this approach,

future division and subdivision of parcels could occur, but each newly created lot would obtain access via the connection permitted by the ordinance. Because of this constraint, property owners would be obliged to share driveways, use service drives, cross access, and even rear access drives in some instances to maintain appropriate access. Limitations on new driveways may be established using a corridor overlay approach.

See Section 14 of the Model Regulations for corridor overlay standards based on this technique.

Outparcel Requirements

Outparcels are lots on the perimeter of a larger parcel that abut a roadway. Outparcel regulations are adopted for commercial corridors to foster coordinated on-site circulation systems that serve outparcels as well as interior development, thereby reducing the need for driveways on an arterial. Outparcel regulations may include standards governing: the number of outparcels; minimum lot frontage; access; unified parking and circulation; landscaping and pedestrian amenities; building height, coverage, and setback requirements; and signage.

The City of Pembroke Pines, Florida limits the number of outparcels to one per ten acres of site area, with a minimum frontage requirement of 500 lineal feet per outparcel. Standards also call for a minimum of 300 lineal feet of open space between outparcels. Roadways separating adjacent parcels may be included with open space in meeting this requirement. The ordinance prohibits more than one building per outparcel. Each parcel must provide all required parking on site and conform to all landscaping and setback requirements of that zoning district. Access requirements are as follows:

"Access to the outparcel shall be as direct as possible avoiding excessive movement across parking aisles and queuing across surrounding parking and driving aisles. All access to the outparcel must be internalized utilizing the main access drive of the principal retail center... Drive-in facilities shall be provided on the outparcel site exclusively. In no instance shall the circulation and access of the principal commercial facility and its parking and service be impaired."

In addition, covenants imposed by the Planning and Zoning Board and Architectural Review Board must be added to the deed if title to the outparcel is transferred after the site plan is approved. The seller must notify the buyer, who is bound by the restrictions.

plan has been drafted. The preliminary plan is then checked to determine if additional conditions are required

See Section 10 of the Model Regulations for outparcel standards.

Corridor Overlay Zones

Overlay zones are a growing method for managing access along commercial corridors. The technique is used to overlay a special set of requirements onto an existing zoning district, while retaining the underlying zoning and its associated requirements. Text that specifies standards for the access management overlay district is included in the land development (or zoning) code and then corridors are designated on the zoning map. Overlay requirements may address any issues of concern, such as joint access, parking lot cross access, reverse frontage, driveway spacing, and limitations on new driveways.

Sample regulations for the Grand Traverse Bay Region in Michigan apply to the area 300 feet on either side of the designated corridor, establish minimum lot frontage of 400 feet, and permit only one access per 400 foot lot (Wyckoff, M., Sept. 1992). Service drive provisions freeze the number of driveways on a designated corridor to one per existing parcel having a single tax code number at the date of the amendment. When subsequently subdivided, all parcels must provide access via subdivision roads, other private or public roads, or by service drives in conformance with specified design requirements.

Commercial driveway location and spacing standards are provided for regional arterials and other types of roads. Parcels with less than 100 feet of frontage may be permitted a driveway, but in certain cases a shared driveway or alternative means of access may be required. Requirements for minimum intersection or corner sight distance are tied to AASHTO guidelines and somewhat lower standards tied to the posted speed limit are provided for special circumstances, such as inadequate frontage.

See Section 14 of the Model Regulations for corridor overlay standards.

Improving Coordination

An effective method of coordinating review and approval is through a tiered review process that begins with an informal meeting and concept review. The informal review allows officials to advise the developer regarding information needed to process the application. This may include state and local permit requirements and special considerations of the development site. The concept review provides the developer with early feedback on a proposal, before the preliminary plat or site

**Table 1:
Regulatory Techniques that Support
Access Management**

- Regulate driveway spacing, sight distance, and corner clearance.
- Restrict number of driveways per existing parcel on developing corridors.
- Increase minimum lot frontage along thoroughfares.
- Encourage joint access and parking lot cross access.
- Review lot splits to prevent access problems.
- Regulate flag lots and lot width-to-depth.
- Minimize commercial strip zoning and promote mixed use and flexible zoning.
- Regulate private roads and require maintenance agreements.
- Establish reverse frontage requirements for subdivision and residential lots.
- Require measurement of building setbacks from future right-of-way line.
- Promote unified circulation and parking plan.

for approval and the final plan should require only administrative review. A parallel review process should be established in coordination with the state DOT district office where an application involves access to the state highway system, as is done in Oregon (Falconi 1991) and in many Florida DOT Districts.

To ensure conformance with land division and access requirements, the building permit should be established as the lead permit during development review. Property owners may then be required to submit the necessary permits or certificates of approval from regulatory agencies involved in subdivision or site plan review before issuing a building permit. In Florida, this should include a "notice of intent to permit" an access connection from the Florida Department of Transportation where the state highway system is involved, to assure conformance with state access management and driveway permitting requirements. In turn, FDOT will not issue the actual access permit until the local government gives final development approval.

Upon adoption of new access management requirements, planners should also initiate a training program to educate planning commissioners, the zoning administrator, and the zoning board of adjustment on the

purpose and administration of the new standards. It is essential that the regulations be applied consistently—especially when opportunities arise for retrofitting nonconforming features. Variance requests should be judiciously evaluated according to specified review procedures and discretionary standards to avoid inconsistency.

See Section 23 of the Model Regulations for procedures on coordinating access review with the Florida Department of Transportation on the State Highway System.

Conclusion

Access management addresses a broad array of quality of life issues fundamental to promoting livable, prospering communities. Land division and access controls:

- foster well designed circulation systems that improve the safety and character of commercial corridors;
- discourage subdivision practices that destroy the rural character of the landscape or essential natural resources;
- advance economic development goals by promoting more efficient use of land and transportation systems; and
- help control public service costs and the substantial public investment in infrastructure and services.

Effective local access management requires both planning and regulatory solutions. Communities should establish a policy framework that supports access management in the local comprehensive plan, prepare corridor or access management plans for specific problem areas, and encourage good site planning techniques. Zoning and subdivision regulations should be amended accordingly and communities could consider a separate access management ordinance. Comprehensive and subarea plans provide the rationale for access management programs and can serve as the legal basis for public policy decisions.

Because land division and access controls are politically charged, planning officials are advised to develop strategies for diffusing opposition before advancing recommendations. Be aware of the practical concerns of those most affected by proposed amendments and devise strategies for ameliorating hardship. Town meetings, attitude surveys, and other techniques should be used to educate stakeholders and generate political support.

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