

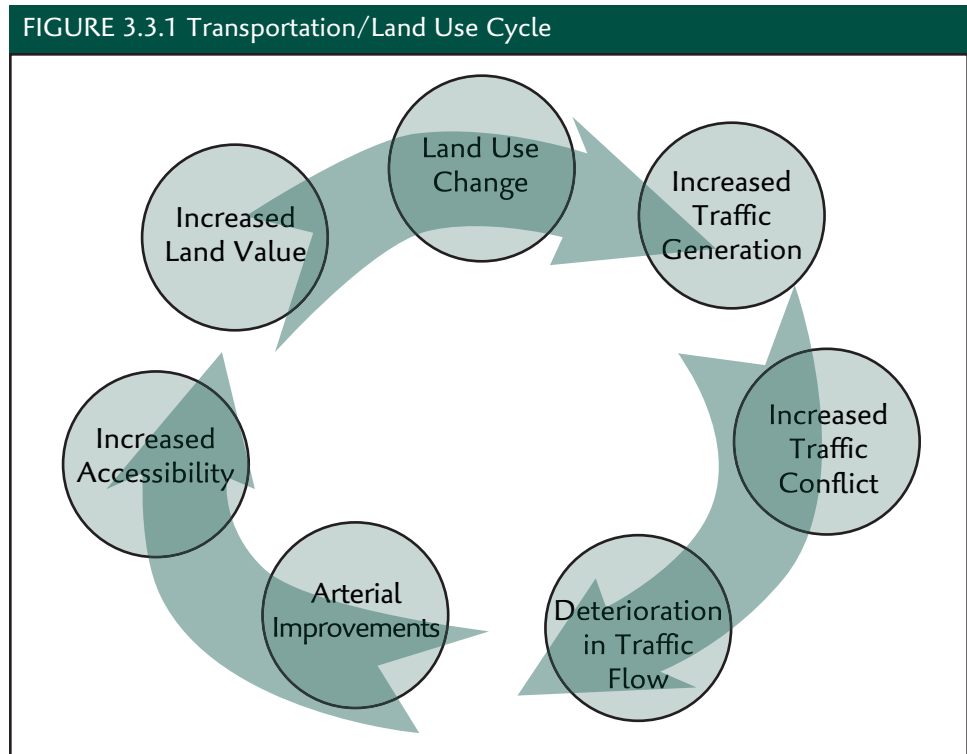
# 3.3 Access Management

## BACKGROUND AND PURPOSE

Access management involves the planning and coordination of the location, number, spacing and design of access points from a roadway to adjacent land. Historically, transportation and access management plans have concentrated primarily on efficiently controlling the movement of vehicles by seeking to reduce conflicts and maximizing the traffic capacity of a roadway. However, recent planning efforts recognize that transportation is inextricably linked to land use decisions and that sprawl and inefficient land use policies go hand in hand with congestion, reliance on automobiles, and increased pollution.

The “Transportation/Land Use Cycle” (Figure 3.3.1) involves a sequence of events in which improvements are made to the transportation network that lead to new land use development, which generates additional traffic and the need for further roadway improvements.

- RELATED TOOLS:
- Pedestrian Oriented Development
  - Infill Development
  - Village Plan Alternative



The recommendations contained in the chapter on Pedestrian Oriented Development should be considered and incorporated into the development of access management plans.

In order to change this cycle, access management must incorporate all modes of transportation including public transit, bicycles and pedestrians, as well as encouraging land use techniques such as nodal development, mixed-use development, and other techniques that reduces the need to travel by automobile and brings the cycle more into balance. Planners now focus access management plans not only on vehicle efficiency, but also on promoting

good land use planning techniques and smart growth as effective ways to extend the life and capacity of roadways.

Good access management can enhance good land use planning. In its simplest concept, access management is quite simply a good balance between the needs of an efficient transportation system and the need to access adjacent land uses. When access to property along roadways is uncoordinated, growth along major travel corridors can result in strip development and sprawl, a proliferation of access points causing unsafe conditions for drivers, pedestrians and other highway users. With uncoordinated development, each individual land use along the corridor has its own access driveway. Numerous access points along the corridor create conflicts between turning and through traffic, which causes delays and accidents.

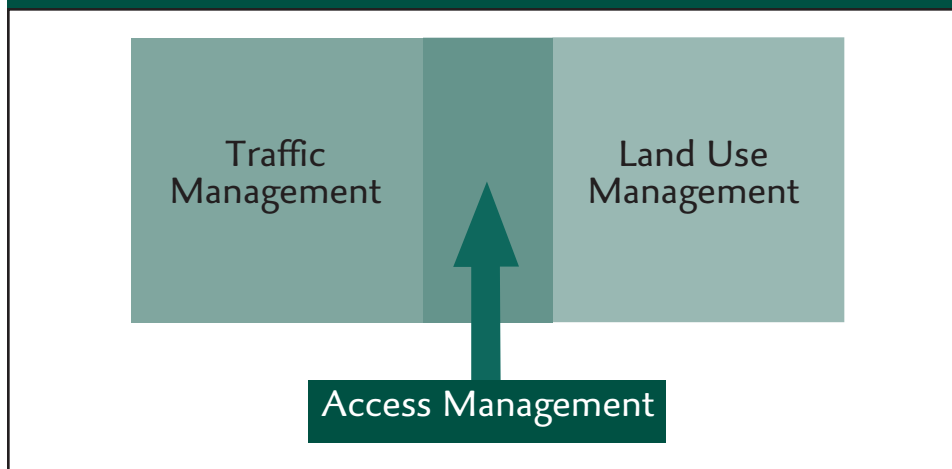
Access management programs facilitate safe access to land uses along major roadways, while promoting and supporting an efficient street system, as well as unified access and internal circulation systems for development. The most effective access management plans are combined with a comprehensive menu of land use planning and zoning techniques that limit strip development and inappropriate growth that often create access and traffic flow problems. They feature concentrated nodes of development along corridors that preserve open space between nodes and integrate pedestrian walkways and bicycle path ways that provide true alternative means for reaching key work, shopping and leisure destinations within the nodes.

The result is a roadway corridor that functions safely and efficiently for its useful life, provides healthier, more walkable communities and a more attractive corridor. Additional benefits that access management plans can facilitate are reduced overall vehicle trips, fewer traffic delays and congestion, maintenance of roadway capacity, improved air quality, compact development patterns, improved access to adjacent land uses and enhanced pedestrian and bicycle networks.

## APPROPRIATE CIRCUMSTANCES AND CONTEXT FOR USE

Because of the increase in recent growth rates, many segments of New Hampshire's arterial and collector roadway system are becoming increasingly congested. Most of these congested segments are located on established roadways that provide through routes for commuters as well as local access to employment centers or commercial strips. The key to good access management is to ensure that land uses and development regulations along major corridors and the adjoining local road networks complement and implement the recommendations of a well thought out corridor plan. Coordinated access management (Figure 3.3.2) is the juncture between land use planning policies and traffic management.

FIGURE 3.3.2 Access Management



The actions of local planning boards in planning, reviewing, and approving land development can significantly impact transportation plans. Planning boards play a key role in implementing transportation plans by making sure that the land use decisions they make are coordinated with an overall access management strategy. They have the opportunity to work with developers to implement good land use policies as well as good access management policies.

There are a number of access management strategies that can be used to coordinate transportation and land use. Not all will apply to every community. Some of them are more appropriate to less developed rural areas, others are more appropriate to existing urban areas. In the urban areas, various methods can be applied when existing sites are redeveloped or when negotiations with landowners are successful. Therefore, it is up to each planning board to determine what will work best based on local conditions.

Corridor management plans (discussed below) can assist communities in identifying appropriate land use policies as well as techniques specific to the needs of the corridor. The following are common access management techniques and corresponding land use policies.

- **Limit the number of access points.** Roadways that serve higher volumes of regional through traffic need more access control to preserve their traffic function. Zoning for nodal development which limits development to mixed-use areas such as village areas and restricts development along the corridors in between the nodes strengthens this access management technique.
- **Street and driveway design.** Elements such as medians, median openings, auxiliary lanes, driveway design, intersection channelization, frontage roads, and grade separations are also used to help manage access. Design standards for these elements are usually set forth in local subdivision and site plan regulations or refer to state standards. Design standards are especially important for situations in which there is no comprehensive access management plan.

The requirement of shared driveways is becoming more common and is an effective technique in limiting the number of access points onto major roadways.

For more explanation of these techniques, refer to “Summary of Access Management Methods” (NHCRP Report 548, 2005).

Shared driveways have a tendency to reduce accidents associated with turning traffic and have a tendency of improving the efficiency of the main road.

- **Acquisition of access rights.** State and local agencies have the authority to acquire access rights, which is typically the method used for controlling the access along freeways, expressways, parkways, and other types of major roadways. The acquisition of access rights is an effective and long-term solution to the problem of providing adequate and safe access, particularly at selected locations such as interchanges or close to planned interchanges.
- **Access management ordinances.** Ordinances may be used to address various aspects of access management, such as permitting or prohibiting access; location, spacing, and design of access connections; spacing of median openings, signalized intersections, and interchanges; and the access permitting process. Zoning ordinances can address lot dimensions and coverage, landscaping, parking, site circulation, sidewalks and bicycle facilities, development density, and the allowable use of the land. “Corridor overlay districts” are sometimes used to establish access requirements for a specific roadway corridor. Village Plan Alternatives, higher density development, can be combined with access management ordinances to create a safe, livable and walkable community.
- **Policies, directives, and guidelines.** Communities may adopt specific policies, directives, or guidelines that are directly or indirectly related to access management. Every local government has statutory authority to control highway design and operations to protect public safety, health, and welfare (see RSA 674:17, D). A local community may establish policies by resolution or in its master plan. Access management issues are also sometimes addressed through guidelines without specific legislative authority and without the mandatory status and enforceability of regulations.
- **Land development regulations.** Many communities address highway access management under their subdivision and site plan review process. This can include specific access management and driveway design requirements, as well as regulations that govern the division of land into lots, blocks, and public ways to help ensure proper street layout for existing or planned roadways. Traffic impact studies are usually required for larger developments and can show if, where and how site access may be most effective.
- **Zoning Ordinances.** Encouraging nodal development through zoning and other regulations helps to concentrate development into areas where access can be designed and coordinated while allowing uninterrupted travel between nodes.

## LEGAL BASIS AND CONSIDERATIONS FOR NEW HAMPSHIRE

The legal basis for access management comes primarily from three sources: the zoning ordinance, site plan review and subdivision regulations. In New Hampshire, municipalities are expressly given the mandate to develop zoning ordinances that are designed to lessen congestion in the streets, secure safety from fires, panic and other dangers, and facilitate the adequate provision of transportation (RSA 674:17, I a-j).

Under RSA 674:36 (Subdivision Regulations), planning boards are authorized to develop regulations that allow it to design and control the transportation system within the community. Planning boards may regulate the proper arrangement and coordination of streets within subdivisions in relation to other existing or planned streets, require suitably located streets of sufficient width, and be coordinated so as to compose a convenient system.

Under RSA 674:43 (Power to Review Site Plans), municipalities that have adopted a zoning ordinance (RSA 674: 16) and subdivision regulations (RSA 674:36) may permit planning boards to review site plans for non-residential development and multi-family dwelling units. The language that authorizes site plan review mirrors the language in RSA 674:44, subsections (d), (e) and (f) which authorize planning boards to adopt regulations that address the “proper arrangement and coordination of streets within the site in relation to other existing or planned streets or with features of the official map of the municipality” as well as other features such as width, and “be coordinated so as to compose a convenient system.”

## ACCESS AND COORDINATION ON STATE ROADWAYS

The New Hampshire Department of Transportation (DOT) issues driveway permits for all proposals for access the state road system (see RSA 236:13). Until recently, the DOT issued permits with limited input from the local decision makers. To improve the coordination of local and state planning objectives along the state’s road system, the DOT is instituting a process to allow communities that have conducted a corridor planning process be more involved in the state permitting process. The DOT has developed a memorandum of understanding (MOU), which is an agreement between the DOT and the community, to coordinate the review and issuance of driveway permits to access state roads.

The MOU contains a number of requirements for the community and the DOT:

1. The community must develop, adopt and enforce access management standards for state highways that comply with best management practices for access management.
2. The community can develop site or parcel specific access management plans for highway corridors or segments.
3. The community must notify the DOT district engineer when it receives a development proposal that would require a state driveway permit and solicit input on the design.
4. The community shall require that all access points comply with its adopted access management standards and any applicable site specific access plans.
5. The community must inform the DOT of any waivers or variances from the access management standards or plans prior to local approval and provide appropriate notice for comments.
6. The DOT will provide information and technical assistance to the community in developing access management standards and site/parcel specific plans.
7. The DOT will not approve driveway permits that do not conform to the local access management standards or plans except with the consent of the community.
8. The DOT district engineer shall notify the community and transmit copies of all

driveway access permit applications to the planning board.

9. The DOT will withhold final action on any driveway access permit until the planning board has formally approved the access plan for the development.
10. The DOT must notify the community if it intends to issue a driveway access permit that is not in conformance with the adopted access management standards or parcel specific plan.
11. All corridor or site specific access management regulations or plans must be filed with the DOT.

Communities interested in coordinating more closely with the Department of Transportation should contact their Regional Planning Commission to explore the MOU option. In addition, communities should develop a permitting process for driveways accessing local roads. Such permits can assist with the implementation of access management techniques.

## EXAMPLES AND OUTCOMES

### CORRIDOR STUDIES

Corridor studies are studies of specific highway corridors that evaluate the current conditions and address potential problems. These studies identify ways that communities can improve the highway corridor by managing access and makes land use policy recommendations to guide future development in a manner that maximizes the roadway capacity and the efficient development of adjacent land. Transportation corridors are the areas along a roadway and the adjacent land uses.

The *New Hampshire Route 101 Corridor Plan* (2002) completed for the towns of Amherst, Milford, and Wilton is an example of a typical corridor study. The analysis covers traffic volumes, bicycle and pedestrian opportunities, land use patterns and regulation, the natural environment, historic and cultural resources, visual analysis and sets forth a vision for the future. The plan proposes strategies for improving the efficiency of the corridor through a combination of roadway improvements and changes to land use regulations.

An example of a corridor study that spans a large segment of the state is the *Route 16 Corridor Protection Study* developed by DOT and published in 1999. The goal of the study was to “demonstrate an innovative approach to developing a long-range solution to the problem of providing an efficient transportation system which promotes economic vitality and a high quality of life for the residents of communities and visitors to the regions served by the Route 16 Corridor.”

The project phases included initial data collection, additional data collection and public input, analysis, and recommendations. The purpose of this study was to develop principles and techniques to implement the corridor vision. The three main recommendations in the plan for future land use planning were:

1. Encourage development in nodes.
2. Discourage major new development between nodes.
3. Manage access to land uses.

The plan sets forth a program to integrate good transportation and land use principles to guide growth and prevent the sprawl of development. In combination with a planned and dynamic transportation improvement program, conflicts along the roadways can be reduced. Finally, the implementation of the corridor management plan will enhance the travel experience by offering safe passage through a major traffic corridor linking the seacoast with the mountains.

## ACCESS MANAGEMENT PLANS

An access management plan should be incorporated into a corridor study along the length of a highway, but it can also serve a more defined area, such as a shopping center or central village area. An example of a recent access management plan that served a targeted area rather than an entire corridor is *The Town of Warner, NH 103 Access Management Study* (2005), which covers the area around Exit 9 on I-89 in the town of Warner. This area is home to recent development that centers around the I-89 Exit 9 interchange, and includes a grocery store, assorted gas stations, a NH Park & Ride facility, fast food restaurants. The town recently located its new police station nearby and was concerned that without a plan, this area could become quickly congested and unsafe, as well as a detriment to the nearby historic village center. As the subject of a Plan NH charrette, the town developed a vision for a gateway and coordinated access to the major businesses. The access management plan analyzed the feasibility of the vision, and proposed a framework for future development around Exit 9. This will serve as a blueprint for the planning board and zoning board of adjustment as they evaluate applications for development in the area.

### Subdivision and Site Plan Regulations Addressing Access Management

Many New Hampshire communities have not completed access management plans for all roadways within their communities. However, access management plans are not a prerequisite for incorporating access management into existing regulations. While some communities have regulations that help to specifically control access to important arterial or collector corridors, many more have adopted general regulations that apply to all developments that assist in controlling and managing access to the transportation network.

#### Control of Access Points

**Town of Litchfield:** The northern commercial zone requires 500 feet of frontage on Route 3A and limits the number of access points in the district to one per 500 feet. If an access is constructed to town standards or access is taken from an existing town road, then the frontage requirement is reduced to 150 feet.

**Town of Hudson:** The driveway regulations permit only one driveway per parcel.

**Town of Amherst:** The commercial zones allow no more than one access to any lot wherever desirable for traffic safety and they allow for combining access points where two or more lots are being developed.

#### Spacing of Access Points

**Town of Brookline:** The driveway regulations require that any driveway be separated a minimum of 50 feet from another driveway.



**Town of Bedford:** The zoning ordinances require a minimum separation of 120 feet between curb cuts.

**Town of Mont Vernon:** The zoning ordinance requires 500 feet of frontage on Route 13 and permits one access road per 1,000 feet.

### Width of Access Points

**Town of Amherst:** The subdivision regulations limit the maximum width of any driveway to 20 feet for each lane, or 40 feet for a two way driveway.

**Town of Hudson:** The driveway regulations limit the maximum driveway width to 50 feet with provisions for flaring the entrance to accommodate the turning radius of vehicles expected to use the site.

### Shared Access Points

**Town of Brookline:** The zoning ordinance permits common driveways service a maximum of four lots.

**Town of Hollis:** The zoning ordinances permit common driveways serving no more than two adjacent lots.

**Town of Wilton:** The commercial and industrial zoning districts along Route 101 require the design and construction of streets or side roads to permit travel between adjacent lots without accessing Route 101.

**Town of Amherst:** The zoning ordinance has explicit provisions to limit points of access to commercial and office zones and encourages combining access points where two or more lots are being developed. In addition, direct access to 101A in the industrial zone is not allowed unless other access is unavailable.

**Town of Brookline:** The site plan regulations provide for shared parking and for minimum and *maximum* parking provision requirements.

### Pedestrian and Bicycle Access

**Town of Litchfield:** The road design standards require developments along Albuquerque Avenue to construct an eight-foot pedestrian/ bicycle path.

**City of Nashua:** The subdivision regulations require the construction of five-foot wide sidewalks in residential, commercial and industrial developments.

**Town of Merrimack:** The subdivision regulations require sidewalks be constructed along all existing or proposed collector or arterial streets or streets constructed as part of a subdivision.

### Frontage and Backage Roads

**City of Nashua:** The subdivision regulations require the construction of a “parallel” road to provide access to land adjacent to a limited-access highway, railroad right-of-way or an open watercourse. The parallel road must be at a sufficient distance that the land between the two roads can be used for another use in conformance with the zoning ordinance.

**Town of Litchfield:** The zoning ordinance encourages the use of an “internal” road to provide access to land along Route 3A by reducing the frontage requirement from 500 feet along 3A to 150 feet along an internal road.



# Model Language and Guidance for Implementation

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## I. ACCESS MANAGEMENT AUDIT (see audit form at the end of chapter)

Planning boards can evaluate their current ordinances to determine if they adequately address access management strategies. By comparing current ordinances and regulations to these guidelines, communities can identify areas in the ordinances or regulations where access management strategies can be incorporated. These measures are based on the access management guidelines that were developed by the Nashua Regional Planning Commission in 2002.

## II. MODEL REGULATION LANGUAGE (Subdivision and Site Plan)

Unless access management regulations are incorporated into a specific zoning or overlay district, most of the techniques are a collection of regulations that work together in a comprehensive scheme to control access to a transportation network. Below is some suggested language that can be incorporated into existing subdivision or site plan review regulations.

## III. LANGUAGE TO INCORPORATE INTO DEFINITIONS

**Access Management:** Providing or managing access to land development while simultaneously preserving the flow of traffic on the surrounding road system in terms of safety, capacity and speed.

**Arterial Road:** A road whose primary function is mobility, moving people and goods over long distances quickly and efficiently.

**Collector Road:** A road connecting arterial roads to local roads, whose function is divided between providing mobility and access.

**Curb:** A stone, concrete or other improved boundary usually marking the edge of the roadway or paved area.

**Curb Cut:** The opening along the curb line at which point vehicles may enter or leave the roadway.

**Driveway:** A private roadway providing access to a street or highway.

**Easement:** A grant of one or more of the property rights by the owner to, or for the use by, the public, a corporation or another person or entity.

**Frontage:** The length of any one property line of a premises that abuts a legally accessible street right-of-way.

**Local Road:** A road whose primary function is to provide access to adjacent development.

**Median:** A barrier placed between lanes of traffic flowing in opposite directions or between parking spaces.

**Parking Aisle:** The area of a parking lot that allows motor vehicles ingress and egress from the driveways or streets.

**Parking Lot:** An outdoor area where motor vehicles may be stored for the purposes of temporary, daily or overnight off-street parking.

**Parking Space:** A temporary storage area for a motor vehicle.

**Pedestrian:** A person traveling on foot; a walker. A person operating a pushcart; a person riding on, or pulling a coaster wagon, sled, scooter, tricycle, bicycle with wheels less than 14 inches in diameter, or a similar conveyance, or on roller skates, skateboard, wheelchair or a baby in a carriage.

**Right-of-way:** An easement held by the municipality or the state over land owned by the adjacent property owners that allows the holder to exercise control over the surface and above and below the ground of the right-of-way. Property owners are typically responsible for the construction of transportation improvements adjacent to their property. The municipality or the state maintains the street, while the property owner is responsible for maintaining the sidewalk.

**Street:** Any vehicular way that is: 1) an existing state or municipal roadway; 2) shown upon a plat approved pursuant to law; or 3) approved by other official action; including rights-of-way, whether improved or unimproved.

**Traffic Study:** A traffic impact study to determine the effect of a proposed development, both on and off site, and propose appropriate mitigation measures.

#### IV. LANGUAGE TO INCORPORATE INTO PLAN REVIEW STANDARDS

**Traffic:** The planning board shall determine that the proposed development will not cause unreasonable highway or public road congestion or unsafe conditions with respect to the use of the highways or public roads existing or proposed, and the traffic associated with the development shall maintain the existing level of service within 200 feet of any existing or proposed curb-cut. In making its determination, the planning board shall consider factors such as vehicular circulation, parking, pedestrian circulation, and landscaping. The board shall also consider a statement or report from a traffic engineer indicating that the proposed development will not create or further contribute to unsafe traffic conditions, and consider statements from the fire department, police department and public works department in evaluating the project for highway or public road congestion or safety.

**Pedestrian and Bicycle Access and Safety:** The planning board shall determine that the proposal is designed to accommodate bicyclists and pedestrians, and addresses issues of bicycle and pedestrian access, safety and circulation both within the site and to points outside of the site. In making its determination, the planning board shall consider factors such as vehicular circulation, parking, pedestrian circulation, and landscaping.

#### V. VEHICULAR CIRCULATION STANDARDS

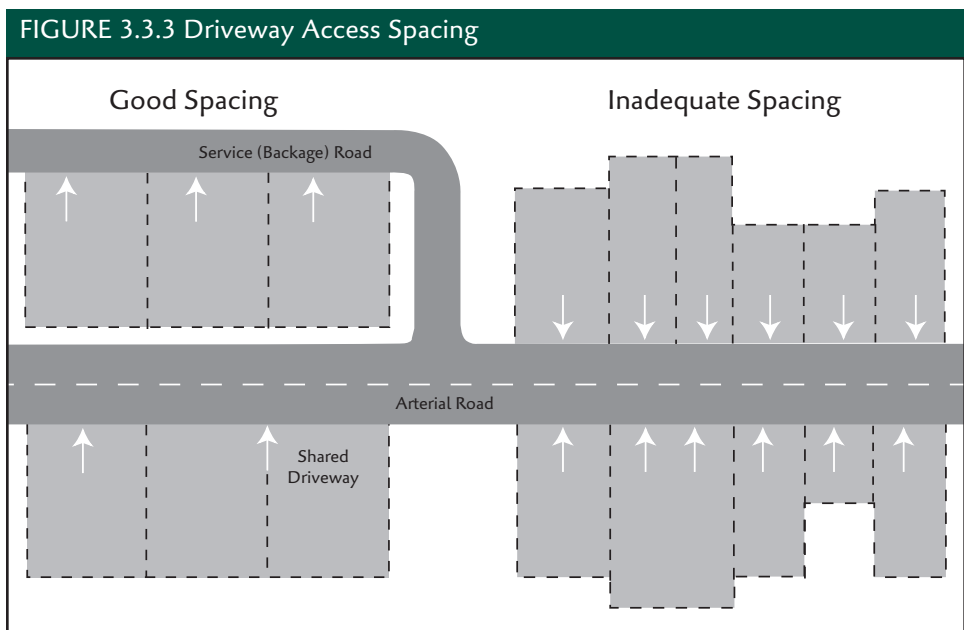
##### A. Number, Spacing and Width of Access Points

1. **General Provisions:** No person shall cut, break or remove any curb along a street except as herein authorized. No person shall construct, alter or extend any driveway approach that can be used as a parking space or area between the curb and private property. The provisions in this section are based on principals of access management.
2. **Driveway Approach Width (commercial and industrial):** The maximum width of a driveway approach for a two-way driveway shall not exceed 36 feet including two-foot shoulders. The minimum width of a driveway approach for two-way driveway shall not be less than 24 feet including two-foot shoulders.
3. **Driveway Approach Width (multifamily residential):** The maximum width of a driveway approach shall not exceed 15 feet. The minimum width of a driveway approach shall not be less than 10 feet.
4. **Driveway Access Spacing:** Driveway access spacing shall be measured from the edge of the proposed driveway pavement to the nearest edge of the roadway of the adjacent or opposite driveway or street. Driveway access spacing shall meet the requirements of Table 3.3.1.

This section should be integrated with the pedestrian circulation section of the Pedestrian Oriented Development chapter.

TABLE 3.3.1 Driveway Spacing		
Roadway Classification	Minimum Spacing (feet)	Desirable Spacing (feet)
Major Arterial	300	500
Minor Arterial	100	300
Collector	100	200

Source: Access Management Guidelines, Nashua Regional Planning Commission, April 2002



Source: Access Management Guidelines, Nashua Regional Planning Commission, April 2002

5. **Intersection Alignment:** If a proposed driveway cannot meet the requirements of the sections above, then the proposed driveway shall be aligned directly opposite an existing or proposed opposite driveway and the configuration shall be treated as a four-way intersection.
6. **Angle of Driveway Approach:** The angle of driveway approach shall be approximately 90 degrees for two-way driveways and between 60 degrees and 90 degrees for one-way driveways.
7. **Turning Radii:** The principal users of the roadway shall be considered when determining the inside turning radii. The inside turning radii shall vary between a minimum of 15 feet and a maximum of 30 feet and meet the minimum and maximum requirements of Table 3.3.2.

Land Use	Minimum Inside Turning Radii (feet)	Maximum Inside Turning Radii (feet)
Multifamily/Residential	15	20
Commercial/Industrial	20	30
Mixed Uses	15	30

Source: *Access Management Guidelines, Nashua Regional Planning Commission, April 2002*

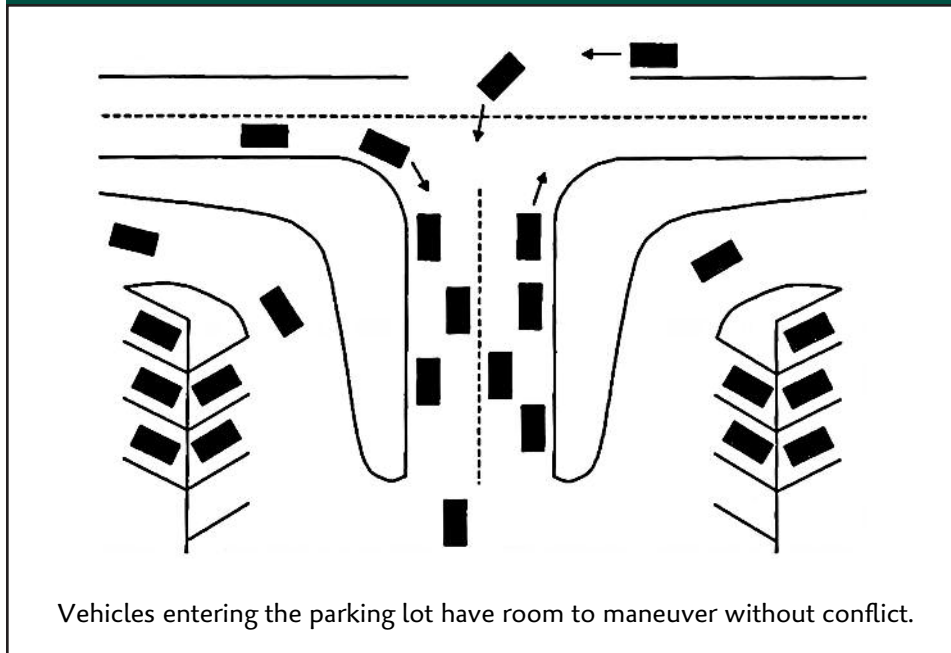
8. **Corner Clearance:** No driveway approach may be located closer to the corner than indicated in Table 3.3.3. The measurement shall be taken from the intersection of property lines at the corner to the nearest edge of the proposed driveway pavement. When these requirements cannot be met due to lack of frontage, the nearest edge of the proposed driveway pavement shall be located as far as possible from the intersection of property lines at the corner.

Speed (mph)	Distance to Corner (ft)
30	325
35	425
40	525
45	630
50	750

Source: *Access Management Guidelines, Nashua Regional Planning Commission, April 2002*

9. **Driveway Throat Length:** Driveway throat length shall be measured from the edge of the property line to the furthest end of the driveway. A minimum driveway throat length of 25 feet for collector streets, 40 feet for minor arterials, and 55 feet for major arterials shall be required. The purpose of the driveway throat length is to allow for traffic entering the site to

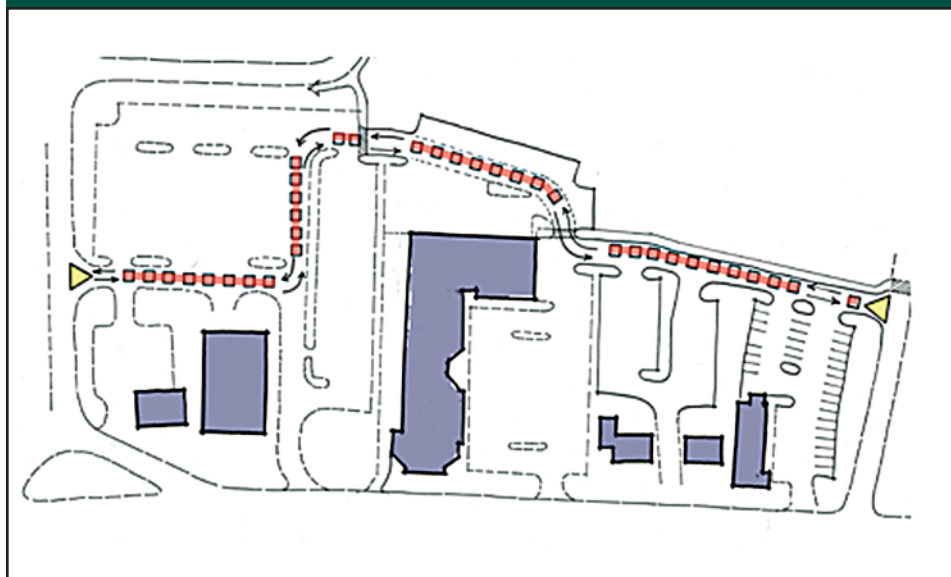
FIGURE 3.3.4 Adequate Throat Length



be stored on site in order to avoid a queue of traffic on the roadway causing delays and a potentially hazardous situation. (See Figure 3.3.4.)

10. **Shared Access:** Shared driveways are encouraged and may be required between adjacent lots that front on arterial and collector streets. In such cases, a joint access easement between the property owners may be required. The location and dimensions of said easement shall be determined by the planning board (See Figure 3.3.5).

FIGURE 3.3.5 Shared Access



Source: *Access Management Guidelines*, Nashua Regional Planning Commission, April 2002

**11. All-Season Safe-Sight Distance:** All-season safe-sight distance is defined as a line that encounters no visual obstruction between two points, each at a height of three feet nine inches above the pavement, and 10 feet back from the road pavement as to represent the critical line of sight between the operator of a vehicle using the access and the operator of a vehicle approaching from either direction. Safe sight distance shall be compatible with the maximum speed limit posted on the roadway as indicated in Table 3.3.4.

**TABLE 3.3.4 All-Season Safe-Sight Distance**

SPEED LIMIT (MPH)	ALL SEASON SAFE SIGHT DISTANCE (FEET)					
	Downgrades			Upgrades		
	3%	6%	9%+	3%	6%	9%+
25	158	165	173	147	143	140
30	205	215	227	200	184	179
35	257	271	287	237	229	222
40	315	333	354	289	278	269
45	378	400	427	344	331	320
50	446	474	507	405	388	375
55	520	553	593	469	450	433

*Source: Access Management Guidelines, Nashua Regional Planning Commission, April 2002*

To prevent hardship to owners of small parcels of land or special land uses, exceptions to the all season safe sight distance requirements should be allowed for individual homes, agricultural land, public works land, highway department land and temporary accesses for vehicles such as construction vehicles, gravel trucks and log trucks. The road shall then be properly signed for “Blind Drive” or “Trucks Entering.”

## VI. PARKING REQUIREMENTS

**Shared Parking Provision:** Parking provisions for any combination of uses on the same site shall consider the opportunity for combined visits (i.e. one parking space in front of a gas station pump may count as one parking space for both the convenience store and the gas station in a combined gas station/convenience store development). Shared parking arrangements with adjoining nonresidential developments or other uses on site are encouraged. Off-site shared parking shall be protected with a shared parking easement agreement which shall be reviewed and approved by the planning board and recorded with the approved site plan.

## ACCESS MANAGEMENT STRATEGIES AUDIT

Planning boards can evaluate their current ordinances to determine if they adequately address access management strategies. By comparing current ordinances and regulations to these guidelines, communities can identify areas in the ordinances or regulations where access management strategies can be incorporated. These measures are based on the Access Management Guidelines that were developed by the Nashua Regional Planning Commission in 2002; see table at end of chapter.

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**ACCESS MANAGEMENT STRATEGIES: COMMUNITY AUDIT**

DOCUMENT	FEATURE	Y	N	Comments/Notes
<b>ZONING ORDINANCE</b>				
	Limit number of access points per parcel or frontage			
	Require use of side roads or shared driveways			
	Allow reduced frontage requirements along arterials and collectors when a frontage/backage road is used instead of a driveway			
	Other alternative zoning requirements			
	Required Shared parking for commercial establishments			
<b>SUBDIVISION AND SITE PLAN REVIEW REGULATIONS</b>				
	Minimum driveway spacing standards to control space between curb cuts			
	Minimum and maximum driveway width standards			
	Minimum and maximum turning radius standards for access points based on land use			
	Minimum distance between driveways and intersections.			
	Require consolidation of driveways or corner clearance during redevelopment of sites.			
	Adopt minimum throat length standards for new or redeveloped sites			
	Require interconnections between existing and future subdivisions			
	Require rights of way be provided to adjacent undeveloped land			
	Establish standards for shared driveways			
	Require commercial developments to establish cross easements and interconnections between developments			
	Define standards for intersections, street and driveway alignments			
	Establish safe sight distance requirements based on the design speed of the road.			
	Require traffic impact studies to identify needed roadway improvements resulting from proposed development.			
	Provide safe pedestrian and bicycle access within and between developments			
	Require parking areas to address pedestrian access and circulation within the site			

ACCESS MANAGEMENT STRATEGIES: COMMUNITY AUDIT				
DOCUMENT	FEATURE	Y	N	Comments/Notes
SUBDIVISION AND SITE PLAN REVIEW REGULATIONS (CONTINUED)				
	Require bus turnouts and shelters for large retail or employment centers where existing or proposed transit services are provided			
	Require construction of frontage/backage roads to service parcels adjacent to arterials or collectors			
	Provide for the use of roundabouts in the community, referencing FHWA design criteria			
	Develop preliminary review process for applications to receive input into the design of new developments at the outset of a project			
	Require overall access and development plans for large sites			
COMMUNITY POLICIES				
	Promote an interconnected road network for municipal and private roadways			

