

Traffic, Access, Parking & Loading

1.0 General Principles

The following principles shall apply to all commercial, multifamily, and industrial developments:

1.1 The development shall take into account all public streets, highways, and sidewalks that provide site access. The development shall be designed so as to adequately provide for the safe ingress and egress of all forms of traffic.

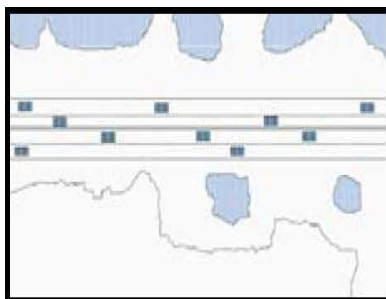
1.2 The traffic patterns on, within, and off of the site shall be coordinated with preexisting traffic patterns so as to compose a safe and convenient system.

1.3 There shall be proper arrangement of streets within the site and in relation to other existing and planned streets (including the features of the Master Street Plan) such that the development of the site shall not endanger public safety or welfare and shall promote public convenience and prosperity.

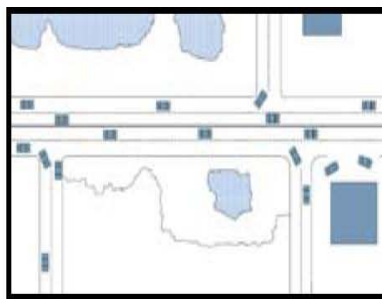
1.4 There shall be access of adequate width from public rights-of-way to each structure on the site for fire, police, and medical emergency vehicles and personnel.

These regulations are necessary to prevent the cumulative impact of roadside development over time, as shown in **Figure 1**.

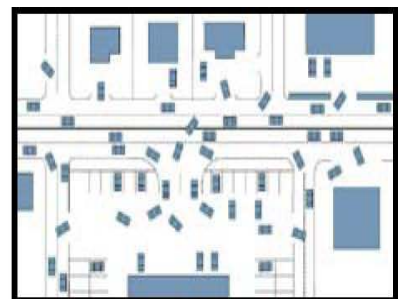
Figure 1. Cumulative Impacts of Roadside Development



- Scenic
- No driveways or intersections
- Efficient traffic flow
- Few accidents, primarily rear-end and cross-over
- Supports 1,300 to 2,000 vehicles per hour in each direction
- Average speed 45 miles per hour
- Comfortable driving conditions



- Sparse development
- Few driveways or intersections
- Disrupted traffic flow
- Occasional accidents, some caused left-turning vehicles
- Supports 1,100 to 1,600 vehicles per hour in each direction
- Average speed 30 miles per hour
- Some driver discomfort



- Extensive development
- Numerous, poorly-spaced driveways and intersections
- Congested traffic flow
- Many accidents of all types
- Supports 900 to 1,200 vehicles per hour in each direction
- Average speed 20 miles per hour
- Highly stressful

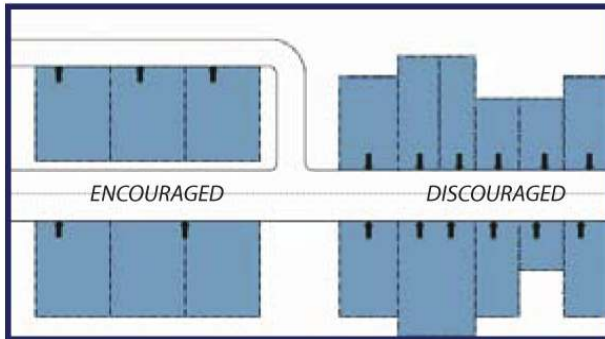
Strip development often occurs so slowly that it is seldom viewed as a crisis until traffic problems become severe.

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2.0 Access Requirements

In order to preserve the smooth flow of traffic along adjoining streets and highways, the number of curb cuts allowed shall be limited. Furthermore, driveway sharing shall be required for all properties abutting streets functionally classified as major arterial, minor arterial, and collector, as identified by the Master Street Plan.

Figure 2. Indirect Access



Internal roads provide access to multiple lots with minimum curb cuts on the adjacent road.

2.3 For lots having 240' of street frontage or more, curb cuts shall be no less than 100' from the closest side lot line.

2.4 No curb cut shall be within 125' of any signalized intersection.

2.5 Curb cuts shall be coordinated with existing or planned median openings and shall, where possible and reasonable, line up with driveways or streets on the opposite side of the roadway.

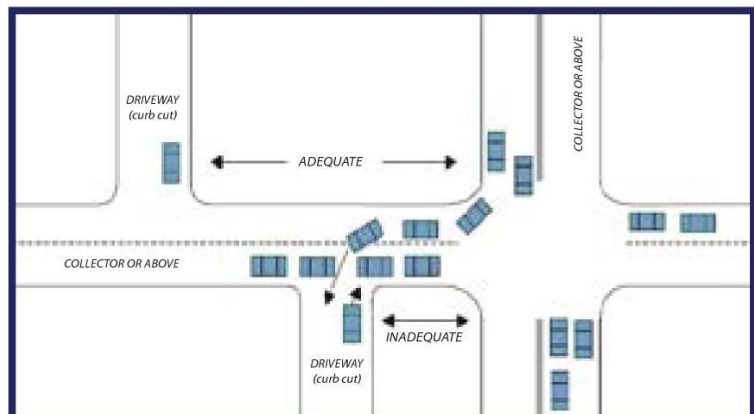
2.1 Curb cuts shall be a minimum of 15' in width for one lane and a maximum of 40' in width for three lanes. Typical two-way travel driveway (curb cut) width is 24'.

2.2 Curb cuts shall be spaced according to **Table 1**. These measurements shall be taken from the nearest respective edge of each curb cut, driveway, or intersecting public right-of-way.

Table 1. Curb Cut Spacing

Type of Corridor	Spacing
Major Arterial	300' to 500'
Minor Arterial	200' to 300'
Collector	100' to 200'

Figure 3. Curb Cut Spacing in Relation to Intersections



Curb cuts in close proximity to intersections create conflicts between site traffic and through traffic.

Proper access spacing is essential to the safety and efficiency of roadways.

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3.0 Joint Access

3.1 For lots having less than 240' of street frontage, joint access with the adjoining property owner(s) shall be required.

3.2 The two adjacent property owners shall enter into a joint-access agreement whereupon they will share a single driveway which is ideally, but not necessarily, along their common property line.

3.3 Parcels that cannot comply immediately due to undeveloped adjoining property or lack of a preexisting joint-access agreement and/or easement may be allowed a temporary curb cut at a location designated by the City Engineer or his/her designee. This temporary curb cut shall be contingent on the property owner meeting the following conditions:

- a. A joint access easement with a width of no less than 15' and no more than 40' is depicted on the record plat filed with the Circuit Court Clerk, and
- b. A joint maintenance agreement defining maintenance responsibilities of each property owner is filed with the Circuit Court Clerk.

3.4 Temporary curb cuts shall be closed provided that easements, agreements, and improvements providing joint access are secured upon future neighboring development. The permittee is responsible for removing the temporary drive once the joint access drive is complete.

4.0 Cross Access

4.1 All parking lots for commercial properties shall have at least one vehicular connection to all adjacent properties.

4.2 A continuous service drive, or cross-access corridor, extending up to the entire length of each block, shall be provided where necessary to ensure that curb cut separation remains consistent with these standards.

4.3 The service drive shall have a design speed of 10 mph, be of sufficient width for two-way travel, and designed to accommodate automobiles, services vehicles, and loading vehicles.

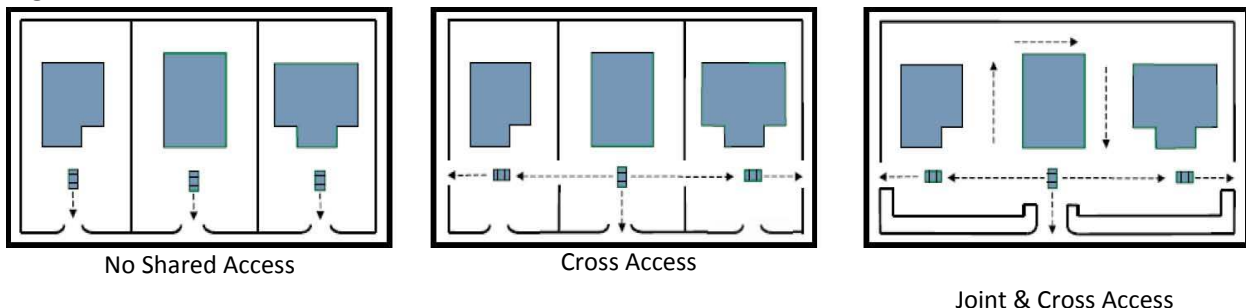
4.4 Stub-outs and other design features shall be required to make it visually obvious that the abutting properties may be tied in to provide cross access via a service drive. Stub-outs shall be required so that cross access to abutting properties is ensured.

4.5 Cross access corridors should contain landscaping and/or other design features to make them visually obvious to traffic as a service corridor.

4.6 A unified access and circulation system plan that includes coordinated or shared parking areas should be offered wherever feasible.

4.7 A cross access easement shall be shown on the record plat per Section 3.3.

Figure 4. Multi-site Circulation



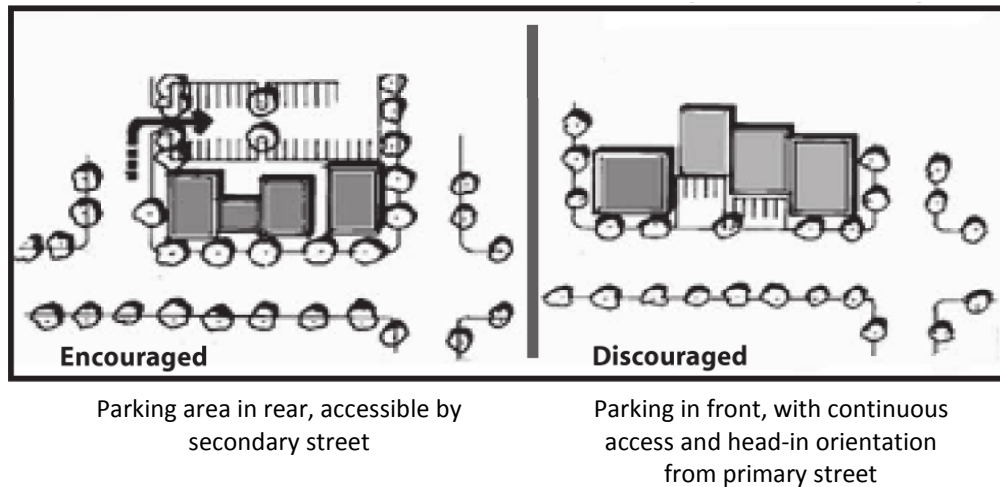
Complete multi-site circulation is strongly encouraged.

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5.0 Parking Area Orientation

5.1 Parking areas located in the front setback or between the principal structure and any public street, including corner lots, are strongly discouraged. Parking should be provided to the side and rear of the building, with no more than one parking aisle on the side of any structure. Any available and allowed on-street parking shall be exempt from this requirement.

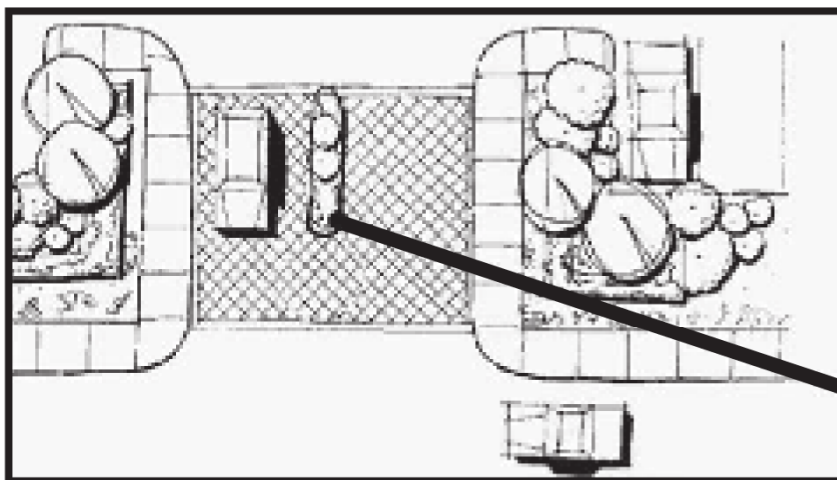
Figure 5. Parking Area Access and Orientation



5.2 Continuous access, head-in parking is not permitted as off-street parking. Vehicles shall not back out into public streets unless otherwise allowed in specific zoning districts.

5.3 It is recommended that primary entry drives for large-scale developments (greater than 2,000 ADT) include a minimum 6' wide landscaped median to separate incoming and outgoing traffic.

Figure 6. Use of Median to Separate Traffic



Landscaped medians create entry focal points and separate inbound and outbound site traffic.

Many access management techniques not only improve the operation of the transportation system, but also the aesthetics of developed land.

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6.0 Parking Area Design

6.1 Parking lots shall be designed with a hierarchy of circulation, as follows:

- a. Major access drives with no parking, framed by use of one or more of the following: building facades, sidewalks, low walls, trees, and/or shrubs.
- b. Major circulation aisles with little or no parking, generally adjacent to the building(s) being served, and typically wide enough to allow for drop-offs and pick-ups.
- c. Narrower parking aisles to reduce speeds and allow for direct access to parking spaces.

6.2 In order to break down large expanses of paved surface, parking areas shall be organized into a series of small modules of no greater than 48 spaces each, and separated by circulation aisles and/or landscaped areas consisting of trees and low shrubs. Parking areas in large scale developments (greater than 2,000 ADT) may incorporate 96 spaces per module.

Figure 7. Hierarchy of Circulation

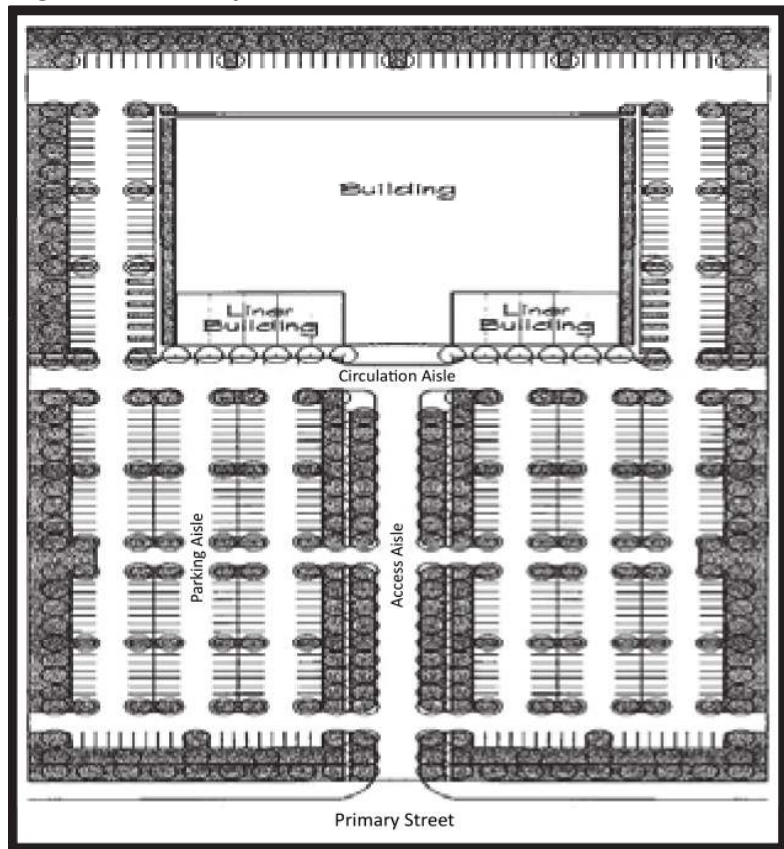
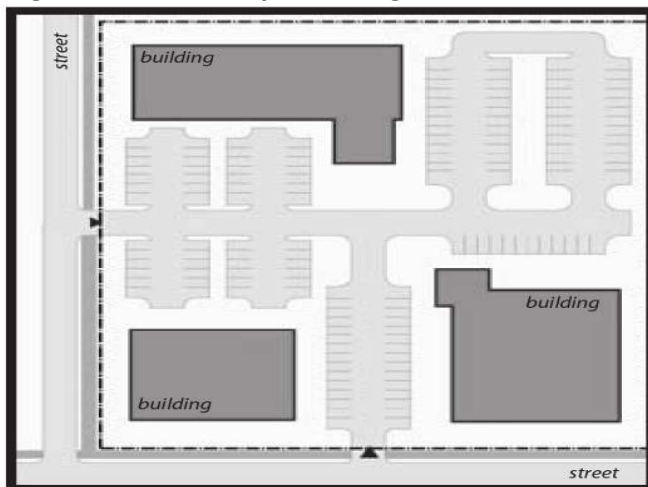


Figure 8. Connectivity of Parking Facilities



Sidewalks located within landscaped areas between and connecting parking modules are strongly encouraged.

Proper parking lot design minimizes traffic disruptions on surrounding streets and aesthetic impacts on surrounding properties.

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6.3 Parking Space Requirements

The purpose of required parking is to provide a sufficient number of spaces to accommodate the majority of traffic generated by the range of uses that might locate at a given site over time. In response to this long-term emphasis, the City's required parking numbers in **Table 2** correspond to broad use categories, not specific uses.

Table 2. Required Parking

CATEGORY	MINIMUM	MAXIMUM
Residential	1.5/dwelling	2.0/dwelling
Lodging	1.0/room	1.1/room
Office/Institution	2.8/1000 sq ft	4.2/1000 sq ft
Retail/General Business	3.4/1000 sq ft	4.8/1000 sq ft
Restaurant	9/1000 sq ft	12/1000 sq ft
Industry	0.6/1000 sq ft	1.8/1000 sq ft

The following deductions shall be applied to the above requirements for structures exceeding 10,000 square feet:

10,001 – 20,000 sq ft = 95% of total
20,001 – 30,000 sq ft = 90% of total

30,001 – 40,000 sq ft = 85% of total
40,001 – remaining = 80% of total

Where certain instances warrant interpretation or refinement based upon specific parking needs, a comprehensive assessment shall be made by the Planning Director in order to provide a more accurate parking requirement. Reductions in parking requirements may be warranted, for example, in cases where the clientele may be more pedestrian or transit-oriented or in a downtown setting. Standards developed by chain retailers may be utilized in establishing the requirements differing from those in **Table 2** at the discretion of the Planning Director.

6.4 On-street parking is generally recommended in the Downtown Commercial Core or where otherwise allowed by city ordinance. Parking along a street offers several important benefits including, but not limited to:

- a. Increasing available parking areas, thereby decreasing additional paving for off-street lots;
- b. Being inherently traffic-calming in nature, slowing vehicles along the corridor to aid in pedestrian safety;
- c. Providing a physical and psychological barrier between the corridor and sidewalk.

Where on-street parking is allowed, any on-street parking spaces located between the two side lot lines of the site and along the same side as the structure being served shall be counted toward parking requirements. All parking within the public right-of-way shall be considered public parking, and no signage or signal that indicates otherwise may be posted or erected.

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6.5 Parking Area Dimensions

Parking areas shall be designed and arranged in accordance with **Figure 9**:

Figure 9. Parking Space Dimensions

	<ul style="list-style-type: none"> • Permits one-way traffic operation • Stalls angled between 45 and 60 degrees • Typical parking stall is 9 feet wide
	<ul style="list-style-type: none"> • Permits two-way traffic operation • Stalls angled between 45 and 60 degrees • Typical parking stall is 9 feet wide
	<ul style="list-style-type: none"> • Permits one-way traffic operation • Stalls parallel to travel lane • Typical parking stall is 22 feet long • Typical parking stall is 8 feet wide
	<ul style="list-style-type: none"> • Permits two-way traffic operation • Stalls parallel to travel lanes • Typical parking stall is 22 feet long • Typical parking stall is 8 feet wide
	<ul style="list-style-type: none"> • Permits two-way traffic operation • Stalls angled 90 degrees • Typical parking stall is 20 feet long • Typical parking stall is 9 feet wide • Permitted for off-street parking only

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6.6 Overflow Parking

All surface parking spaces provided in excess of the maximum requirement shall be pervious in nature. Such additional spaces may be approved by the Planning Director for overflow events, seasonal demands, and so forth. However, such additional parking and access lanes shall use alternate pervious materials such as geotextile-reinforced grass, mulch-covered gridblocks, and /or porous paving materials for the entire overflow area. Standard, non-porous asphalt or concrete, as well as other impervious materials, shall not be permitted within the overflow area.

6.7 Location of Parking Areas

Off-street parking may be located within 1,000' of the structure to be served, measured as a straight line between the nearest points of the parking area and the structure. If detached parking areas are provided, they shall provide a complete pedestrian infrastructure connecting the parking area and the structure being served, and also be located on property zoned to allow the same principle use as said structure. All off-street parking areas shall have direct access to a street or alley.

6.8 Shared Parking

In areas where there are two or more differing principal uses, the sharing of parking areas by neighboring properties is highly encouraged and shall be permitted as follows:

- a. The sharing of parking will generally conform to the ratios provided in Figure 10, but may be adjusted by the Planning Director as circumstances warrant.
- b. Shared parking requirements may be further reduced if peak demand periods for proposed land uses do not occur during the same general time periods.
- c. A convenient, visible, pedestrian connection between all shared parking areas must be provided and maintained.
- d. The availability off-site parking for all participating developments shall be indicated by directional signs as addressed in Chapter 117.
- e. Property owners must enter into a Shared Parking Agreement as follows:

Figure 10. General Sharing Factors

USE	with		USE
residential			residential
lodging			lodging
office		1	office
retail	1.4	1.1	1.4
	1.2	1.7	1.2
	1.3	1	1.3
	1.2	1.2	
		1	

To calculate the recommended number of shared parking spaces, identify the basic parking requirement of each land use, combine those requirements to create a parking sum, and divide that sum by the indicated sharing factor.

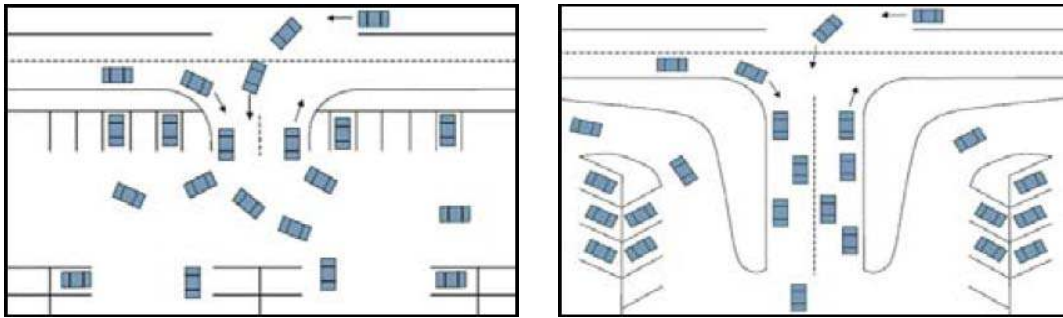
- i. Each party identifies specific requirements and maintenance responsibilities.
- ii. This Agreement shall be permanent in nature, approved by the Planning Director, recorded on the title records of each affected property, and filed with the Circuit Court Clerk.

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7.0 Driveway Throat Length

7.1 Driveways shall be designed to prevent queuing of site traffic on public streets. The depth of the formal entranceway, where vehicles may queue without interfering with traffic circulation, is referred to as the “throat length.” The length of this “throat” is particularly important for businesses that generate a high number of vehicle trips per day.

Figure 11. Impact of Throat Length on Traffic Flow



Insufficient throat length and poor site planning can result in unsafe conditions and may result in vehicles queuing, or stacking, in the roadway, interrupting traffic flow.

With adequate throat length, queuing occurs on site, rather than on the roadway. This reduces driver confusion, traffic problems, and unsafe conditions.

7.2 Throat length should be determined on a case-by-case basis, but generally it will vary according to the number of trips generated by the land use, as indicated in **Table 2**, and the available area for constructing the driveway throat. A traffic impact study based on peak hour demand is the best way to determine the extent of potential queuing problems and how best to resolve them.

7.3 The City Engineer or his/her designee, working in coordination with the project engineer, shall make all driveway throat length determinations based upon the characteristics of the given site.

Table 3. General Throat Length Recommendations

Size / Impact of Development	Throat Length (from right-of-way)
Small / 200 ADT	20' (2 vehicles)
Moderate / 750 ADT	40' to 80' (4-6 vehicles)
Large / 2,000 ADT	180' to 240' (9-12 vehicles)

Parking systems should be designed to internalize the circulation of site traffic to prevent disruption of public streets.

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8.0 Traffic Impact Study Guidelines

8.1 The City Engineer or his/her designee may review the development plan to determine if the developer shall be required to provide a traffic impact study to include, at a minimum, recommendations for on-site and off-site improvements.

8.2 Traffic impact studies shall be required for all developments that are expected to generate [insert threshold] trips per day. The scope of the study shall be determined in accordance with the provisions of the City of Jonesboro's Traffic Impact Study Guidelines.

8.3 If a traffic impact study is required, it must be submitted, reviewed and approved by the City Engineer or his/her designee, and any warranted improvements included in the site plan before final approval.

8.4 The developer shall be responsible for all costs related to traffic impact studies and any associated improvements. All traffic engineering studies and associated improvements shall be conducted at the developer's expense.

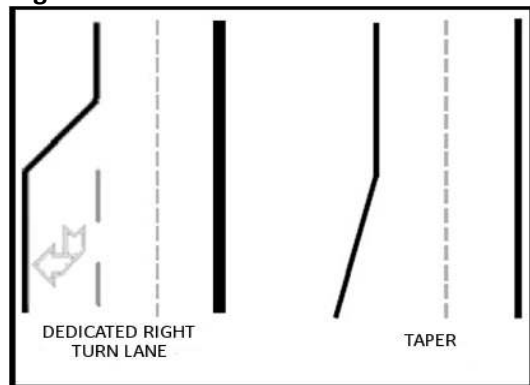
9.0 Right Turn Deceleration Lanes

9.1 A dedicated right turn lane is often necessary when the right turn volume exceeds 750 vehicle trip ends per day or the development fronts an arterial with a speed limit of 35 miles per hour or greater.

9.2 In most cases, only moderate to large-scale developments will warrant a right turn lane. However, certain circumstances may make the addition of a deceleration lane necessary, even in situations where a development generates less than 750 vehicle trip ends daily.

9.3 On lower driveways or in areas with limited right-of-way, tapers may be required to help remove turning vehicles from the roadway more quickly. Tapers may be most useful in rural areas, where speeds are high and volumes low.

Figure 1. Deceleration Lanes



The length of this lane will vary according to the speed of traffic on the roadway and expected traffic volumes. However, the lane or taper should be of sufficient length so as to allow the turning vehicle to leave the through lane at the posted speed limit, decelerate, and negotiate the turn.

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9.4 The City Engineer or his/her designee, working in coordination with the project engineer, shall determine if a deceleration lane or taper is appropriate for a given site, and, if so, the design characteristics of the deceleration lane or taper, based upon the criteria identified in **Figure 13**.

9.5 If a dedicated right turn lane or taper is required, designs for the improvement must be submitted, reviewed and approved by the City Engineer or his/her designee, and included on the site plan before final approval. The developer will be responsible for all costs associated with such improvements.

Figure 13. Traffic Impact Curves

