

CHAPTER 900. DEVELOPMENT STANDARDS

SECTION 901. TRANSPORTATION

901.4. Substandard Roadway Analysis and Mitigation

A. Intent and Purpose

The intent and purpose of this section is to ensure that deficiencies on substandard roads impacted by new development are corrected or mitigated.

B. Applicability

This section applies to all development where any portion of the development has connection, either directly or indirectly, to County local or collector roadways, or non-County and non-State maintained roadways on which anyone other than the owners travel

This section shall apply to the following applications and substantial amendments of same filed on or after June 8, 2004:

1. Development of Regional Impact.
2. MPUD Master Planned Unit Developments, Euclidean Zonings, Conditional Uses, and Special Exceptions.
3. Preliminary site plans.
4. Preliminary development plans.
5. Right-of-Way Use Permits.

C. Exemptions

1. Any project having an impact of less than 500 daily trips to a Collector roadway segment on the County's Highway Vision Plan and Functional Class Map (Comprehensive Plan Map 7-36) is exempt from mitigation and analysis for that roadway segment.
2. Any project having an impact of less than or equal to 20 daily trips to a County-maintained local or subdivision collector roadway is exempt from mitigation and analysis for that roadway segment.
3. Any project having an impact of less than or equal to 100 daily trips to a County-maintained local or subdivision collector roadway is exempt from analysis for that roadway segment.
4. Any project having an impact of less than or equal to 100 daily trips to a non-County maintained roadway is exempt from mitigation and analysis for that roadway segment.

5. Unless specifically required by the County Administrator or designee or Board of County Commissioners, no analysis or mitigation shall be required for roadways that lie beyond the first standard collector roadway segment accessed by the project.

D. Analysis

1. If applicable under Section 901.4.B and not otherwise exempt under Section 901.4.C, the following analysis requirements shall apply:
 - a. When a substandard road analysis has been submitted as part of the application for an MPUD or DRI a second substandard road analysis shall not be required as part of a subsequent development application. However, should the County determine that roadway pavement conditions (to a public roadway previously identified in the initial substandard road analysis and for which no conditions of approval have been approved to bring such road to standard) have changed, it reserves the right to require an updated substandard roadway analysis.

A required Substandard Roadway Analysis may be waived by the County Administrator or Designee if:

- (1) The County agrees that all roads to be accessed, as required by this Code, meet the minimum standards of this section; or
- (2) The applicant agrees to improve the roads accessed to comply with the minimum standards of this section as determined by the County.

2. Procedural Requirements

a. Methodology

Prior to undertaking a Substandard Roadway Analysis, the applicant shall prepare a written methodology statement that includes the following items and submit it for review with the appropriate review fee.

- (1) Location of development (illustrated on a map).
- (2) Proposed land uses and size.
- (3) Net external estimated daily traffic generation. If trip generation data for a specific land use is not available, then the latest version of the *Institute of Traffic*

Engineers (ITE) Trip Generation Manual shall be used or other trip generation estimates as mutually agreed to by the applicant and the County Administrator or Designee. Trip generation estimates shall include separate estimates for interim trip generating uses.

Mining and Land Excavation, even as an interim use, is presumed to be a separate and distinct mining land use requiring separate trip generation estimates.

(4) Internal Capture

Internal capture estimates shall be based on the ITE acceptable methodologies. In no case will an internal capture of more than twenty (20) percent be acceptable unless the County accepts a higher internal capture percentage based on verifiable documentation; e.g., field studies of comparable sites.

(5) Passerby Capture

If passerby data for a specific land use is not available, then the latest version of the *ITE Trip Generation Manual* shall be used, or other data as mutually agreed to by the applicant and the County Administrator or Designee. In no event shall the total passerby trips entering and exiting a site exceed the (10) percent of the total background traffic on the adjacent roadway.

(6) Estimated distribution and assignment of daily traffic.

(7) Indication of proposed, potentially substandard roads to be reviewed.

The County Administrator or Designee will review and comment on the acceptability of the proposed methodology.

b. Analysis Requirements

The substandard roadway assessment is not intended to be a topographic survey of the impacted roadways, but rather a "windshield survey," supplemented with appropriate field measurements and "ground observations" when potentially substandard conditions are observed.

E. Submittal Information

1. The Substandard Roadway Analysis shall contain all the necessary data and assessment, and a list of any potential improvements and shall be signed and sealed by a Florida registered professional

engineer. The data and assessment shall be sufficient for the County Administrator or Designee 's review and approval of the substandard section of the study. The assessment shall include a statement as to whether the existing typical condition meets the standards; a general description of physical constraints that may prevent upgrading the substandard condition to a standard condition and a proposal of alternative standards, if necessary; and a detailed description of the proposed improvements and associated costs.

2. Lane Width and Shoulders

- a. Data Collection: The lane and shoulder widths that represent a typical lane and shoulder width of the impacted roadways shall be field measured and reported. Extreme variations from the existing typical widths shall also be reported.
- b. Standards: The minimum lane and shoulder widths allowed are provided below. The design year and speed as stated in the below referenced tables shall mean the build-out year of the project and posted speed limit, respectively.

TABLE 901.4 A

Lane and Shoulder Widths—Rural Multilane

Design Year AADT	Design Speed (mph)	Minimum Lane Width (Feet)	Minimum Shoulder Width (Feet)
ALL	ALL	12	6

TABLE 901.4 B

Lane and Shoulder Widths, Two Lane Rural and Urban—Without Curb and Gutter

Design Year AADT	Design Speed (mph)	Minimum Lane Width (Feet)	Minimum Shoulder Width (Feet)
1-750	ALL	10 ¹	6 ³
751-2000	<50	11 ¹⁻²	6 ³
	≥50	12 ²	6 ³
>2000	ALL	12 ²	6 ³

¹ For rural and urban projects without curb or gutter (regardless of traffic volume), when widening is required, a minimum lane width of eleven (11) feet is required. A minimum lane width of twelve (12) feet is required if heavy vehicles are ten (10) percent or more of the total daily driveway trips.

² May be reduced by one (1) foot if heavy vehicles are less than ten (10) percent of design year traffic and are less than ten (10) percent of the total daily driveway trips.

³ The required width is eight (8) feet if heavy vehicles are ten (10) percent or more of the total daily driveway trips.

TABLE 901.4 C

Urban Multilane or Two Lane with Curb and Gutter

Design Year AADT	Design Speed (mph)	Minimum Thru-Lane (Feet)	Minimum Turn Lane (Feet)	Minimum Parking Lane (Feet)
ALL	ALL	10 ¹	9 ²	7 ³

¹ For rural and urban projects without curb or gutter (regardless of traffic volume), when widening is required, a minimum lane width of eleven (11) feet is required. A minimum lane width of twelve (12) feet is required if heavy vehicles are ten (10) percent or more of the total daily driveway trips.

² May be reduced by one (1) foot if heavy vehicles are less than ten (10) percent of design year traffic and less than ten (10) percent of the total daily driveway trips.

³ A minimum width of seven (7) feet, measured from the face of the curb, may be left in place. Otherwise provide eight (8) feet minimum, measured from the face of the curb.

3. Pavement Condition

a. Data Collection: The thickness of the surface pavement and base and the cross slopes that represent a typical surface and base thickness, and cross slopes of the impacted roadways shall be field measured and reported. The thickness of the subbase need not be field measured unless practical. If the subbase is not measured, the thickness of the subbase can be assumed standard. In addition, any quarter-panel failures and wheel-rutting shall be noted and reported. Extreme variations from the existing typical conditions shall also be reported.

b. Standards: The minimum structural numbers for roadways are:

- (1) Local Streets in AG (Agricultural) and AG/R (Agricultural/Rural) Land Use Less Than

	Sixteen (16) Lots and RES-1 (Residential - 1 du/ga) Land Use Less Than Ten (10) Lots:	1.89
(2)	Local Streets:	2.19
(3)	Subdivision Collector (Type I):	3.24
(4)	Major Collector:	3.42

A minimum structural number of 4.00 is required on local and collector roadways if heavy vehicles are ten (10) percent or more of the total daily driveway trips.

Layer coefficients are provided in Tables 901.4 D and 901.4 E below:

TABLE 901.4 D

Structural Coefficients for Different Pavement Layers

Specification Section	Layer Coefficient	Layer
337	0.00	FC-2
337	0.22	FC-3
331	0.44	Type S
333	0.30	Type III
332	0.20	Type II
280	0.30	ABC-3 (Marshall - 1,000)
280	0.25	4ABC-2 (Marshall - 750)
280	0.20	ABC-1 (Marshall - 500)
272	0.25	Econocrete (1,100 psa)
272	0.22	Econocrete (800 psi)
270	0.20	Soil Cement (500 psi)
270	0.15	Soil Cement (300 psi)
335	0.15	SAHM (Marshall - 300)
204	0.15	Graded Aggregate (LBR-100)
250	0.18	Cemented Coquina Shell (LBR-100)
200	0.18	Limerock (LBR-100)
250	0.16	Bank Run Shell (LBR-100)
230	0.12	Limerock Stabilized (LBR-70)
240	0.12	Sand Clay (LBR-75)
260	0.10	Shell Stabilized (LBR-70)
160-3	0.10	Stabilized Subbase
180	0.08	Stabilized Subbase
160-2	0.08	Type B Stabilized (LBR-40)
160-2	0.06	Type B Stabilized (LBR 30)
160-2	0.06	Type C Stabilized
170	0.12	Cement Treated Subgrade (300 psi)
165	0.08	Lime Treated Subgrade

N/A	0.15	Crushed Concrete (Reclaimed Concrete Aggregate Base, LBR 150)
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TABLE 901.4 E
Reduced Structural Coefficients
Asphaltic Materials

Layer	Original Design	Pavement Condition		
		Good	Fair	Poor
Type I	0.37	0.30	0.23	0.15
Binder	0.30	0.25	0.20	0.15
SBRM (300 M)	0.15	0.13	0.11	0.08
FC-3	0.22	0.17	0.15	0.12
Type S	0.44	0.34	0.25	0.15
Type III	0.30	0.25	0.20	0.15
Type II	0.20	0.17	0.15	0.12
ABC-3 (1,000 M)	0.30	0.25	0.20	0.15
ABC-2 (750 M)	0.25	0.20	0.16	0.12
ABC-1 (500 M)	0.20	0.17	0.14	0.10
SAHM (300 M)	0.15	0.13	0.11	0.08

NOTE: Reduced structural coefficients for use in the AASHTO Flexible Pavement Design Equation can be obtained from this table for all asphalt layers based on pavement condition. Pavement condition for this table should be based on the surface appearance of the asphalt pavement (cracking, patching, rutting, etc.) and may be supplemented by additional testing. Structural coefficients are not reduced for existing rock base, subbase, or subgrade.

Recommended Criteria:

Good: No cracking, minor rutting/distortion.

Fair: Crack Rating = eight (8) or higher, minor rutting/distortion.

Poor: Crack Rating = less than eight (8), rutting = $\frac{3}{8}$ inch or greater.

NOTE: Quarter-panel failures and wheel rutting are considered to be substandard conditions.

Roadway cross slopes shall conform to Table 901.4 F below:

TABLE 901.4 F
Roadway Cross Slopes

Feature	Standard	Range
Travel Lanes	0.02	0.02-0.04 ¹
Shoulders	0.06	0.03-0.08 ²
Parking Lanes	0.05	0.03-0.05
<p>¹ Existing multilane curb and gutter sections originally constructed with a parabolic crown section may be resurfaced using a series of tangents with a cross slope range from 0.015-0.05.</p> <p>² When existing shoulders are to remain, the algebraic difference between the shoulder slope and adjoining roadway pavement slope shall be ≤ 0.07.</p>		

4. Flooding
 - a. Data Collection: Data collection shall include the compilation of historical flooding locations readily available from the Development Services Branch. The flooding location Geographic Information System map layer titled "Observed Flooding" shall be used to identify flooding areas.
 - b. Standards: The standard is no surface ponding upon roadway.
 - c. Assessment: The assessment shall include a statement as to whether impacted roadways are within the flood area, a general description of physical constraints that may prevent upgrading the substandard condition to a standard condition, and proposed alternative standards, and a detailed description of the proposed improvements and associated costs.

5. Side Slope
 - a. Data Collection: The front and back slopes that represent a typical front and back slope of the impacted roads shall be field measured and reported. Extreme variations from the existing typical conditions shall also be reported.
 - b. Standards: The maximum front slope shall be one to four (1:4) within the clear zone and one to three (1:3) outside the clear zone. However, front slopes of one to three (1:3) or flatter may remain within the clear zone, but shielding may be required. Front slopes steeper than one to three (1:3) shall be shielded per *FDOT Design Standards*, Index 400, General Notes, as may be amended. Consideration should be given to flattening slopes of one to three (1:3) or steeper at locations where run off

the road type crashes are likely to occur; e.g., on the outside of horizontal curves.

The maximum back slope shall be one to three (1:3) in the clear zone. The maximum back slope shall be one to two (1:2) outside the clear zone without shielding.

- c. **Assessment:** The assessment shall include a statement as to whether the existing conditions meet the standards, a general description of physical constraints that may prevent upgrading the substandard condition to standard and proposed alternative standards, and a detailed description of the proposed improvements and associated costs.

6. **Clear-Zone Widths**

- a. **Data Collection:** The clear-zone widths that represent a typical clear-zone width of the impacted roads shall be field-measured and reported. Extreme variations from the existing typical conditions shall also be reported.
- b. **Standards:** Minimum clear-zone widths shall be as listed below on Table 901.4 G. The design speed shall mean the posted speed limit.

TABLE 901.4 G

Clear-Zone Width (Feet)

Design Speed (mph)	Travel Lanes and Multilane Ramps	Auxiliary Lanes and Single-Lane Ramps
<45	6	6
45*	14	8
>45	18	8

General Notes for Table 901.4 G

When relocation is required to meet minimum clear-zone requirements, consideration should be given to providing new construction widths.

Clear-zone widths are for side slopes one to four (1:4) and flatter. For steeper slopes, provide a clear, run-out area at the toe of the fill.

When crash history indicates the need, or where specific site investigation shows definitive crash potential, clear-zone widths shall be adjusted on the outside of horizontal curves with flush shoulders.

Clear-zone width is measured from the edge of the traveled way.

*May be reduced to < 45-mph widths if conditions more nearly approach those for low speed (40 mph or less).

TABLE 901.4 H

Horizontal Clearance for Traffic Control Signs

Placement	Placement shall be in accordance with the <i>FDOT Design Standards</i> . Placement within sidewalks shall be such that an unobstructed sidewalk width of four (4) feet or more (not including the width of the curb) is provided.
Supports	Supports, except overhead sign supports, shall be frangible or breakaway. When practicable, sign supports should be located behind barriers that are justified for other reasons. Overhead sign supports shall be located outside the clear zone unless shielded.

TABLE 901.4 I

Horizontal Clearance for Light Poles

Conventional Lighting	<p>Not in the median, except in conjunction with barriers that are justified for other reasons.</p> <p>Rural (Flush Shoulders): Twenty (20) feet from the travel lane and fourteen (14) feet from the auxiliary lane (may be clear-zone width when the clear zone is less than twenty (20) feet).</p> <p>Urban (Curb and Gutter): From the right-of-way line to four (4) feet back from the face of the curb (may be 1.5 feet back from the face of the curb when all other alternatives are deemed impractical). Placement within sidewalks shall be such that an unobstructed sidewalk width of four (4) feet or more (not including the width of the curb) is provided.</p>
High Mast Lighting	Outside the clear-zone unless shielded.

TABLE 901.4 J

Horizontal Clearance for Utility Installations

Shall not be located within the limited access right-of-way, except as permitted by the Telecommunications Facilities on Limited Access Rights-of-Way Policy (Topic No. 000-625-025).

Shall not be located in the median.

Flush Shoulders:

Not within the clear zone. Install as close as practical to the right-of-way without aerial encroachments onto private property.

Curb or Curb and Gutter:

At the right-of-way line or as close to the right-of-way line as practical. Must maintain 1.5 feet clear from the face of the curb. Placement within sidewalks shall be such that an unobstructed sidewalk width of four (4) feet or more (not including the width of the curb) is provided.

See the *Utility Accommodation Manual*, Topic No. 710-020-001, for additional information.

TABLE 901.4 K

**Horizontal Clearance to Signal Poles
and Controller Cabinets for Signals**

Shall not be located in medians.

Flush Shoulders:

Outside the clear zone.

Curb or Curb and Gutter:

Four (4) feet from the face of outside curbs and outside the sidewalk. However, when necessary, the signal poles may be located within sidewalks such that an unobstructed sidewalk width of four (4) feet or more (not including the width of the curb) is provided. Also, when site conditions make the four (4) foot clearance impractical, clearance may be reduced to 1.5 feet.

TABLE 901.4 L

Horizontal Clearance to Trees

Minimum horizontal clearance for new plantings shall meet new construction criteria.

Minimum horizontal clearance to existing trees where the diameter is or is expected to be greater than four (4) inches when measured six (6) inches above the ground shall be:

Flush Shoulders:

Outside the clear zone.

Curb or Curb and Gutter:

1.5 feet from the face of outside curbs.

3.5 feet from the edge of the inside traffic lane where a median curb is present.

TABLE 901.4 M

Horizontal Clearance to Bridge Piers and Abutments

Minimum horizontal clearance to bridge piers and abutments:

Flush Shoulders:

Outside the clear zone.

Curb or Curb and Gutter:

Sixteen (16) feet from the edge of the travel lane.

TABLE 901.4 N

**Horizontal Clearance to Railroad Grade
Crossing Traffic Control Devices**

Placement shall be in accordance with the design standards.

TABLE 901.4 O

Horizontal Clearance to Other Roadside Obstacles

Minimum horizontal clearance to other roadside obstacles:

Flush Shoulders:

Outside the clear zone.

Curb or Curb and Gutter:

Four (4) feet back from the face of the curb. May be 1.5 feet back from the face of the curb when all other alternatives are deemed impractical.

- c. Assessment: The assessment shall include a statement as to whether the existing conditions meet the standards, a general description of physical constraints that may prevent upgrading the substandard condition to standard and propose alternative standards, and a detailed description of the proposed improvements and associated costs.
7. Railroad Crossing Traffic Control
- a. Data Collection: Document/inventory existing control devices and other data needed to assess conditions relative to the following issues:
 - (1) Traffic control (presence and advance visibility of signing and markings; need for beacons and gates);
 - (2) Minimum crossing sight distance requirements;
 - (3) Road surface smoothness (vertical alignment); and
 - (4) Road surface width through crossing.
 - b. Standards: As required by the following:
 - (1) Traffic Control: *Manual on Uniform Traffic Control Devices* (MUTCD), Chapter 8; Federal Highway Administration (FHWA) Report FHWA-TS-86-215 or current edition; and Florida Department of Transportation (FDOT) *Design Standards*, Indices 17881 and 17882, as may be amended.
 - (2) Sight Distance at Passive Crossing: *AASHTO Green Book*, Case 1, latest edition; and *FDOT Manual of Uniform Minimum Standards for Design, Construction, and Maintenance for Streets and Highways*, latest edition.
 - (3) Road Surface Smoothness and Width Through Crossing: *FDOT Plans Preparation Manual*, Volume 1, Chapter 6, as amended; and *FDOT Design Standards*, Indices 560, 17881, and 17882, as may be amended.
 - c. Assessment: Compare existing conditions with the requirements of the MUTCD and FDOT standards, and undertake analysis to determine the need for improvements. If improvements are needed, consult with the FDOT and CSX Railroad Company for agreement or disagreement and recommend appropriate improvements.

8. Cost Estimate: The applicant shall prepare an estimate of the cost to cure the substandard conditions, and the County's Development Services Branch shall be the agency to review and accept the cost estimate. The Development Services Branch may develop and maintain average unit costs for estimating the costs of upgrading substandard roads.

F. Mitigation

If applicable under Section 901.4.B and not otherwise exempt under Section 901.4.C, the following mitigation requirements shall apply:

1. For Projects that have impact to collector roadways
 - a. The required mitigation for substandard roads shall be the payment of the development's fair share of the cost of designing, constructing, and acquiring right-of-way for all the improvements needed to achieve the applicable minimum roadway design and maintenance standards. The fair share shall be calculated in accordance with the following equation:

$$\text{Developer Share} = \text{Daily Development Trips} / (\text{Existing AADT} + \text{Daily Development Trips}).$$
2. For Projects that have an impact to local roadways:
 - a. Developments impacting less than or equal to 100 daily trips (Substandard Road Subthreshold Developments) shall be required to pay a substandard road fair-share payment, calculated by the County, or, at the applicant's option, calculated by the applicant and approved by County . Any Substandard Road Subthreshold Development that disagrees with the cost estimate for correcting substandard conditions prepared by the County, or the calculation of the fair-share payment as determined by the County, shall have the right to prepare a cost estimate in accordance with the requirements set forth in this section, which shall be approved by the County. For the purposes of this subsection, the term "development" shall be defined as a "project" pursuant to the definition in Appendix "A".
 - b. The required mitigation for substandard County-maintained roads, where the proposed development has an impact of more than 100 daily trips and exceeds the maximum entitlements of the existing zoning or land use (whichever is more restrictive), shall be the design, construction, and right-of-way donation/acquisition for all the improvements needed to achieve the applicable minimum roadway design and maintenance standards.

- c. The required mitigation for substandard County-maintained roads, where the proposed development has an impact of more than 100 daily trips and does not exceed the maximum entitlements of the existing zoning or land use (whichever is more restrictive), shall be the payment of the development's fair share of the cost of designing, constructing, and acquiring right-of-way for all the improvements needed to achieve the applicable minimum roadway design and maintenance standards. The fair share shall be calculated in accordance with the following equation:

$$\text{Developer Share} = \text{Daily Development Trips} / (\text{Existing AADT} + \text{Daily Development Trips}).$$

3. For projects impacting more than 100 daily trips to a non-County maintained roadway segment, the mitigation shall be the design, construction, and right-of-way donation/acquisition for all the improvements needed to achieve the applicable minimum roadway design and maintenance standards.

Any substandard road fair-share payment collected by the County shall be budgeted separately and shall be utilized only to correct substandard conditions on one (1) or more of the roads which formed the basis of the fair-share calculation or on other substandard roads which will benefit the fee payer. Such payment shall be credited against any future paving assessment that includes the project and the substandard road(s) which were the basis of the fair-share payment. If the payment has not been budgeted for one of the foregoing substandard roads within 15 years of the date the payment was made, a refund may be requested in accordance with Section 1302.1.H.

G. Relief

The County Administrator or Designee, is authorized to grant deviations from the requirements of Section 901.4.D, 901.4.E, or 901.4.F pursuant to Section 303.6.C or 407.5, as applicable. Relief from the remaining provisions of this section may only be granted by the Board of County Commissioners in accordance with Section 407.4 or the Planning Commission in accordance with Section 407.5.

EXHIBIT 901-4

EXHIBIT A

SIZE OF DEVELOPMENT THAT GENERATES OVER 20, 100, and 500 DAILY TRIPS

LAND USE	Daily Trip Rate	Size of Development Generating over 20 Daily Trips	Size of Development Generating over 100 Daily Trips	Size of Development Generating over 500 Daily Trips	UNIT
RESIDENTIAL:					
Single-Family (Detached)	9.44	3	11	53	DU
Multifamily Housing (Low-Rise)	7.32	3	14	69	DU
Mobile Home Park	5.00	4	20	100	DU
Age-Restricted Single-Family	3.71	6	27	135	DU
Congregate-Care Facility (Attached)	2.25	9	45	223	DU
Multifamily Housing (Mid-Rise)	5.44	4	19	92	DU
Multifamily Housing (High-Rise)	4.45	5	23	113	DU
LODGING:					
Hotel	8.36	3	12	60	Room
Motel	3.35	6	30	150	Room
RECREATION:					
Marina	2.41	9	42	208	Berth
Golf Course	30.38	1	4	17	Hole
Movie Theaters	220.00	1	1	3	Screen
Recreational Community Center	28.82	1	4	18	1,000 SF
INSTITUTIONAL:					
Hospital	10.72	2	10	47	1,000 SF
Nursing Home	3.06	7	33	164	Bed
Elementary School	1.89	11	53	265	Student
Middle School	2.13	10	47	235	Student
High School	2.03	10	50	247	Student
Junior/Community College	1.15	18	87	435	Student
University	1.56	13	65	321	Student
Church	6.95	3	15	72	1,000 SF
Day Care	4.09	5	25	123	Student
Cemetery	6.02	4	17	84	Acres
OFFICE:					
General Office Building	9.74	3	11	52	1,000 SF
Medical Office	34.80	1	3	15	1,000 SF
Office Park	11.07	2	10	46	1,000 SF
Veterinarian Clinic	21.50	1	5	24	1,000 SF
RETAIL:					
Shopping Center	37.75	1	3	14	1,000 SF
Pharmacy/Drug Store with Drive-Through	109.16	1	1	5	1,000 SF
Home Improvement Superstore	30.74	1	4	17	1,000 SF
Hardware/Paint	9.14	3	11	55	1,000 SF
Quality Restaurant	83.84	1	2	6	1,000 SF
High-Turnover (Sit-Down) Restaurant	112.18	1	1	5	1,000 SF
Fast-Food Restaurant with Drive-Through	470.95	1	1	2	1,000 SF
Gasoline Station	172.01	1	1	3	Fuel Pos
Quick Lube	40.00	1	3	13	Bays
Self-Service Car Wash	108.00	1	1	5	Bays
Tire Store	28.52	1	4	18	1,000 SF
Automobile Sales (New)	27.84	1	4	18	1,000 SF
Automobile Sales (Used)	27.06	1	4	19	1,000 SF
Supermarket	106.78	1	1	5	1,000 SF
Convenience Store with Gas Pumps	624.20	1	1	1	1,000 SF
Furniture Store	6.30	4	16	80	1,000 SF
Drive-in Bank	100.03	1	1	5	1,000 SF
Super Convenience Market/Gas Station	837.58	1	1	1	1,000 SF
INDUSTRY:					
General Light Industrial	4.96	5	21	101	1,000 SF
Industrial Park	3.37	6	30	149	1,000 SF
Manufacturing	3.93	6	26	128	1,000 SF
Warehouse	1.74	12	58	288	1,000 SF
Mini-Warehouse	1.51	14	67	332	1,000 SF
High-Cube Warehouse	1.40	15	72	358	1,000 SF

NOTES: For land uses not listed herein, or land uses with higher weekend trip generation, either the *ITE Trip Generation Handbook*, latest edition, or other trip-generation studies as approved by the County shall be used.

To estimate total daily driveway trips for land uses listed herein with heavy vehicles that are 10 percent or more of the total daily driveway trips, the total estimated daily driveway trips for heavy vehicles shall be multiplied by 2, unless ITE heavy vehicle data or other County-approved heavy vehicle trip generation data for the land use support a different multiplier; however, in no event shall the multiplier be less than 1. The size of development thresholds listed herein may be reduced based on additional heavy vehicle trips.

Source: *ITE Trip Generation Handbook, 10th Edition.*