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STATEWIDE MULTIMODAL ACCESS MANAGEMENT AND TRANSPORTATION SITE IMPACT

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WEBINAR SERIES 2023-2024

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Webinar Staff

FLORIDA DEPARTMENT OF TRANSPORTATION

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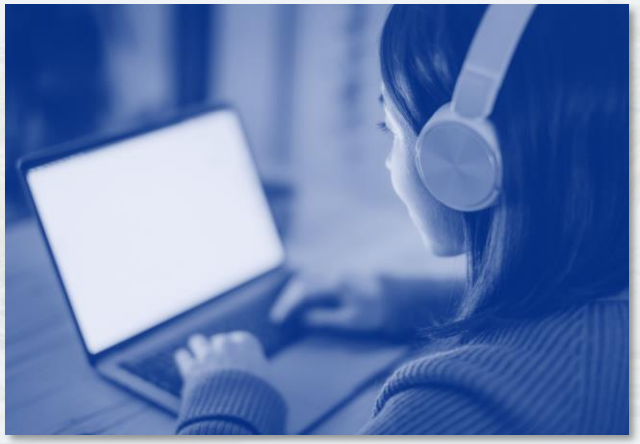
Agenda



CREDITS AND WEBINAR MATERIAL

MULTIMODAL ACCESS MANAGEMENT

CONTACT INFO

Credits Information

Certificates will be distributed through email.

Your participation will be recorded by GoToWebinar.

- You will need to attend to the entire webinar with the unique link provided by GoToWebinar.

STATEWIDE MULTIMODAL ACCESS MANAGEMENT AND TRANSPORTATION SITE IMPACT WEBINAR SERIES 2023-24

FLORIDA DEPARTMENT OF TRANSPORTATION

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Webinar Material

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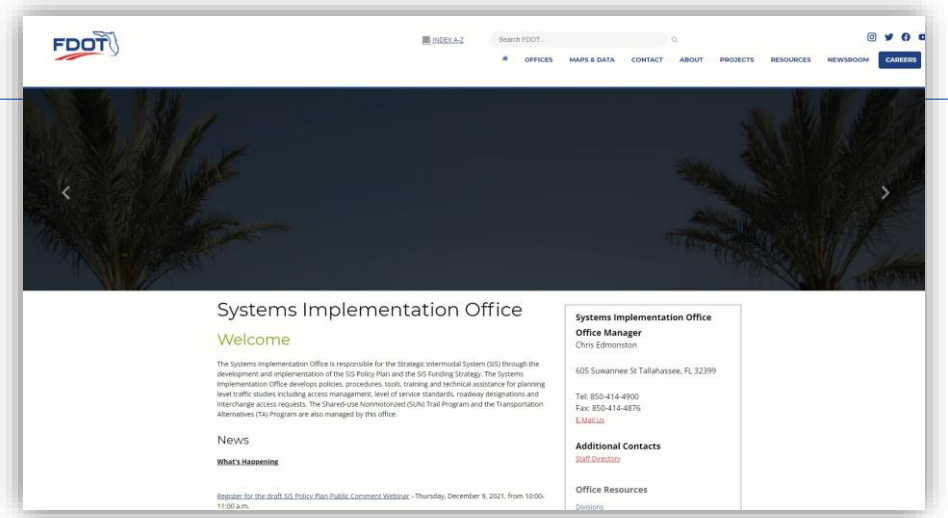


What organization do you represent?

FDOT

Local Government

Private Firm

Other

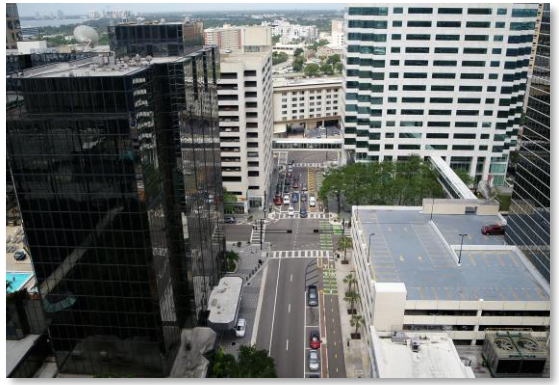
Statewide Multimodal Access Management And Transportation Site Impact

WEBINAR SERIES 2023-2024

Webinar #1

Multimodal Site Impact Analysis

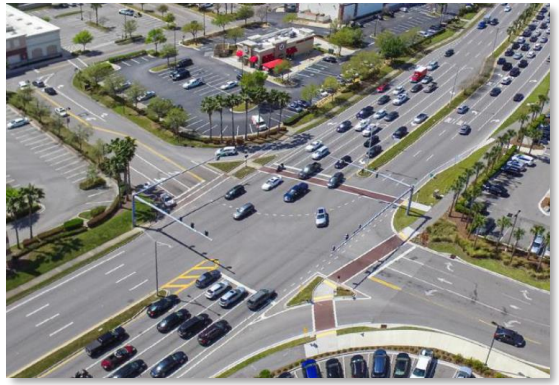
Tuesday, August 15, 2023



Webinar #2

Multimodal Quality Level of Service

Tuesday, November 14, 2023



Webinar #3

Multimodal Access Management

Tuesday, February 20, 2024

NEXT! Webinar #4

Trip Generation Research on High-Volume Fast-Food Restaurants and Coffee Shops

Tuesday, May 21, 2024

Statewide Multimodal Access Management And Transportation Site Impact

WEBINAR SERIES 2023-2024

Today's Webinar

Multimodal Access Management

Tuesday, February 20, 2024

2:00PM – 3:30PM

Credits: 1.5

How familiar are you with Multimodal Access Management Guidebook?

VERY FAMILIAR

SOMEWHAT FAMILIAR

NOT FAMILIAR

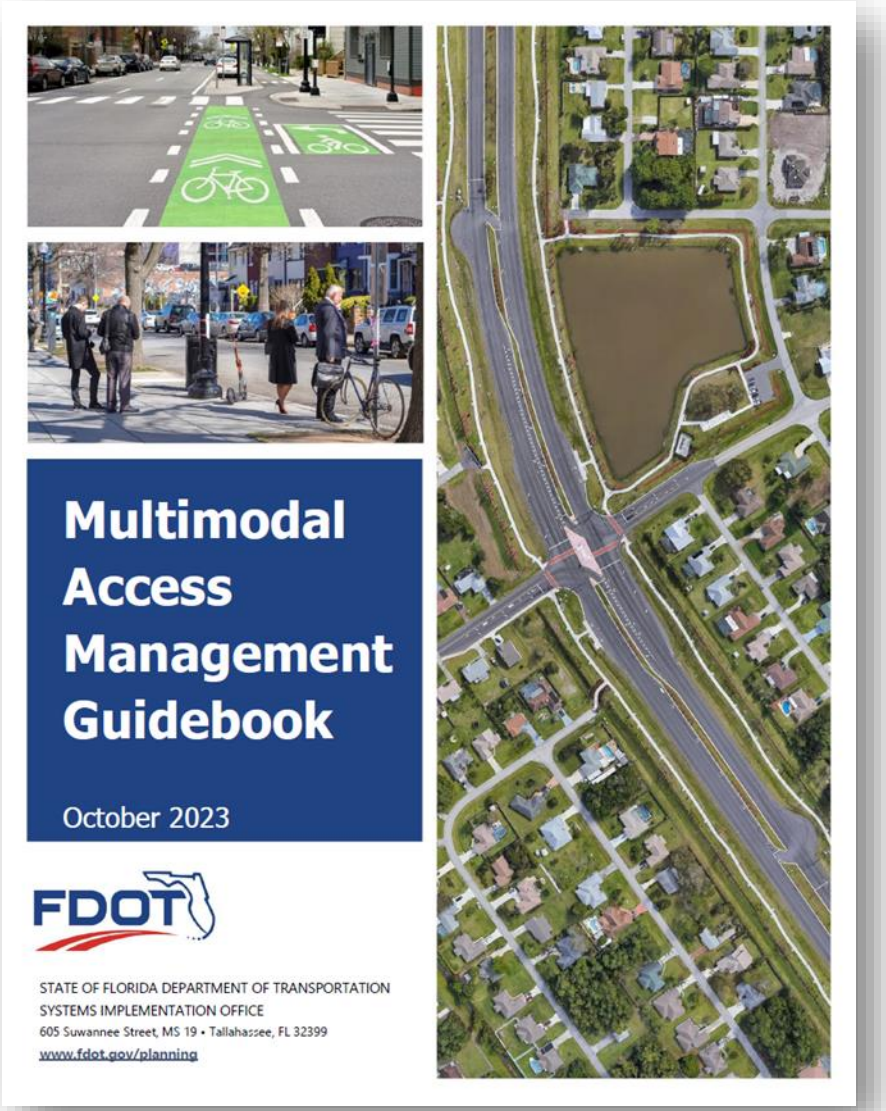
Guidebook

Revised Rule Chapters 14-96

Rule 14-97

Curb Management

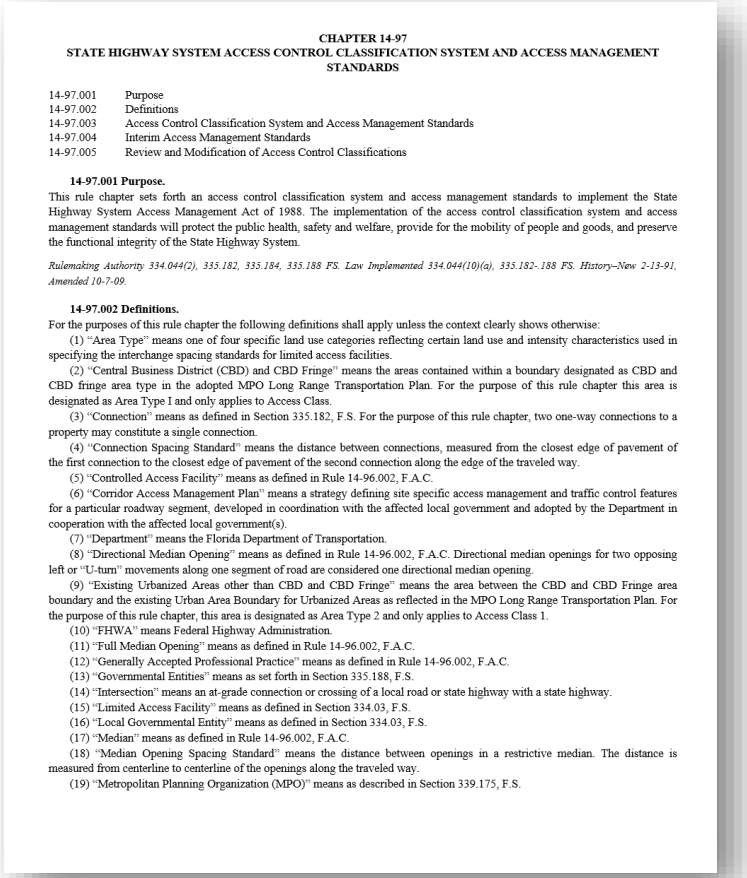
Corridor Access Management Plans



Rule 14-97

Chapter Title: State Highway System Access Control Classification System and Access Management Standards

- 14-97.001 Purpose
- 14-97.002 Definitions
- 14-97.003 Access Control Classification System and Access Management Standards
- 14-97.004 Interim Access Management Standards
- 14-97.005 Review and Modification of Access Control Classifications



CHAPTER 14-97
STATE HIGHWAY SYSTEM ACCESS CONTROL CLASSIFICATION SYSTEM AND ACCESS MANAGEMENT STANDARDS

14-97.001 Purpose
14-97.002 Definitions
14-97.003 Access Control Classification System and Access Management Standards
14-97.004 Interim Access Management Standards
14-97.005 Review and Modification of Access Control Classifications

14-97.001 Purpose.
This rule chapter sets forth an access control classification system and access management standards to implement the State Highway System Access Management Act of 1988. The implementation of the access control classification system and access management standards will protect the public health, safety and welfare, provide for the mobility of people and goods, and preserve the functional integrity of the State Highway System.

Rulemaking Authority 334.044(2), 335.182, 335.184, 335.188 FS. Law Implemented 334.044(10)(a), 335.182-.188 FS. History–New 2-13-91, Amended 10-7-09.

14-97.002 Definitions.
For the purposes of this rule chapter the following definitions shall apply unless the context clearly shows otherwise:
(1) "Area Type" means one of four specific land use categories reflecting certain land use and intensity characteristics used in specifying the interchange spacing standards for limited access facilities.
(2) "Central Business District (CBD) and CBD Fringe" means the areas contained within a boundary designated as CBD and CBD fringe area type in the adopted MPO Long Range Transportation Plan. For the purpose of this rule chapter this area is designated as Area Type I and only applies to Access Class.
(3) "Connection" means as defined in Section 335.182, F.S. For the purpose of this rule chapter, two one-way connections to a property may constitute a single connection.
(4) "Connection Spacing Standard" means the distance between connections, measured from the closest edge of pavement of the first connection to the closest edge of pavement of the second connection along the edge of the traveled way.
(5) "Controlled Access Facility" means as defined in Rule 14-96.002, F.A.C.
(6) "Corridor Access Management Plan" means a strategy defining site specific access management and traffic control features for a particular roadway segment, developed in coordination with the affected local government and adopted by the Department in cooperation with the affected local government(s).
(7) "Department" means the Florida Department of Transportation.
(8) "Directional Median Opening" means as defined in Rule 14-96.002, F.A.C. Directional median openings for two opposing left or "U-turn" movements along one segment of road are considered one directional median opening.
(9) "Existing Urbanized Areas other than CBD and CBD Fringe" means the area between the CBD and CBD Fringe area boundary and the existing Urban Area Boundary for Urbanized Areas as reflected in the MPO Long Range Transportation Plan. For the purpose of this rule chapter, this area is designated as Area Type 2 and only applies to Access Class 1.
(10) "FHWA" means Federal Highway Administration.
(11) "Full Median Opening" means as defined in Rule 14-96.002, F.A.C.
(12) "Generally Accepted Professional Practice" means as defined in Rule 14-96.002, F.A.C.
(13) "Governmental Entities" means as set forth in Section 335.188, F.S.
(14) "Intersection" means an at-grade connection or crossing of a local road or state highway with a state highway.
(15) "Limited Access Facility" means as defined in Section 334.03, F.S.
(16) "Local Governmental Entity" means as defined in Section 334.03, F.S.
(17) "Median" means as defined in Rule 14-96.002, F.A.C.
(18) "Median Opening Spacing Standard" means the distance between openings in a restrictive median. The distance is measured from centerline to centerline of the openings along the traveled way.
(19) "Metropolitan Planning Organization (MPO)" means as described in Section 339.175, F.S.

https://www.flrules.org/gateway/ChapterHome.asp?Chapter=14-97

Access Management Classification Rule 14-97

Table 1
Access Management Standards for Limited Access Facilities

Access Class	Segment Location	Applicable Interchange Spacing Standard
1	Area Type 1 – CBD & CBD Fringe for Cities in Urbanized Areas	1 Mile
	Area Type 2 – Existing Urbanized Areas Other Than Area Type 1	2 Miles
	Area Type 3 – Transitioning Urbanized Areas and Urban Areas Other Than Area Type 1 OR 2	3 Miles
	Area Type 4 – Rural Areas	6 Miles

Table 2
Access Management Standards for Controlled Access Facilities

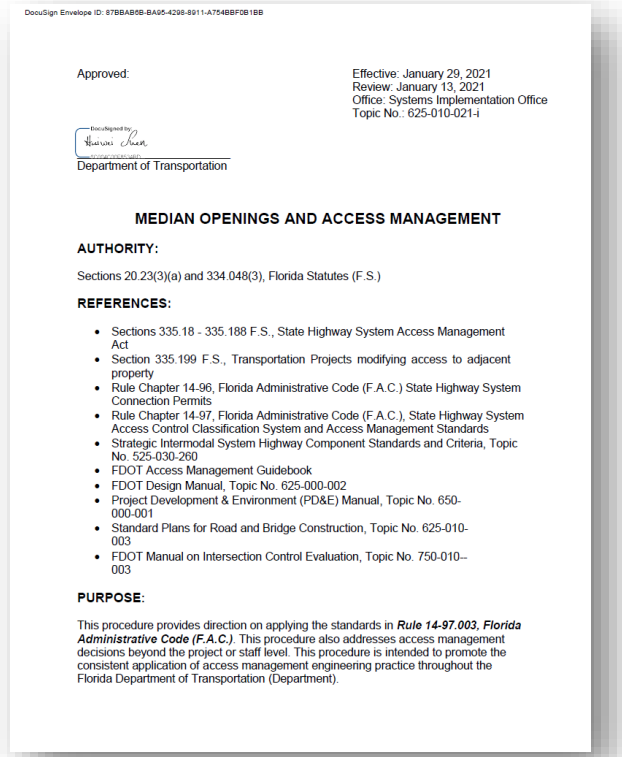
Access Class	Median	Median Opening Spacing Standard (feet)		Signal Spacing Standard (feet)	Connection Spacing Standard (feet)	
		Full	Directional		Posted Speed Greater than 45 MPH	Posted Speed of 45 MPH or less
2	Restrictive	2,640	1,320	2,640	1,320	660
3	Restrictive	2,640	1,320	2,640	660	440
4	Non-Restrictive			2,640	660	440
5	Restrictive	2,640 Posted Speed Greater than 45 MPH 1,320 Posted Speed of 45 MPH or less	660	2, 640 Posted Speed Greater than 45 MPH 1,320 Posted Speed of 45 MPH or less	440	245
6	Non-Restrictive			1,320	440	245
7	Both Median Types	660	330	1,320	125	125

Median Openings and Access Management Topic No. 625-010-021

Title: Assignment of Access Management Classification to the State Highway System

- Effective on June 1, 2020

1. Median Review
2. District Access Management Review Committee
3. Access Management Decisions in Department Improvement Projects
4. Median Retrofit Considerations
5. Considerations for Review of Deviations from Median Opening Standards
   - 5.4 Recommended Queue Storage Length
   - 5.5 Some Design Prohibitions and Cautions
6. Minor Deviations from Median Openings Standards
7. Notification and Communication with Interested and Potentially Affected People
   - 7.2 Implementing Section 335.199
8. Central Office Responsibility in Access Management and Median Opening Decisions
9. Intersection Control Evaluation (ICE) Applicability
10. Training and Assistance from Central Office
11. Forms



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Approved:

Effective: January 29, 2021
Review: January 13, 2021
Office: Systems Implementation Office
Topic No.: 625-010-021-i

Department of Transportation

MEDIAN OPENINGS AND ACCESS MANAGEMENT

AUTHORITY:

Sections 20.23(3)(a) and 334.048(3), Florida Statutes (F.S.)

REFERENCES:

- Sections 335.18 - 335.188 F.S., State Highway System Access Management Act
- Section 335.199 F.S., Transportation Projects modifying access to adjacent property
- Rule Chapter 14-96, Florida Administrative Code (F.A.C.) State Highway System Connection Permits
- Rule Chapter 14-97, Florida Administrative Code (F.A.C.), State Highway System Access Control Classification System and Access Management Standards
- Strategic Intermodal System Highway Component Standards and Criteria, Topic No. 525-030-260
- FDOT Access Management Guidebook
- FDOT Design Manual, Topic No. 625-000-002
- Project Development & Environment (PD&E) Manual, Topic No. 650-000-001
- Standard Plans for Road and Bridge Construction, Topic No. 625-010-003
- FDOT Manual on Intersection Control Evaluation, Topic No. 750-010--003

PURPOSE:

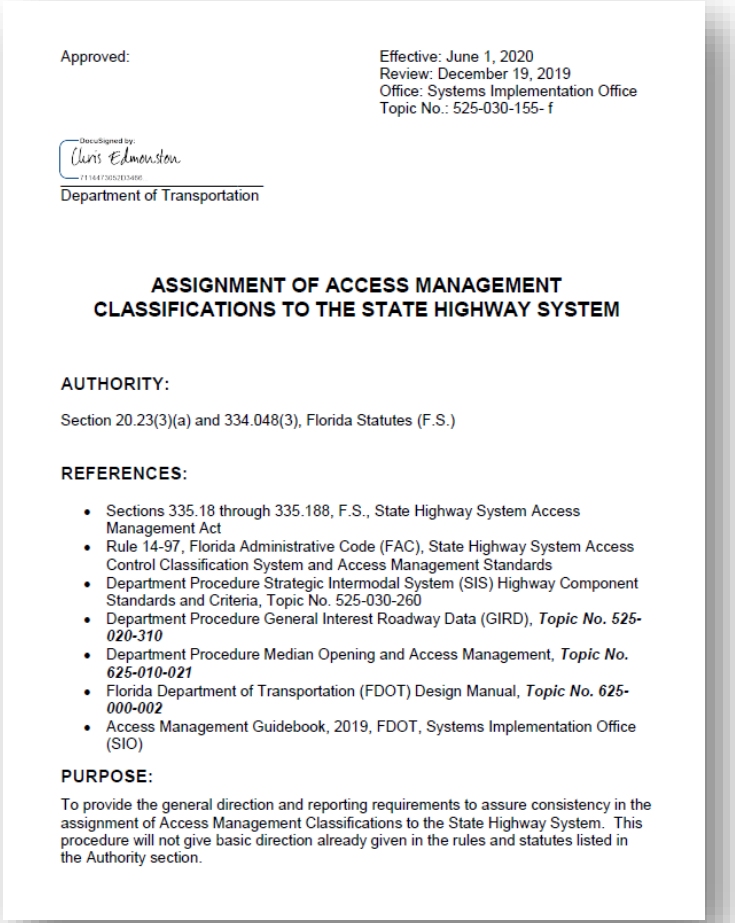
This procedure provides direction on applying the standards in ***Rule 14-97.003, Florida Administrative Code (F.A.C.)***. This procedure also addresses access management decisions beyond the project or staff level. This procedure is intended to promote the consistent application of access management engineering practice throughout the Florida Department of Transportation (Department).

Access Management Classification Topic No. 525-030-155

Title: Median Openings and Access Management

- Effective on January 29, 2021

1. Guidelines for the classification process
2. Access management classification in the strategic intermodal system (SIS)
3. Critical data that involves existing and future conditions
4. General guidance for reclassification
5. Classification process due to transfers of roadways to the SHS and road improvements
6. Roadway characteristics inventory (RCI)



Approved:

Effective: June 1, 2020
Review: December 19, 2019
Office: Systems Implementation Office
Topic No.: 525-030-155- f

DocuSigned by:
Chris Edmonston
Department of Transportation

ASSIGNMENT OF ACCESS MANAGEMENT CLASSIFICATIONS TO THE STATE HIGHWAY SYSTEM

AUTHORITY:

Section 20.23(3)(a) and 334.048(3), Florida Statutes (F.S.)

REFERENCES:

- Sections 335.18 through 335.188, F.S., State Highway System Access Management Act
- Rule 14-97, Florida Administrative Code (FAC), State Highway System Access Control Classification System and Access Management Standards
- Department Procedure Strategic Intermodal System (SIS) Highway Component Standards and Criteria, Topic No. 525-030-260
- Department Procedure General Interest Roadway Data (GIRD), ***Topic No. 525-020-310***
- Department Procedure Median Opening and Access Management, ***Topic No. 625-010-021***
- Florida Department of Transportation (FDOT) Design Manual, ***Topic No. 625-000-002***
- Access Management Guidebook, 2019, FDOT, Systems Implementation Office (SIO)

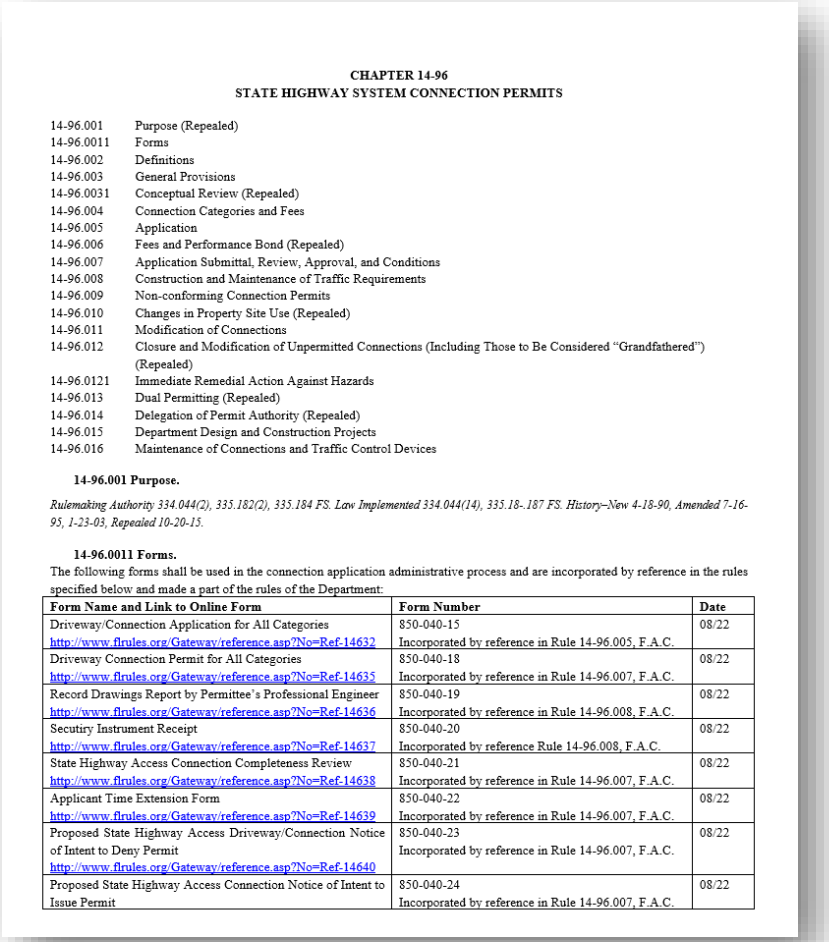
PURPOSE:

To provide the general direction and reporting requirements to assure consistency in the assignment of Access Management Classifications to the State Highway System. This procedure will not give basic direction already given in the rules and statutes listed in the Authority section.

Rule 14-96

Chapter Title: State Highway System Connection Permit

- 14-96.001 Purpose (Repealed)
- 14-96.0011 Forms
- 14-96.002 Definitions
- 14-96.003 General Provisions
- 14-96.0031 Conceptual Review (Repealed)
- 14-96.004 Connection Categories and Fees
- 14-96.005 Application
- 14-96.006 Fees and Performance Bond (Repealed)
- 14-96.007 Application Submittal, Review, Approval, and Conditions
- 14-96.008 Construction and Maintenance of Traffic Requirements
- 14-96.009 Non-conforming Connection Permits
- 14-96.010 Changes in Property Site Use (Repealed)
- 14-96.011 Modification of Connections
- 14-96.012 Closure and Modification of Unpermitted Connections (Including those to be Considered “Grandfathered”) (Repealed)
- 14-96.0121 Immediate Remedial Action Against Hazards
- 14-96.013 Dual Permitting (Repealed)
- 14-96.014 Delegation of Permit Authority (Repealed)
- 14-96.015 Department Design and Construction Projects
- 14-96.016 Maintenance of Connections and Traffic Control Devices



CHAPTER 14-96
STATE HIGHWAY SYSTEM CONNECTION PERMITS

14-96.001 Purpose (Repealed)
14-96.0011 Forms
14-96.002 Definitions
14-96.003 General Provisions
14-96.0031 Conceptual Review (Repealed)
14-96.004 Connection Categories and Fees
14-96.005 Application
14-96.006 Fees and Performance Bond (Repealed)
14-96.007 Application Submittal, Review, Approval, and Conditions
14-96.008 Construction and Maintenance of Traffic Requirements
14-96.009 Non-conforming Connection Permits
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14-96.012 Closure and Modification of Unpermitted Connections (Including Those to Be Considered “Grandfathered”) (Repealed)
14-96.0121 Immediate Remedial Action Against Hazards
14-96.013 Dual Permitting (Repealed)
14-96.014 Delegation of Permit Authority (Repealed)
14-96.015 Department Design and Construction Projects
14-96.016 Maintenance of Connections and Traffic Control Devices

14-96.001 Purpose.

Rulemaking Authority 334.044(2), 335.182(2), 335.184 FS. Law Implemented 334.044(14), 335.18-.187 FS. History–New 4-18-90, Amended 7-16-95, 1-23-03, Repealed 10-20-15.

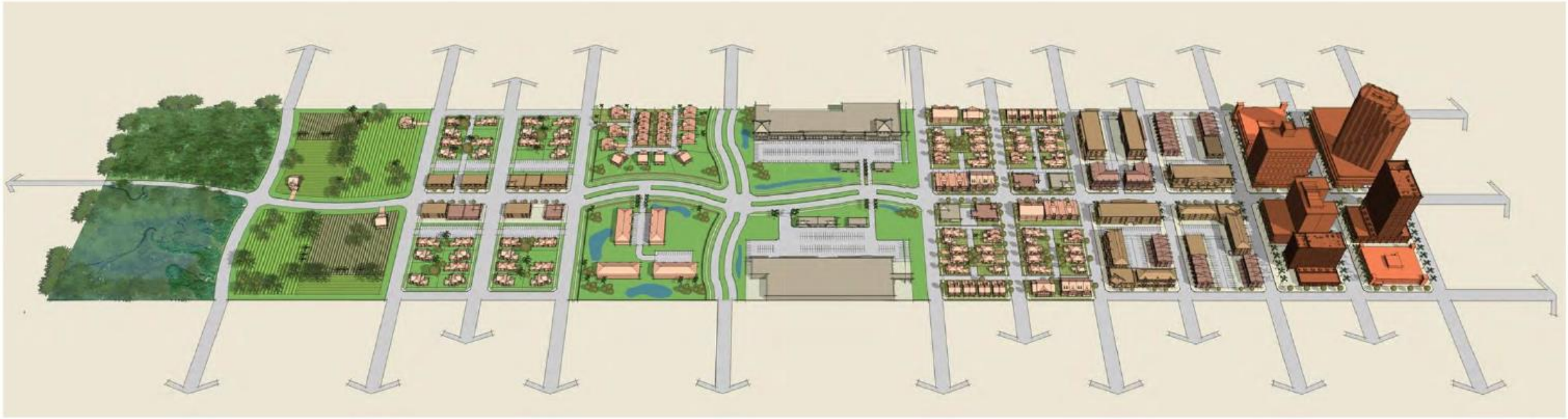
14-96.0011 Forms.
The following forms shall be used in the connection application administrative process and are incorporated by reference in the rules specified below and made a part of the rules of the Department:

Form Name and Link to Online Form	Form Number	Date
Driveway/Connection Application for All Categories http://www.flrules.org/Gateway/reference.asp?No=Ref-14632	850-040-15 Incorporated by reference in Rule 14-96.005, F.A.C.	08/22
Driveway Connection Permit for All Categories http://www.flrules.org/Gateway/reference.asp?No=Ref-14635	850-040-18 Incorporated by reference in Rule 14-96.007, F.A.C.	08/22
Record Drawings Report by Permittee’s Professional Engineer http://www.flrules.org/Gateway/reference.asp?No=Ref-14636	850-040-19 Incorporated by reference in Rule 14-96.008, F.A.C.	08/22
Secutiry Instrument Receipt http://www.flrules.org/Gateway/reference.asp?No=Ref-14637	850-040-20 Incorporated by reference Rule 14-96.008, F.A.C.	08/22
State Highway Access Connection Completeness Review http://www.flrules.org/Gateway/reference.asp?No=Ref-14638	850-040-21 Incorporated by reference in Rule 14-96.007, F.A.C.	08/22
Applicant Time Extension Form http://www.flrules.org/Gateway/reference.asp?No=Ref-14639	850-040-22 Incorporated by reference in Rule 14-96.007, F.A.C.	08/22
Proposed State Highway Access Driveway/Connection Notice of Intent to Deny Permit http://www.flrules.org/Gateway/reference.asp?No=Ref-14640	850-040-23 Incorporated by reference in Rule 14-96.007, F.A.C.	08/22
Proposed State Highway Access Connection Notice of Intent to Issue Permit	850-040-24 Incorporated by reference in Rule 14-96.007, F.A.C.	08/22

https://www.flrules.org/gateway/ChapterHome.asp?Chapter=14-96

Complete Streets

https://www.fdot.gov/roadway/csi/default.shtm\



C1-Natural
Lands preserved in a natural or wilderness condition, including lands unsuitable for settlement due to natural conditions.

C2-Rural
Sparsely settled lands; may include agricultural land, grassland, woodland, and wetlands.

C2T-Rural Town
Small concentrations of developed areas immediately surrounded by rural and natural areas; includes many historic towns.

C3R-Suburban Residential
Mostly residential uses within large blocks and a disconnected or sparse roadway network.

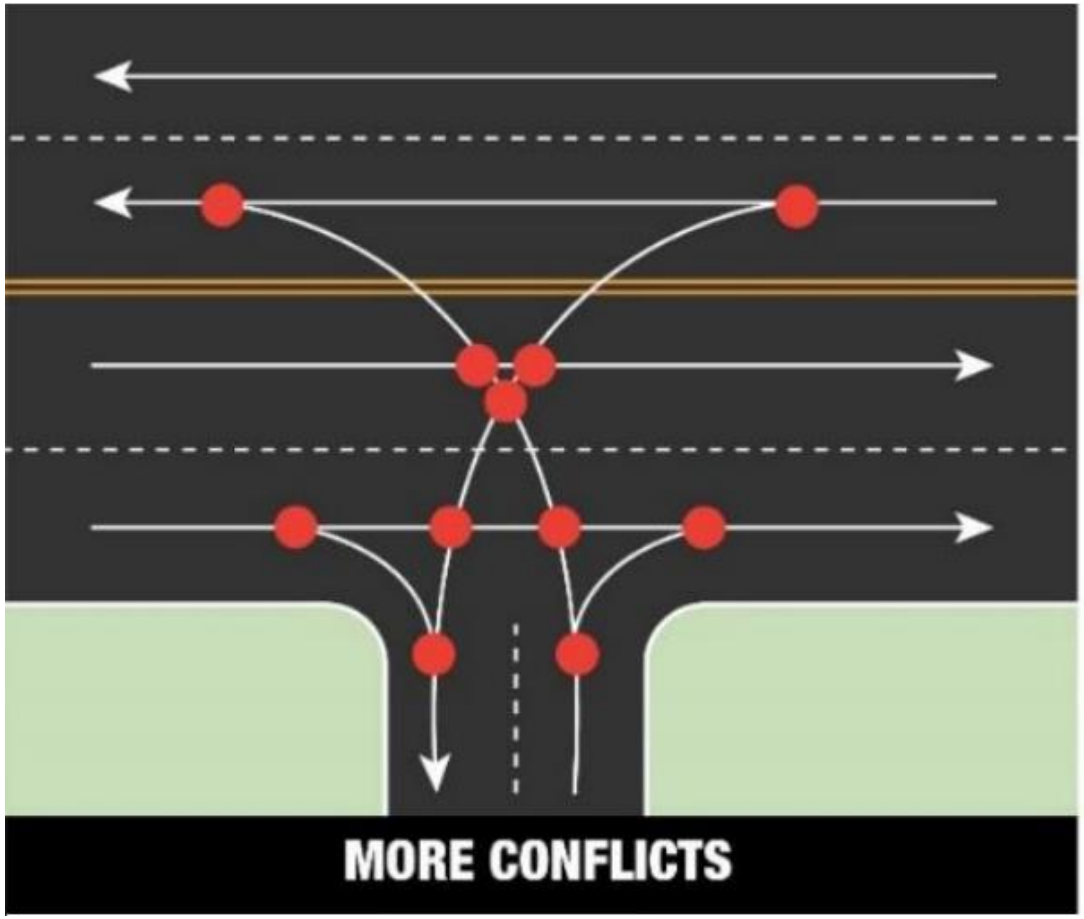
C3C-Suburban Commercial
Mostly non-residential uses with large building footprints and large parking lots within large blocks and a disconnected or sparse roadway network.

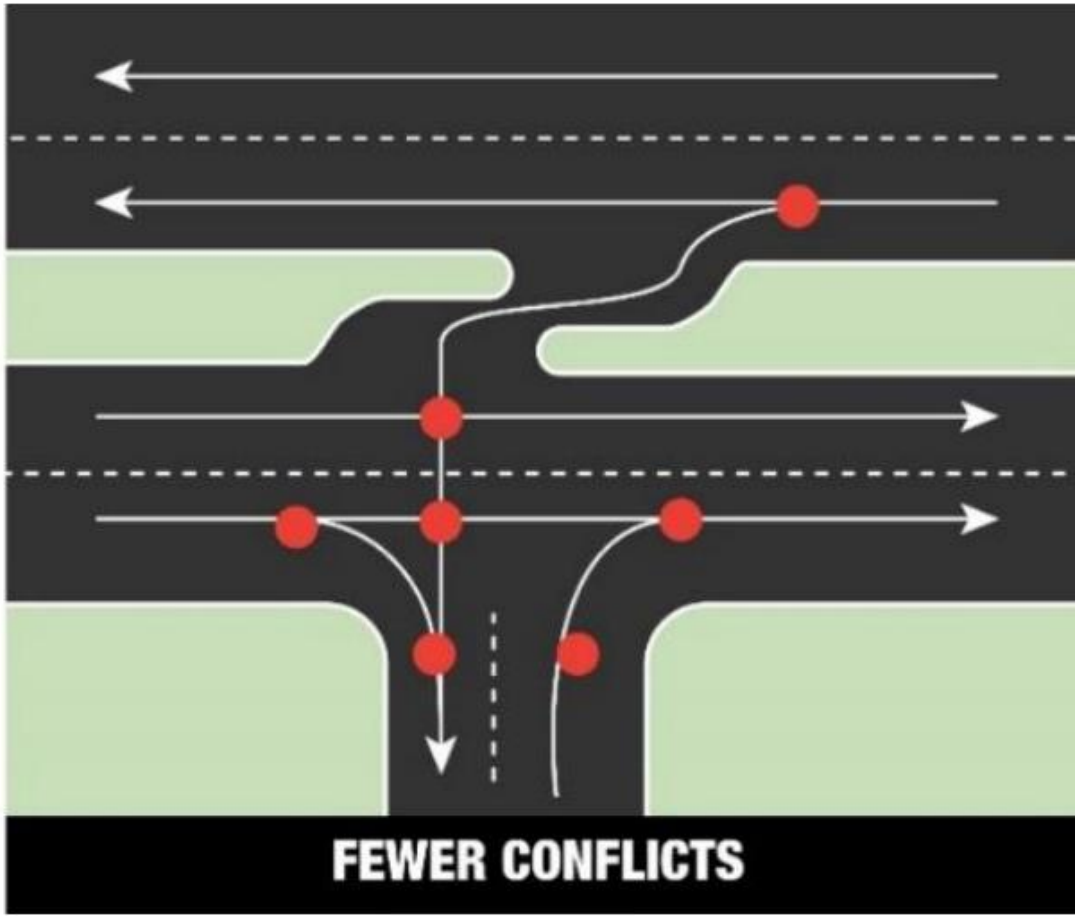
C4-Urban General
Mix of uses set within small blocks with a well-connected roadway network. May extend long distances. The roadway network usually connects to residential neighborhoods immediately along the corridor or behind the uses fronting the roadway.

C5-Urban Center
Mix of uses set within small blocks with a well-connected roadway network. Typically concentrated around a few blocks and identified as part of a civic or economic center of a community, town, or city.

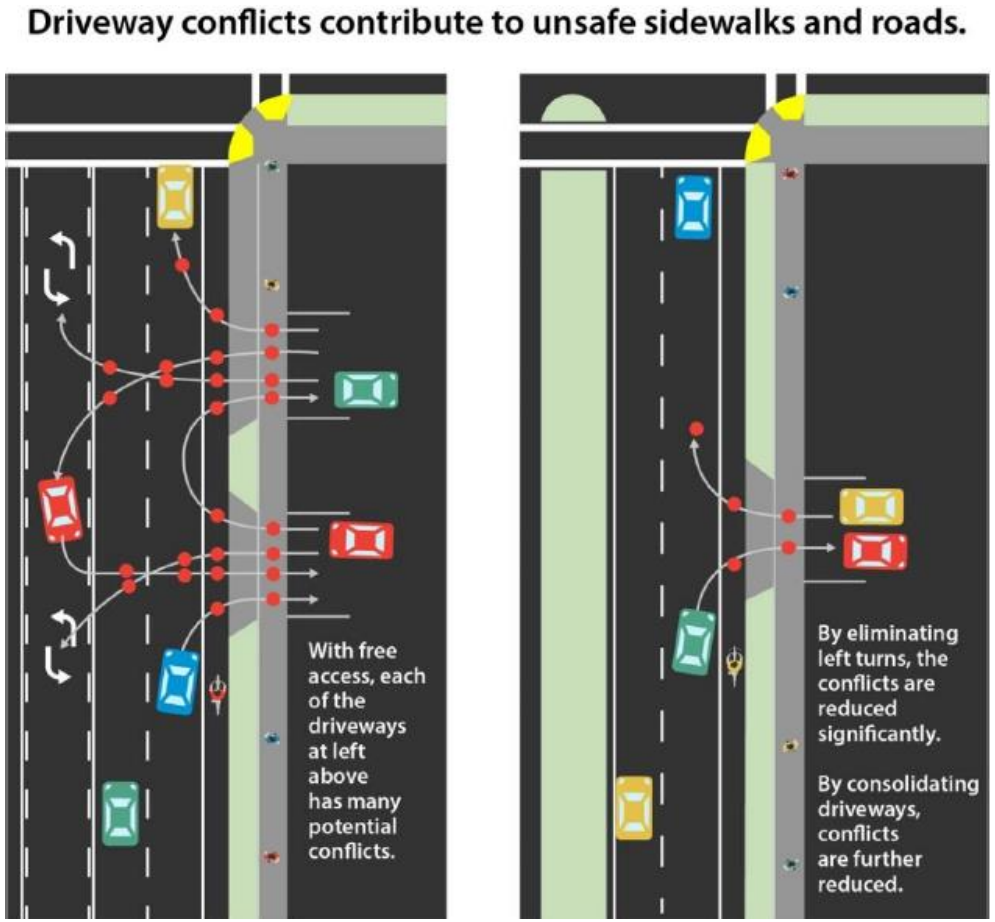
C6-Urban Core
Areas with the highest densities and building heights, and within FDOT classified Large Urbanized Areas (population >1,000,000). Many are regional centers and destinations. Buildings have mixed uses, are built up to the roadway, and are within a well-connected roadway network.

What is Access Management





What is Access Management



Benefits of Access Management

Table 1 | User/Stakeholder Benefits of Access Management

User/Stakeholder	Benefits
Motorists	• Fewer traffic conflicts • Simplified traffic task • Increased safety • Reduced travel time and traffic delays
Bicyclists	• Increased safety on roadways with medians and fewer driveways • Reduced conflicts and crashes with turning vehicles • More predictable motorist travel patterns
Pedestrians	• Fewer and less frequent conflict points from motorists entering and exiting a roadway • Medians can be used as a refuge in crossing lanes of traffic • Improved direct and safe access to destinations • Improved neighborhood walkability
Transit Rider/Transit Agency	• Reduced delay and reduced travel times • Safer pedestrian (walking environment), and bicycle access and connectivity to transit stops • Convenient access to transit stops with improved connectivity of streets and sidewalks • Improved reliability of transit service on corridors with effective access management
Business Owner	• Efficient roadway system that captures a broader market area or a greater share of vehicles (customers) • Improved pedestrian and bicycle safety • Improved pedestrian and bicycle customer access • Stable or increasing property values • Predictable and consistent development environment
Freight Industry	• Reduced delay and increased safety will lower transportation costs and shorten delivery times • Improved site design to accommodate trucks
Government Agencies	• Reduced cost of delivering an efficient and safe transportation system • Accomplish regional transportation objectives
Communities	• Enhanced business environment • Stabilize or increase property values • Safer and more sustainable transportation system for all modes of travel • Less need for road widening, which causes displacement of businesses, homes, and communities • More livable roadway corridors and activity centers • Help protect and preserve their investment in transportation facilities • Reduced capital improvement costs for new or reconstructed roadways

Table 2 | Effects of Access Management Techniques

Treatment	Effect
Add Non-traversable Median	• 55% reduction in total crashes • 30% decrease in delay • 30% increase in capacity
Replace TWLTL with Non-traversable Median	• 15% to 57% reduction in crashes on four-lane roads • 25% to 50% reduction in crashes on six-lane roads
Add Left-turn Bay	• 25% to 50% reduction in crashes on four-lane roads • Up to 75% reduction in total crashes at unsignalized access • 25% increase in capacity
Type of Left-turn Improvement Painted	• 32% reduction in total crashes
Separator or Raised Divider	• 67% reduction in total crashes
Add Right-turn Bay	• 20% reduction in total crashes • Limit right-turn interference with platooned flow, increased capacity
Increase Driveway Speed from 5 to 10 miles per hour (mph)	• 50% reduction in delay per maneuver; less exposure time to following vehicles
Visual Cue at Driveways Driveway Illumination	• 42% reduction in crashes
Prohibition of On-street Parking	• 30% increase in traffic flow • 20% to 40% reduction in crashes
Long Signal Spacing with Limited Access	• 42% reduction in total vehicle hours of travel • 59% reduction in delay • 57,500 gal of fuel saved per mile per year

Context Classification and Access Management

Table 7 | Context Classifications, Medians and Median Openings, and Modal Emphasis

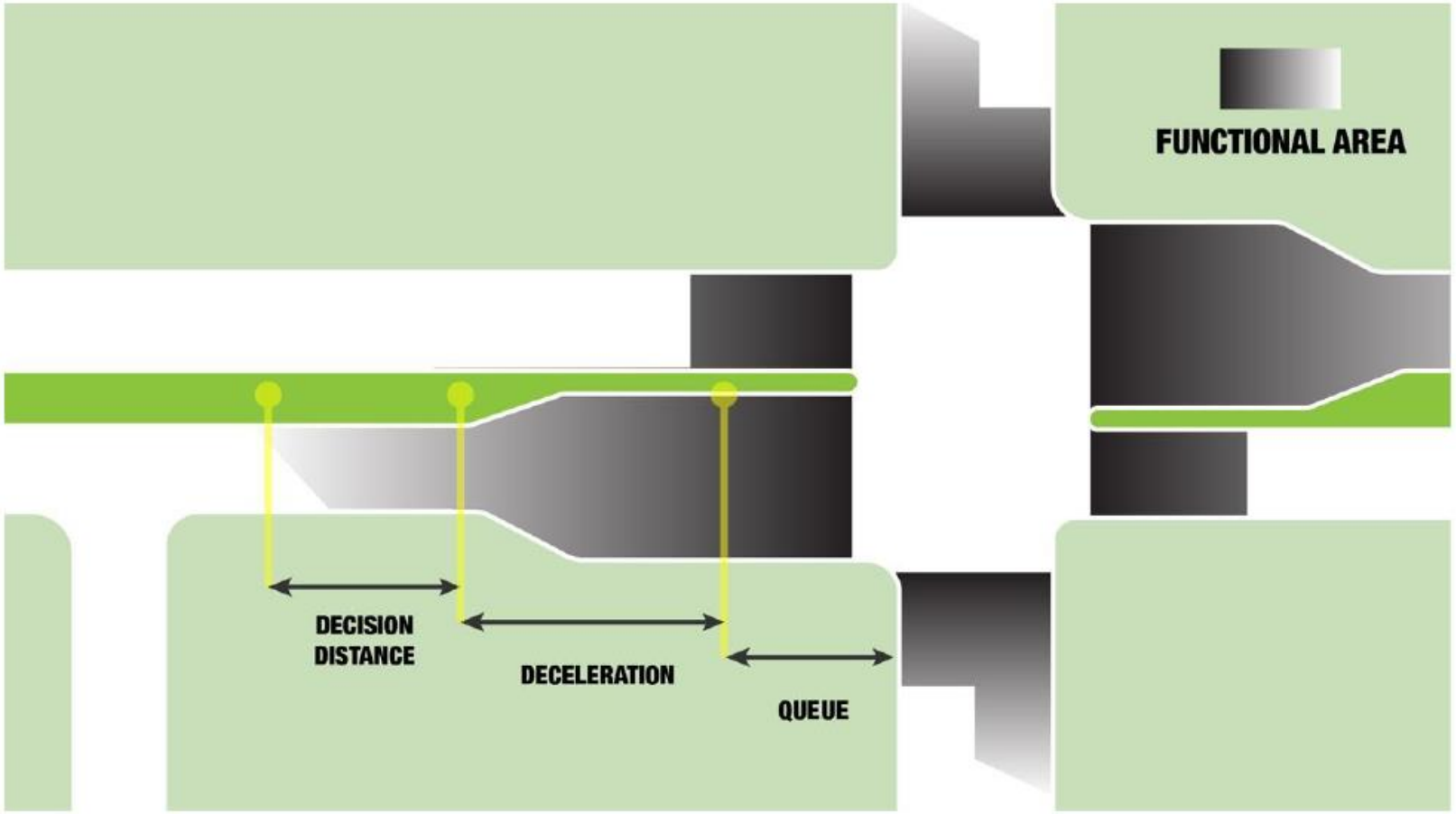
Class	Characteristics By Mode	Relative Median Modal Emphasis By Context Classification					General Median Considerations
		CAR	BICYCLE	WALKING	TRANSIT	TRUCKS	
C1 Natural Access Class 2,3	Motor vehicles predominant, Occasional bicycle and pedestrian activity, occasional public transportation	High	Low	Low	Low	High	• Install medians on all major four-lane highways. • Provide turn lanes at all median openings • Retrofit continuous two-way left-turn lanes into restrictive medians
C2 Rural Access Class 2,3	Motor vehicles predominant, Occasional bicycle and pedestrian activity, occasional public transportation	High	Low	Low	Low	High	• Install medians on all major four-lane highways. • Provide turn lanes at all median openings • Retrofit continuous two-way left-turn lanes into restrictive medians
C2T Rural Town Access Class 4,5,6,7	Sidewalk paved from utility strip or in some cases the curb edge to face of building, shorter block sizes, higher pedestrian volumes, often on street parking	High to mediu m	Medium	High	Medium	Medium	• Install medians on all major four-lane highways leading into the rural town. • Provide left-turn lanes at all median openings • Based on expected traffic and speed, consider 3-lane section through the rural town with pedestrian refuge areas and other enhancements to the pedestrian environment to ensure visibility of pedestrians • Minimize extra driveways • Maintain sidewalks across driveway openings • Improve left turn conditions to side streets, especially parking and rear delivery entrances. • Assure safe, visible, and accessible midblock pedestrian crossings where warranted and signal spacing is greater than 660 feet • Preserve the existing street network and intersection spacing based on existing block sizes
C3R Suburban Residential Access Class 3	Bicycles and pedestrians present. Bus transit transportation is usually present. Entrances into subdivisions usually local street design	High	Medium	Medium	Medium	Medium	• Install medians on all major multi-lane highways. • Provide turn lanes at all median openings • Retrofit continuous two way left-turn lane sections into restrictive medians • Assure safe, visible, and accessible midblock pedestrian crossings where warranted and signal spacing is greater than 660 feet
C3C Suburban Commercial Access Class 3	May include activity centers Bicycles and pedestrians present. Bus transit usually present	High	Medium	Medium	Medium	Medium to High	• Install medians on all major multi highways. • Provide turn lanes at all median openings • Retrofit continuous two way left-turn lane sections into restrictive medians. • Assure sufficient turning radii where large vehicles are frequent • Assure safe, visible, and accessible midblock pedestrian crossings where warranted and signal spacing is greater than 660 feet
C4 General Urban Access Class 4,5,6,7	Mix of uses within small blocks, well- connected roadway network, some blocks may extend long distances, Road network usually connects to residential neighborhoods along the corridor or behind	High	Medium	Medium to high	Medium to high	Medium to High	• Install medians on all major multi highways. • Provide left-turn lanes at all median openings • Retrofit continuous two way left-turn lane sections into restrictive medians with pedestrian refuge areas. • Assure sufficient turning radii at median openings where large vehicles are frequent • Assure safe, visible, and accessible midblock pedestrian crossings where signal spacing is greater than 660 feet • Preserve the existing street network and intersection spacing based on existing block sizes
C5 Urban Center Access Class 4,5,6,7	Connected buildings, sidewalk paved from curb to building face, shorter blocks, high pedestrian volumes, high bicycle volumes and bike-share possible, high bus volumes, possible rail or BRT, motor vehicle traffic congested during peak hours	Medium to low	Medium to high	High	High	Medium	• Block sizes in these sections should be sufficiently short to not require separate midblock pedestrian crossings. • Assure safe, visible, and accessible midblock pedestrian crossings where warranted and signal spacing is greater than 660 feet • Preserve the existing street network and intersection spacing based on existing block sizes
C6 Urban Core Access Class 4,5,6,7	Connected buildings, sidewalk paved from curb to building face, shorter blocks, high pedestrian volumes, high bicycle volumes and bike-share possible, high bus volumes, possible rail or BRT, motor vehicle traffic congested during peak hours	Medium to low	Medium to high	High	High	Medium	• Block sizes in these sections should be sufficiently short to not require separate midblock pedestrian crossings. • Assure safe, visible, and accessible midblock pedestrian crossings where warranted and signal spacing is greater than 660 feet • Preserve the existing street network and intersection spacing based on existing block sizes

Context Classification and Access Management

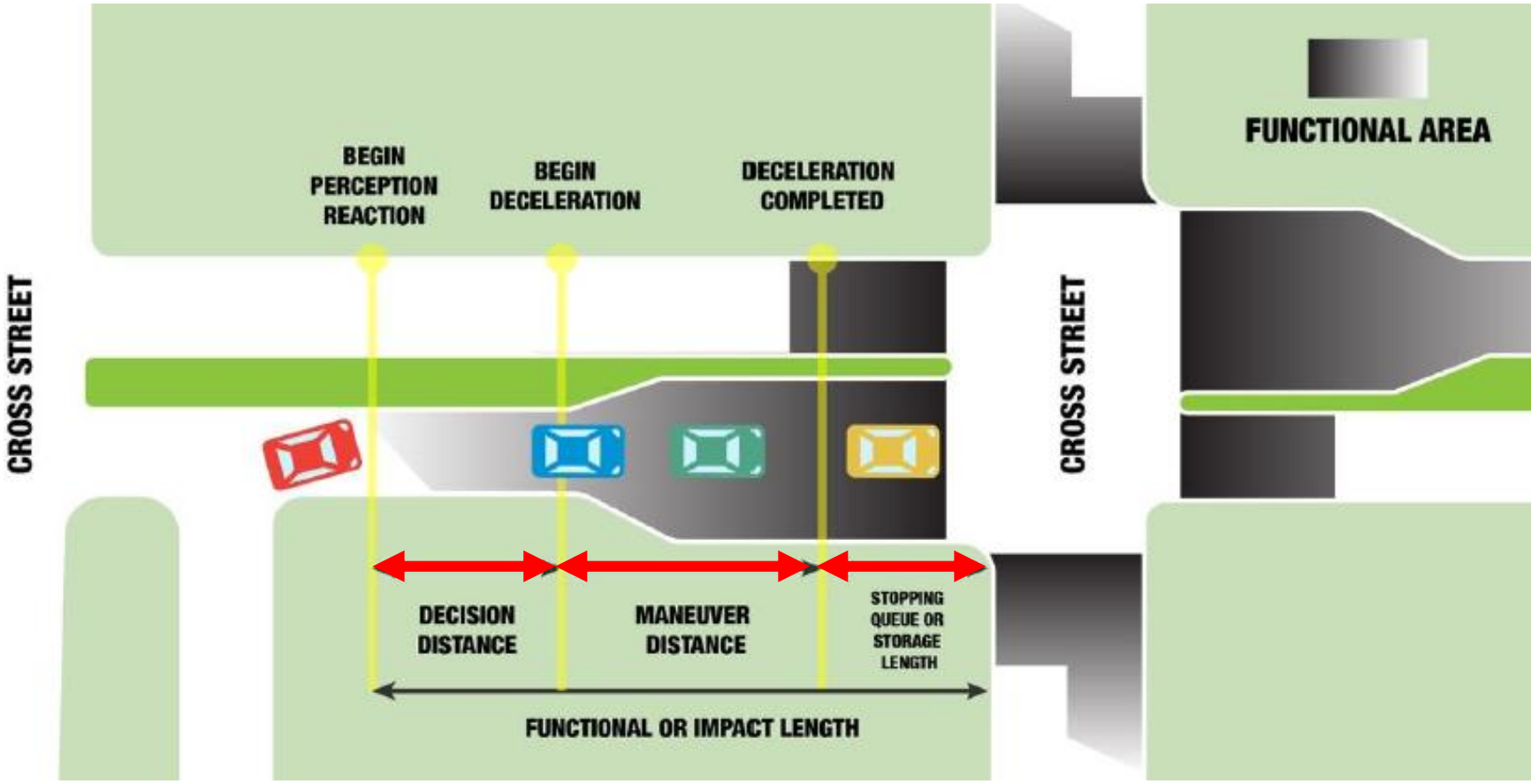
Table 8 | Context Classifications, Driveways, and Modal Emphasis

Class	Characteristics By Mode	Relative Driveway Modal Emphasis By Context Classification					General Driveway Considerations
		CAR	BICYCLE	WALKING	TRANSIT	TRUCKS	
C1 Natural Access Class 2,3	Motor vehicles predominant, occasional bicycle and pedestrian activity, occasional public transportation	High	Low	Low	Low	High	• Wide turning radius and width necessary for multi-unit tractor trailer when present. Extra width needed to accommodate single direction only
C2 Rural	Motor vehicles predominant, occasional bicycle and pedestrian activity, occasional public transportation	High	Low	Low	Low	High	• Wide turning radius and width necessary for the design vehicle only in one direction
C2T Rural Town	Sidewalk paved from utility strip or in some cases the curb edge to face of building, shorter block sizes, higher pedestrian volumes, often on-street parking	Medium	Medium	High	Low	Medium	• Minimize the number of driveways to create a consistent pedestrian environment. • When driveways are built, the first principle is to keep the sidewalk level across the driveway space. The second is that the flare or apron not cross the sidewalk zone. This establishes that the driver is now entering a pedestrian environment. Other driveway design elements should consider bicycle and pedestrian use such as turning radii, driveway width, angle, separators, islands, and length. • Vehicular access should be through the side and back. • FDOT should reinforce local network connectivity for access/ accessibility (e.g., blocks and local streets). • Reduce the number of driveways through shared or consolidated driveways and cross-access between properties.
C3R Suburban Residential	Bicycles and pedestrians present. Bus service common. Entrances into subdivisions usually of local street design	High	Medium	Medium	Medium	Medium	• Medium turning radii in neighborhoods with attention paid to the pedestrian environment through the use well marked crosswalks. • Consider the use of small sized radii, and the use of a reinforced textured raised surface to allow off-tracking of typical multi-unit tractor trailers when present.
C3C Suburban Commercial Access Class 3	May also include activity centers. Bicycles and pedestrians present. Bus service common.	High	Medium	Medium	Medium	Medium to High	• Wide turning radius and width necessary for multi-unit tractor trailers when present. Extra width maybe needed to accommodate two movements exiting and entering at the same time, especially in industrial areas. • Consider the use of small sized radii, and the use of a reinforced textured raised surface to allow off-tracking of typical multi-unit tractor trailers when present.
C4 General Urban	Mix of uses within small blocks. Well- connected roadway network. Some blocks may extend long distances. Road network usually connects to residential neighborhoods along the corridor or behind.	Medium	Medium	High	Medium to High	Medium	• Small to medium-sized radii on driveways. • Consider the use of small sized radii, and the use of a raised reinforced textured surface to allow off-tracking to the typical multiunit tractor trailer. • When driveways are built, the first principle is to keep the sidewalk level across the driveway space. The second is that the flare or apron not cross the sidewalk zone. This establishes that the driver is now entering a pedestrian environment. Other driveway design elements should consider bicycle and pedestrian use such as turning radii, driveway width, angle, separators, islands, and length. • FDOT should reinforce local network connectivity for access/ accessibility to support rear or side entrances and exits (e.g. blocks and local streets). • Reduce the number of driveways through shared or consolidated driveways and cross-access between properties.
C5 Urban Center	Connected buildings, sidewalk paved from curb to building face, shorter blocks, high pedestrian volumes, high bicycle volumes and bike-share possible, high bus volumes, possible rail or BRT, motor vehicle traffic congested during peak hours	Medium to Low	Medium to High	High	High	Medium	• Minimize the number of driveways to create a consistent pedestrian environment. • When driveways are built, the first principle is to keep the sidewalk level across the driveway space. The second is that the flare or apron not cross the sidewalk zone. This establishes that the driver is now entering a pedestrian environment. Other driveway design elements should consider bicycle and pedestrian use such as turning radii, driveway width, angle, separators, islands, and length. • Vehicular access should be through the side and back of developments. • FDOT should reinforce local network connectivity for access/ accessibility to support rear or side entrances and exits (e.g. blocks and local streets). • Reduce the number of driveways through shared or consolidated driveways and cross-access between properties.
C6 Urban Core	Connected buildings, sidewalk paved from curb to building face, shorter blocks, high pedestrian volumes, high bicycle volumes and bike-share possible, high bus volumes, possible rail or BRT, motor vehicle traffic congested during peak hr.	Medium to Low	Medium to High	High	High	Medium	• Minimize the number of driveways to create a consistent pedestrian environment. • When driveways are built, the first principle is to keep the sidewalk level across the driveway space. The second is that the flare or apron not cross the sidewalk zone. This establishes that the driver is now entering a pedestrian environment. Other driveway design elements should consider bicycle and pedestrian use such as turning radii, driveway width, angle, separators, islands, and length. • As much as possible, large vehicle access should be through the side and back of developments. FDOT should reinforce local network connectivity for access/ accessibility (blocks, local streets) • Reduce the number of driveways through shared or consolidated driveways and cross-access between properties.

Functional Area



Functional Area

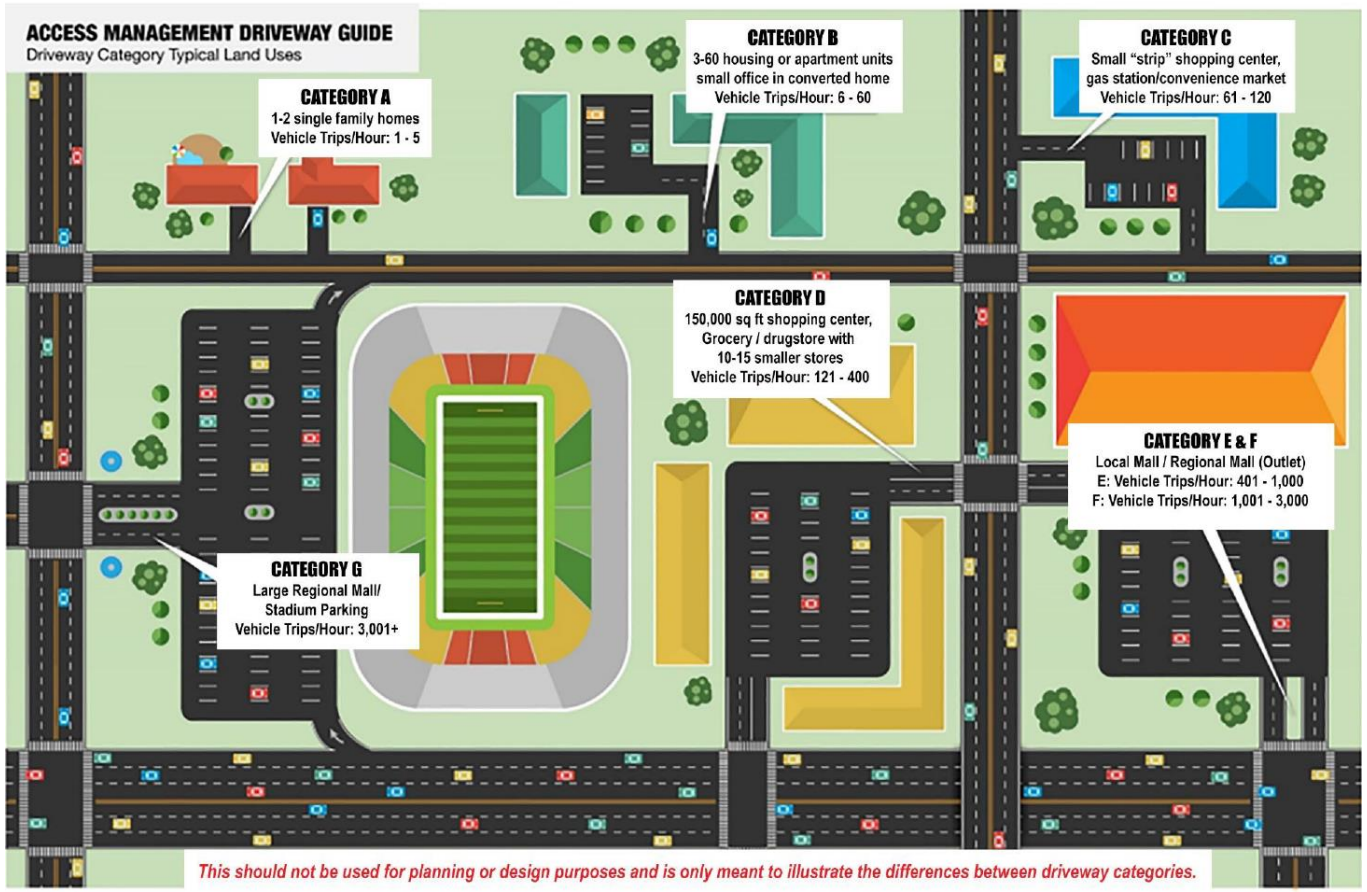


Driveways

Table 9 | Connection (Driveway) Category Criteria

Driveway Category	Vehicle Trips per Day (vpd)	Vehicle Trips per Hour (vph)	Typical Land Uses
A	1 – 20	1 – 5	1 or 2 single family homes
B	21 – 600	6 – 60	3 to 60 housing or apartment units. Small office in converted home.
C	601 – 1,200	61 – 120	Small "Strip" shopping center (20-75,000 square feet)
D	1,201 – 4,000	121 – 400	150,000 square feet shopping center Grocery/drugstore with 10-15 smaller stores
E	4,001 – 10,000	401 – 1,000	Local Mall Wholesale Club
F	10,001 – 30,000	1,001 – 3,000	Regional Mall (Outlet)
G	30,001+	3,001	Large Regional Mall

Figure 8 | Driveway Categories



Driveway Type Guidance

- Two types of driveways
  - Flared Design
    - Traffic volume does not exceed 600 vehicle trips/day.
    - Category A and B
  - Radial Return Design
    - Traffic volume exceed 600 vehicle trips/day
    - Categories C and D

Table 11 | Driveway Type Guidance

Element Description	Connection Category		
	A	B 2-Way	C and D 2-Way
Curbed Roadways	Flared	Flared	Radius
Flush Shoulder Roadways	Radius	Radius	Radius

Notes:

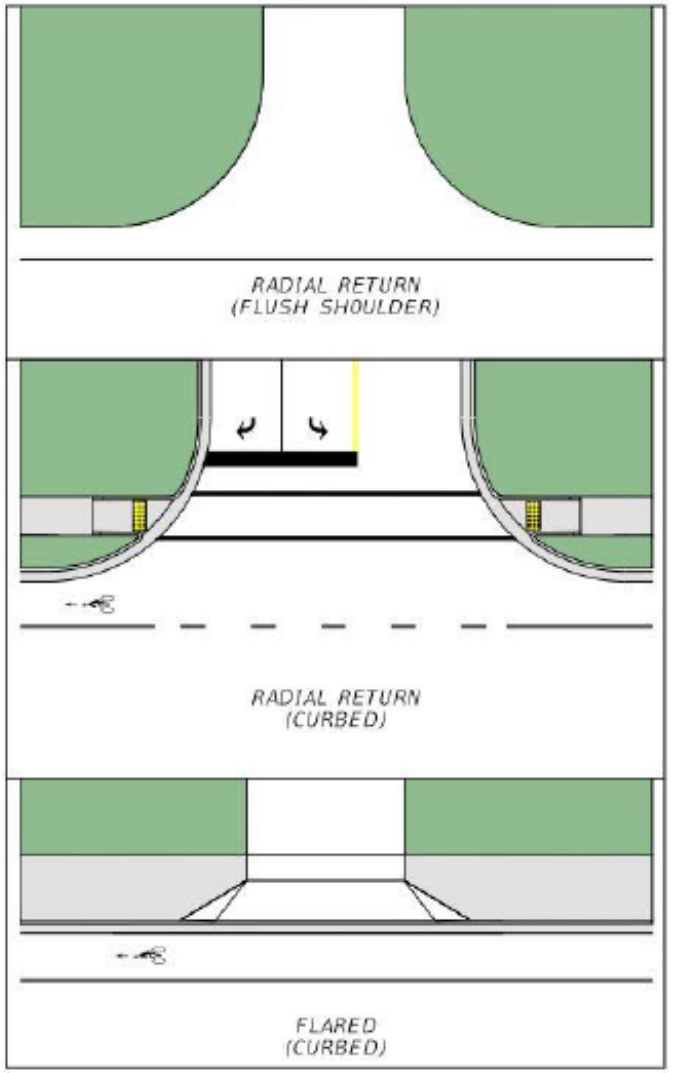
1. Connection Categories A, B, C, and D are defined in *FDM 214.1.1.*
2. Small radii may be used in lieu of flares for curbed roadways with Category B Connections when approved by the Department.

Source: FDM 214 – Driveways (Table 214.2.1)

Flush Shoulder Roadway

Radial Return

Figure 12 | Comparison of Driveway Types



Source: FDM 214 – Driveways (Figure 214.2.1)

Curbed Roadway

Radial Return

Curbed Roadway

Flared Return

Median Types

Full Median Opening

Directional Median Opening

Spacing Standards

Table 12 | Access Management Standards for Controlled Access Facilities

Roadway Access Class	FDOT Context Classification	Movement Type	Multimodal Mix	Network Density	Median Type	Connection/Driveway Spacing (feet)		Median Opening Spacing (feet)		Minimum Signal Spacing (feet)***
						≤45mph Posted	>45mph Posted	Directional	Full	
Limited Access (LA) Right of Way Facilities						Refer to Right of Way (ROW) Maps				
2	C1 Natural, C2 Rural	Regional	Low	Low	Restrictive w/Service Roads	660	1320	1,320	2,640	2,640
3	C1 Natural, C2 Rural, C2T Rural Town, C3R Suburban Residential, C3C Suburban Commercial	Regional	Low	Low	Restrictive	440	660	1,320	2,640	2,640
4	C3R Suburban Residential, C3C Suburban Commercial	Regional	Moderate	Low	Non-Restrictive**	440	660			2,640
5	C3R Suburban Residential, C3C Suburban Commercial, C4 Urban General	Regional	High	High	Restrictive	245	440	660/330*	2,640/ 1,320*/660*	2,640/ 1,320*
6	C4 Urban General, C5 Urban Center, C6 Urban Core	Cross-town	High	High	Both Median Types**	245	440	Match Network Block Size	660	1,320
7	C2T Rural Town, C4 Urban General, C5 Urban Center, C6 Urban Core	Local	High	High	Both Median Types**	125		Match Network Block Size	Match Network Block Size	1,320

*Full Median Opening Spacing 1,320 and 660 feet when roadway speed limit is 40-45 mph and 35 mph or below respectively.
*Directional Median Opening Spacing 330 feet when roadway speed limit is 35 mph or below.

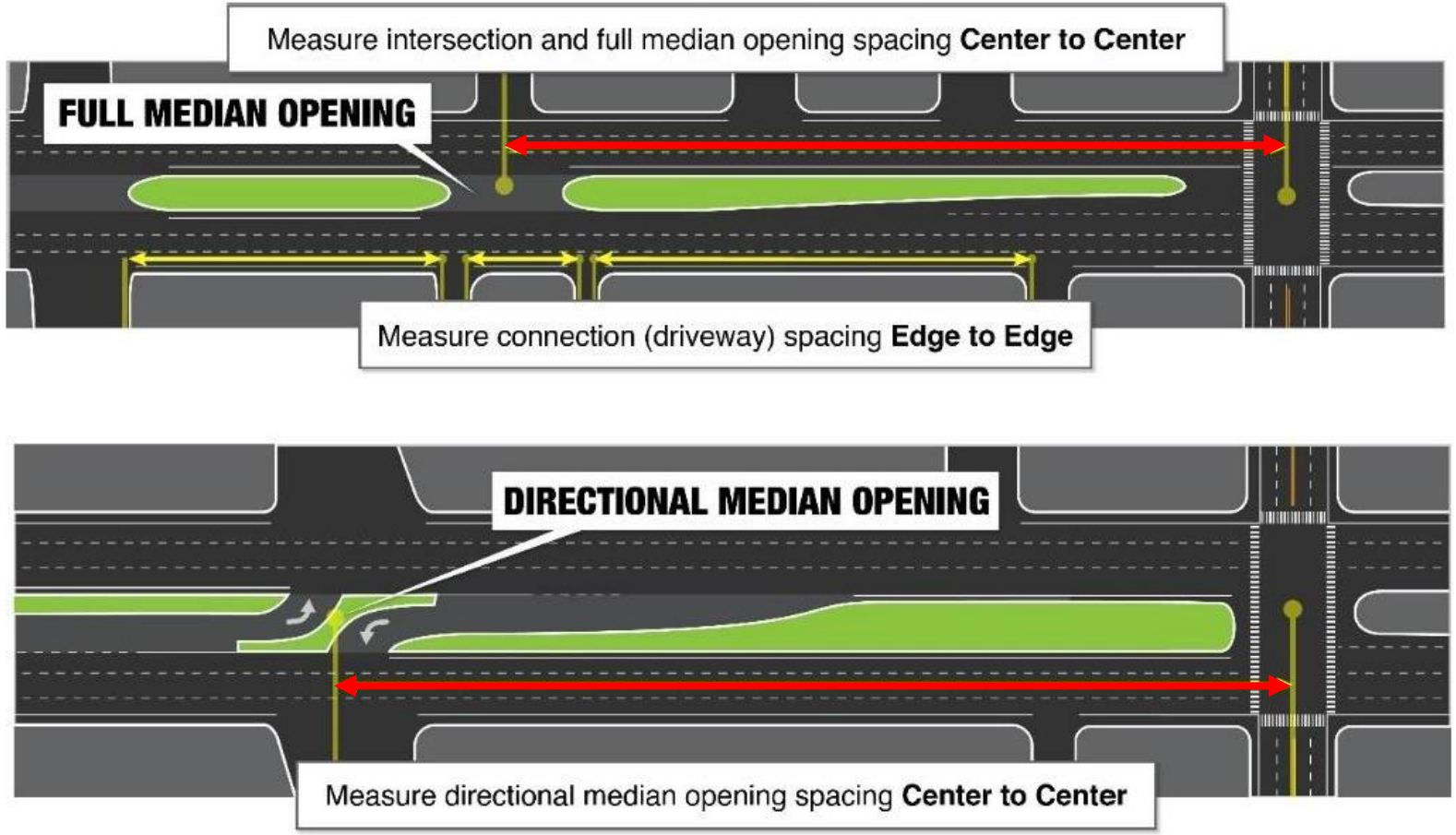
**It is recommended that additional safety/operational analysis is completed for non-restrictive medians

***Traffic signals, proposed at intervals closer than the access management standard for the designated access class, will only be approved where the need for such signal(s) is clearly demonstrated for the safety and operation of the roadway through the signal warrant process. (F.A.C. Rule Chapter: 14-97.003) Applicants requesting or requiring the addition, removal, or modification of a traffic signal for Category E, F, and G connections, must submit an Intersection Control Evaluation Form, Form 750-010-30 (F.A.C. Rule Chapter: 14-96.003). This language is in the draft version of rule 14-96.

Source: Adapted from FDM 201 - Design Controls and FDOT Context Classification

Spacing Standards

Figure 16 | Measuring Spacing Between Openings



Spacing Considerations

Figure 17 | Before Driveway Closure

Figure 18 | After Driveway Closure

Spacing Considerations

Figure 19 | Driveway Spacing with Ramp Taper

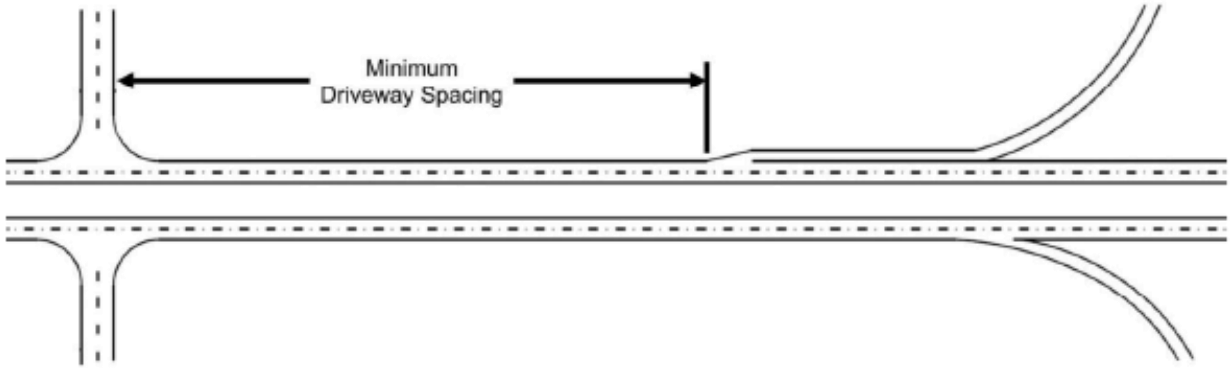
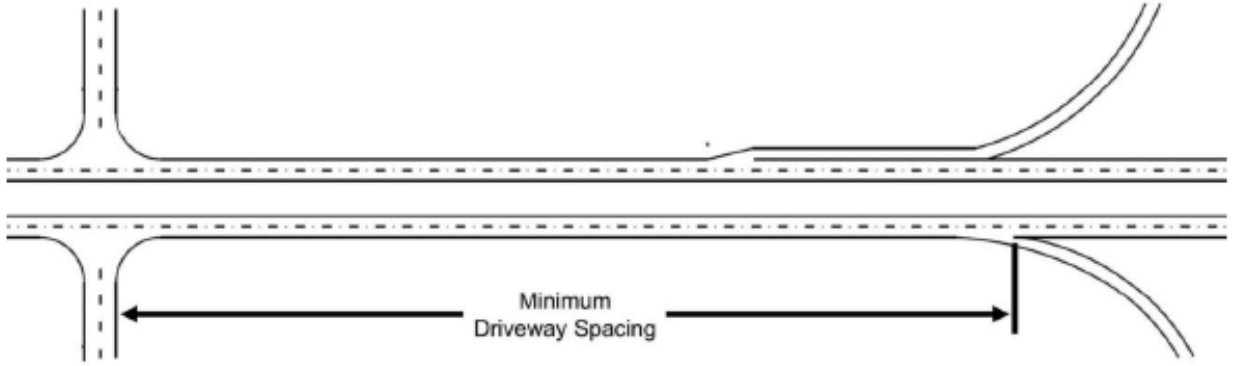


Figure 20 | Driveway Spacing without Ramp Taper



Spacing Considerations

Frontage and Backage Roads

Stub-Outs

Local Roadway Connections

Shared Connections

Shared Connections/Driveways and Cross Parcel Access

Fewer Driveways…

Reduce the number of conflict points and creates a safety benefit for all modes.

Reduce congestion caused by frequent stops, the number of trips on major roads, and improve traffic flow on the major road.

May provide the ability to provide a turn lane or longer turn lane, shift an existing median opening, or provide an additional median opening.

Cross Access…

May help to mitigate existing crash issues at unsignalized locations, increase property value, and provide enhanced pedestrian connectivity.

Providing cross access between properties broadens the access choices for the driver.

Benefits small corner properties and outparcels because left-turn access is often a problem as they would conflict with the functional area of the adjacent intersection.

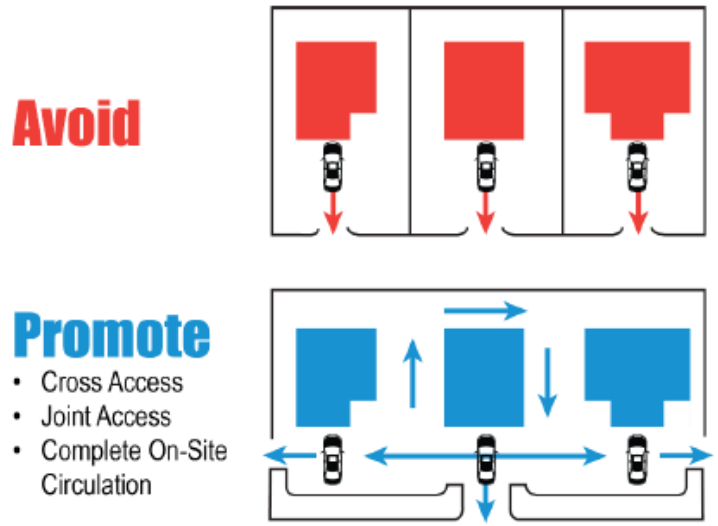
Shared Connections/Driveways and Cross Parcel Access

Benefits

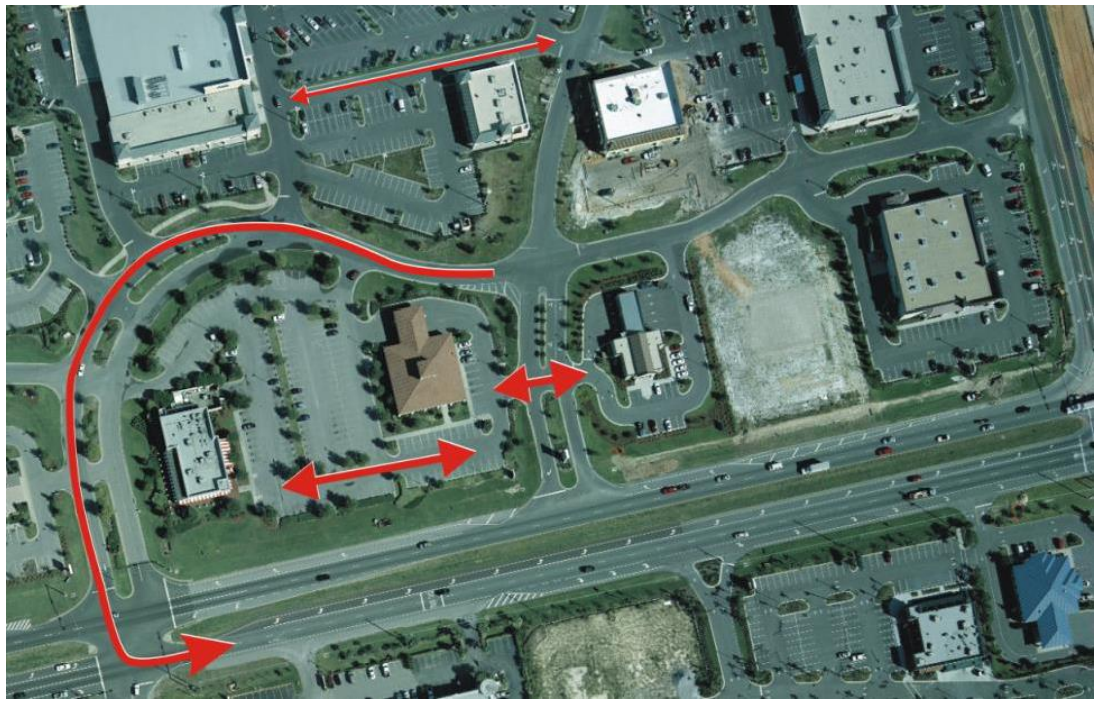
The first minimizes the number of driveways on the arterial road

The second is providing cross access between properties broadens the access choices for the driver

Figure 21 | Driveway Consolidation



Source: "Managing Corridor Development, A Municipal Handbook", Center for Urban Transportation Research, University of South Florida, October 1996. Williams, Kristine M. and Marshall, Margaret A.



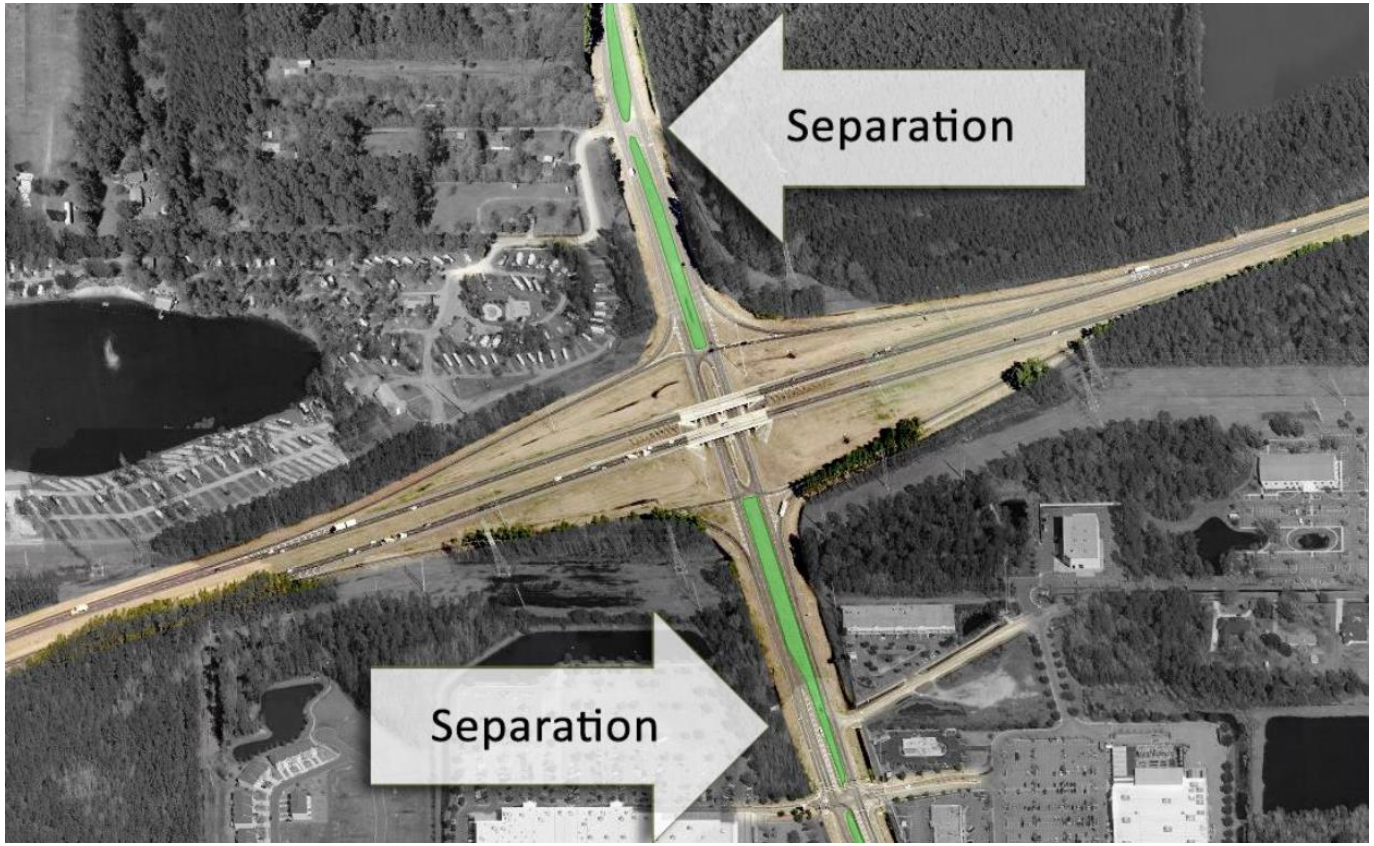
Emergency Only Access Connections

To reduce response times to emergencies, particularly for areas of a larger development that are located far away from the main entrance/exit of the development or would require emergency vehicles to travel an extended distance to reach portions of the development.

To provide a secondary means of evacuation for the development if the main entrance/exit is blocked.

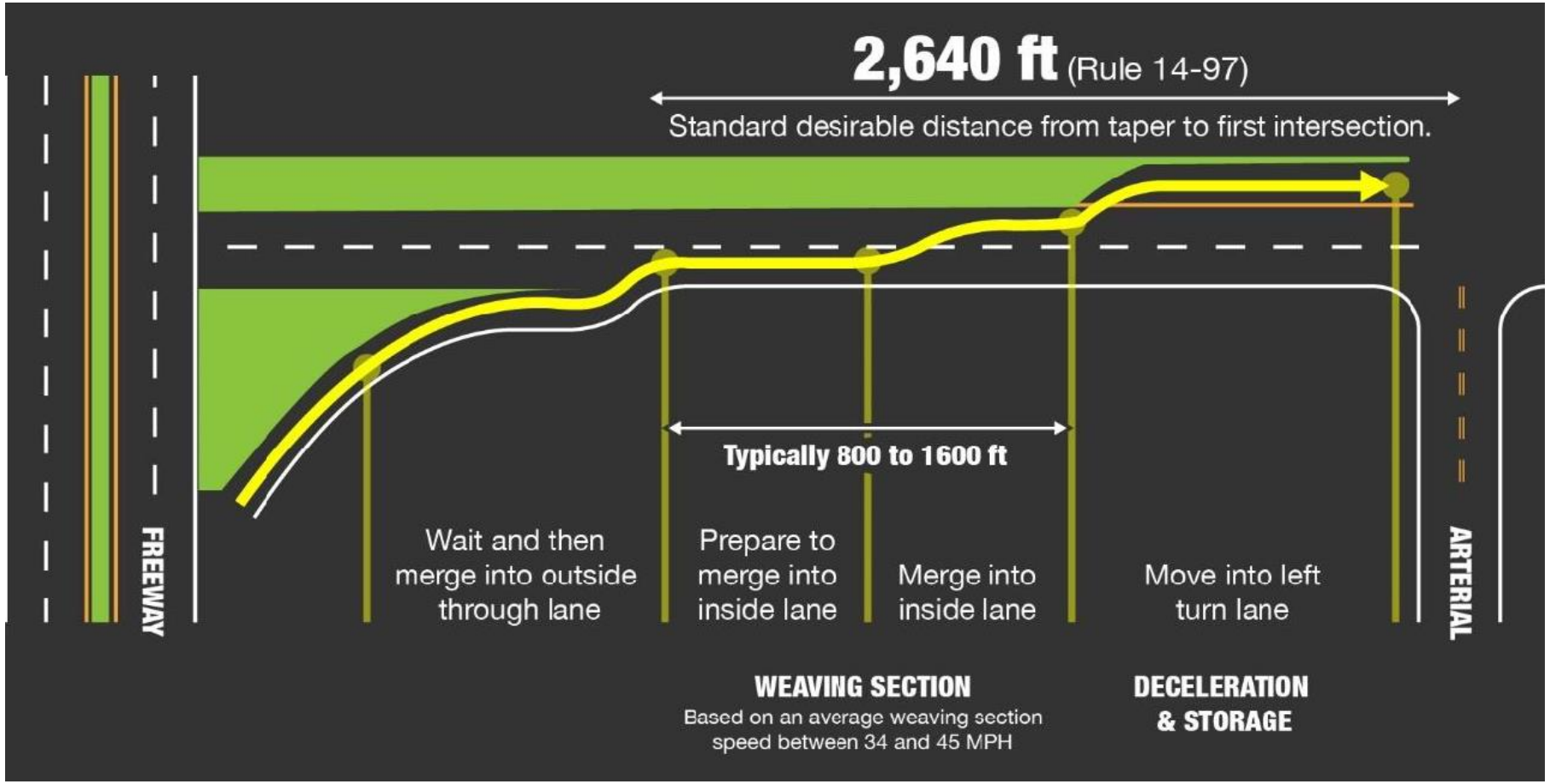
To provide an entrance or exit for emergency vehicles that are unable to turn around within the site, i.e., if the site does not provide a turnaround such as a hammerhead or cul-de-sac.

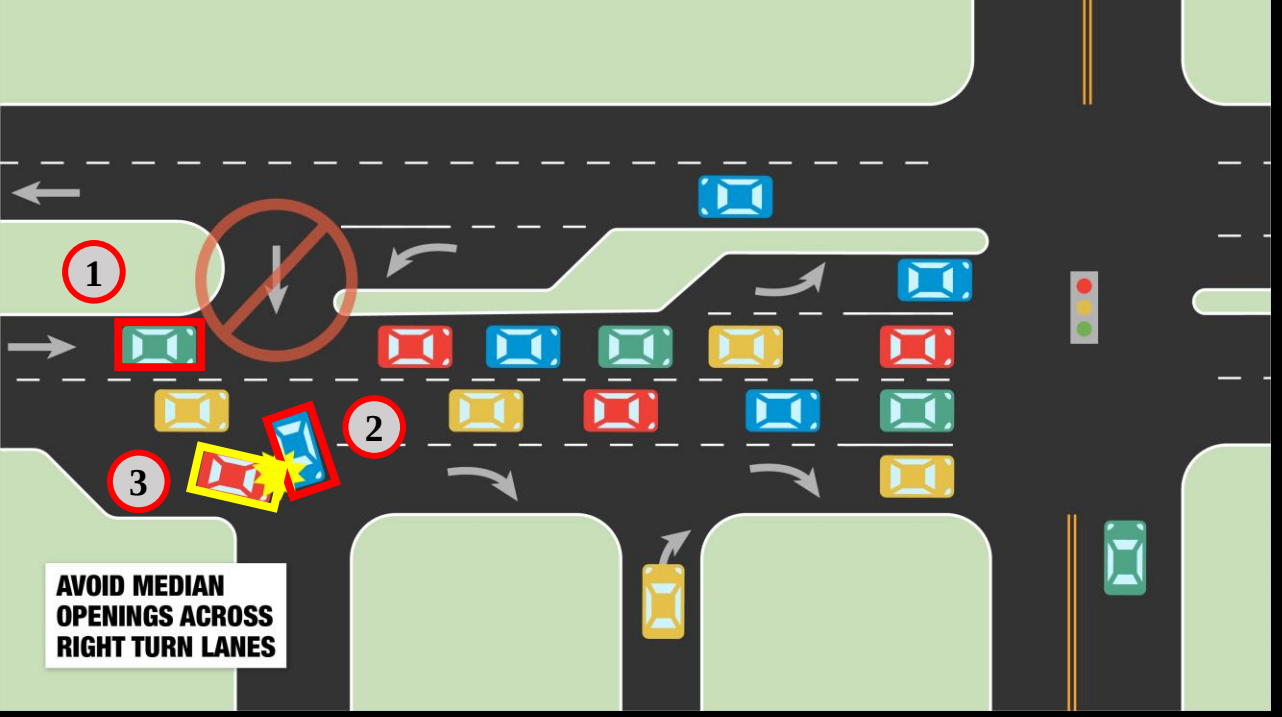
Median Openings Near Freeway Interchanges

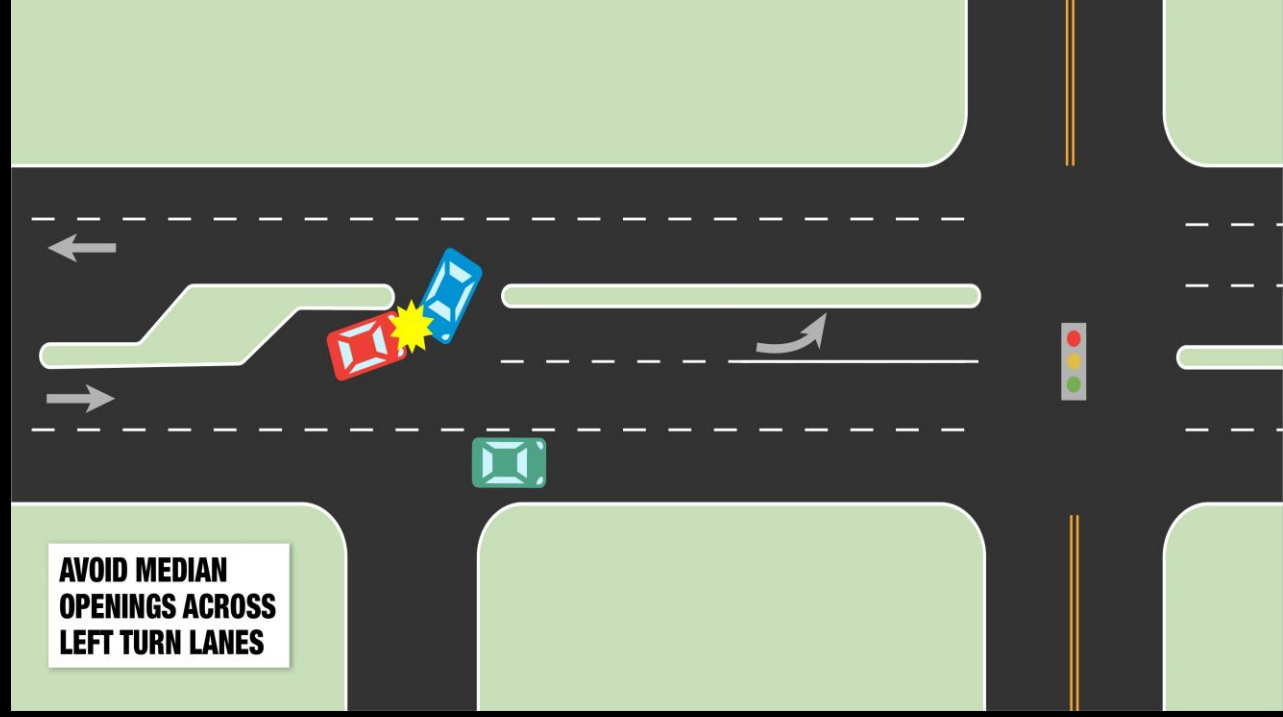


The standard distance to the first full median opening shall be at least 2,640 feet as measured from the end of the taper of the off-ramp

Median Openings Near Freeway Interchanges



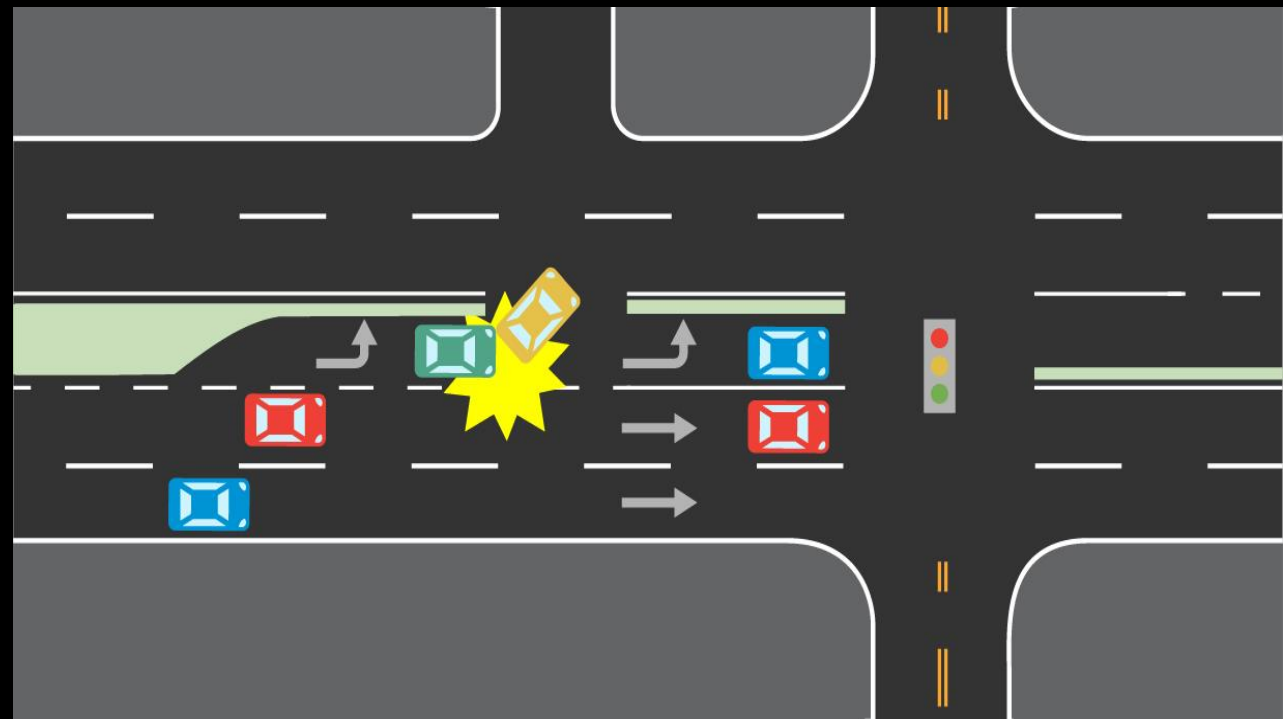




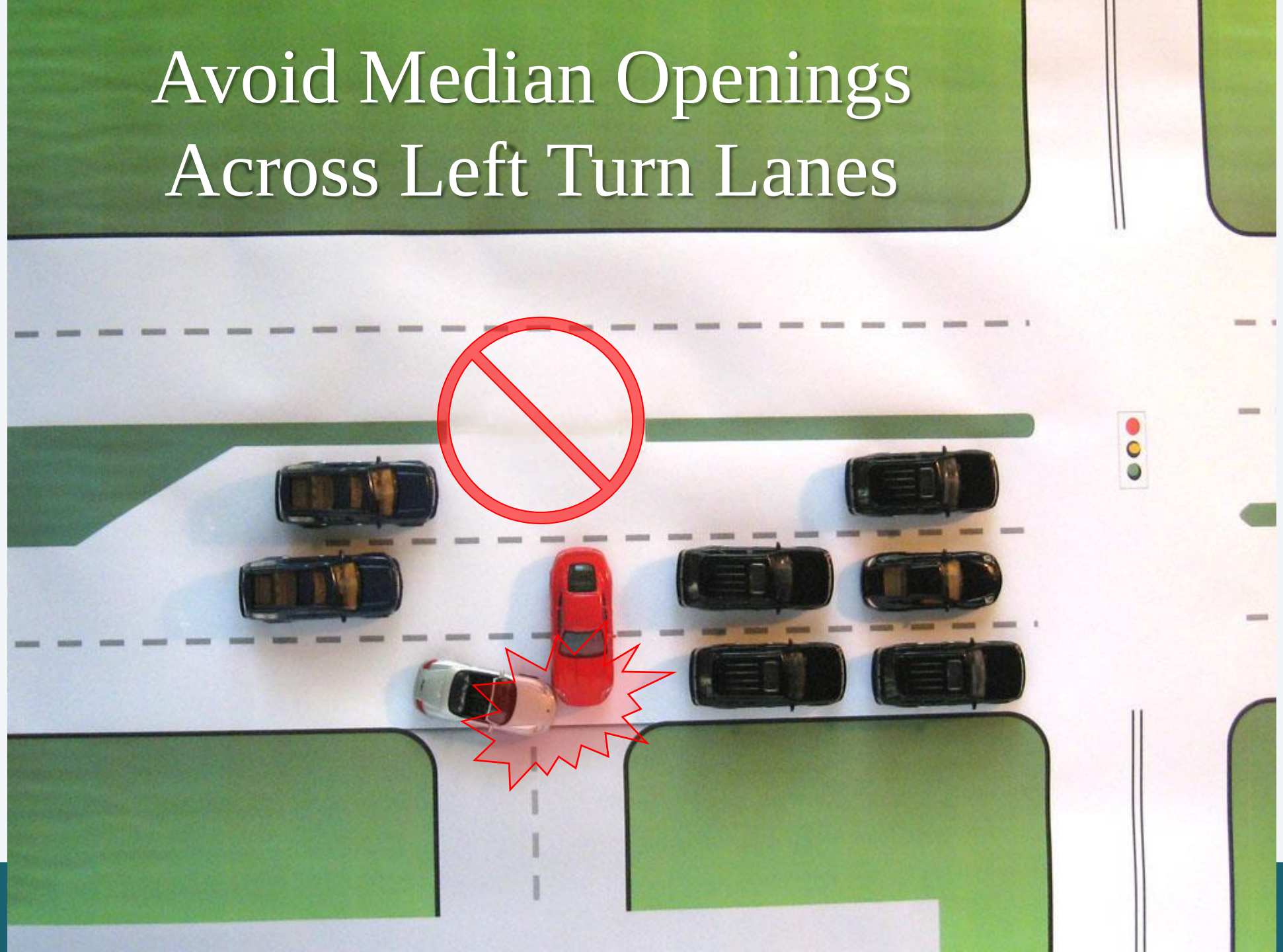
Important Considerations

Exclusive right-turn lanes are most appropriate under the following conditions:

- No median openings interfere,
- The right-turn lane does not continue across intersections, and
- No closely spaced high volume driveways



Avoid Median Openings Across Left Turn Lanes



Design of Medians & Medians Opening

- FDM 210
  - Median width is expressed as the dimension between the inside edges of traveled way.
- The appropriate median width should be determined by the specific function the median is designed to serve.

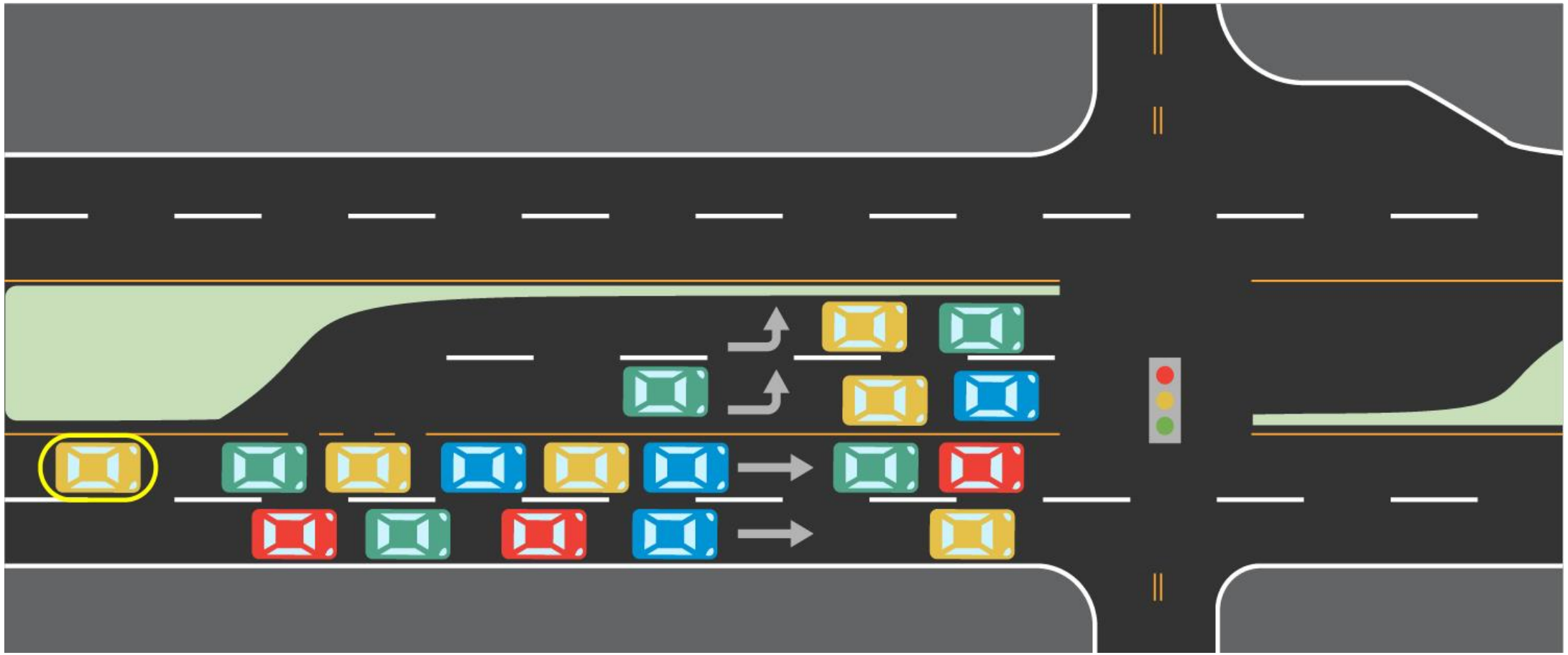
Context Classification	Curbed Roadways and Flush Shoulder Roadways (feet)		High Speed Curbed Roadways (feet)	Flush Shoulder Roadways (feet)
	Design Speed (mph)			
	25-35	40-45	50-55	≥ 50
C1 Natural	N/A	N/A	30	40
C2 Rural	N/A	N/A	30	40
C2T Rural Town	15.5	22	N/A	N/A
C3 Suburban	22	22	30	40
C4 Urban General	15.5	22	N/A	N/A
C5 Urban Center	15.5	N/A	N/A	N/A
C6 Urban Core	15.5	N/A	N/A	N/A

Notes:

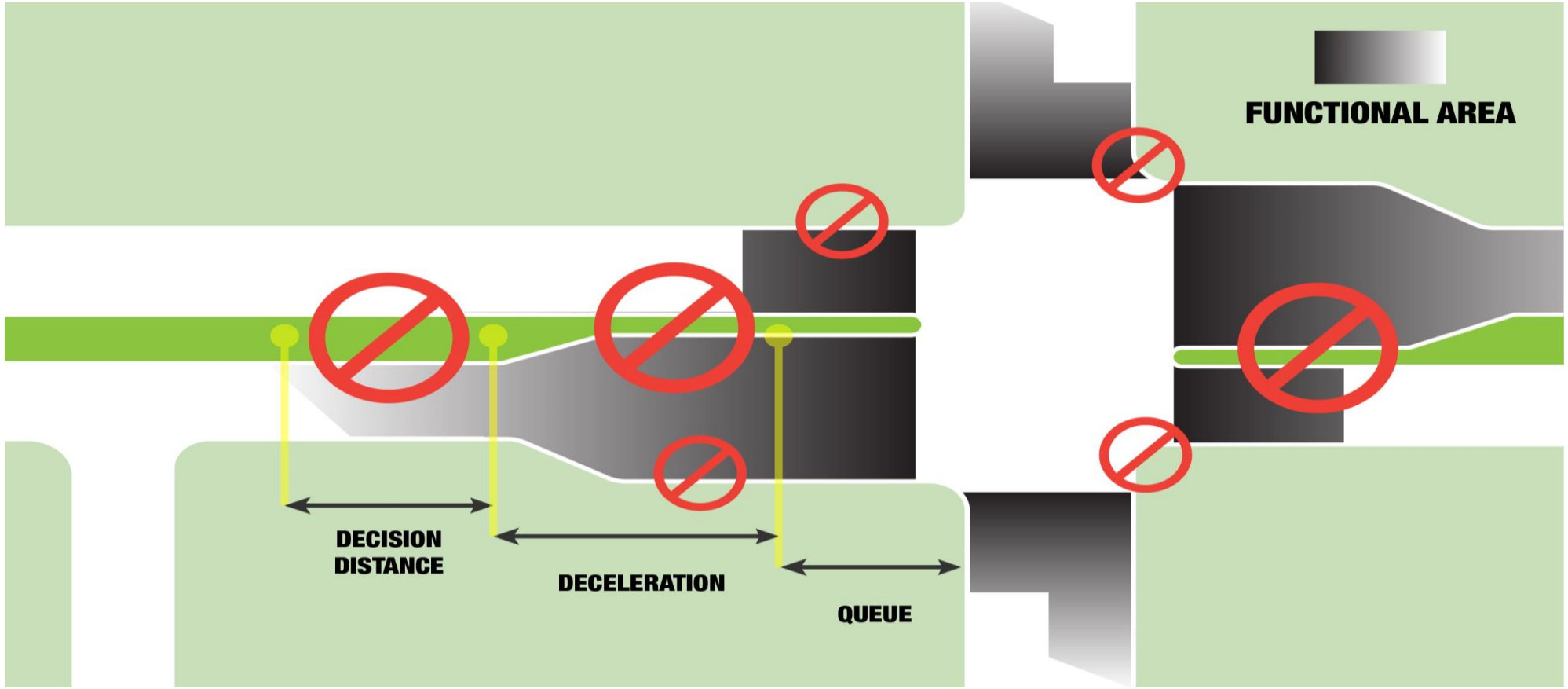
1. On reconstruction projects where existing curb locations are fixed due to severe right of way constraints, the minimum median width may be reduced to 19.5 feet for design speeds = 45 mph, and to 15.5 feet for designs speeds ≤ 40 mph.
2. A minimum 6-foot median may be used within C5 and C6 context classifications only where left-turn lanes are not expected.
3. N/A indicates this combination of design speed and context classification is outside the intended design range and should be avoided. See ***FDM Table 201.5.1*** for context classifications and design speed ranges.

Source: FDM 210 – Arterials and Collectors (Table 210.3.1)

Left Turn Failure



Exclusive Left-Turn Lane Length



Perception-Reaction-Decision

- The perception-reaction-decision distance required by drivers varies depending on certain factors.
- For drivers who frequently use the corridor, the perception reaction decision may be as little as one second or less. However, unfamiliar drivers may not be in the proper lane to execute the desired maneuver and may require three or more seconds.

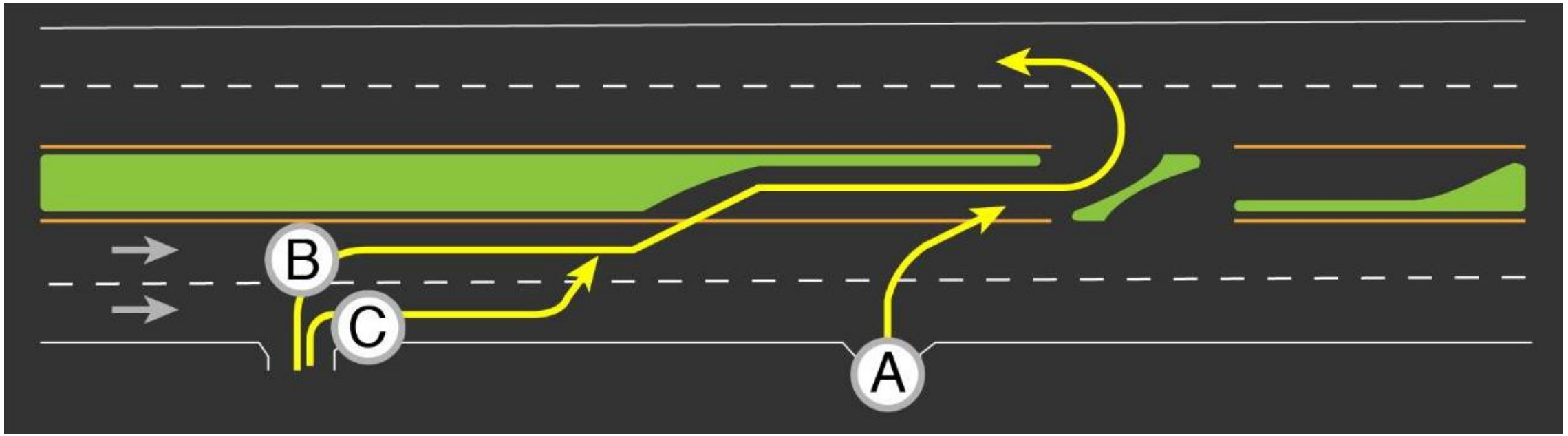
Areas	Seconds	35 MPH	45 MPH	55 MPH
Rural	2.5	130 ft.	165 ft.	200 ft.
Suburban	2	100 ft.	130 ft.	160 ft.
Urban	1.5	75 ft.	100 ft.	120 ft.

Right-Turn Weaving Distance

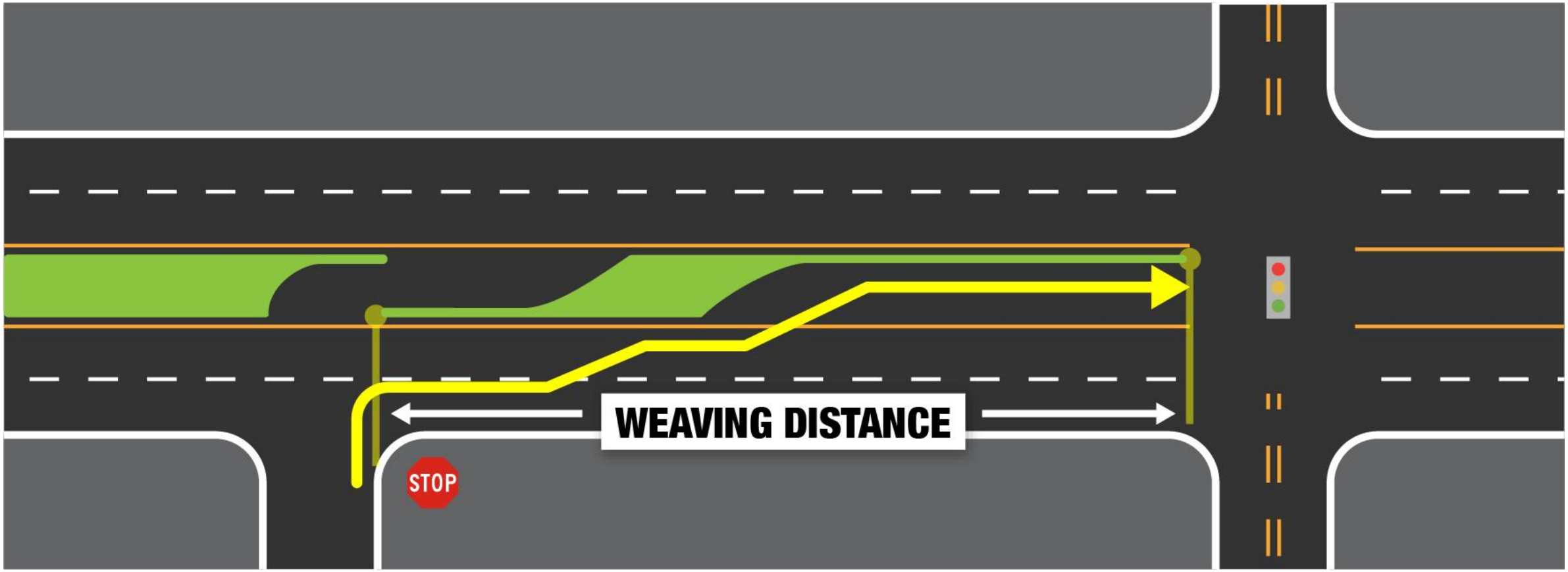
A- Short Distance

B- Long Separation, Low Volume approaching from the left

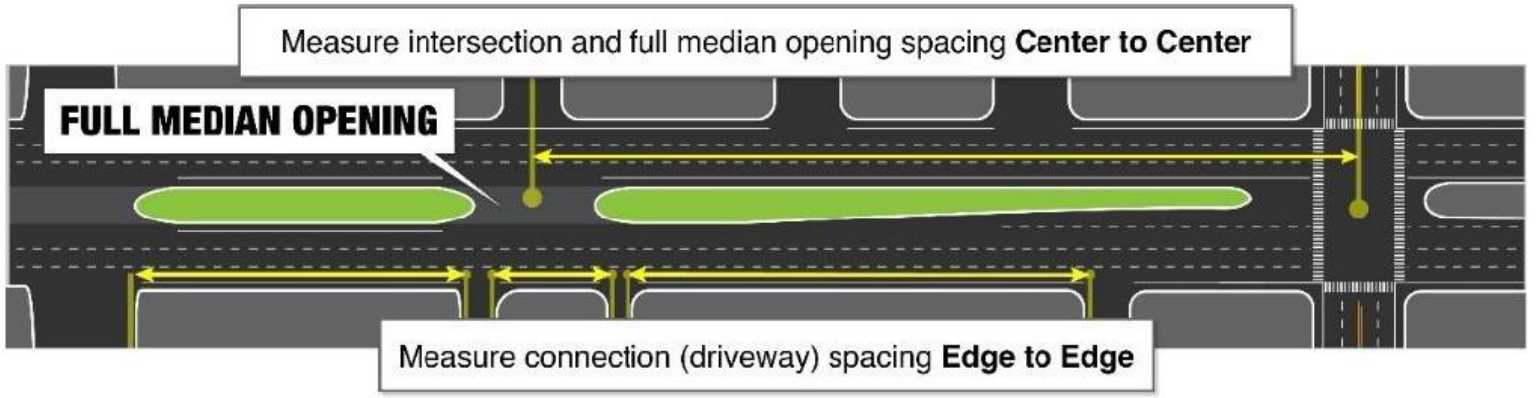
C- Long Separation, High Volume or Low Volume and high-speed traffic c from the left

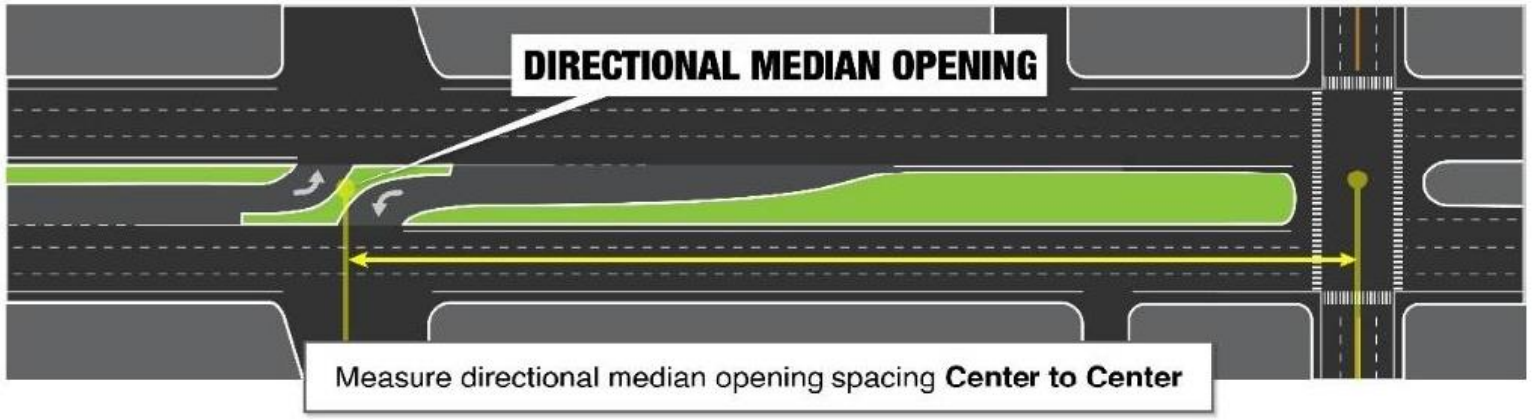


Right-Turn Weaving Distance



Median Opening Failures | Full Median Length

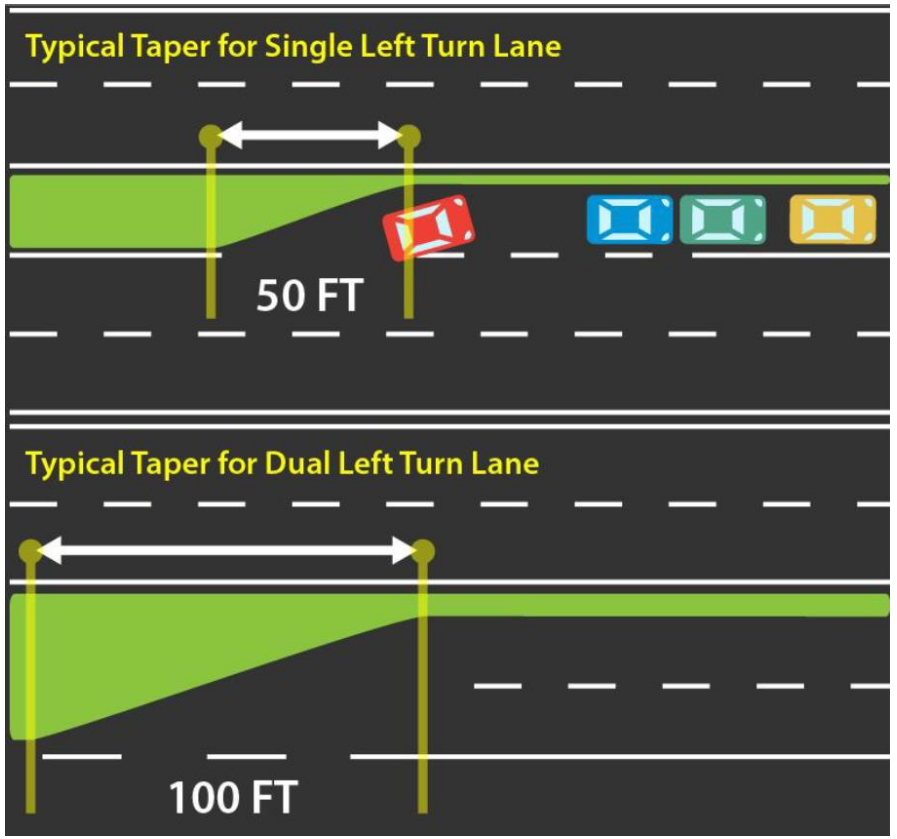




Maneuver/Deceleration Distance

- The Maneuver-Deceleration Distance consists of two components; taper and deceleration.
- Taper is the portion of the median opening that begins the transition to the turn lane.
- The faster the speed, the longer the taper
- Most urban areas will benefit from a longer storage area for queued vehicles

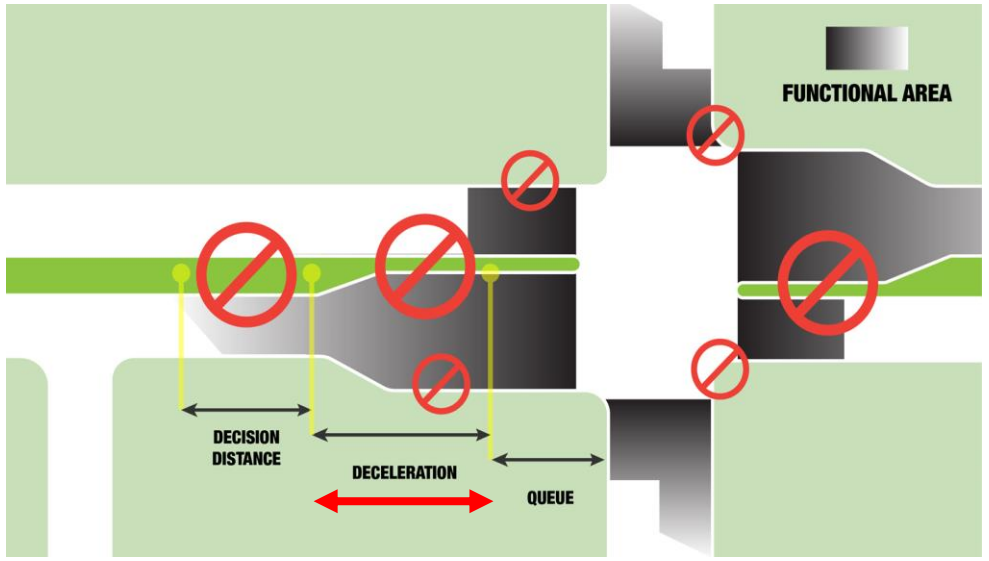
Additional information can be found in the AASHTO Green Book and FDM 212



Total Deceleration

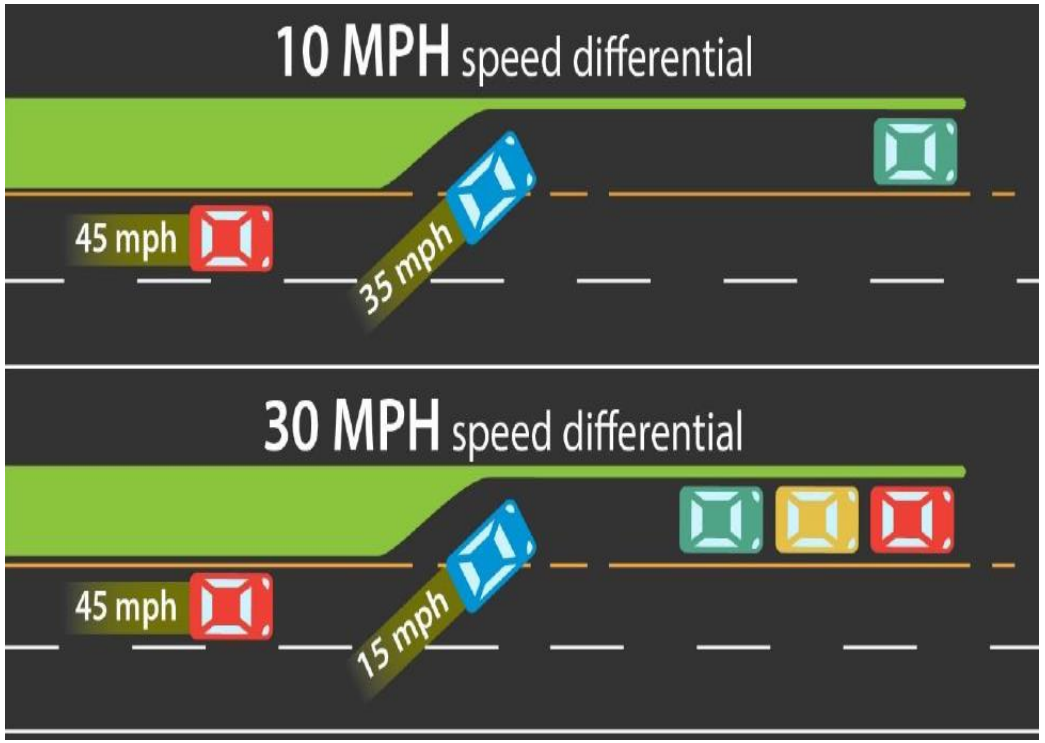
- This distance is measured from the beginning of the taper to the end of the queue storage portion.
  - Minimum standards for the distance needed to properly slow a vehicle down and bring the vehicle to the storage portion of the median opening, or deceleration distance, is found in *FDM 212* and FDOT Standard Plans, Index 711-001.

Design Speed (mph)	Entry Speed (mph)	Total Deceleration (ft)
35	25	145
40	30	155
45	35	185
50 Urban	40	240
50 Rural	44	290
55 Rural	48	350
60 Rural	52	405
65 Rural	55	460



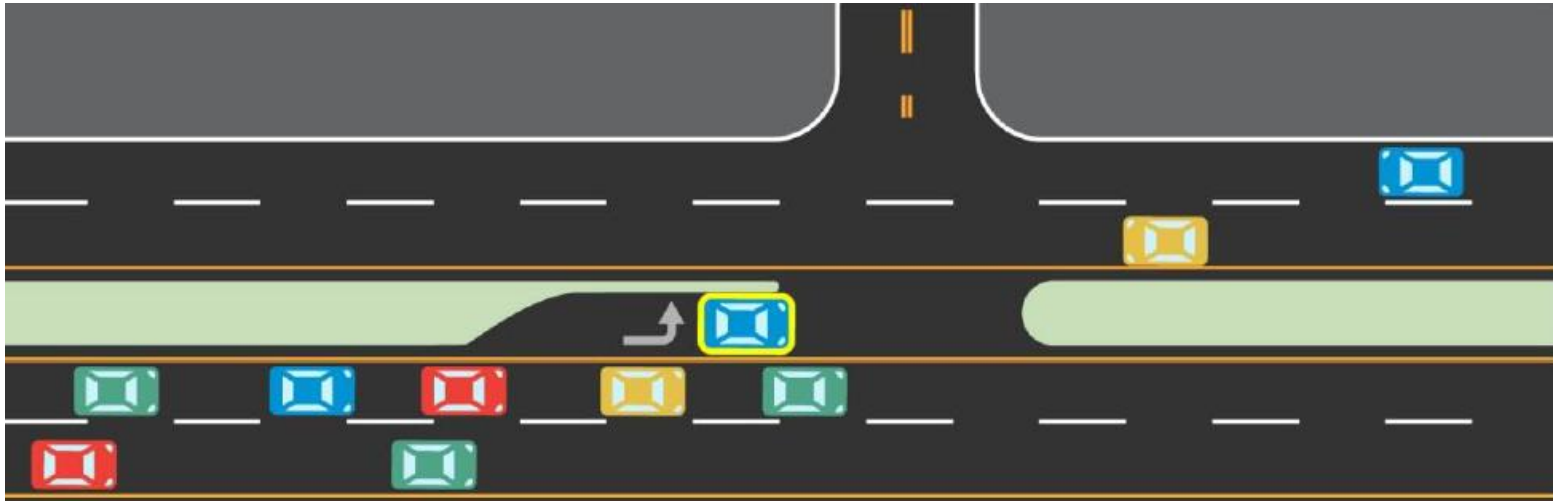
Design Speed

- Design Speed and the related entry speed are the bases for determining the minimum length of the turn lane for deceleration and stopping behind the turn lane queue.
- If the turn lane is too short, or queued vehicles take up too much of the deceleration portion of the turn lane, excessive deceleration will occur in the through lane. This creates a high crash potential.



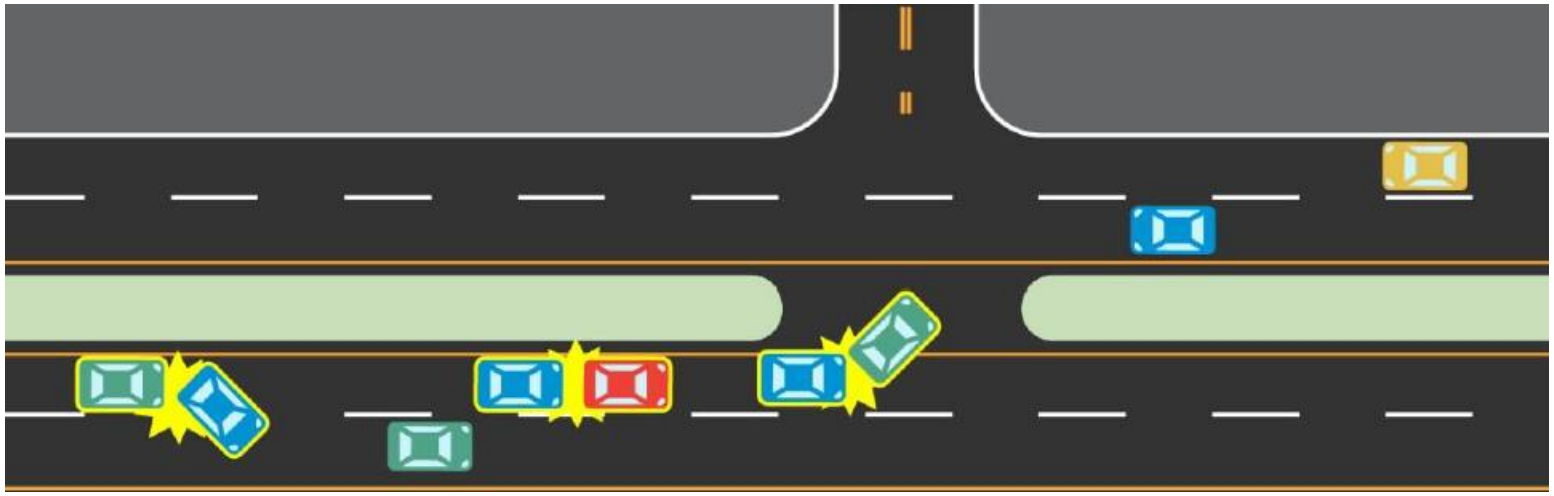
Median Treatments

- The most common method in which left-turning vehicles can be removed from a through traffic lane is to install a left-turn lane.
- Per the *FDOT Median Opening and Access Management Procedure*, "Existing bullet nose median openings should be replaced with an adequate left-turn lane."



Median Treatments

- The “bullet nose” median opening requires a vehicle to make a left turn from a through lane interfering with the through traffic. This will result in a situation with a high potential for rear-end crashes.

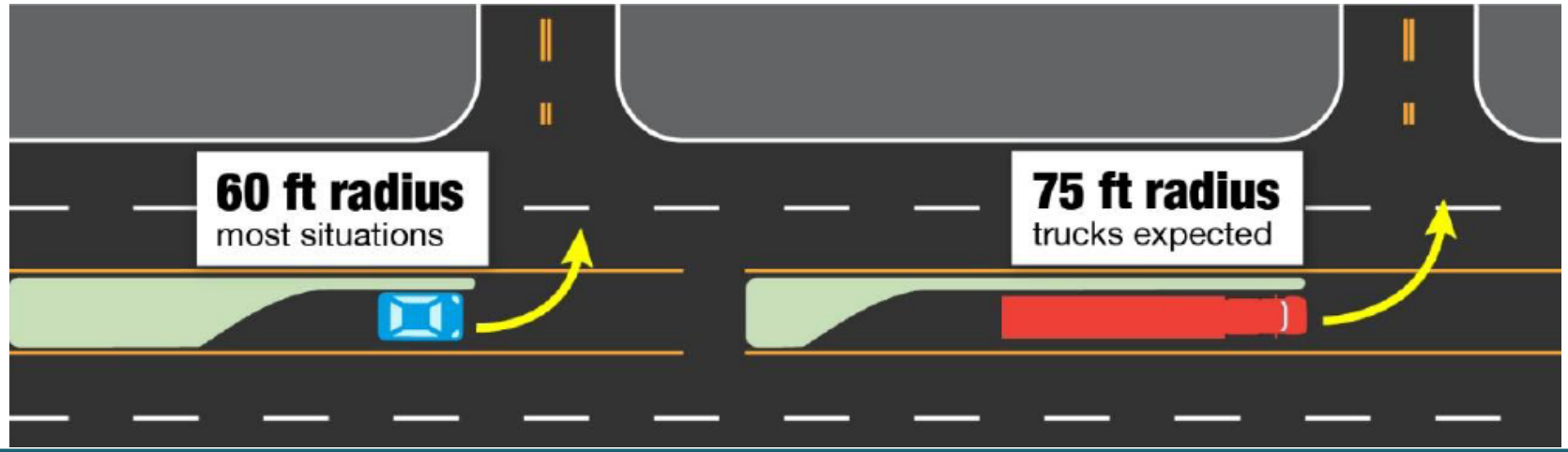


Median Opening Left Turn Radius

Control Radii for Minimum Speed Turns

Design Vehicles Accommodated	Control Radius (ft)			
	50 (40 min)	60 (50 min)	75	130
Predominant	P	SU-30	SU-40, WB-40	WB-62FL
Occasional	SU-30	SU-40, WB-40	WB-62	WB-67

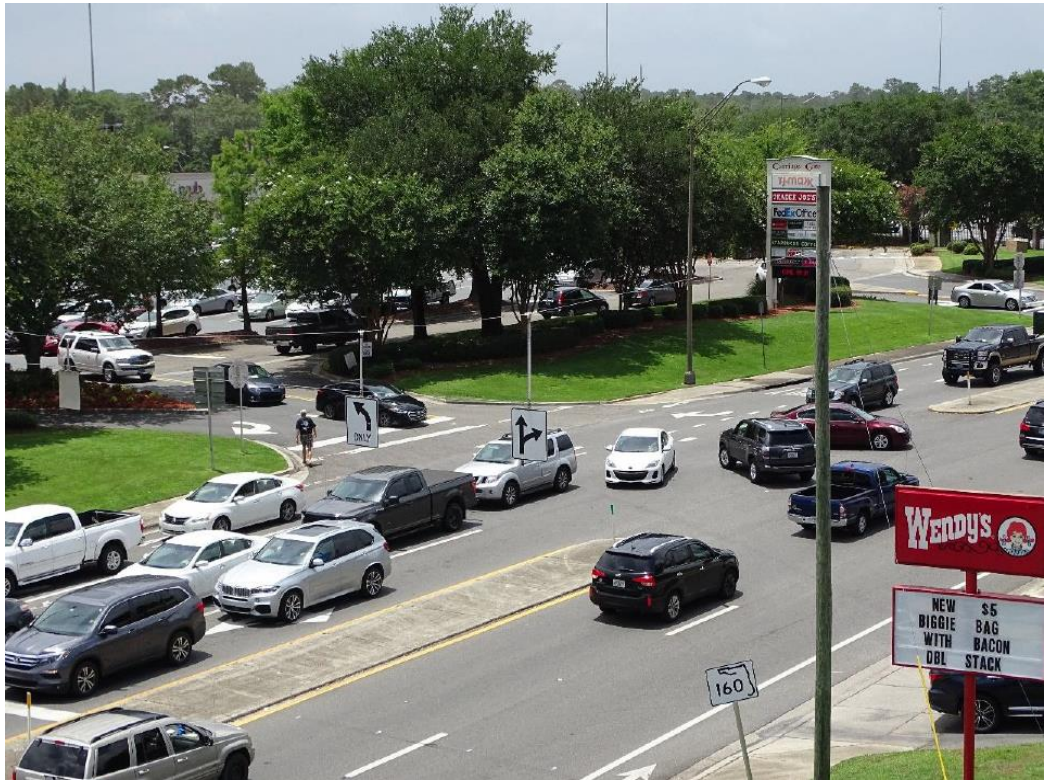
Source: FDM 212 – Intersections (Table 212.9.2)



Median Opening Length

Median opening length is governed by the:

- Turning or control radii
- Side street geometrics
- Median (traffic separator) width
- Intersection skews
- Intersection legs



Median Opening Length

Difficulties

- Multiple conflicts for both the turning vehicles and through traffic
- Impaired sight distance
- Signalization should be considered only if the median opening meets the criteria of a signal warrant analysis.

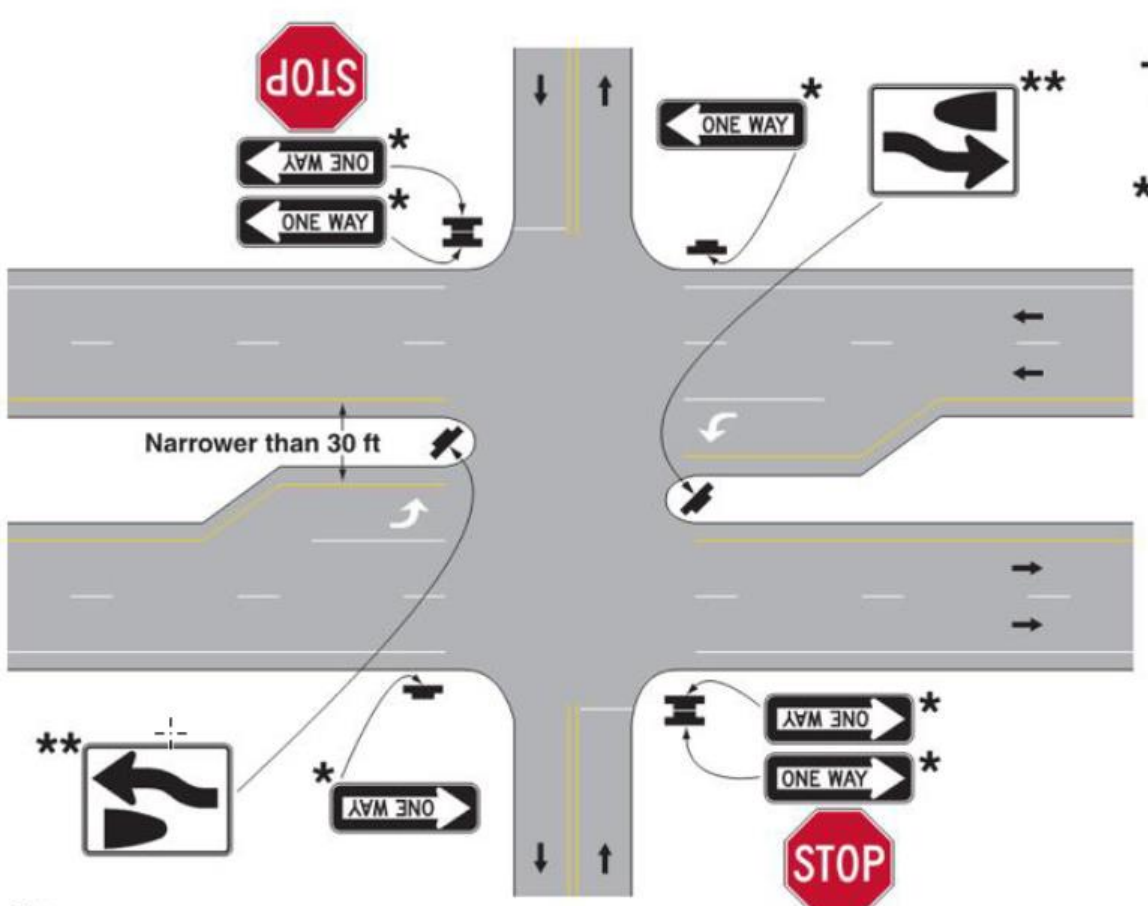
Solutions

- Reconstruct the unsignalized full opening as a more restrictive median opening
- Close the median opening
- Directionalize the median opening

The solution selected, as well as the design of the restrictive movement (if used) will depend on several factors including; the proximity to other median openings, alternative routes, traffic volumes, and the crash history of the roadway.

Pavement Markings And Signing

Figure 2B-16. ONE WAY Signing for Divided Highways with Median Widths Narrower Than 30 Feet



Notes:

See Figure 2B-12 for examples of placing DO NOT ENTER and WRONG WAY signing.

See Figure 2B-15 if median is 30 feet or more in width.

Typical Mounting

Source: MUTCD

Retrofit Considerations

Assessing a Median Opening Guidance

Determination of Major Cross Streets and Major Driveway Locations

Data Collection

Analysis

Recommendations

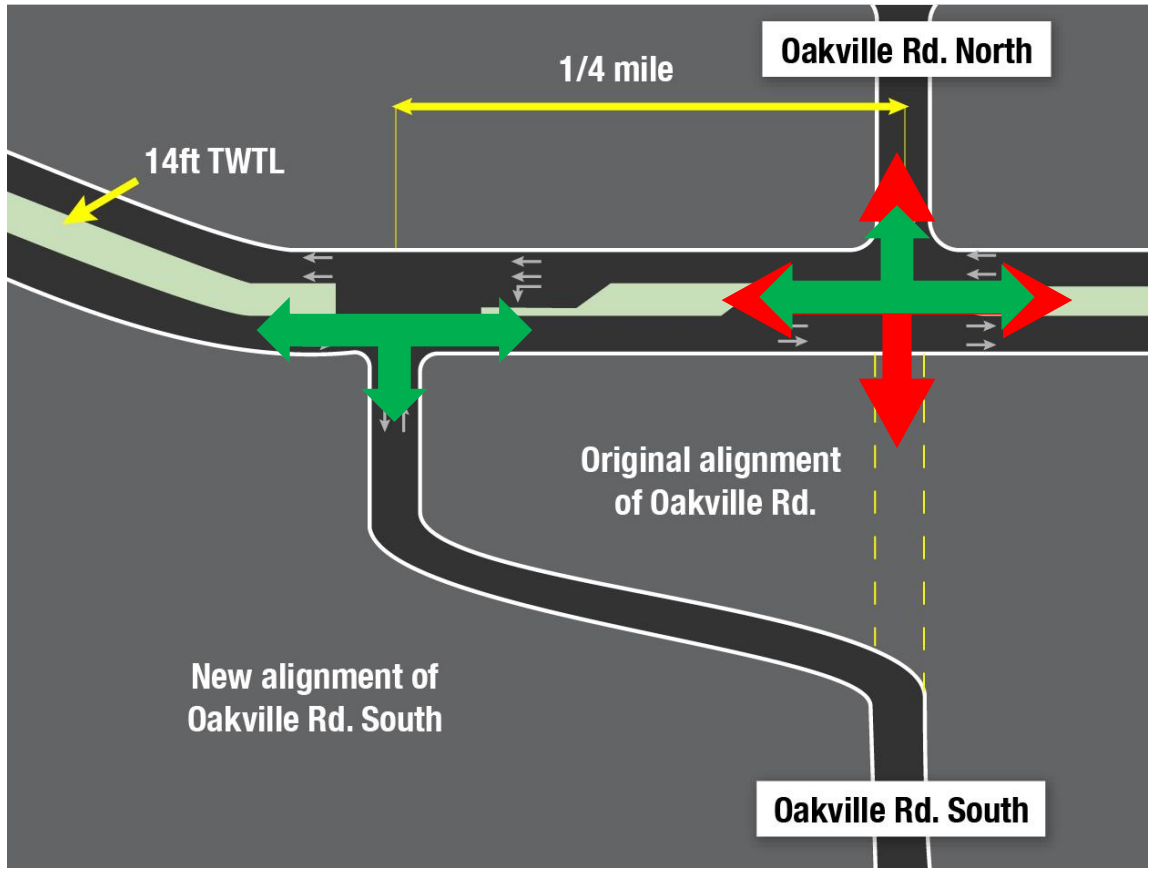
- Closing a Median Opening
- Altering a Median Opening

Retrofit Considerations

Considerations for Resurfacing, Restauration, and Rehabilitation (3R):

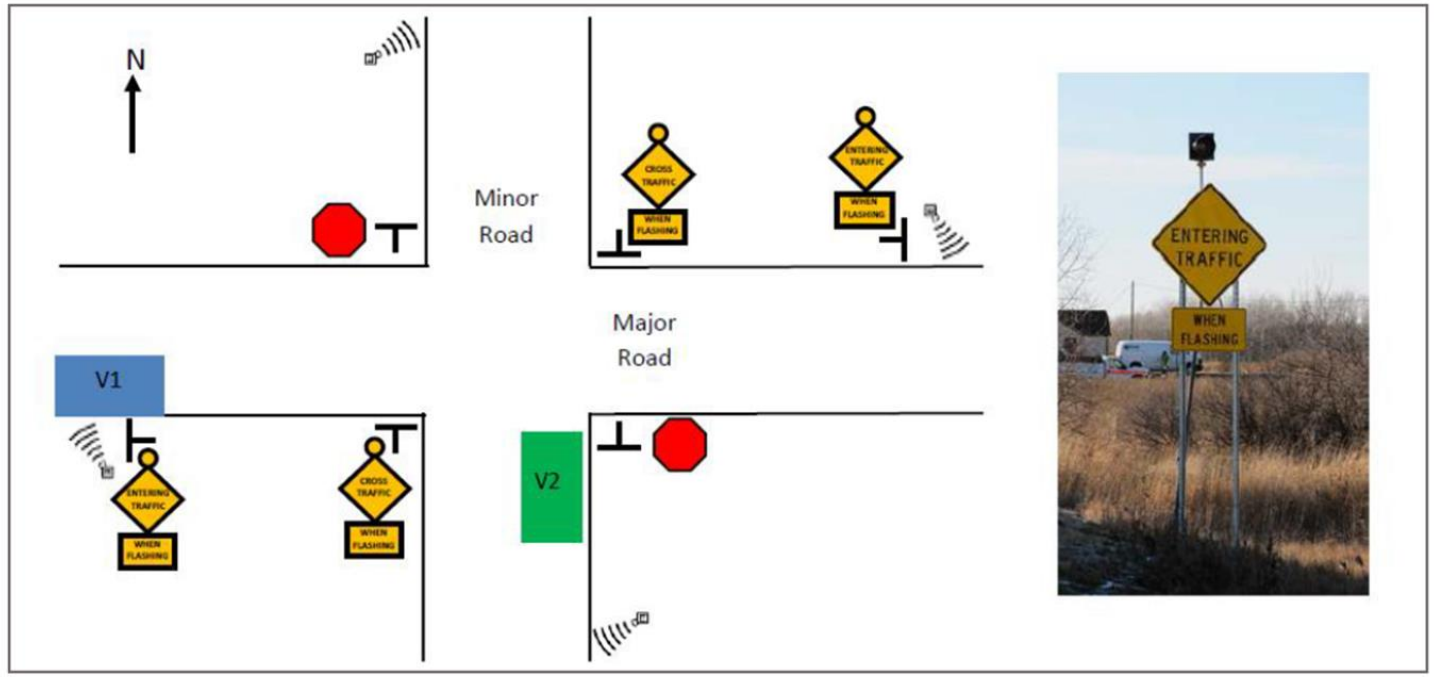
- Radius improvements at side road driveways due to evidence of off-tracking
- Close abandoned driveway in urban/curb & gutter section to improve ADA accessibility/sidewalk
- Correct driveways that do not meet design standards
- Construct new transit/bus amenities
- Construct new turn lanes to meet projected need
- Lengthen/revise existing turn lanes at signalized intersections due to documented operational issues
    - Any intersection could be revised as needed based on verified crash history

Rural Median Opening Considerations



- Re-Aligning Minor Roadway Intersections
- NCHRP Report 650 Median Intersection Design for Rural High-speed Divided Highways.

Rural Highway Treatments

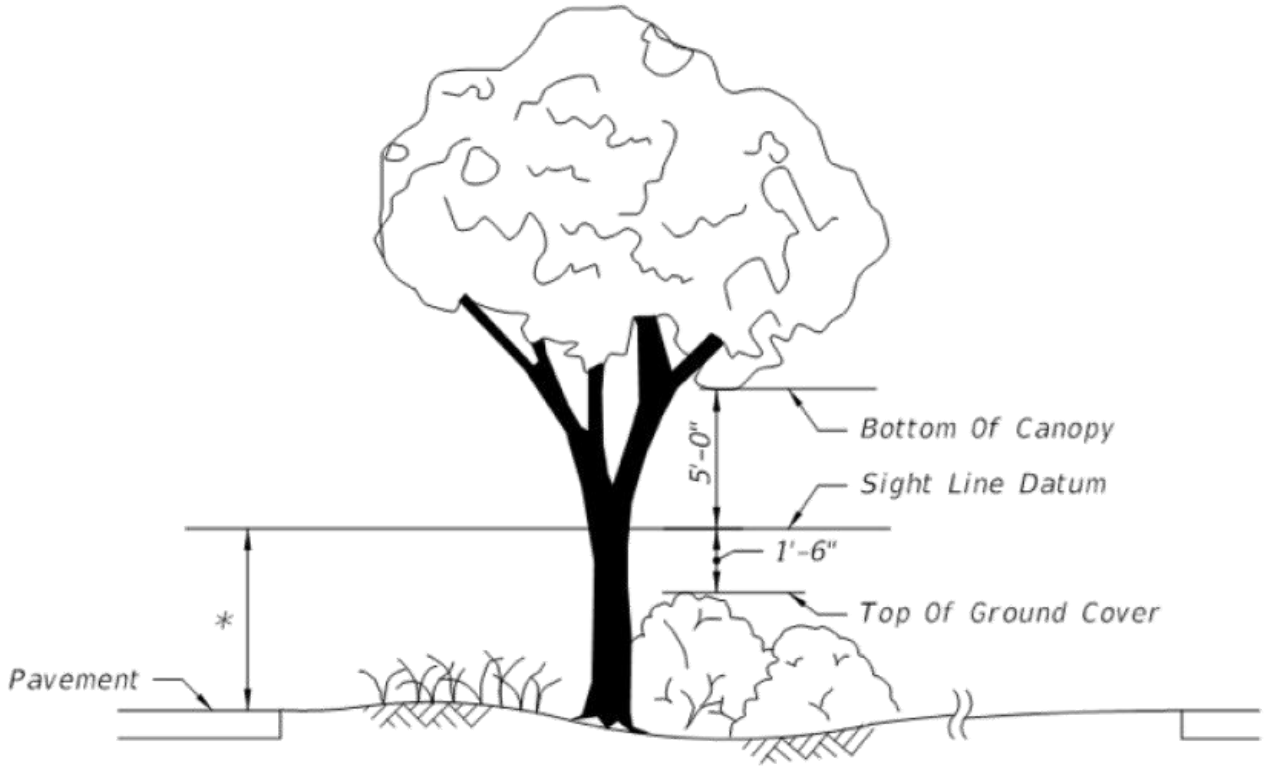


Source: *Rural Intersection Conflict Warning Systems Deployment – Concept of Operations (2012) Minnesota DOT*

RICWS system video, Minnesota Department of Transportation (MnDOT)

Sight Distance Factors

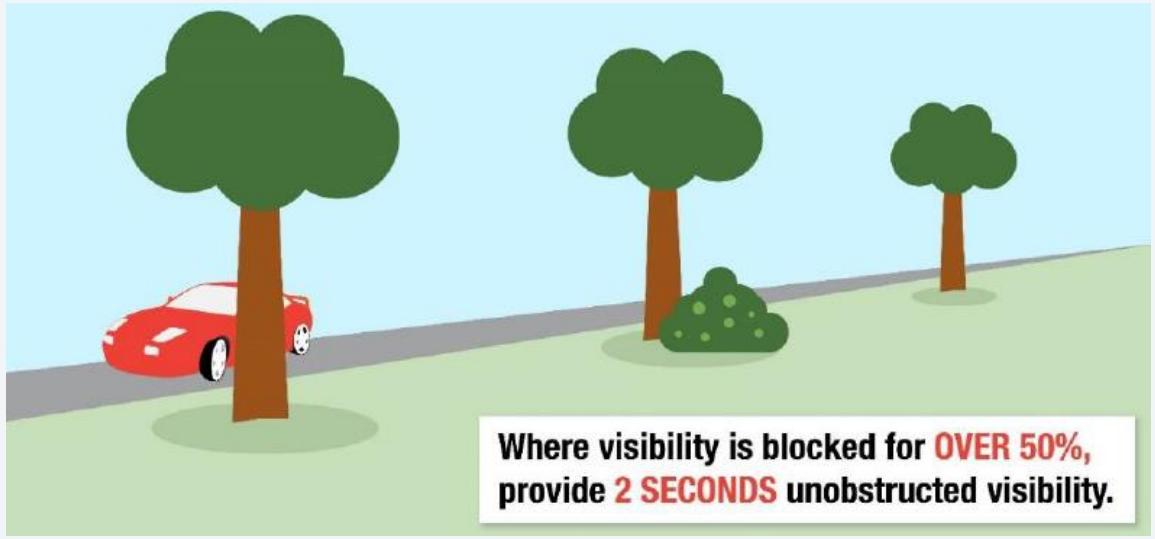
- Height of the eye
- Height of the object
- Drive eye setback
- Vehicle area
- Time
- Visibility



*Since observations are made in both directions, the line of sight datum between roadways is 3.5 feet above both pavements.

Source: FDM 212 – Intersections (Figure 212.11.2)

Time, Visibility and Vehicle Area Size



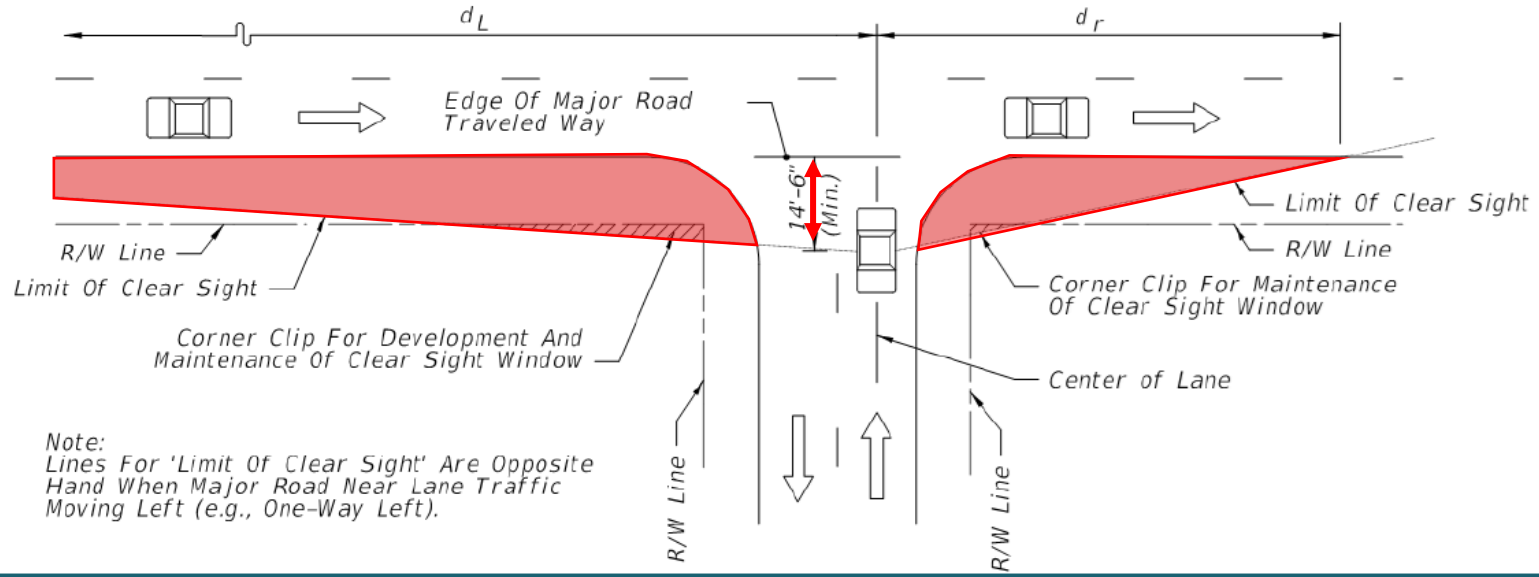
Stopping Sight Distance (SSD)

- SSD can be defined as the distance needed for drivers to see an object on the roadway ahead and bring their vehicles to a safe stop before colliding with the object.
- The various factors that affect stopping sight distance are the grade of the roadway and design speed which in turn determine the SSD for the roadway.
- When drivers require additional time to make decisions, larger distances may be necessary. The *AASHTO Green Book* states that:
  - *"…greater distances may be needed where drivers must make complex or instantaneous decisions, when information is difficult to perceive, or when unexpected or unusual maneuvers are needed."*

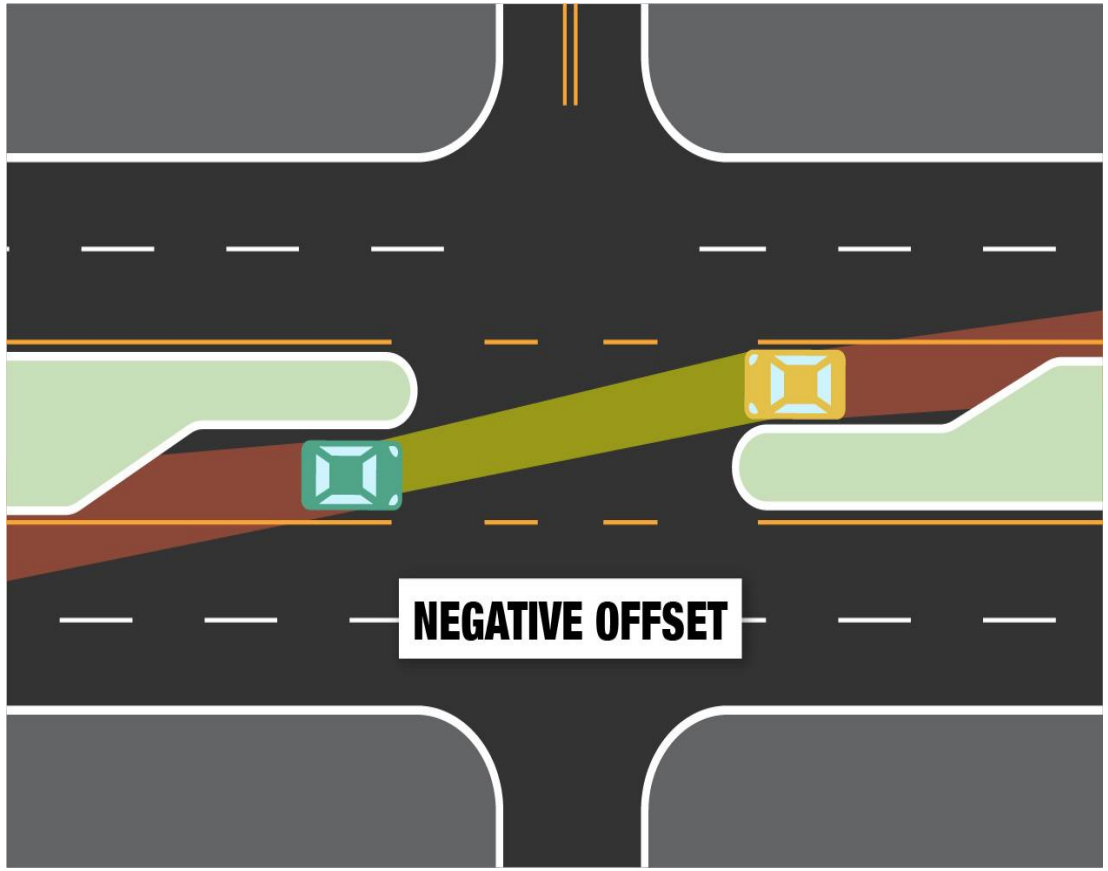
Grade (Percent)	Minimum Stopping Sight Distance (Feet)									
	Design Speed (MPH)									
	25	30	35	40	45	50	55	60	65	70
Downgrade/Upgrade (≤2%)	155	200	250	305	360	425	495	570	645	730

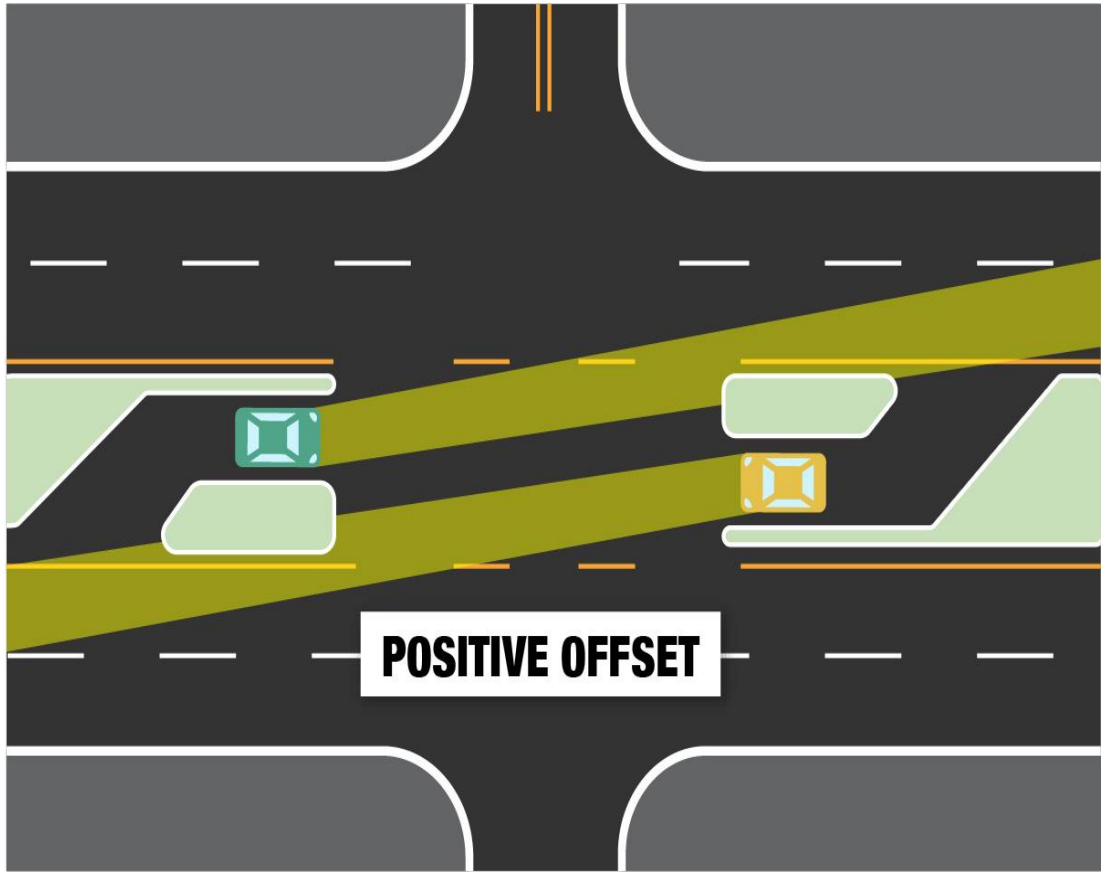
Intersection Sight Distance (ISD)

- ISD is defined as the distance necessary for drivers to safely approach and pass through an intersection."
- Intersection sight distances are important for medians and median openings, but more importantly for driveways, since they are treated as intersections.



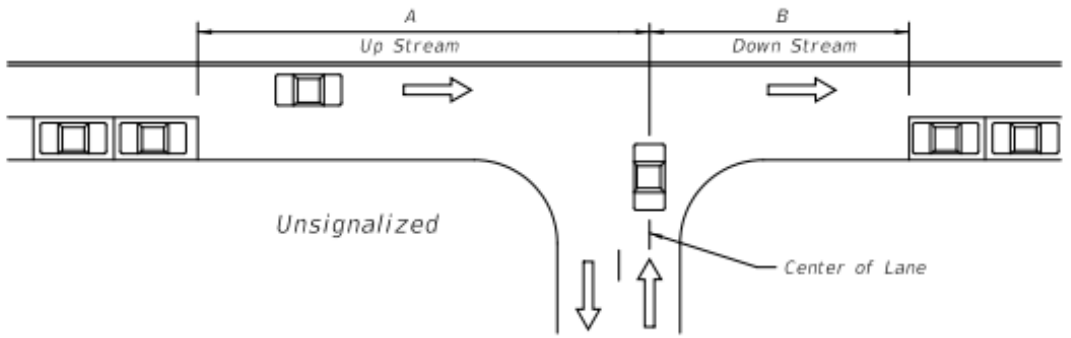
Lateral Offset for Left Turn Lanes

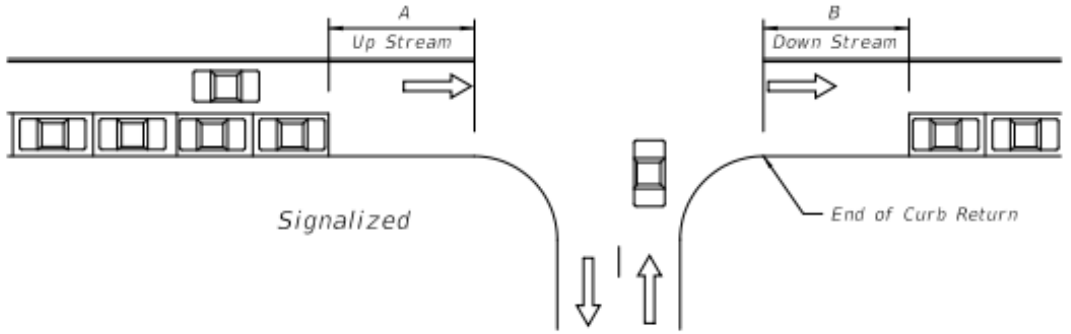




On Street Parking

Control Type	Posted Speed (mph)	A - Up Stream (ft)	B – Down Stream (ft)	
			2-Lane	4-Lane or more
Unsignalized	< 35	90	60	45
	35	105	70	50
Signalized	< 35	30	30	30
	35	50	50	50





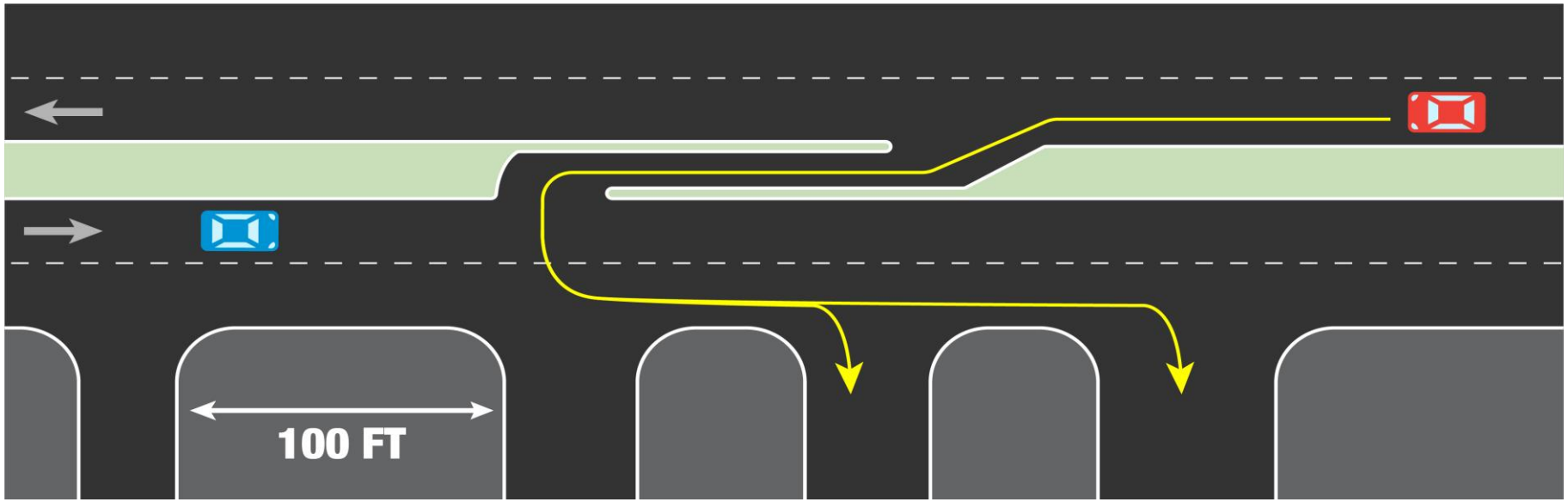
Concerns at Driveways

Two-Way Left-Turn (TWLTL)

- May be used on 3-lane and 5-lane typical sections with design speeds ≤ 40 mph.
- Design criteria for lane widths and pavement slopes are given by lane type, design speed and context classification.
- On new construction projects, flush medians are to include sections of raised or restrictive median to enhance vehicular, bicycle, and pedestrian safety, improve traffic efficiency, and attain the standards of the Access Management Classification of that highway system.

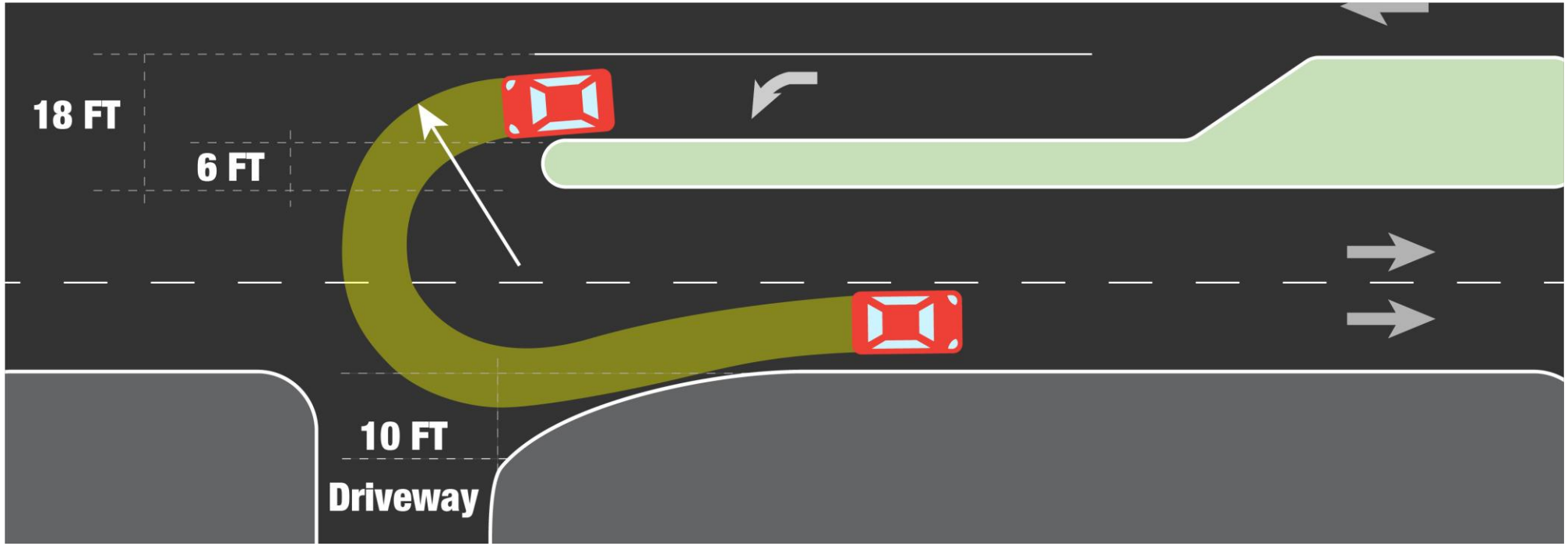
U-Turns

- Driveways should be located directly opposite, or downstream, from a median opening.
- Driveways access should be located more than 100 feet upstream from the median opening to prevent wrong-way maneuvers.



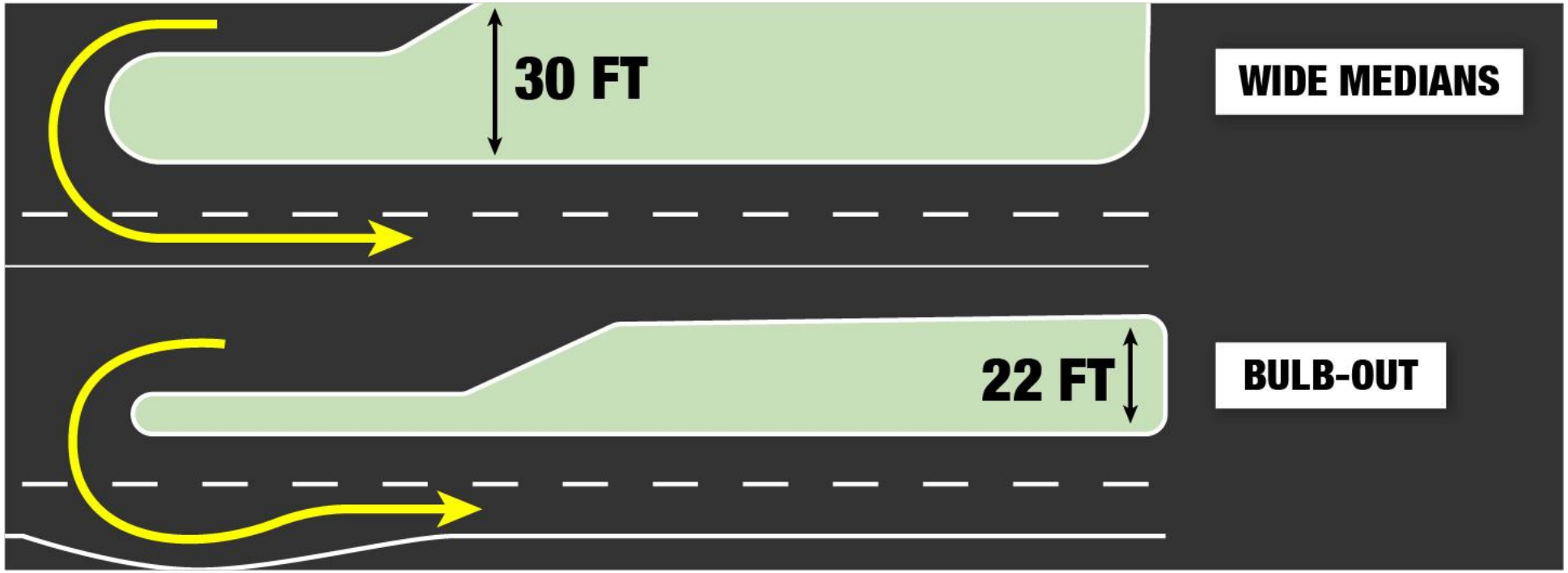
U-Turns

- Widen Driveways



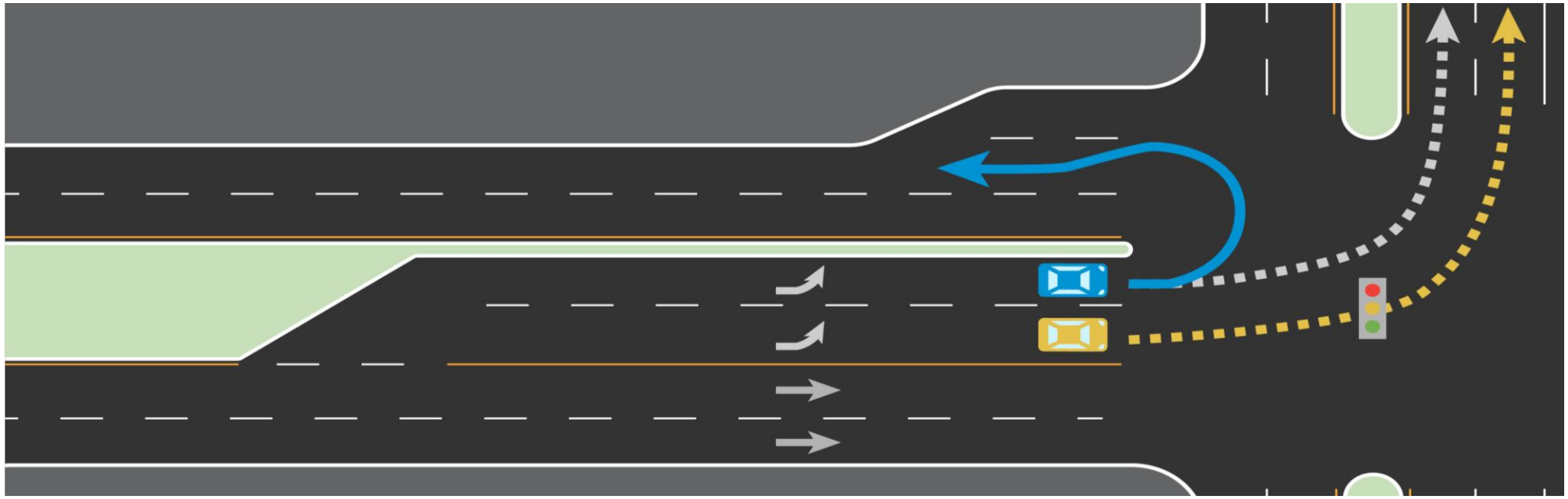
U-Turns

- Consider the type of vehicle



U-Turns

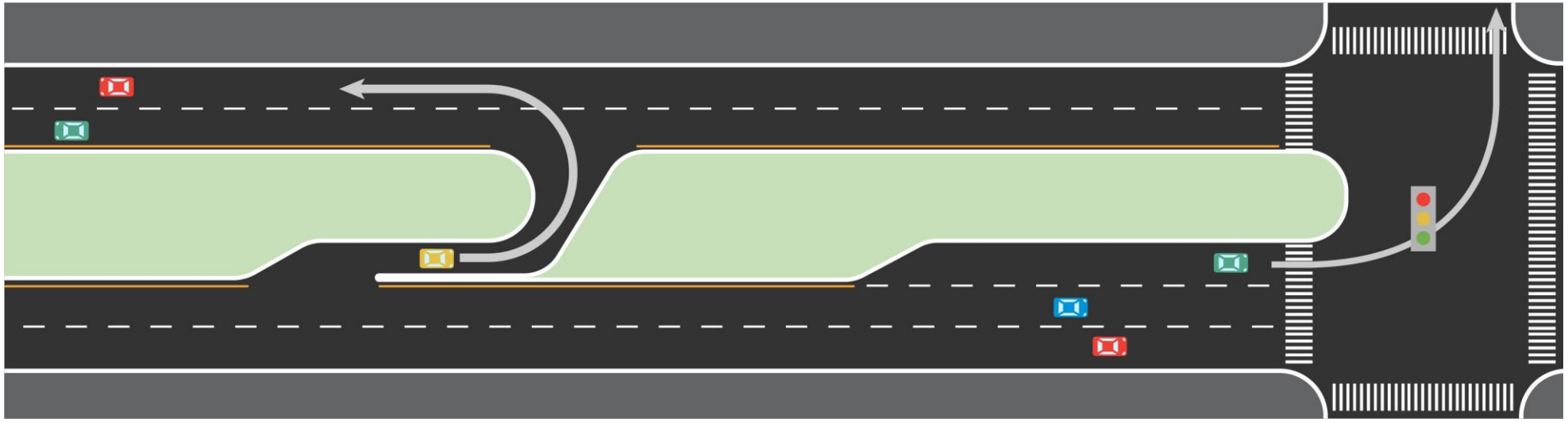
- There must be sufficient median width to avoid encroachment onto the sidewalks.
- Where medians are of sufficient width to accommodate dual left-turns, an option is to allow U-turns from the inside left-turn.



U-Turns

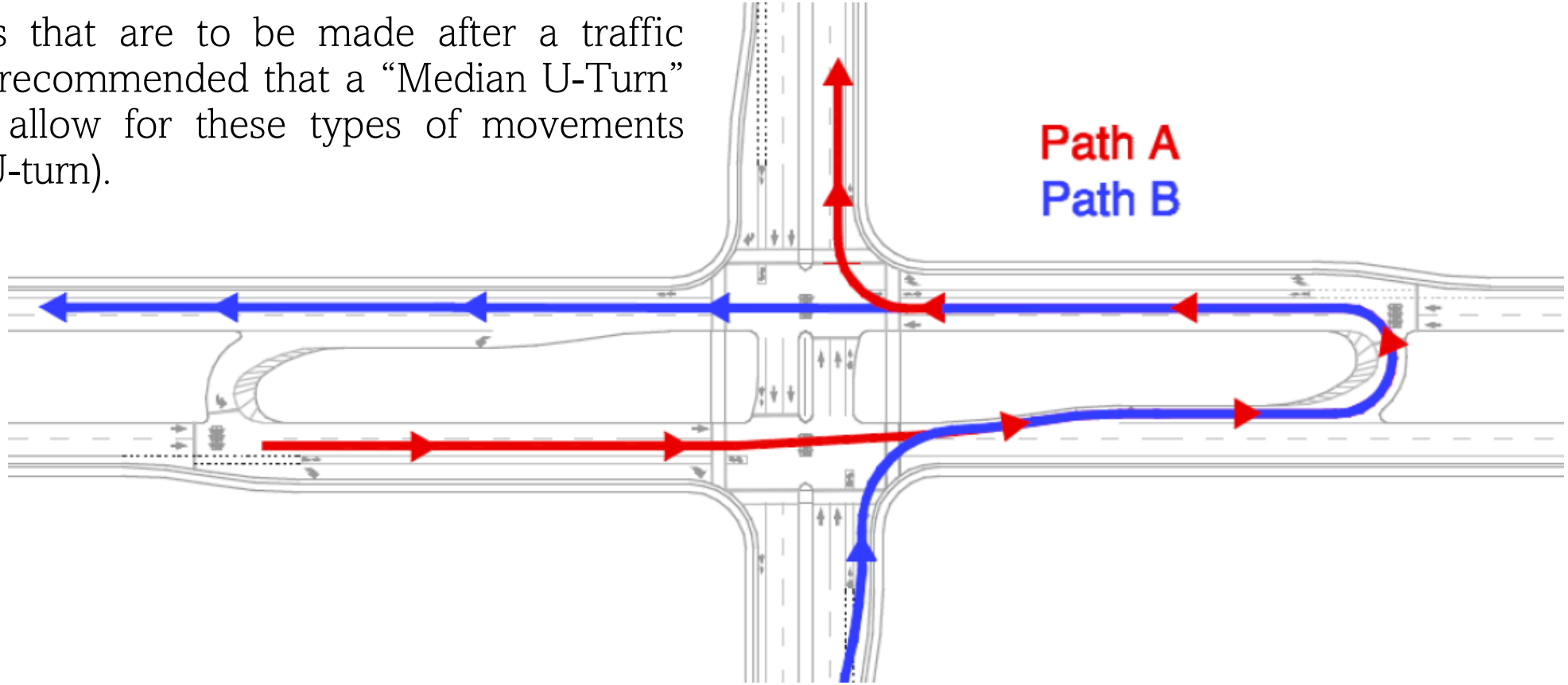
Indications that you should consider a U-turn opening before a signalized intersection are:

- High volume of left turns currently at signalized intersection
- Numerous conflicting left turns and U-turns
- Where there is enough space to separate the signalized intersection and U-turn opening



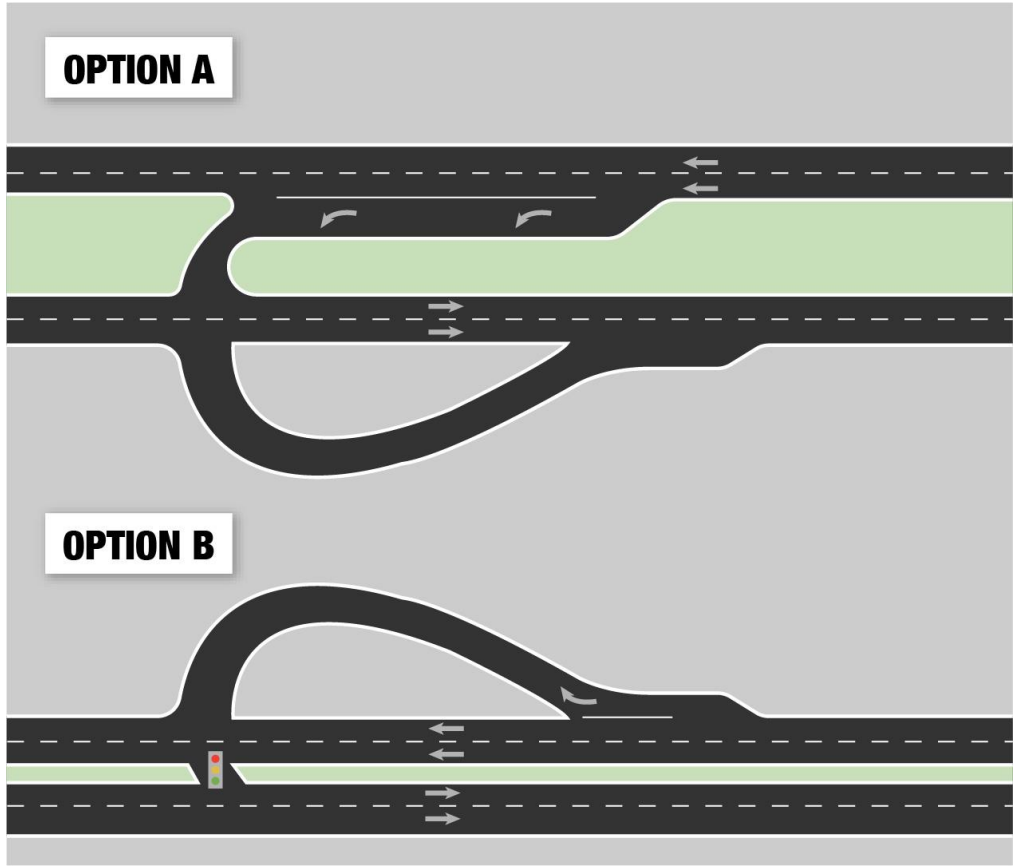
U-Turns

- For U-turns that are to be made after a traffic signal, it is recommended that a “Median U-Turn” is used to allow for these types of movements (Michigan U-turn).



U-Turns

- Alternatives for large vehicles
- Option A desirable operational features:
  - A U-turning vehicle is stored in the median parallel to the through traffic lanes
  - A suitable gap is needed in the opposing traffic stream only
  - After completion of the U-turn the driver can accelerate prior to merging into the through traffic lane
- Option B
  - A traffic signal is needed, in most of the cases



U-Turn/Jughandles

Multimodal Access Management

Figure 94 | Worn Footpaths between Bus Stop, Crosswalk, and Major Retail Center

Site Access for Non-Motorized Users

To provide pedestrian/bicycle access to a site, paths should:

- Connect the external pedestrian and bicycle network/s to the main entrance of the site's building/s
- Provide connection between the main entrances of multiple on-site buildings, if present
- Provide connection between the parking areas and building entrances
- Be convenient with minimal conflicts with other modes, and minimized travel distance with the most direct route
- Meet ADA requirements

Figure 95 | Direct Sidewalk Connection from Roadway to Site with Crosswalks Onsite

Transit Considerations

The bus operator must be able to see the vehicles entering and exiting the driveway

The bus operator and those entering and exiting the driveway should be able to see transit patrons

The people using the driveway should have sufficient sight distance to see oncoming buses and traffic

Transit Considerations

Figure 103 | Acceptable Bus Stop Placement Near Driveway

Source: FDOT Accessing Transit Design Handbook 2013 (Figure 4.2.4)

Curbside Management

Curb space is the interface between the access and mobility functions of a road.

Figure 128 | Delivery Truck Using Median

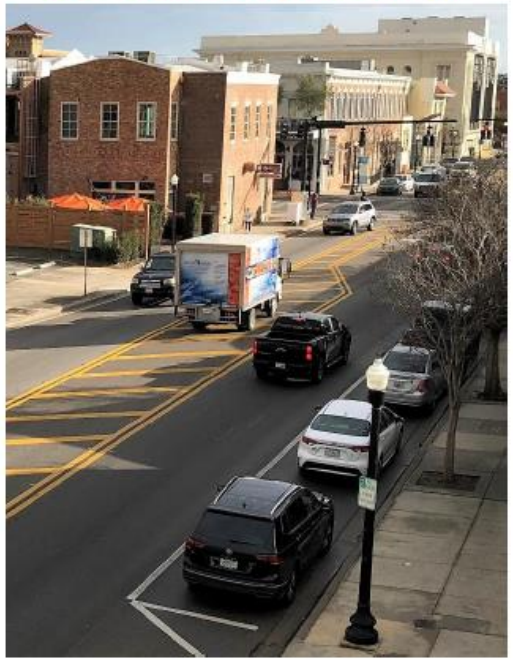


Figure 129 | Who Wants to Access the Curb

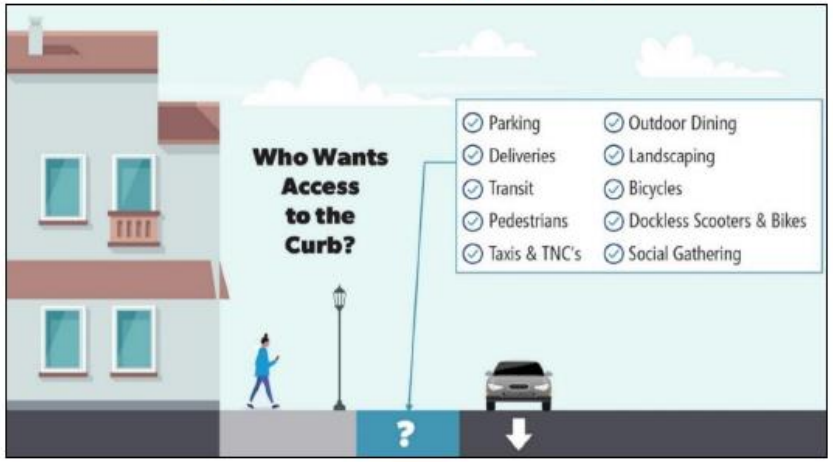
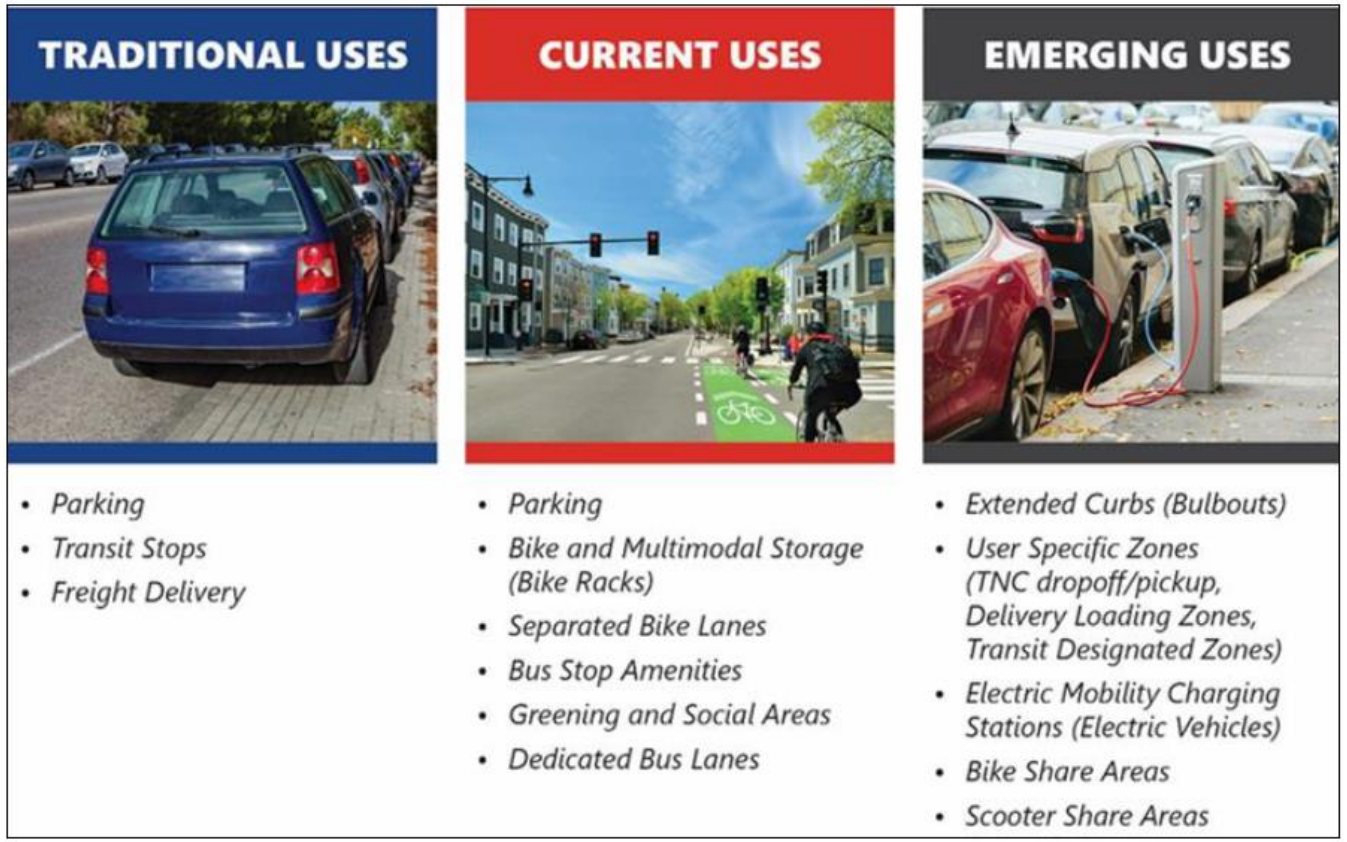


Figure 151 | Gran Forno Parklet

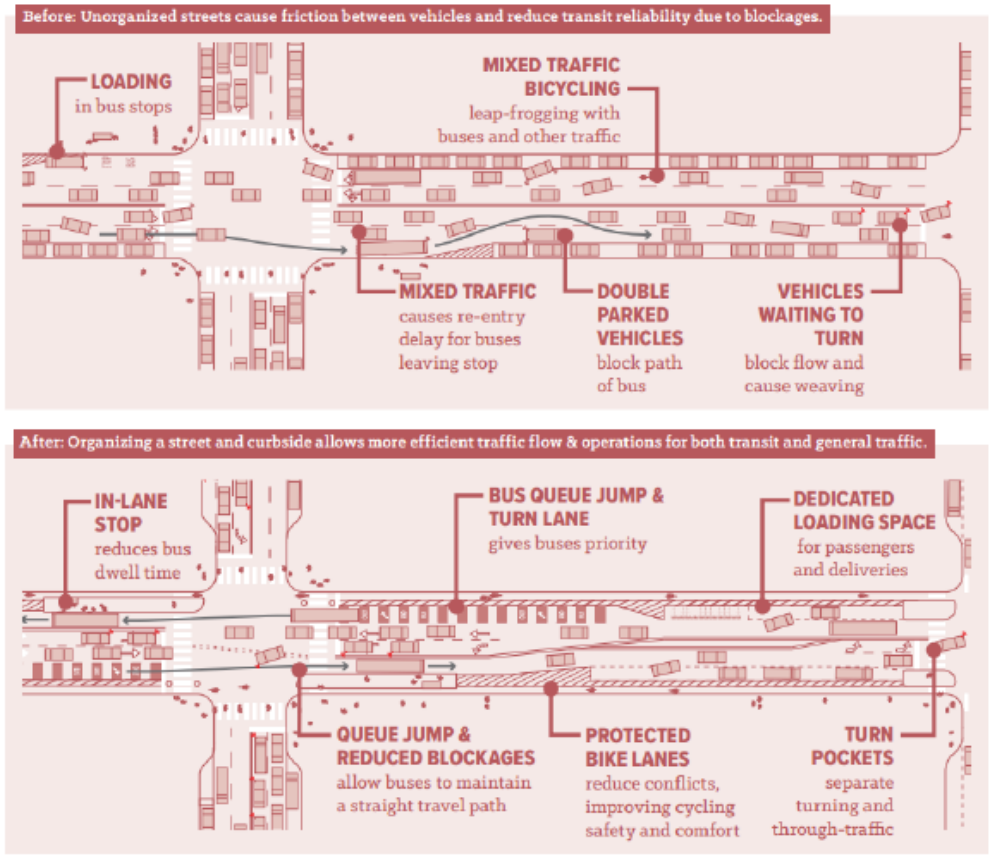
Curb Management

Figure 130 | Changes in Curbside Uses Over Time



Curb Management

Figure 131 | Example of an Unmanaged Curb Versus Good Curbside Management

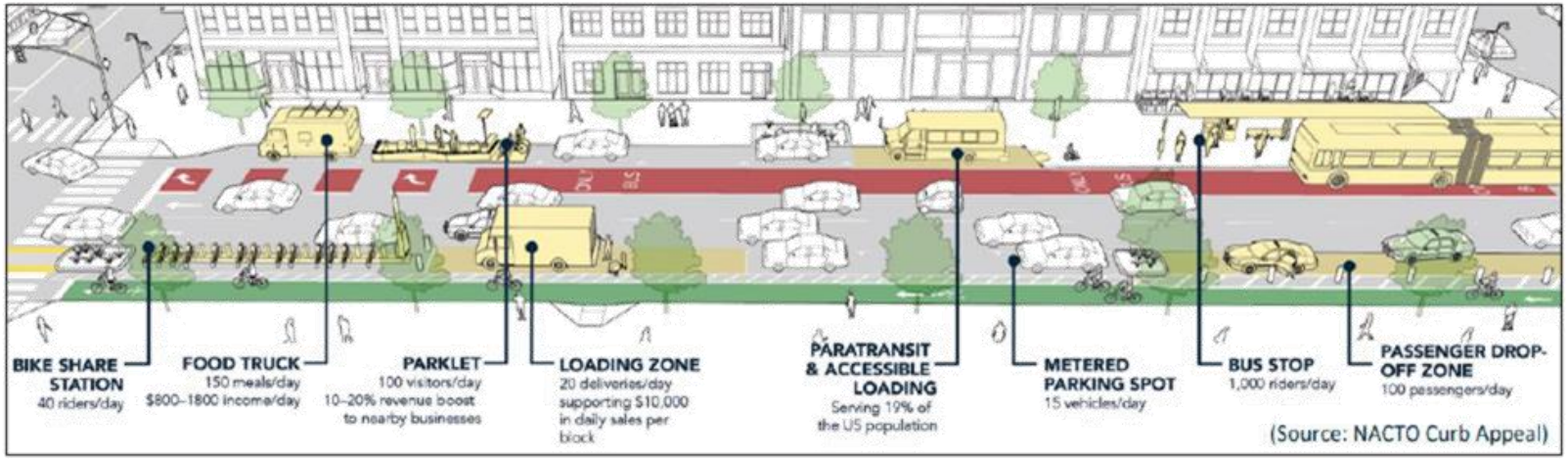


Curb Management

Figure 132 | Who Benefits from Curbside Management

Figure 133 | Benefits of Curbside Management

Figure 134 | Capacity by Curbside Use



Curb Management | Planning Considerations

Context Class and Transportation Characteristics

Curbside Demand

Right of Way (ROW)

Curbside Priorities

Impacts of Parking Removal

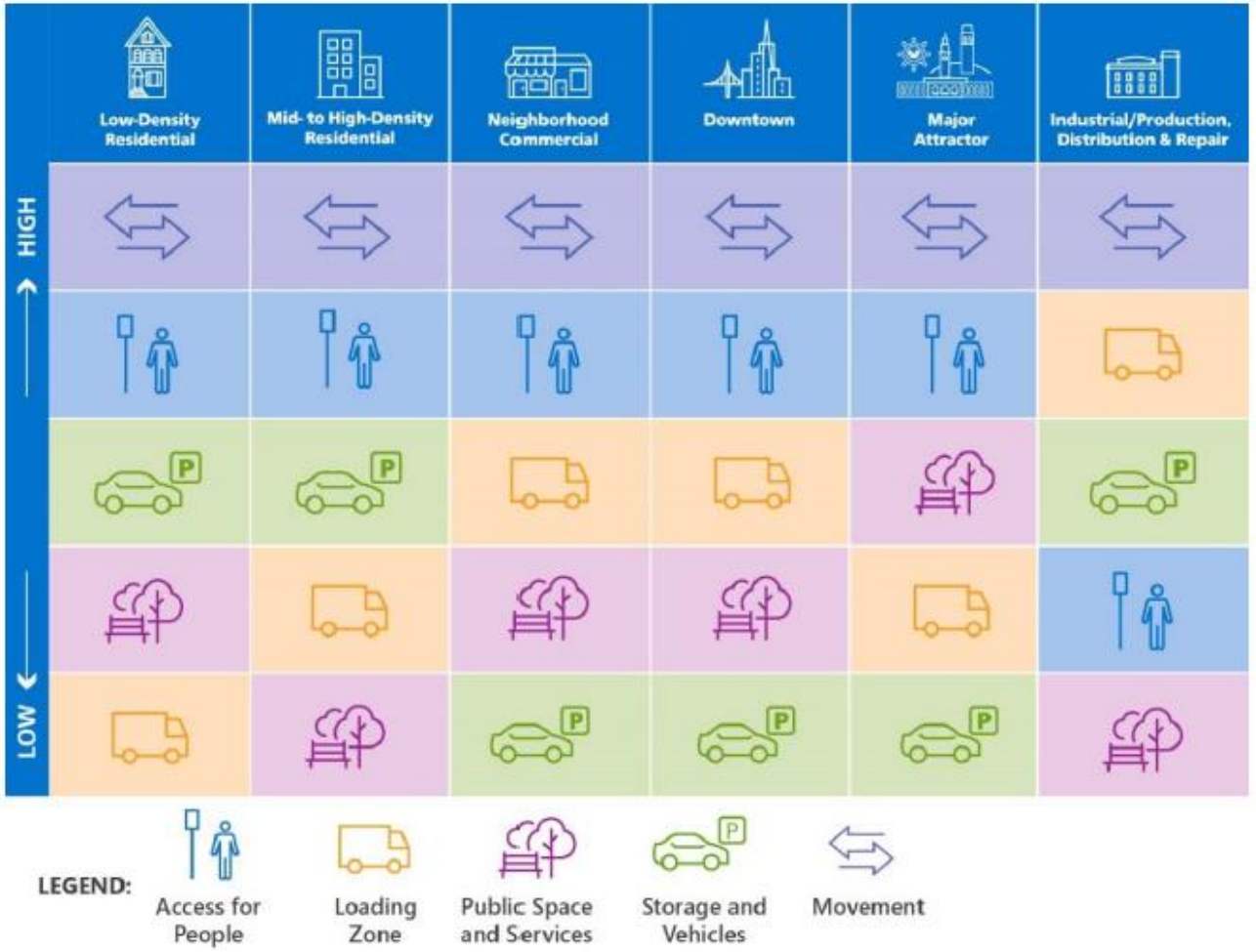
Curb Management- Planning Considerations

Figure 136 | Questions to Consider when Developing Curbside Priorities

QUESTIONS TO CONSIDER WHEN DEVELOPING CURBSIDE PRIORITIES

WHAT TYPES OF LAND USES ARE PRESENT?	• Commercial, retail, offices • Restaurants, bars, cafes • Mixed-Used developments
WHO ARE THE PRIMARY USER GROUPS?	• Pedestrians • Cyclists • Transit (bus or rail) • Vehicles • Delivery
WHAT ARE THE PRIMARY ACTIVITIES AT THE CURB?	• Transportation and mobility • Social gathering: street furniture, public art, parklets, street festivals, food trucks • Retail & shopping: restaurants, outdoor dining cafes, shops • Pickup/drop-off: TNCs, deliveries • Parking
WHAT ARE THE COMMUNITIES GOAL FOR THE CURB? **CONSIDER CITY-WIDE MOBILITY & PLANNING GOALS.**	• Reduce single occupancy vehicle mode share • Improve pedestrian walkability • Increase transit service • Reduce vehicle congestion • Accommodate pickup/drop-off activities • Improve safety for bike and pedestrian activity • Reduce conflicts between various modes and activities • Provide on-street parking for surrounding land uses • Reduce on-street parking • Increase turnover of on-street parking • Encourage economic development • Provide space for social gathering • Bringing order and safety

Figure 137 | Curbside Priorities

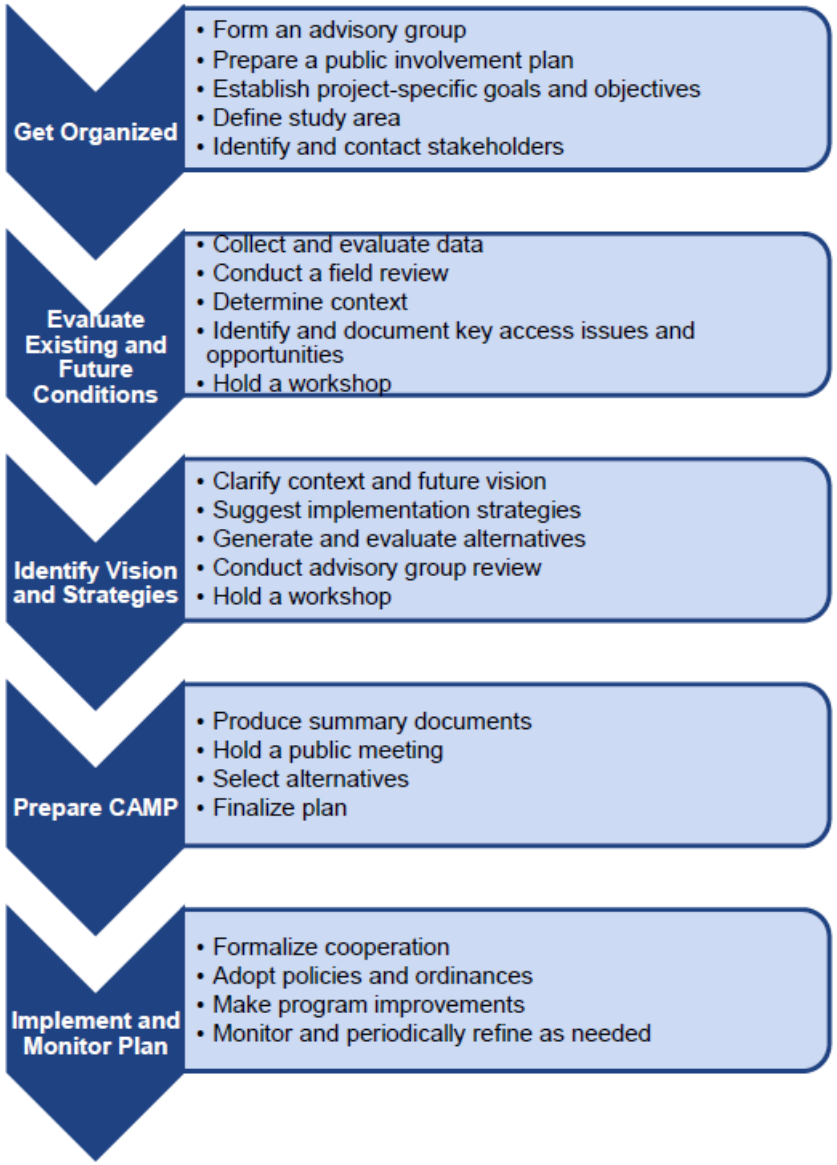


Corridor Access Management Plans

Corridor Access Management Plan (CAMP) is defined in F.A.C. 14-97 as a strategy defining site specific access management and traffic control features for a particular roadway segment, developed in coordination with the affected local government and adopted by the Department in cooperation with the affected local government(s).

Corridor Access Management Plans

Figure 158 | Typical Corridor Access Management Plan Process



Source: TRB Access Management Manual, Second Edition, 2014 (Exhibit 10-2)

Public Involvement and Stakeholder Engagement

It is critical and essential to get public and stakeholder involvement and participation in planning, design, construction, and operation of access management treatments along the state roadways.

QUESTIONS

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THANK YOU!