



TDOT

Department of
Transportation

Highway System Access Manual Volumes 1, 2 & 3 Overview

TNMUG May 2022 Meeting



Highway System Access Manual Overview

TNMUG May Meeting

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Project History & Purpose

<https://www.tn.gov/tdot/traffic-operations-division/traffic-engineering-office/operations-and-safety/access-manual.html>

The screenshot shows a web browser displaying the TDOT Highway System Access Manual. The browser's address bar shows the URL: <https://www.tn.gov/tdot/traffic-operations-division/traffic-engineering-office/operations-and-safety/access-manual.html>. The browser's tab bar shows several tabs: Personal, Work Resources, Google, The Tennessean, TDOT SmartWay: Tr..., and When2meet. The TDOT website header features the TN Department of Transportation logo, a search bar labeled "Search TDOT", and a "Go to TN.gov" link. Below the header is a navigation menu with links: Traveler how do I..., Business how do I..., Government how do I..., Find Local Information, Sitemap, and Index of Services. A red banner below the navigation menu reads "COVID-19 INFORMATION". The main content area has the title "TDOT Highway System Access Manual" and a list of links: Introduction, HSAM Volume 1: Planning - Corridor Management Agreement Guidance, Model Land Development Regulations, HSAM Volume 2: Intersection & Interchange Evaluation - Introduction, IIE Form Guidance, Methodology, IIE Tool, HSAM Volume 3: Geometric Design Criteria, HSAM -1 Deviation Request v1 (TDOT Projects), and HSAM-2 Deviation Request v1 (External Projects). At the bottom of the page is a footer with icons and labels for various transportation modes: Highway, Public Transportation, Bike & Pedestrian, Aeronautics, Waterway, Rail, and Freight.

Personal Work Resources Google The Tennessean TDOT SmartWay: Tr... When2meet

TN TDOT Department of Transportation

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COVID-19 INFORMATION

TDOT Highway System Access Manual

- [Introduction](#)
- [HSAM Volume 1: Planning - Corridor Management Agreement Guidance, Model Land Development Regulations](#)
- [HSAM Volume 2: Intersection & Interchange Evaluation - Introduction, IIE Form Guidance, Methodology](#)
 - [IIE Tool](#)
- [HSAM Volume 3: Geometric Design Criteria](#)
 - [HSAM -1 Deviation Request v1 \(TDOT Projects\)](#)
 - [HSAM-2 Deviation Request v1 \(External Projects\)](#)

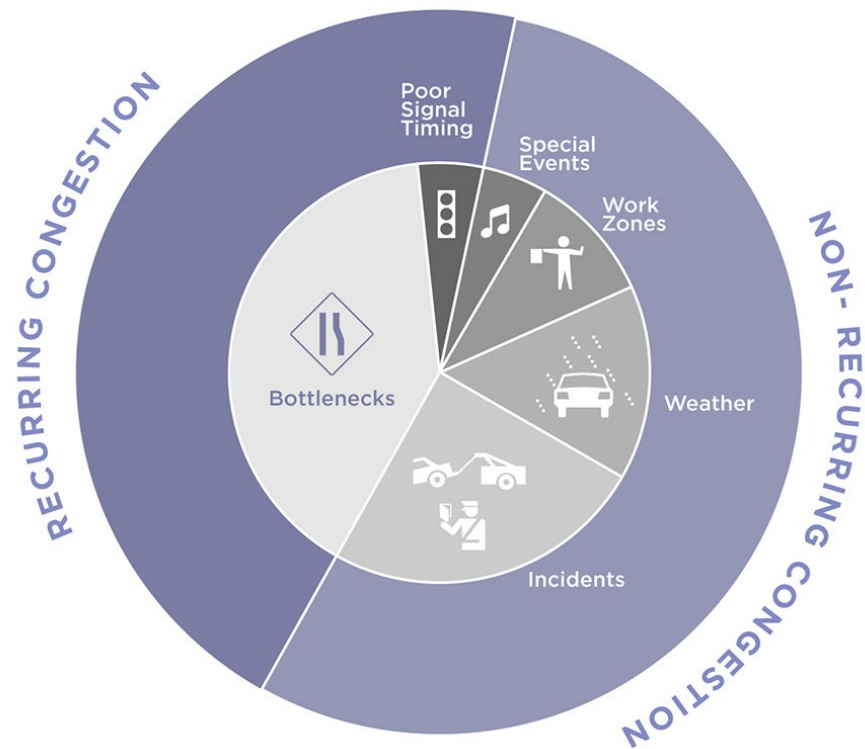
Highway Public Transportation Bike & Pedestrian Aeronautics Waterway Rail Freight

TSMO Overview - How HSAM Fits

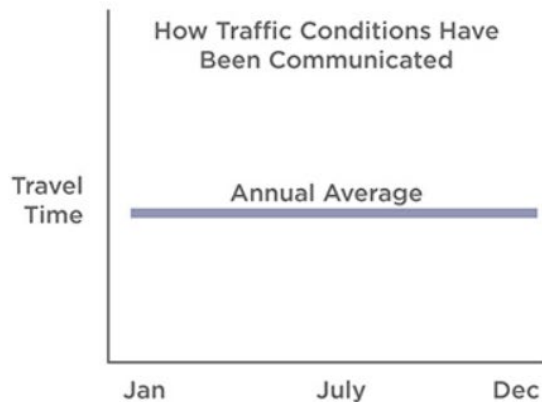
What is TSMO?

TSMO is an emerging term used to describe a cross-discipline, collaborative, and integrated program of strategies and applications to improve existing and planned transportation infrastructure and multimodal systems through better integration, coordination and implementation of key operational strategies, innovation, and technology. TSMO improves the safety, reliability, and operation of the transportation system with lower-cost, high-impact actions that can be implemented relatively quickly as well as enhance traditional capacity projects.

TSMO Overview - How HSAM Fits



TSMO Overview - How HSAM Fits



TSMO Overview - How HSAM Fits



Safety

Reduce the frequency and severity of crashes on the transportation system through TSMO focused planning, design and management.



Efficiency

Operate and maintain a coordinated multi-modal transportation system that provides seamless mobility to users.



Reliability

Improve travel-time reliability by managing transportation network delays and enhancing real-time traveler information.



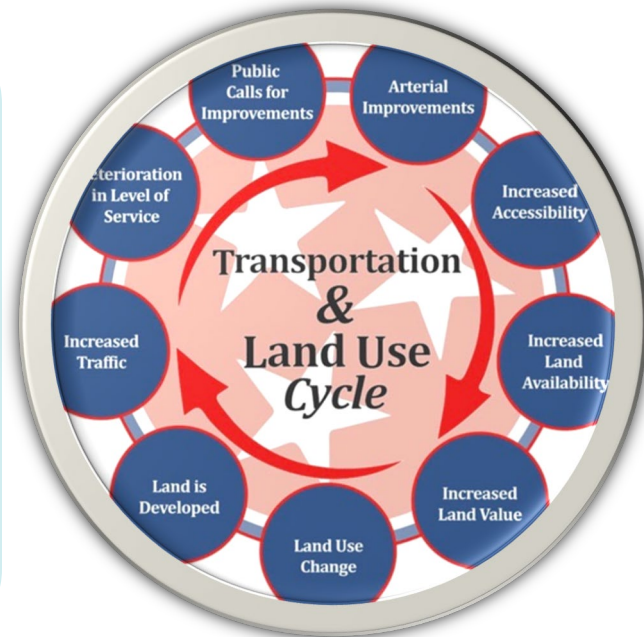
Workforce

Support and advance TSMO education, training needs, and resource depositories for TDOT and local partners.

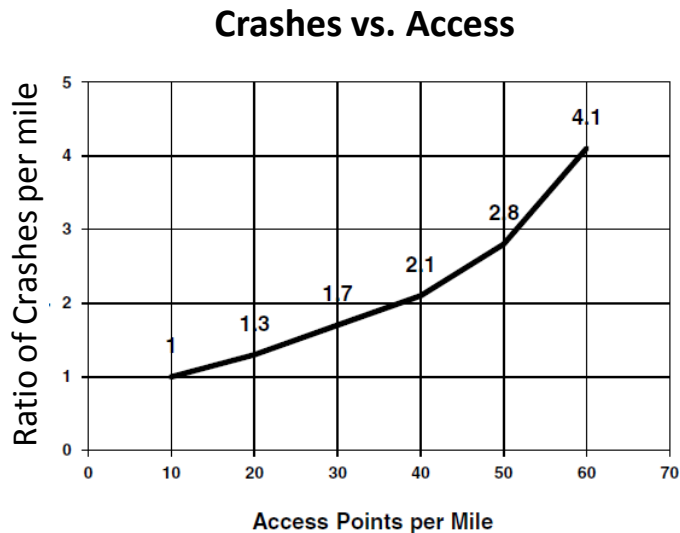
TSMO Overview - How HSAM Fits

Why Update TDOT's Standards?

- Safety
 - 55% of all vehicular crashes involve access activity
 - 20 to 60% reduction in crashes with proper access management
- Operations
 - 40-60% percent reduction in delay with proper access management



HSAM - Why are we doing this?



(a)



(b)

TSMO Overview - How HSAM Fits

TSMO Program Vision

Support and promote a TSMO Program in Tennessee that becomes fully integrated into both state and local agency practices.

TSMO Program Mission

To preserve and optimize the efficiency, reliability, and safety of Tennessee's transportation system for all road users by leveraging data-driven, operational, and technology-based strategies and applications.

HSAM Policy

Adoption of TDOT Policy 385-01 (February 1, 2022)

- A. The HSAM Volume 1: **Planning is recommended guidance to local agencies** for use in the development of their land use policies. The Volume 1 Guidance is to guide land use decisions to allow for appropriate access management.
- B. The HSAM Volume 1: Planning shall be used to guide the process of **developing corridor management agreements.**
- C. The HSAM Volume 2: Intersection and Interchange Evaluation shall be used during the project planning process to evaluate intersections on all projects. For projects where there are more than 1 intersection, the intersections shall be evaluated individually.

Projects implemented by in-house maintenance, private driveways, other than street type intersections, and **intersections where the major and minor approach have less than 400 vehicles per hour are not required to be evaluated under this policy.**

- D. The HSAM Volume 3: **Geometric Design** Criteria shall apply to the following types of projects:
 - 1. **New alignment projects**
 - 2. **Roadway widening projects**
 - 3. **Major reconstruction projects**

The project planning process shall utilize this manual when scoping projects.

- E. The HSAM Volume 3: Geometric Design Criteria guidelines should be used when feasible on all other projects; though, no exception or waiver is required for not meeting design



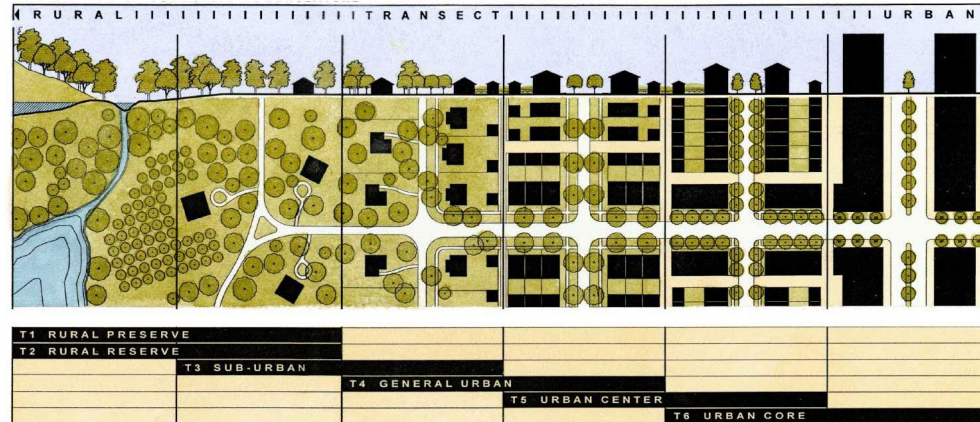
HSAM 3-Volume Set



HSAM Vol. 1 Planning

Volume 1: Planning

- Strengthens Corridor Management Agreements
- Develop Model Land Development Regulations
- Provide resources for local agencies for Land Use Planning



The importance of incorporating access management and right-of-way preservation strategies into the comprehensive plan cannot be overstated

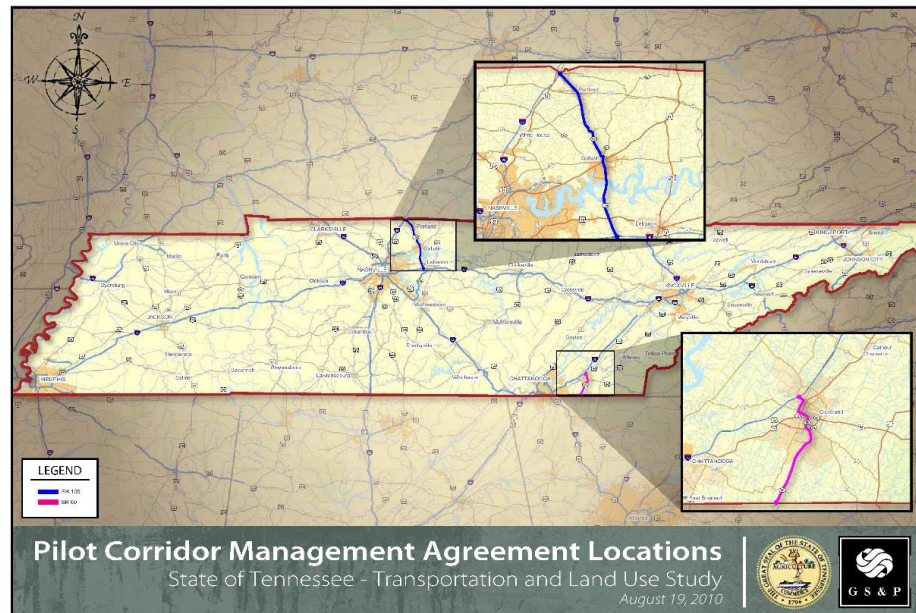
Volume 1: Planning

- Best Practice Resources
 - TRB
 - NCHRP
 - Other States
 - FDOT
 - Iowa DOT
 - MnDOT
 - PennDOT
 - VDOT

Volume 1: Planning - CMAs

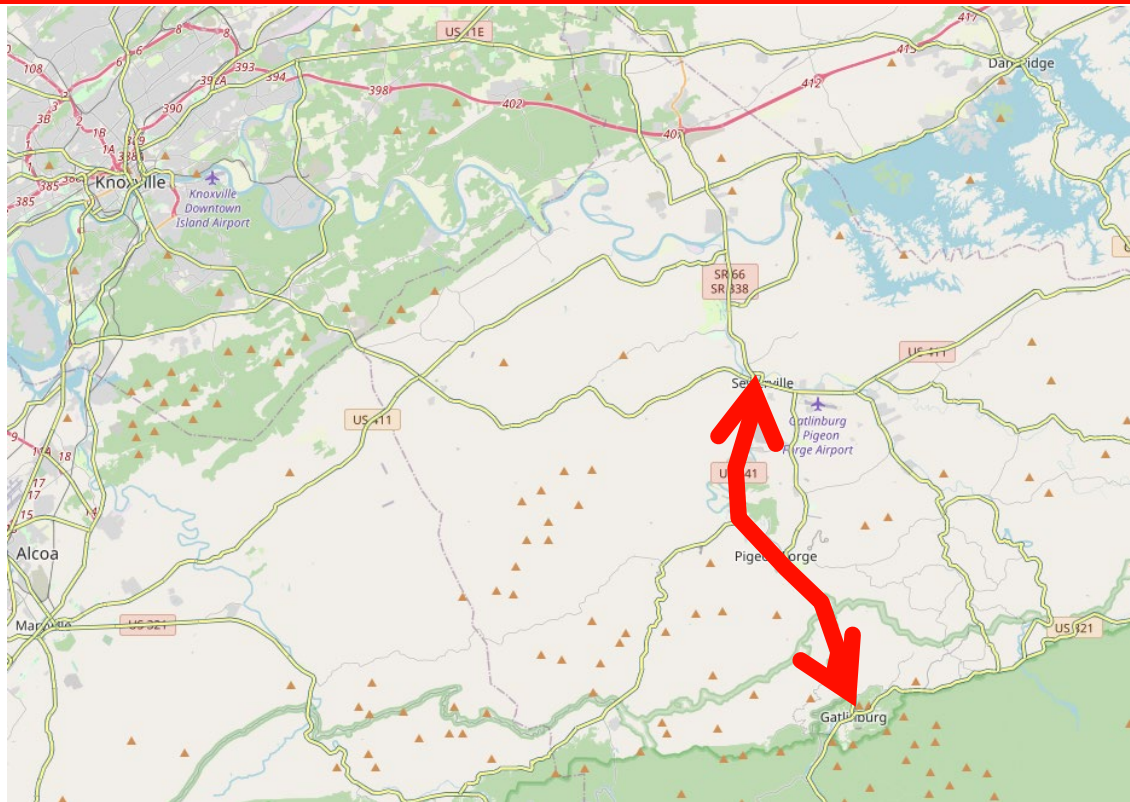
Corridor Management Agreements (CMA)

CMA is a collaborative agreement among multiple jurisdictions or agencies that addresses the development, management, and operations of a transportation corridor.



Volume 1: Planning - CMAs

- SR 449 CMA a success story
- Strategies include interagency coordination for:
 - Access Management
 - Land Use Planning
 - Roadway Design and Capacity



Vol. 1 Planning - CMAs

Corridor Management Agreement Potential Incentives

Planning / Technical Resources	Facilitation of permit review processes on projects with access management components
	Access management training for local agency staff and officials
	Training and technical assistance on supporting plans, policies, and standards
Planning Grants	Preferred consideration for multimodal planning grants
	Cost sharing of local plans and policies (e.g. comprehensive plan, major thoroughfare plan)
	Cost sharing of corridor management plans or local access management plans
Infrastructure	Funding for integrating access management improvements in transportation capacity or maintenance projects
	Preferred consideration for multimodal access grants
	Additional weight in transportation project selection formula for criteria that support access management (e.g. cost, impacts, safety)
	Funding for stand-alone streetscape projects
	Priority funding for state projects in growth areas identified in corridor management plans
	Funding for ITS and TSM&O strategies identified in corridor management plans

Vol. 1 Planning - Model LDRs

- By State Law, TDOT cannot dictate Land Development Regulations; this is the responsibility of local agencies
- But we do control the permitting of driveways on State Routes
- So TDOT developed model regulations for 25 different topics as guidance to help local planning agencies improve land development regulations
- Topics include joint and cross access, outparcel access, reverse frontage, flag lot standards (avoidance), etc.

Vol. 1 Planning - Model LDRs

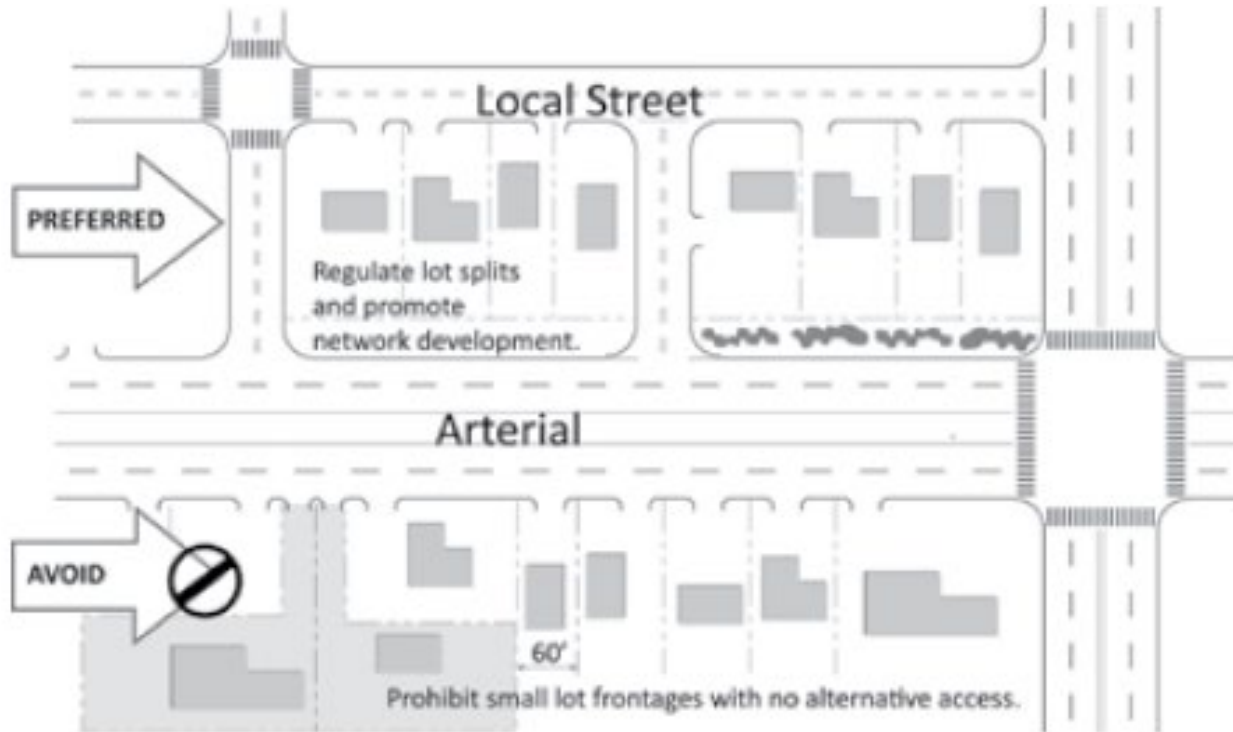
Model Land Development Regulations

25 different topics

Model Land Development Regulations

<u>Section 1</u>	<u>Intent and Purpose Variances, Deviations, and Exemptions</u>
<u>Section 2</u>	<u>Applicability Variances, Deviations, and Exemptions</u>
<u>Section 3</u>	<u>Conformance with Plans, Regulations, and Statutes</u>
<u>Section 4</u>	<u>Definitions</u>
<u>Section 5</u>	<u>Access Category System</u>
<u>Section 6</u>	<u>Deviations and Waivers</u>
<u>Section 7</u>	<u>Corner Clearance and Side Street Access</u>
<u>Section 8</u>	<u>Driveway Location and Design</u>
<u>Section 9</u>	<u>Nonconforming Access</u>
<u>Section 10</u>	<u>Joint and Cross Access</u>
<u>Section 11</u>	<u>Outparcels and Phased Development Plans</u>
<u>Section 12</u>	<u>Street Network and Connectivity</u>
<u>Section 13</u>	<u>Pedestrian and Bicycle Access</u>
<u>Section 14</u>	<u>Location and Placement of Transit Access</u>
<u>Section 15</u>	<u>Interchange Area Access Management</u>
<u>Section 16</u>	<u>Corridor Access Management Plans and Overlays</u>
<u>Section 17</u>	<u>Reverse Frontage</u>
<u>Section 18</u>	<u>Flag Lot Standards</u>
<u>Section 19</u>	<u>Lot Width-to-Depth Ratios</u>
<u>Section 20</u>	<u>Small Subdivisions and Rural Residential Access</u>
<u>Section 21</u>	<u>Review of Minor Subdivisions</u>
<u>Section 22</u>	<u>Private Roads</u>
<u>Section 23</u>	<u>Emergency Access</u>
<u>Section 24</u>	<u>Site Plan Review Procedures</u>
<u>Section 25</u>	<u>Variance Standards</u>

Vol. 1 Planning - Model LDRs



Vol. 1 Planning - Model LDRs

- Outparcel guidance

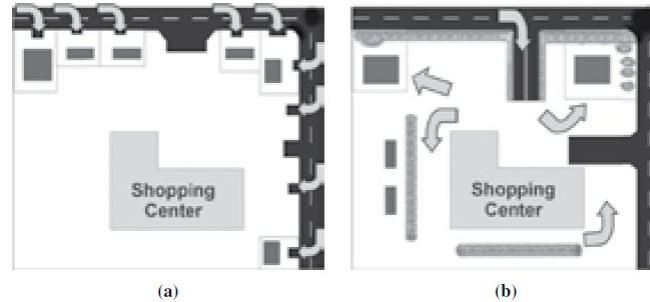


EXHIBIT 9-7 Outparcel access: (a) configuration to avoid and (b) preferred configuration.

Vol. 1 Planning - Model LDRs

- Joint Use Driveways

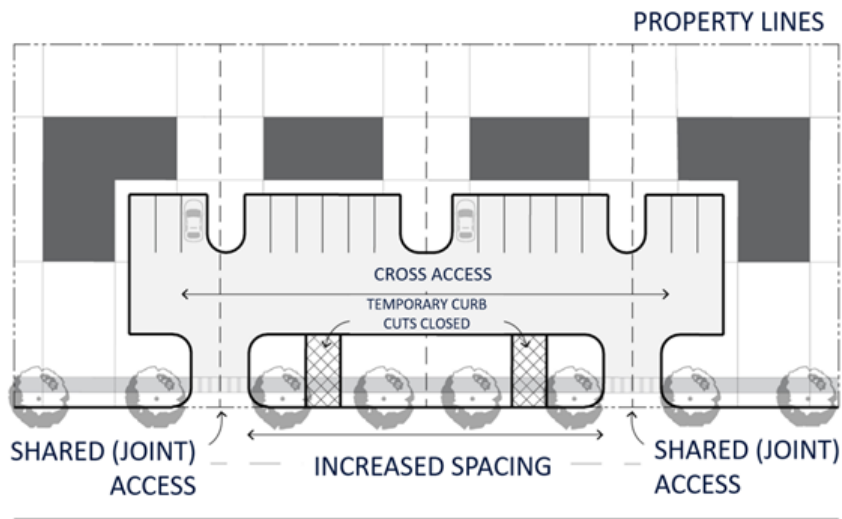
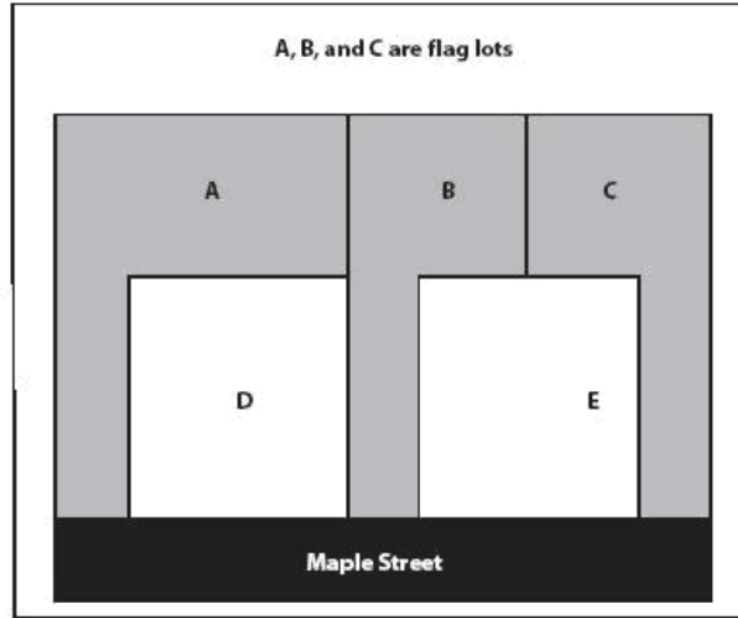


Figure 1-10: Joint and Cross Access

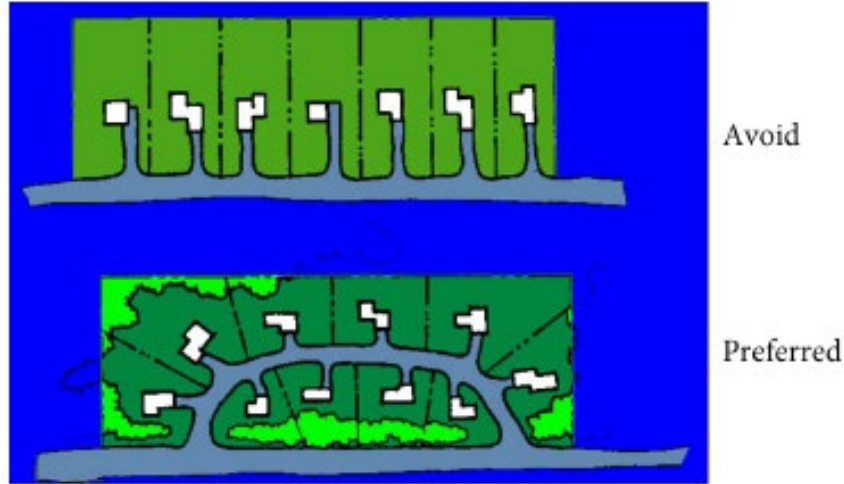
Vol. 1 Planning - Model LDRs

- Discourage “Flag Lots”



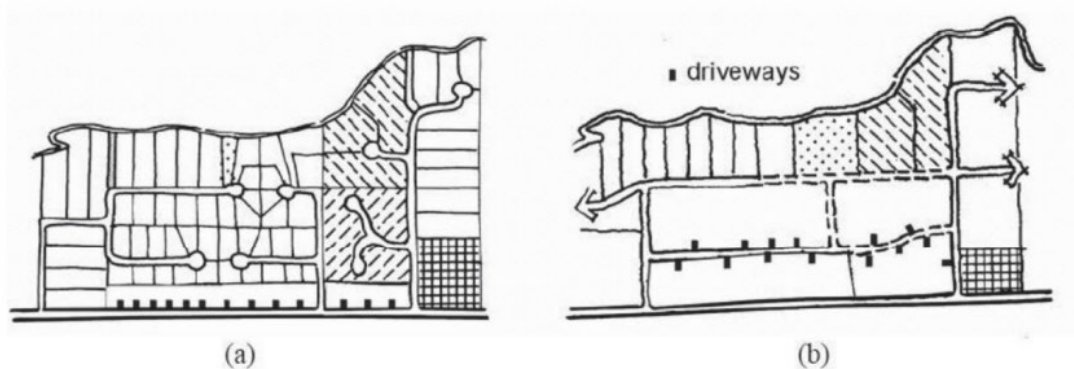
Vol. 1 Planning - Model LDRs

- Small subdivision/rural residential access



Vol. 1 Planning - Model LDRs

- **Promote Street Network Connectivity**



- (a) Poor connectivity impedes walking, bicycling, and transit use. It also increases local trips on major roads and results in more properties requiring direct access to major roadways.
- (b) Improved connectivity shortens local trips and improves multimodal mobility. It also enhances local mobility and provides opportunities for internalizing site access off of major roadways.

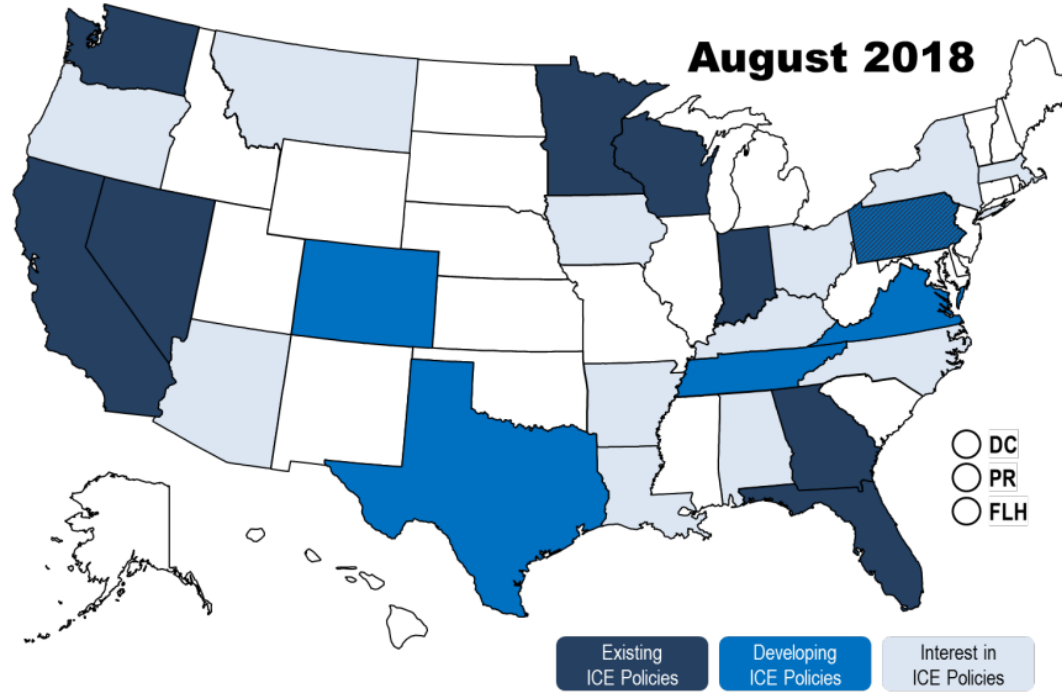
Figure 1-16: Street Network Connectivity and Access

Source: Model Regulations and Plan Amendments for Multimodal Districts (2004)



HSAM Vol. 2 IIE

State Progress on ICE Policies



Volume 2 IIE- Intersections

Used to evaluate alternatives for at-grade intersections:

- Traditional intersections
- The modern roundabout
- Displaced left-turn (DLT)
- Restricted crossing U-turn (RCUT)
- The J-turn
- The median U-turn (MUT)
- Quadrant roadway (QR) intersections
- Others



Vol. 2 IIE

Volume 2 IIE- Interchanges

Used to evaluate alternatives for interchanges:

- Diamond
- Parclo
- Displaced Left Turn
- Contraflow Left
- Diverging Diamond
- Single Point
- Single Point with Roundabout




- **New for TDOT:**
 - ICE Guidance and Policy
 - CAP-X volume/capacity screening tool
 - LCCET Life Cycle Cost Estimating Tool (Optional)
 - SPICE predictive crash analysis tool (Optional)

Vol. 2 IIE

Series of Forms

- Traffic Screening
- Cost
- Life-Cycle Cost (Optional)
- Traffic Analysis
- Predictive Crash Analysis (Optional)
- Multimodal
- Stakeholder Input

	Intersection Location:		SR 1 at Penny Lane in Davidson County									
	Number of Intersection Legs:		4		PIN:		12345.00		Date:		9/3/20	
	TDOT IIE Stage II Form - Selection Analyst: JHS, ABC Consultant								Version: 09042020			
Existing Control		Option 1		Option 2		Option 3		Option 4				
Two-Way Stop Control		Traffic Signal		Roundabout		None		None				
Project Cost												
Tool Used		Not Applicable		TDOT STID Tool		TDOT STID Tool		-		-		
Total Project Cost		Not Applicable		\$1,000,000		\$3,000,000		-		-		
Life Cycle Cost												
Tool Used		LCCE (NCHRP 220)		LCCE (NCHRP 220)		LCCE (NCHRP 220)		-		-		
Analysis Period		2025 to 2045		2025 to 2045		2025 to 2045		2025 to 2045		2025 to 2045		
Total Life Cycle NPV Cost		\$13,835,701		\$16,359,474		\$3,626,270		-		-		
Traffic Operations												
Traffic Analysis Software Used		Synchro		Synchro		Synchro		-		-		
2025 Opening Year		AM PM		AM PM		AM PM		AM PM		AM PM		
LOS		C F		B B		A A		-		-		
Delay (s/veh)		20 290		12 10		4 8		-		-		
v/c		0.28 1.25		0.55 0.4		0.2 0.5		-		-		
Queues Accommodated?		Yes No		Yes Yes		Yes Yes		-		-		
2045 Design Year		AM PM		AM PM		AM PM		AM PM		AM PM		
LOS		D F		B B		A A		-		-		
Delay (s/veh)		25.3 354		14.4 11.8		4.6 9.7		-		-		
v/c		0.328 1.53		0.65 0.52		0.249 0.595		-		-		
Queues Accommodated?		Yes No		Yes Yes		Yes Yes		-		-		
Predictive Crash Analysis												
Tool Used		SPICE		SPICE		SPICE		-		-		
Analysis Period		2025 to 2045		2025 to 2045		2025 to 2045		2025 to 2045		2025 to 2045		
Total Crashes		17.36		28.37		15.28		-		-		
Fatal & Injury Crashes		6.77		11.62		1		-		-		
Multimodal												
Are peds, bicyclists, and transit riders accommodated?		Poorly		Well		Adequately		-		-		
Stakeholder Posture												
Local Community Support		Not Applicable		Supportive		Neutral		-		-		
TDOT Support		Not Applicable		Supportive		Neutral		-		-		
TDOT Approval												
Preferred Option?		Not Applicable		Yes		No		-		-		
Comments		Evening is controlling time. Two-Way Stop Control has LOS F on stop-controlled approaches (reported values). Roundabout shows improved LOS compared to signal, but concern with pedestrians and bicyclists crossing multilane roundabout. Budget constraints are a concern with Roundabout - initial costs more of a concern than life-cycle. Local Government is not as supportive of a roundabout due to ROW impacts.										
TDOT Reviewer Name and Title		John Doe, STID Supervisor		Signature				Date		9/4/20		

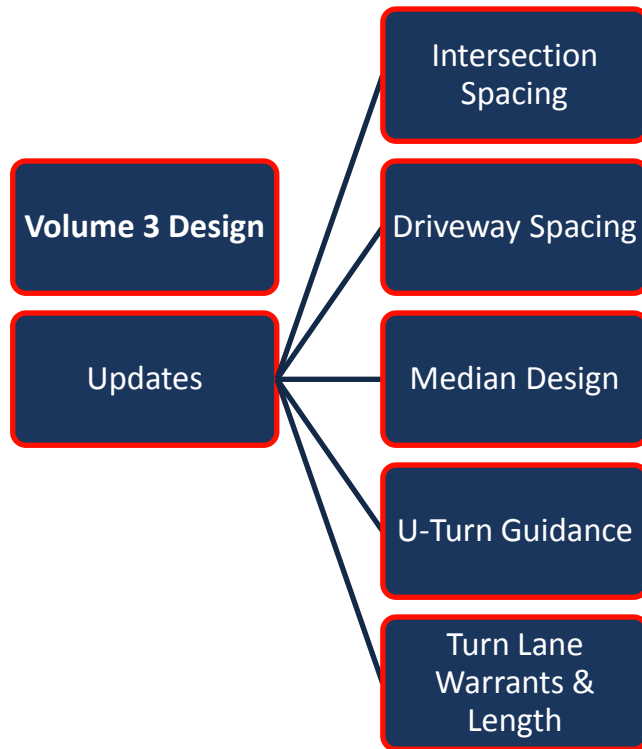
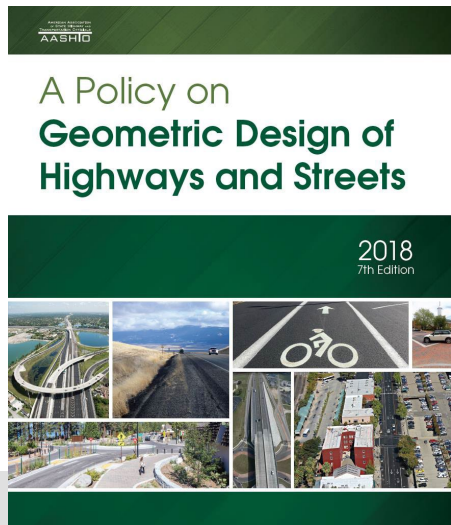


HSAM Vol. 3 Design

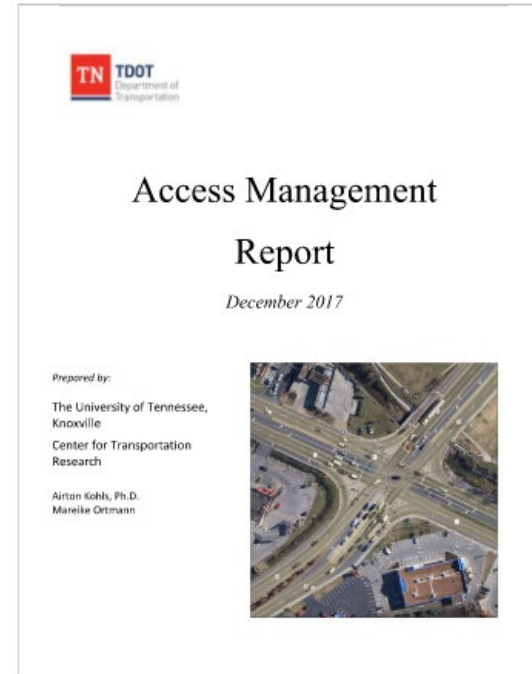
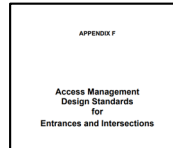
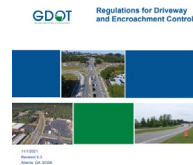
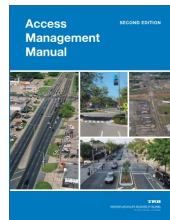
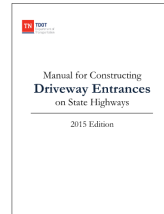
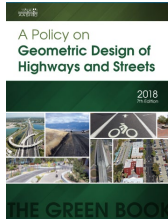
Volume 3: Design Criteria

Volume 3 Design

- Updates to TDOT's Design Criteria
- Coordination with new 2018 AASHTO "Greenbook"
- Implement some elements of TRB's Access Management Manual 2nd Edition



Volume 3: Design Criteria



Volume 3: Design Criteria

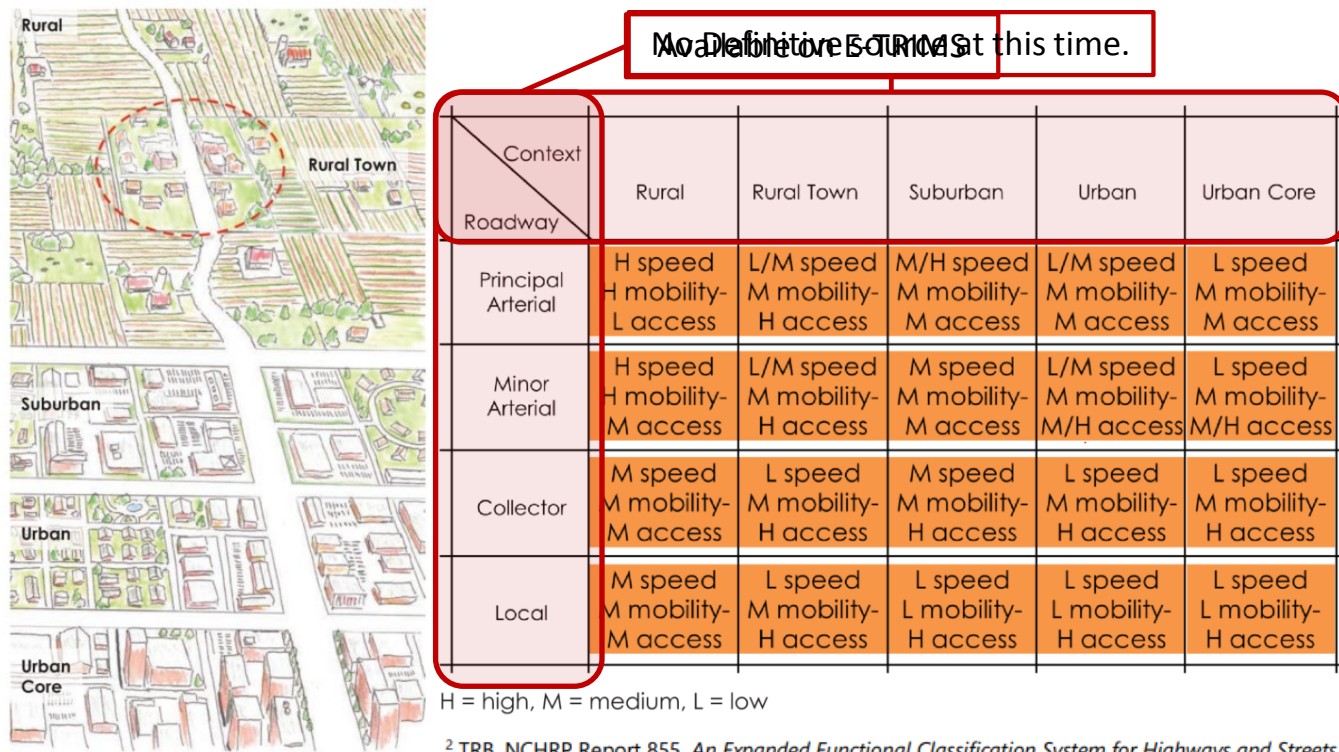


Figure 2. Five context categories.

² TRB, NCHRP Report 855, *An Expanded Functional Classification System for Highways and Streets* (2018)

Volume 3: Design Criteria

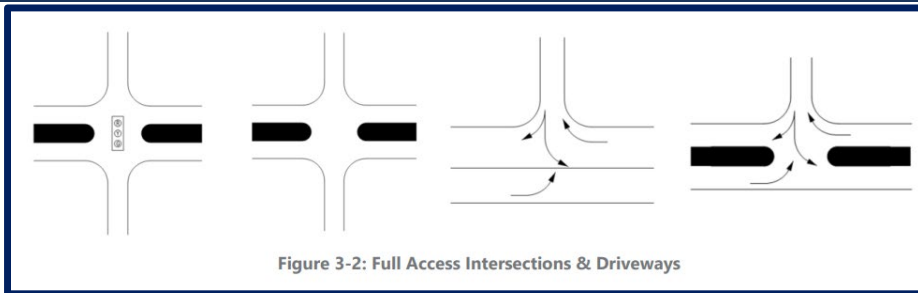


Figure 3-2: Full Access Intersections & Driveways

Full Access

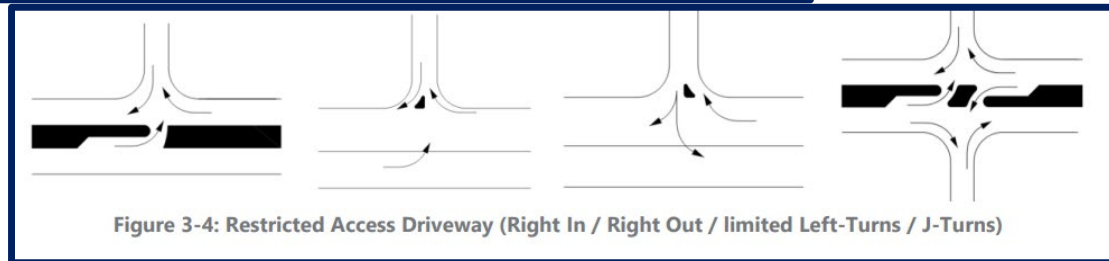


Figure 3-4: Restricted Access Driveway (Right In / Right Out / limited Left-Turns / J-Turns)

Restricted Access

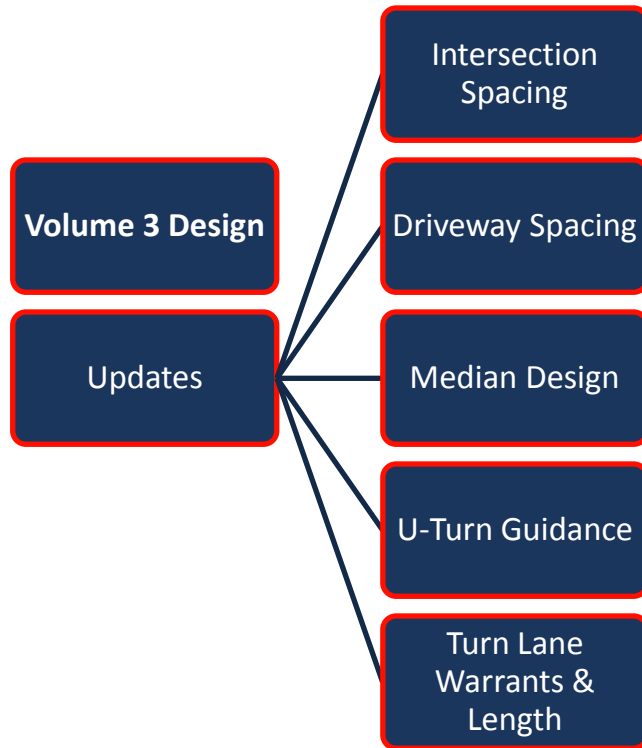
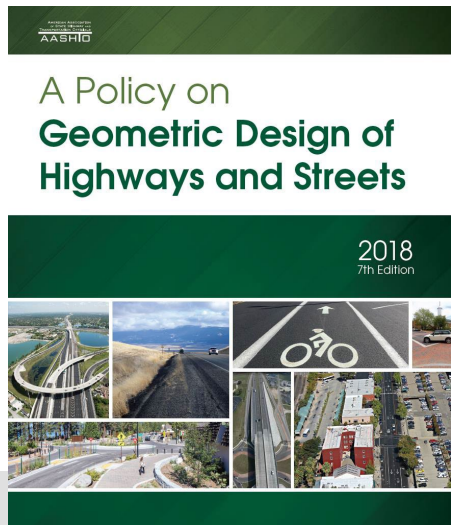


Figure 3-3: Restricted Access Driveways (Right in / Right Out)

Volume 3: Design Criteria

Volume 3 Design

- Updates to TDOT's Design Criteria
- Coordination with new 2018 AASHTO "Greenbook"
- Implement some elements of TRB's Access Management Manual 2nd Edition



Volume 3: Design Criteria

- Align TDOT Standards with the 2018 AASHTO Greenbook's Functional Classifications and Context Classes

Table 3-5: Required Minimum Spacing of Driveways (Urban, Urban Core & Suburban)

Driveway Spacing – (Urban, Urban Core & Suburban) ***									
Functional Classification	Suburban			Urban			Urban Core		
	Non-Traversable Median		Traversable Median	Non-Traversable Median		Traversable Median	Non-Traversable Median		Traversable Median
	Full Access	Restricted Access		Full Access	Restricted Access		Full Access	Restricted Access	
Freeway	N/A								
Principal Arterial*	1,320 ft.	330 ft.	880 ft.	880 ft.	330 ft.	880 ft.	880 ft.	330 ft.	660 ft.
Minor Arterial	660 ft.	330 ft.	660 ft.	660 ft.	330 ft.	660 ft.	440 ft.	330 ft.	330 ft.
Major Collector	660 ft.	330 ft.	330 ft.	660 ft.	330 ft.	330 ft.	440 ft.	330 ft.	330 ft.
Minor Collector	440 ft.	330 ft.	330 ft.	440 ft.	330 ft.	330 ft.	440 ft.	330 ft.	330 ft.
Local Road or Street	**								

* Direct driveway connections along Principal Arterials is discouraged whenever practical.

** Refer to Local zoning and ordinances for desired spacing, in lieu of additional guidance use 330 feet.

*** Spacing to be measured from the centerline of a driveway to the centerline of the next successive access point.

Volume 3: Design Criteria

- Align TDOT Standards with the 2018 AASHTO Greenbook's Functional Classifications and Context Classes

Table 3-6: Required Minimum Spacing of Driveways (Rural & Rural Town)

Driveway Spacing (Rural & Rural Town) ***						
Functional Classification	Rural			Rural Town		
	Non-Traversable Median		Traversable Median	Non-Traversable Median		Traversable Median
	Full Access	Restricted Access		Full Access	Restricted Access	
Freeway	N/A					
Principal Arterial*	1,320 ft.	660 ft.	880 ft.	880 ft.	330 ft.	660 ft.
Minor Arterial	880 ft.	660 ft.	880 ft.	440 ft.	330 ft.	660 ft.
Major Collector	880 ft.	660 ft.	660 ft.	440 ft.	330 ft.	330 ft.
Minor Collector	440 ft.	330 ft.	330 ft.	440 ft.	330 ft.	330 ft.
Local Road or Street	**					

* Direct driveway connections along Principal Arterials is discouraged whenever practical.

** Refer to Local zoning and ordinances for desired spacing, in lieu of additional guidance use 330 feet.

*** Spacing to be measured from the centerline of a driveway to the centerline of a successive access point.

Volume 3: Design Criteria

Multimodal Considerations

The Opportunities

- Medians serve as pedestrian refuges
- Fewer driveways = fewer conflicts with pedestrians and bicyclists
- Improved opportunities for transit operations

The Challenges

- More turn lanes and larger radius can lead to higher turning speeds
- Larger intersection spacing = fewer crossing opportunities
- Potential for higher speeds

Volume 3: Design Criteria - Mitigation

- Limiting Access points to right-in / right-out
- Consider use of frontage or backage roads to consolidate access
- Consider joint access driveways
- Reducing the number of driveways for properties with multiple access points
- Limit corner lot access to minor roadway



Bonus Material!

TSMO Program Plan

- Our TSMO Program Plan is now available
- Sets our goals for the next three years
- Institutional, Organizational, Procedural; Performance Measurement; Services and Projects



https://www.tn.gov/content/dam/tn/tdot/traffic-engineering/TDOT_TSMO_Program_Plan_2022_Final.pdf

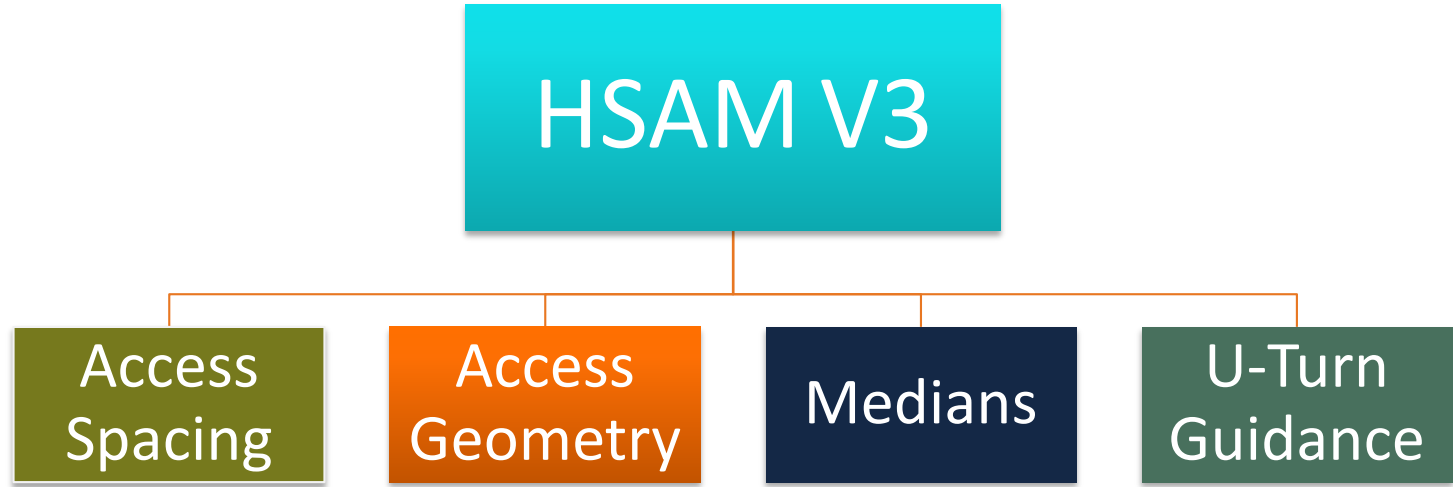


Thank You!

TNMUG May Meeting

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HSAM V3: Content Overview



Access Spacing - Overview

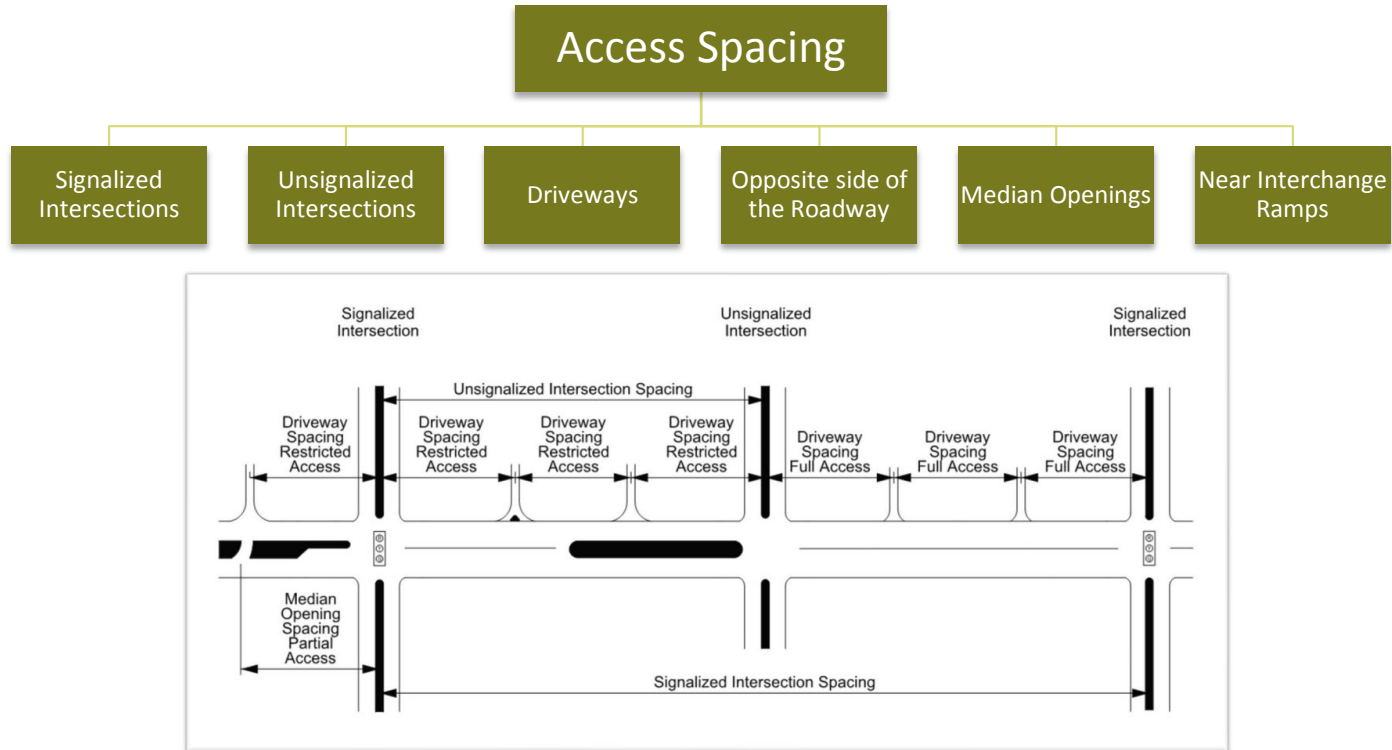


Figure 3-5: Typical Access Point Spacing

Access Spacing: Unsignalalized Intersections



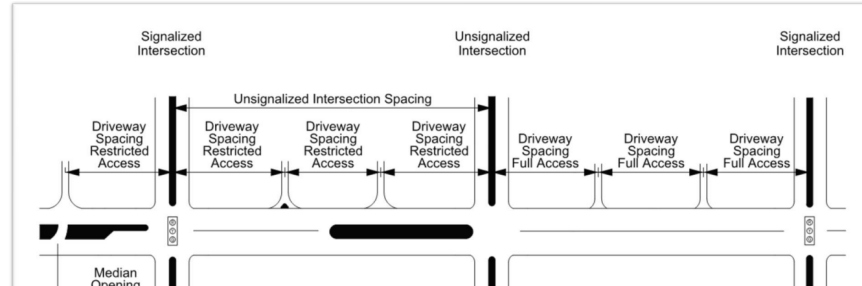
Indicates
Required
Criteria

Table 3-4: Required Minimum Spacing of Unsignalized Intersections⁸

Intersections Spacing (Unsignalized) **					
Functional Classification of Road	Rural	Rural Town	Suburban	Urban	Urban Core
Freeway	N/A				
Principal Arterial	2,640 ft.	660 ft.	1,320 ft.	1,320 ft.	1,320 ft.
Minor Arterial	1,320 ft.	660 ft..	1,320 ft.	1,320 ft.	660 ft.
Major Collector	1,320 ft.	660 ft..	660 ft.	660 ft.	660 ft.
Minor Collector	330 ft.	330 ft.	660 ft.	660 ft.	330 ft.
Local Road or Street	*				

* Refer to Local zoning and ordinances for desired spacing, in lieu of additional guidance use 330 feet.

** Spacing to be measured from centerline to centerline of successive roads.





Access Spacing: Driveways

Table 3-5: Required Minimum Spacing of Driveways (Urban, Urban Core & Suburban)

Driveway Spacing – (Urban, Urban Core & Suburban) ***									
Functional Classification	Suburban			Urban			Urban Core		
	Non-Traversable Median		Traversable Median	Non-Traversable Median		Traversable Median	Non-Traversable Median		Traversable Median
	Full Access	Restricted Access		Full Access	Restricted Access		Full Access	Restricted Access	
Freeway	N/A								
Principal Arterial*	1,320 ft.	330 ft.	880 ft.	880 ft.	330 ft.	880 ft.	880 ft.	330 ft.	660 ft.
Minor Arterial	660 ft.	330 ft.	660 ft.	660 ft.	330 ft.	660 ft.	440 ft.	330 ft.	330 ft.
Major Collector	660 ft.	330 ft.	330 ft.	660 ft.	330 ft.	330 ft.	440 ft.	330 ft.	330 ft.
Minor Collector	440 ft.	330 ft.	330 ft.	440 ft.	330 ft.	330 ft.	440 ft.	330 ft.	330 ft.
Local Road or Street	**								

* Direct driveway connections along Principal Arterials is discouraged whenever practical.

** Refer to Local zoning and ordinances for desired spacing, in lieu of additional guidance use 330 feet.

*** Spacing to be measured from the centerline of a driveway to the centerline of the next successive access point.

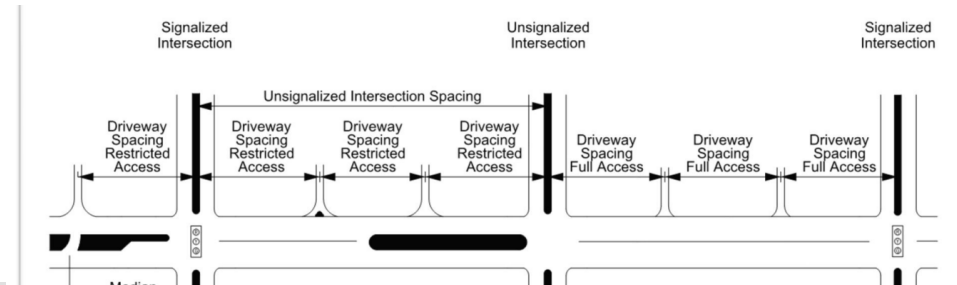
Table 3-6: Required Minimum Spacing of Driveways (Rural & Rural Town)

Driveway Spacing (Rural & Rural Town) ***						
Functional Classification	Rural			Rural Town		
	Non-Traversable Median		Traversable Median	Non-Traversable Median		Traversable Median
	Full Access	Restricted Access		Full Access	Restricted Access	
Freeway	N/A					
Principal Arterial*	1,320 ft.	660 ft.	880 ft.	880 ft.	330 ft.	660 ft.
Minor Arterial	880 ft.	660 ft.	880 ft.	440 ft.	330 ft.	660 ft.
Major Collector	880 ft.	660 ft.	660 ft.	440 ft.	330 ft.	330 ft.
Minor Collector	440 ft.	330 ft.	330 ft.	440 ft.	330 ft.	330 ft.
Local Road or Street	**					

* Direct driveway connections along Principal Arterials is discouraged whenever practical.

** Refer to Local zoning and ordinances for desired spacing, in lieu of additional guidance use 330 feet.

*** Spacing to be measured from the centerline of a driveway to the centerline of a successive access point.



Access Spacing: At Signalized Interchanges

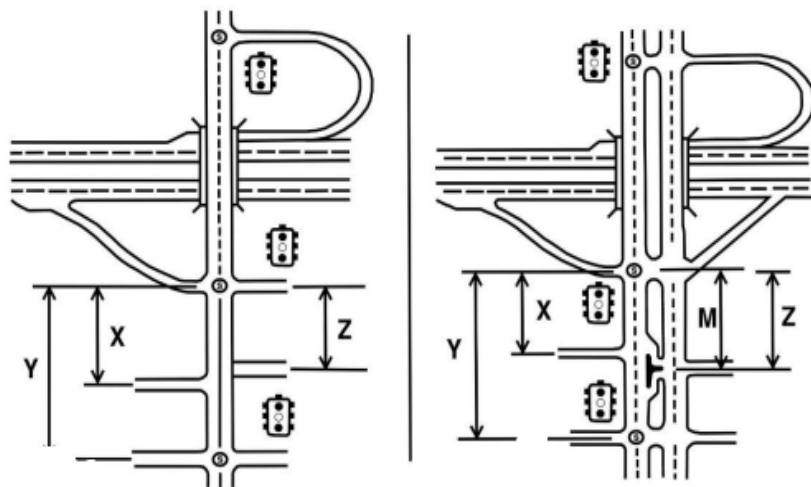


Figure 3-13: Access Spacing at Signalized Interchange Ramp Terminals^{16, 17}

Table 3-9: Required Minimum Access Spacing at Signalized Interchange Ramp Terminals^{16, 17}

Spacing Requirements at Signalized Interchange Ramps				
Arterial Width (no. of Lanes)	Spacing Dimension			
	X	Y	Z	M
Urban Area (35mph)				
2	590 ft.	1,320 ft.	660 ft.	-
4	590 ft.	1,320 ft.	750 ft.	660 ft.
Suburban Area (45 mph)				
2	590 ft.	1,320 ft.	660 ft.	-
4	590 ft.	1,320 ft.	800 ft.	660 ft.
Rural Area (55 mph)				
2	535 ft.	1,320 ft.	560 ft.	-
4	535 ft.	2,640 ft.	865 ft.	550 ft.

X – Distance from ramp terminal to first restricted access driveway.
Y – Distance to first major intersection from end of ramp terminal.
Z – Distance from last driveway to the start of freeway entrance ramp.
M – Distance to first directional restricted access median opening after the exit ramp or before the entrance ramp.

Access Spacing: At Unsignalalized Interchanges

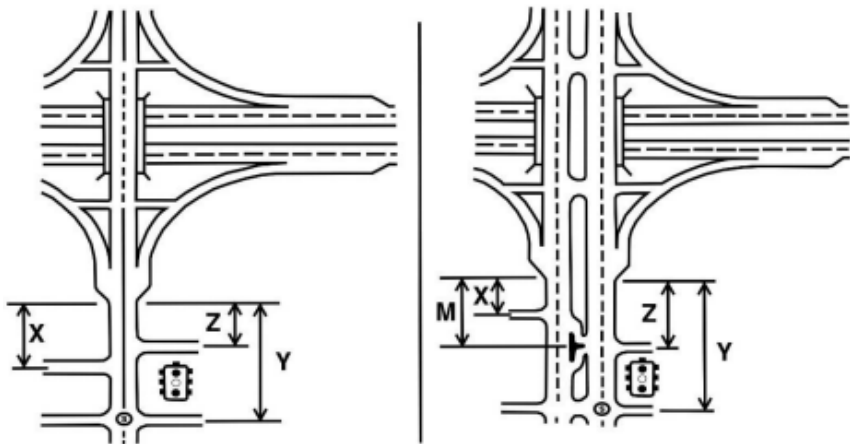


Figure 3-14: Access Spacing at Free-Flow Interchange Ramp Terminals^{18, 19}

Table 3-10: Required Minimum Access Spacing at Free-Flow Interchange Ramp Terminals^{18, 19}

Spacing Requirements at Free-Flow Interchange Ramps				
Arterial Width (no. of Lanes)	Spacing Dimension			
	X	Y	Z	M
Urban Area (35mph)				
2	590 ft.	1,320 ft.	1,100 ft.	-
4	590 ft.	1,320 ft.	1,100 ft.	660 ft.
Suburban Area (45 mph)				
2	590 ft.	1,320 ft.	1,100 ft.	-
4	590 ft.	1,320 ft.	1,100 ft.	660 ft.
Rural Area (55 mph)				
2	535 ft.	1,320 ft.	800 ft.	-
4	535 ft.	2,640 ft.	800 ft.	550 ft.

X – Distance from ramp terminal to first restricted access driveway.
Y – Distance to first major intersection from end of ramp terminal.
Z – Distance from last driveway to the start of freeway entrance ramp.
M – Distance to first directional restricted access median opening after the exit ramp or before the entrance ramp.

Access Geometry - Overview

Access Geometry

Intersection Geometrics

Design Vehicle

Turn Lanes

Lane Drops

Corner Islands

Grading & Tie-ins

Driveway Geometrics

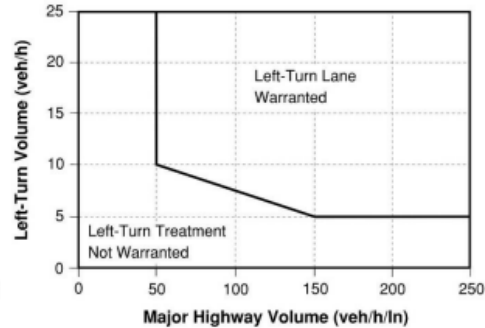
Horizontal Geometrics
(Radius, Width, Length . . .)

Grading & Profile

Cross Slopes

Sight Distance

Multimodal



(b) Four-Leg Intersections

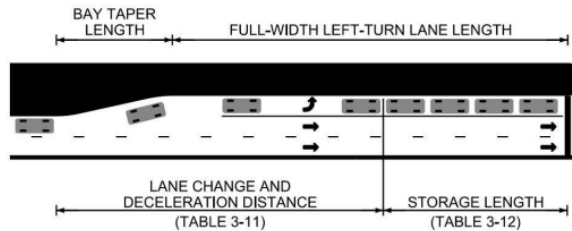
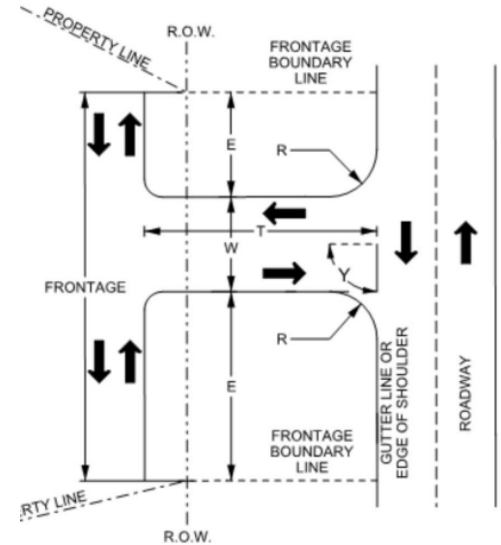
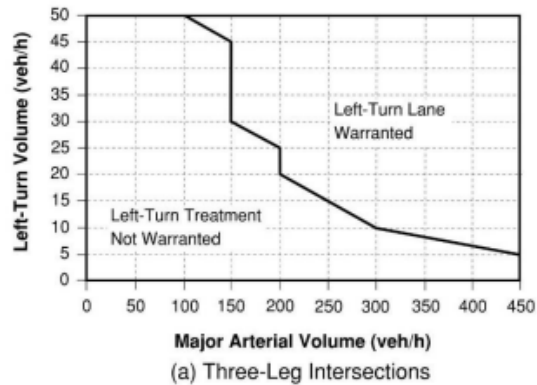


Figure 3-20: Functional Area, for an Exclusive Turn Lane.²⁷

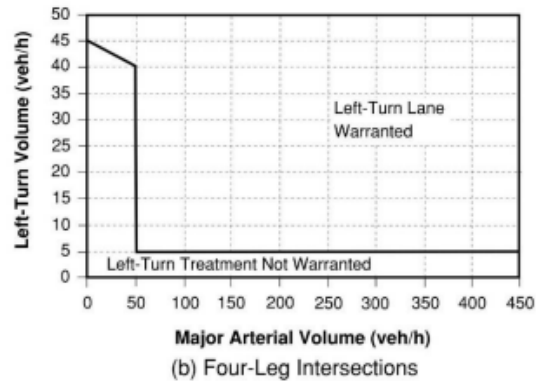
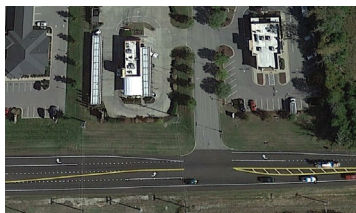


Access Geometry - Left-Turn Lane Warrants (Unsignalized)

“ . . . Warrants indicate situations where a left-turn lane would help mitigate traffic conflicts, not necessarily situations where a left-turn lane is required. . . ”



3-Leg Intersection

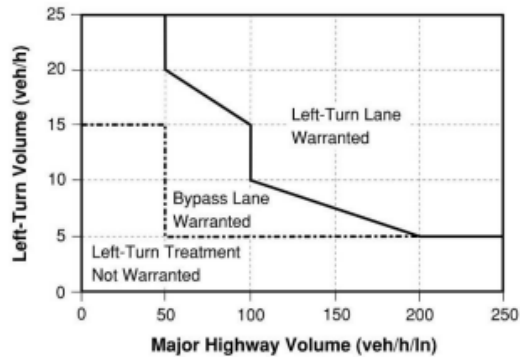


4-Leg Intersection

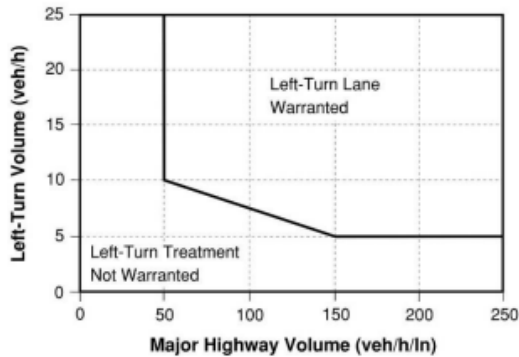


Urban & Suburban

Access Geometry - Left-Turn Lane Warrants (Unsignalized)

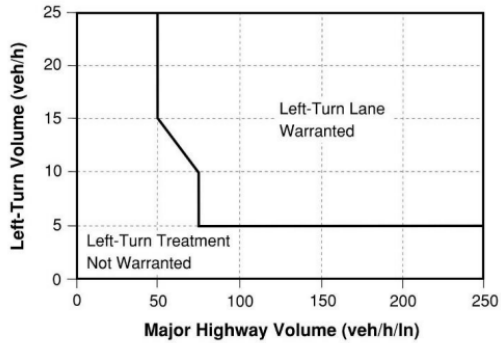


(a) Three-Leg Intersections

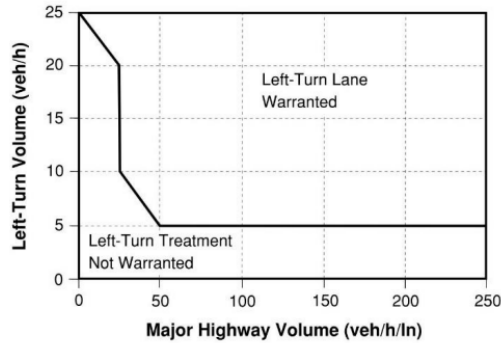


(b) Four-Leg Intersections

2-Lane Rural



(a) Three-Leg Intersections

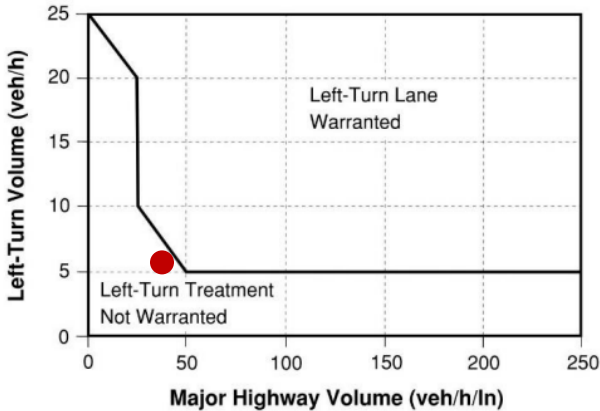


(b) Four-Leg Intersections

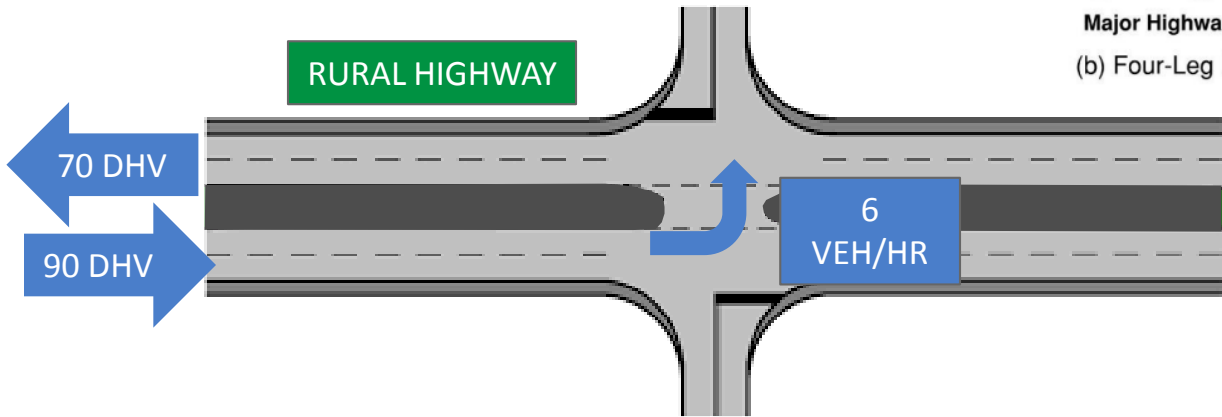
4-Lane Rural

Access Geometry - Left-Turn Lane Warrants (Unsignalized)

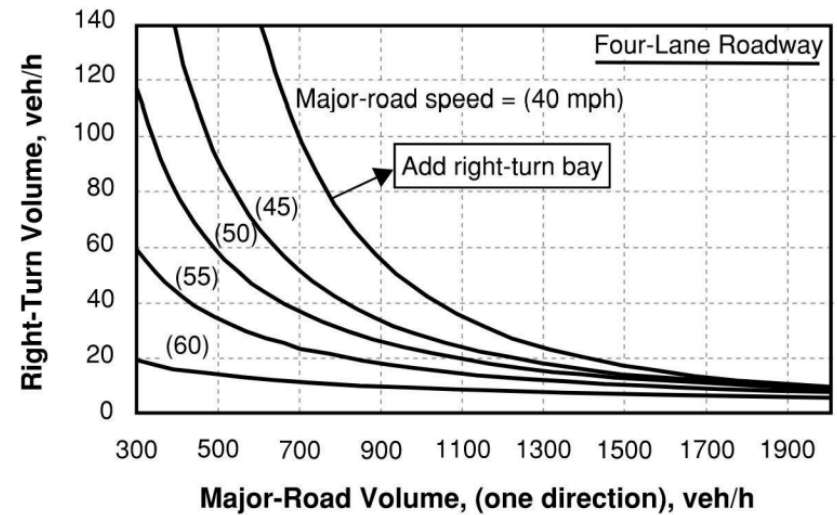
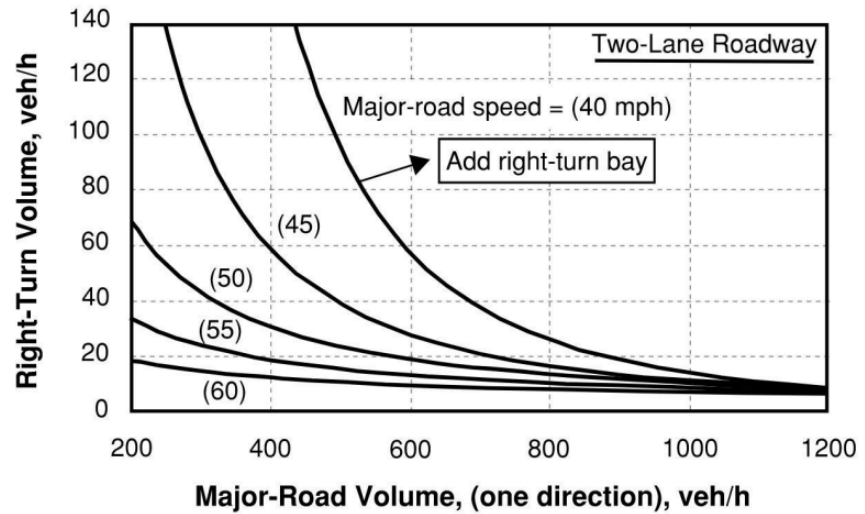
Left Turn Volume = 6 veh/hr
Major Highway Volume = 40 veh/hr/lane



(b) Four-Leg Intersections

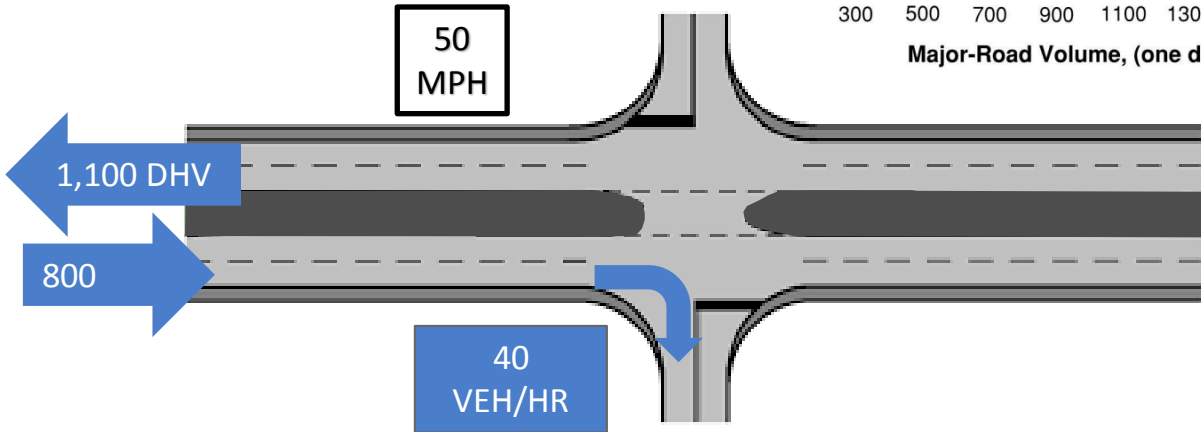
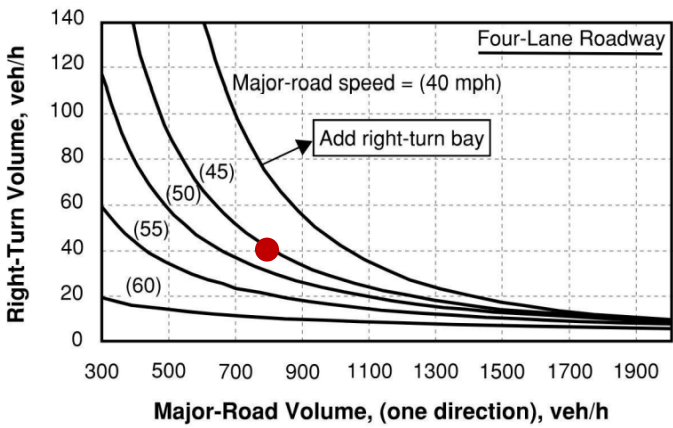


Access Geometry - Right-Turn Lane Warrants (Unsignalized)



Access Geometry - Right-Turn Lane Warrants (Unsignalized)

Right Turn Volume = 40 veh/hr
Major Highway Volume = 800 veh/hr DHV
Design Speed = 50 MPH



Access Geometry - Driveway

Horizontal Geometry

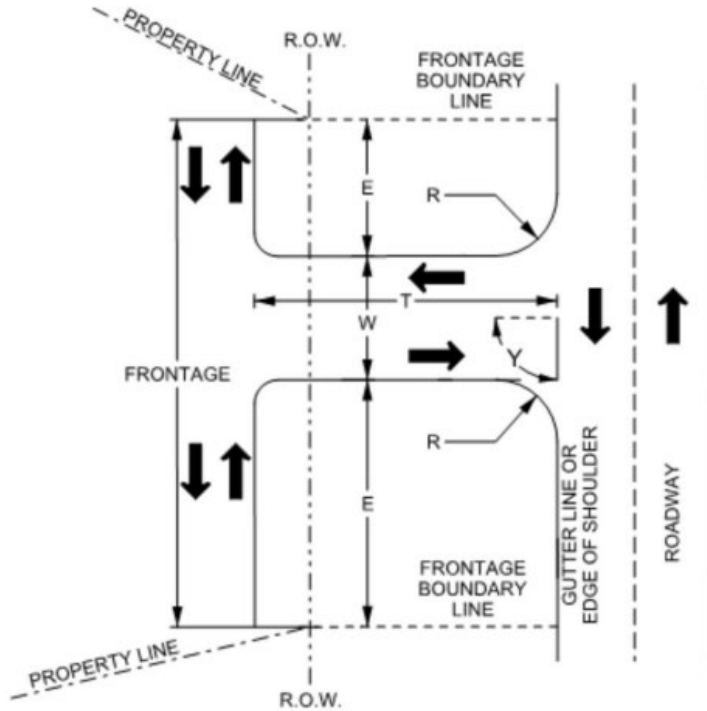


Figure 3-24: Horizontal Driveway Geometrics.

R – Radius of Curvature

W – Driveway Throat Width

T – Driveway Throat Length

Y – Driveway Angle

E – Driveway Edge Clearance

Access Geometry - Multimodal Considerations

“Driveway guidance traditionally focused on accommodating motor vehicles . . . Emphasis is also being placed on managing access and accommodating pedestrians and cyclists”

Manual Directs users to TDOT Design Guide, Chapter 3 along with relevant STD Drawings.

Key Points

- Additional Turn lanes increase conflict points with pedestrians and bikes.
- Larger turning radii increase crossing lengths for pedestrians.
- Larger turning radii increase vehicle speeds.

Medians - Overview



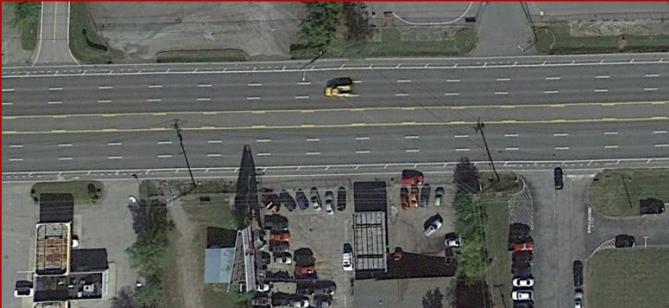
Medians - Two-Way Left-Turn Lanes

HSAM **Recommendations** for TWLTL:

- 3-Lane TWLTL should have ADT < 17,000 VPD
- 5-Lane TWLTL should have ADT < 28,000 VPD
- Posted Speed should be < 45 MPH to warrant TWLTL
- 7-Lane TWLTL is strongly discouraged
- Unsignalized Left-Turning movements across 3+ Lanes of Opposing traffic is strongly discouraged



STRONGLY DISCOURAGED



PREFERRED 6 LANE SECTION



Medians - Two-Way Left-Turn Lanes

Exclusive Left-Turn lanes **should** be provided instead of TWLTL where left-turning volumes from the median to a single access point exceed:

- 150 veh/h across one lane of opposing traffic
- 100 veh/h across two lanes of opposing traffic



U-Turn Guidance - Overview

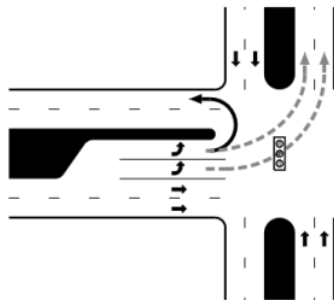
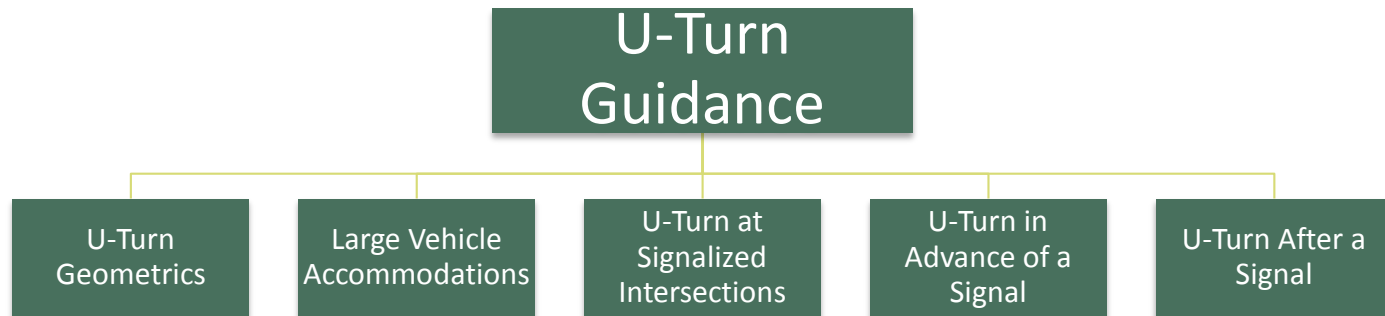


Figure 3-34: U-Turns at Dual Left-Turn Lanes

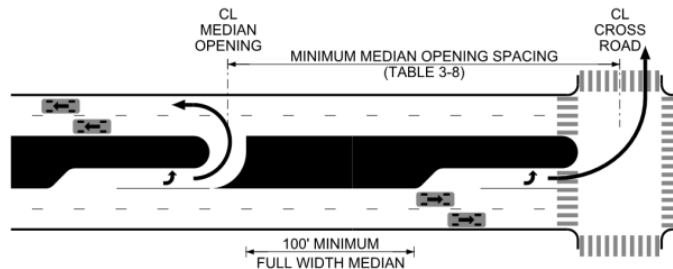


Figure 3-35: U-Turn in Advance of an Intersection.

Deviations - Design Jobs



Highway System Access Manual Form 1 (HSAM-1)

For Access Spacing and/or Access Design Deviations on TDOT Design Projects

To: Enter text	Title: Select Region	Date: Select date
From: Enter text	Title: Enter text	Email: Enter text
Project Number: Enter text	County: Enter text	Phone: ###-###-####
	Mainline Route: SR-XX	Log Mile(s): Enter text
Description of Design Project: Provide short description of project including termini.		

This form is intended to be used for either one or multiple deviation requests (per design project). Select all that apply concerning the roadway and land use context classifications, design speed, and type(s) of deviation(s) requested. Attach plan sheets or aerial imagery identifying each location.

Roadway Classification

- ☐ Principal Arterial
- ☐ Minor Arterial
- ☐ Major Collector
- ☐ Minor Collector
- ☐ Local Road or Street

Land Use Context

- ☐ Rural
- ☐ Rural Town
- ☐ Suburban
- ☐ Urban
- ☐ Urban Core

Speed: ## mph

Type(s) of Deviation(s)

Requested:

- ☐ Spacing - Complete Part A
- ☐ Design - Complete Part B

Part A: Access Spacing Deviation Request

Complete the following for spacing deviation request(s). Note: Single family and duplex residential driveways do not need to be included in the deviation request.

Access Spacing Deviation(s) Requested (select all that apply)

- ☐ Unsignalized Intersection Spacing (HSAM Table 3-4)
- ☐ Driveway Spacing (HSAM Tables 3-5 and 3-6)
- ☐ Number of Entrances per Property
- ☐ Access Spacing Opposite Side of the Roadway (HSAM Table 3-7)
- ☐ Spacing of Median Openings (HSAM Table 3-8)
- ☐ Spacing near Interchange Ramps (HSAM Tables 3-9 and 3-10)
- ☐ Driveway Edge Clearance (HSAM Table 3-15)
- ☐ Driveway Corner Clearance (HSAM Table 3-16)
- ☐ Other Spacing: Description

Most information is simple check boxes or drop downs. Need to identify:

- Roadway Classification
- Land Use context
- Speed
- Exact Criteria not being met
- Reason for not meeting criteria
 - Check boxes offer typical answers
- Include any supporting documents

Deviations submitted to the Regional Traffic Engineer. **Approved deviations required prior to the submittal of Right-of-Way Plans.**

Only applicable to Criteria in the HSAM Manual.

Deviations - Design Jobs



TDOT Highway System Access Form TDOT Design Projects - Spacing and Design Deviation



Highway System Access Manual Form 1 (HSAM-1)

For Access Spacing and/or Access Design Deviations on TDOT Design Projects

To: Enter text	Title: Select Region	Date: Select date
From: Enter text	Email: Enter text	Phone: ###-###-####
Project Number: Enter text	County: Enter text	Log Mile(s): Enter text
Description of Design Project: Provide short description of project including termini.		

Address to Region Traffic Engineer.
Provide Project information.

This form is intended to be used for either one or multiple deviation requests (per design project). Select all that apply concerning the roadway and land use context classifications, design speed, and type(s) of deviation(s) requested. Attach plan sheets or aerial imagery identifying each location.

Roadway Classification

- ☐ Principal Arterial
- ☐ Minor Arterial
- ☐ Major Collector
- ☐ Minor Collector
- ☐ Local Road or Street

Land Use Context

- ☐ Rural
- ☐ Rural Town
- ☐ Suburban
- ☐ Urban
- ☐ Urban Core

Speed: ## mph

Type(s) of Deviation(s)

- Requested:**
- ☐ Spacing - Complete Part A
 - ☐ Design - Complete Part B

Part A: Access Spacing Deviation Request

Complete the following for spacing deviation request(s). Note: Single family and duplex residential driveways do not need to be included in the deviation request.

Access Spacing Deviation(s) Requested (select all that apply)

- ☐ Unsignalized Intersection Spacing (HSAM Table 3-4)
- ☐ Driveway Spacing (HSAM Tables 3-5 and 3-6)
- ☐ Number of Entrances per Property
- ☐ Access Spacing Opposite Side of the Roadway (HSAM Table 3-7)
- ☐ Spacing of Median Openings (HSAM Table 3-8)
- ☐ Spacing near Interchange Ramps (HSAM Tables 3-9 and 3-10)
- ☐ Driveway Edge Clearance (HSAM Table 3-15)
- ☐ Driveway Corner Clearance (HSAM Table 3-16)
- ☐ Other Spacing: Description

To: Enter text	Title: Select Region	Date: Select date
From: Enter text	Title: Enter text	Email: Enter text
Project Number: Enter text	County: Enter text	Mainline Route: SR-XX
Description of Design Project: Provide short description of project including termini.		

Deviations - Design Jobs



TDOT Highway System Access Form TDOT Design Projects - Spacing and Design Deviation



Highway System Access Manual Form 1 (HSAM-1)

For Access Spacing and/or Access Design Deviations on TDOT Design Projects

To: Enter text	Title: Select Region	Date: Select date
From: Enter text	Email: Enter text	Phone: ###-###-####
Project Number: Enter text	County: Enter text	Log Mile(s): Enter text
Description of Design Project: Provide short description of project including termini.		

This form is intended to be used for either one or multiple deviation requests (per design project). Select all that apply concerning the roadway and land use context classifications, design speed, and type(s) of deviation(s) requested. Attach plan sheets or aerial imagery identifying each location.

Roadway Classification <input type="checkbox"/> Principal Arterial <input type="checkbox"/> Minor Arterial <input type="checkbox"/> Major Collector <input type="checkbox"/> Minor Collector <input type="checkbox"/> Local Road or Street	Land Use Context <input type="checkbox"/> Rural <input type="checkbox"/> Rural Town <input type="checkbox"/> Suburban <input type="checkbox"/> Urban <input type="checkbox"/> Urban Core	Speed: ## mph Type(s) of Deviation(s) Requested: <input type="checkbox"/> Spacing - Complete Part A <input type="checkbox"/> Design - Complete Part B
--	--	--

Part A: Access Spacing Deviation Request

Complete the following for spacing deviation request(s). Note: Single family and duplex residential driveways do not need to be included in the deviation request.

Access Spacing Deviation(s) Requested (select all that apply)

- ☐ Unsignalized Intersection Spacing (HSAM Table 3-4)
- ☐ Driveway Spacing (HSAM Tables 3-5 and 3-6)
- ☐ Number of Entrances per Property
- ☐ Access Spacing Opposite Side of the Roadway (HSAM Table 3-7)
- ☐ Spacing of Median Openings (HSAM Table 3-8)
- ☐ Spacing near Interchange Ramps (HSAM Tables 3-9 and 3-10)
- ☐ Driveway Edge Clearance (HSAM Table 3-15)
- ☐ Driveway Corner Clearance (HSAM Table 3-16)
- ☐ Other Spacing: Description

Select:

- Classification
- Speed
- Deviation Type (Spacing / Design)

Roadway Classification

- ☐ Principal Arterial
- ☐ Minor Arterial
- ☐ Major Collector
- ☐ Minor Collector
- ☐ Local Road or Street

Land Use Context

- ☐ Rural
- ☐ Rural Town
- ☐ Suburban
- ☐ Urban
- ☐ Urban Core

Speed: ## mph

Type(s) of Deviation(s)

Requested:

- ☐ Spacing - Complete Part A
- ☐ Design - Complete Part B

Deviations - Design Jobs



TDOT Highway System Access Form TDOT Design Projects - Spacing and Design Deviation



Highway System Access Manual Form 1 (HSAM-1)

For Access Spacing and/or Access Design Deviations on TDOT Design Projects

To: Enter text	Title: Select Region	Date: Select date
From: Enter text	Email: Enter text	Phone: ###-###-####
Project Number: Enter text	County: Enter text	Mainline Route: SR-XX
Log Mile(s): Enter text		
Description of Design Project: Provide short description of project including termini.		

This form is intended to be used for either one or multiple deviation requests (per design project). Select all that apply concerning the roadway and land use context classifications, design speed, and type(s) of deviation(s) requested. Attach plan sheets or aerial imagery identifying each location.

Roadway Classification

- ☐ Principal Arterial
- ☐ Minor Arterial
- ☐ Major Collector
- ☐ Minor Collector
- ☐ Local Road or Street

Land Use Context

- ☐ Rural
- ☐ Rural Town
- ☐ Suburban
- ☐ Urban
- ☐ Urban Core

Speed: ## mph

Type(s) of Deviation(s)

Requested:

- ☐ Spacing - Complete Part A
- ☐ Design - Complete Part B

Part A: Access Spacing Deviation Request

Complete the following for spacing deviation request(s). Note: Single family and duplex residential driveways do not need to be included in the deviation request.

Access Spacing Deviation(s) Requested (select all that apply)

- ☐ Unsignalized Intersection Spacing (HSAM Table 3-4)
- ☐ Driveway Spacing (HSAM Tables 3-5 and 3-6)
- ☐ Number of Entrances per Property
- ☐ Access Spacing Opposite Side of the Roadway (HSAM Table 3-7)
- ☐ Spacing of Median Openings (HSAM Table 3-8)
- ☐ Spacing near Interchange Ramps (HSAM Tables 3-9 and 3-10)
- ☐ Driveway Edge Clearance (HSAM Table 3-15)
- ☐ Driveway Corner Clearance (HSAM Table 3-16)
- ☐ Other Spacing: Description

Access Spacing Deviation(s) Requested (select all that apply)

- ☐ Unsignalized Intersection Spacing (HSAM Table 3-4)
- ☐ Driveway Spacing (HSAM Tables 3-5 and 3-6)
- ☐ Number of Entrances per Property
- ☐ Access Spacing Opposite Side of the Roadway (HSAM Table 3-7)
- ☐ Spacing of Median Openings (HSAM Table 3-8)
- ☐ Spacing near Interchange Ramps (HSAM Tables 3-9 and 3-10)
- ☐ Driveway Edge Clearance (HSAM Table 3-15)
- ☐ Driveway Corner Clearance (HSAM Table 3-16)
- ☐ Other Spacing: Description

For Spacing Deviations:
Check box of exact criteria not being met

Deviations - Design Jobs

Complete Table 1 or attach a table with similar information, including the following:

1. ID number
2. Route (mainline or crossroad name)
3. Station of each entrance/intersection/crossover
4. Type of entrance/intersection (signalized, unsignalized/full access, restricted access)
5. Access spacing deviation requested
6. Required spacing standards
7. Proposed spacing

Table1: Access Spacing Deviation Locations

ID	Route	Station	Type of Entrance	Deviation Requested	Required Spacing (FT.)	Proposed Spacing (FT.)
#	Route	##+###	Choose an item.	Choose an item.	####	####
#	Route	##+###	Choose an item.	Choose an item.	####	####
#	Route	##+###	Choose an item.	Choose an item.	####	####
#	Route	##+###	Choose an item.	Choose an item.	####	####
#	Route	##+###	Choose an item.	Choose an item.	####	####
#	Route	##+###	Choose an item.	Choose an item.	####	####
#	Route	##+###	Choose an item.	Choose an item.	####	####

Reason(s) for access spacing deviation request(s) (select all that apply):

- ☐ Replacing in existing location(s) with modifications only related to tie-down points to adjacent roadway. Note all location IDs: List ID#(s).
- ☐ To be located on an established corridor where existing spacing does not meet the HSAM spacing criteria. Note all location IDs: List ID#(s).
- ☐ Property frontage length(s) does not allow for HSAM spacing criteria to be met. Note all location IDs: List ID#(s).
- ☐ Other (beyond scope of project, etc.). Provide description(s) in text box below. Note all location IDs:

Description

Access Spacing Deviation Request Approval / To be completed by Reviewers

Spacing Deviation Reviewed By: Enter text Regional Traffic Engineer	Action: <input type="checkbox"/> Acceptable <input type="checkbox"/> Not Acceptable	Date: Select date
Remarks: Provide remarks if necessary.		
Spacing Deviation Reviewed By: Enter text State Traffic Engineer	Action: <input type="checkbox"/> Approved <input type="checkbox"/> Denied	Date: Select date
Remarks: Provide remarks if necessary.	Signature:	

Table1: Access Spacing Deviation Locations

ID	Route	Station	Type of Entrance	Deviation Requested	Required Spacing (FT.)	Proposed Spacing (FT.)
#	Route	##+###	Choose an item.	Choose an item.	####	####
#	Route	##+###	Choose an item.	Choose an item.	####	####
#	Route	##+###	Choose an item.	Choose an item.	####	####
#	Route	##+###	Choose an item.	Choose an item.	####	####
#	Route	##+###	Choose an item.	Choose an item.	####	####
#	Route	##+###	Choose an item.	Choose an item.	####	####
#	Route	##+###	Choose an item.	Choose an item.	####	####

Fill out Table with Specifics of the Deviation.

Table to capture multiple deviations along a specific route

Attach accompanying plan exhibits as needed to identify locations

Deviations - Design Jobs

Complete Table 1 or attach a table with similar information, including the following:

1. ID number
2. Route (mainline or crossroad name)
3. Station of each entrance/intersection/crossover
4. Type of entrance/intersection (signalized, unsignalized/full access, restricted access)
5. Access spacing deviation requested
6. Required spacing standards
7. Proposed spacing

Table1: Access Spacing Deviation Locations

ID	Route	Station	Type of Entrance	Deviation Requested	Required Spacing (FT.)	Proposed Spacing (FT.)
#	Route	###+###	Choose an item.	Choose an item.	###	###
#	Route	###+###	Choose an item.	Choose an item.	###	###
#	Route	###+###	Choose an item.	Choose an item.	###	###
#	Route	###+###	Choose an item.	Choose an item.	###	###
#	Route	###+###	Choose an item.	Choose an item.	###	###
#	Route	###+###	Choose an item.	Choose an item.	###	###
#	Route	###+###	Choose an item.	Choose an item.	###	###

Reason(s) for access spacing deviation request(s) (select all that apply):

- ☐ Replacing in existing location(s) with modifications only related to tie-down points to adjacent roadway. Note all location IDs: List ID#(s).
- ☐ To be located on an established corridor where existing spacing does not meet the HSAM spacing criteria. Note all location IDs: List ID#(s).
- ☐ Property frontage length(s) does not allow for HSAM spacing criteria to be met. Note all location IDs: List ID#(s).
- ☐ Other (beyond scope of project, etc.). Provide description(s) in text box below. Note all location IDs:

Description

Access Spacing Deviation Request Approval To be completed by Reviewers

Spacing Deviation Reviewed By: Enter text Regional Traffic Engineer	Action: <input type="checkbox"/> Acceptable <input type="checkbox"/> Not Acceptable	Date: Select date
Remarks: Provide remarks if necessary.		
Spacing Deviation Reviewed By: Enter text State Traffic Engineer	Action: <input type="checkbox"/> Approved <input type="checkbox"/> Denied	Date: Select date
Remarks: Provide remarks if necessary.		

Reason(s) for access spacing deviation request(s) (select all that apply):

- ☐ Replacing in existing location(s) with modifications only related to tie-down points to adjacent roadway. Note all location IDs: List ID#(s).
- ☐ To be located on an established corridor where existing spacing does not meet the HSAM spacing criteria. Note all location IDs: List ID#(s).
- ☐ Property frontage length(s) does not allow for HSAM spacing criteria to be met. Note all location IDs: List ID#(s).
- ☐ Other (beyond scope of project, etc.). Provide description(s) in text box below. Note all location IDs:

Description

Identify reason for Deviation

Standard list provided for common answers to this section

Deviations - Design Jobs

Complete Table 1 or attach a table with similar information, including the following:

1. ID number
2. Route (mainline or crossroad name)
3. Station of each entrance/intersection/crossover
4. Type of entrance/intersection (signalized, unsignalized/full access, restricted access)
5. Access spacing deviation requested
6. Required spacing standards
7. Proposed spacing

Table1: Access Spacing Deviation Locations

ID	Route	Station	Type of Entrance	Deviation Requested	Required Spacing (FT.)	Proposed Spacing (FT.)
#	Route	##+###	Choose an item.	Choose an item.	###	###
#	Route	##+###	Choose an item.	Choose an item.	###	###
#	Route	##+###	Choose an item.	Choose an item.	###	###
#	Route	##+###	Choose an item.	Choose an item.	###	###
#	Route	##+###	Choose an item.	Choose an item.	###	###
#	Route	##+###	Choose an item.	Choose an item.	###	###
#	Route	##+###	Choose an item.	Choose an item.	###	###

Reason(s) for access spacing deviation request(s) (select all that apply):

- ☐ Replacing in existing location(s) with modifications only related to tie-down points to adjacent roadway. Note all location IDs: List ID#(s).
- ☐ To be located on an established corridor where existing spacing does not meet the HSAM spacing criteria. Note all location IDs: List ID#(s).
- ☐ Property frontage length(s) does not allow for HSAM spacing criteria to be met. Note all location IDs: List ID#(s).
- ☐ Other (beyond scope of project, etc.). Provide description(s) in text box below. Note all location IDs:

Description

Access Spacing Deviation Request Approval / To be completed by Reviewers

Spacing Deviation Reviewed By:

Enter text

Regional Traffic Engineer

Action:

☐ Acceptable

☐ Not Acceptable

Date:

Select date

Remarks:

Provide remarks if necessary.

Spacing Deviation Reviewed By:

Enter text

State Traffic Engineer

Action:

☐ Approved

☐ Denied

Date:

Select date

Remarks:

Provide remarks if necessary.

Signature:

Approval section to be completed by Reviewers.

Deviations - Design Jobs

Part B: Access Design Deviation Request

Complete the following for design deviation request(s).

Access Design Deviation(s) Desired (Check all that apply)

- ☐ Driveway Radius of Curvature (HSAM Table 3-11 and 3-12)
- ☐ Driveway Width (HSAM Table 3-13)
- ☐ Driveway Grading and Profile
- ☐ Driveway Sight Distance
- ☐ Other Design Criteria:

Complete Table 2 or attach a table with similar information, including the following:

1. ID number
2. Route (mainline or)
3. Station of each entrance/intersection/crossover
4. Access design deviation requested
5. Description of deviation and why the deviation is necessary.

Table2: Access Design Deviation Location(s)

ID	Route	Station	Deviation Requested	Description
#	Route	###+##	Choose an item.	
#	Route	###+##	Choose an item.	
#	Route	###+##	Choose an item.	
#	Route	###+##	Choose an item.	

Optional: Provide additional description(s) in text box below including why the deviation(s) are necessary. Note all location IDs:

Description

Access Design Deviation Request Approval / To be completed by Reviewers

Design Deviation Reviewed By: Enter text Regional Traffic Engineer	Action: <input type="checkbox"/> Acceptable <input type="checkbox"/> Not Acceptable	Date: Select date
Remarks: Provide remarks if necessary.		
Design Deviation Reviewed By: Enter text State Traffic Engineer	Action: <input type="checkbox"/> Approved <input type="checkbox"/> Denied	Date: Select date
Remarks: Provide remarks if necessary.		Signature:

For Geometric Deviations:

Select specific criteria not being met

Deviations - Design Jobs

Part B: Access Design Deviation Request

Complete the following for design deviation request(s).

Access Design Deviation(s) Desired (Check all that apply)

- ☐ Driveway Radius of Curvature (HSAM Table 3-11 and 3-12)
- ☐ Driveway Width (HSAM Table 3-13)
- ☐ Driveway Grading and Profile
- ☐ Driveway Sight Distance
- ☐ Other Design Criteria:

Complete Table 2 or attach a table with similar information, including the following:

1. ID number
2. Route (mainline or
3. Station of each entrance/intersection/crossover
4. Access design deviation requested
5. Description of deviation and why the deviation is necessary.

Table2: Access Design Deviation Location(s)

ID	Route	Station	Deviation Requested	Description
#	Route	##+##	Choose an item.	
#	Route	##+##	Choose an item.	
#	Route	##+##	Choose an item.	
#	Route	##+##	Choose an item.	

Identify Specifics of the deviation. Include specific values used, what they should be, and why that cannot be met.

Table allows for multiple similar deviations to be combined to single submittal.

Optional: Provide additional description(s) in text box below including why the deviation(s) are necessary. Note all location IDs:

Access Design Deviation Request Approval / To be completed by Reviewers

Design Deviation Reviewed By: Enter text Regional Traffic Engineer	Action: <input type="checkbox"/> Acceptable <input type="checkbox"/> Not Acceptable	Date: Select date
Remarks: Provide remarks if necessary.		
Design Deviation Reviewed By: Enter text State Traffic Engineer	Action: <input type="checkbox"/> Approved <input type="checkbox"/> Denied	Date: Select date
Remarks: Provide remarks if necessary.		Signature:

Deviations - Design Jobs

Part B: Access Design Deviation Request

Complete the following for design deviation request(s).

Access Design Deviation(s) Desired (Check all that apply)

- ☐ Driveway Radius of Curvature (HSAM Table 3-11 and 3-12)
- ☐ Driveway Width (HSAM Table 3-13)
- ☐ Driveway Grading and Profile
- ☐ Driveway Sight Distance
- ☐ Other Design Criteria:

Complete Table 2 or attach a table with similar information, including the following:

1. ID number
2. Route (mainline or
3. Station of each entrance/intersection/crossover
4. Access design deviation requested
5. Description of deviation and why the deviation is necessary.

Table2: Access Design Deviation Location(s)

ID	Route	Station	Deviation Requested	Description
#	Route	##+##	Choose an item.	
#	Route	##+##	Choose an item.	
#	Route	##+##	Choose an item.	
#	Route	##+##	Choose an item.	

Optional: Provide additional description(s) in text box below including why the deviation(s) are necessary. Note all location IDs:

Access Design Deviation Request Approval / To be completed by Reviewers

Design Deviation Reviewed By: Enter text Regional Traffic Engineer	Action: <input type="checkbox"/> Acceptable <input type="checkbox"/> Not Acceptable	Date: Select date
Remarks: Provide remarks if necessary.		
Design Deviation Reviewed By: Enter text State Traffic Engineer	Action: <input type="checkbox"/> Approved <input type="checkbox"/> Denied	Date: Select date
Remarks: Provide remarks if necessary.	Signature:	

Approval section for TDOT Reviewers