

Why Should We Do Access Management?

- Relationship to Functional Classification
- Guiding Principles for Texas
- What are We Trying to Fix/Avoid?
 - Common Problems on Roadways



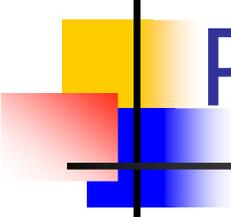
Principal Arterial

Minor Arterial

Locals

Collector

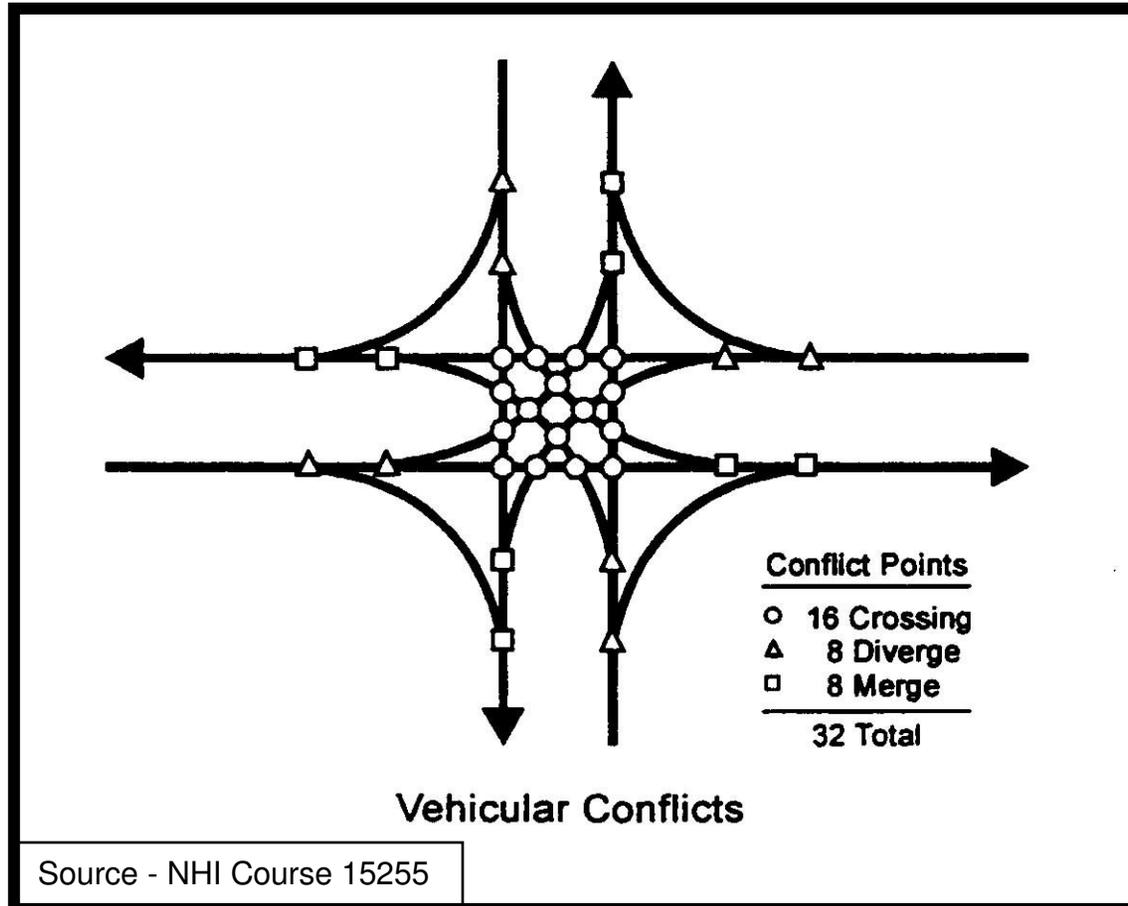
Freeway



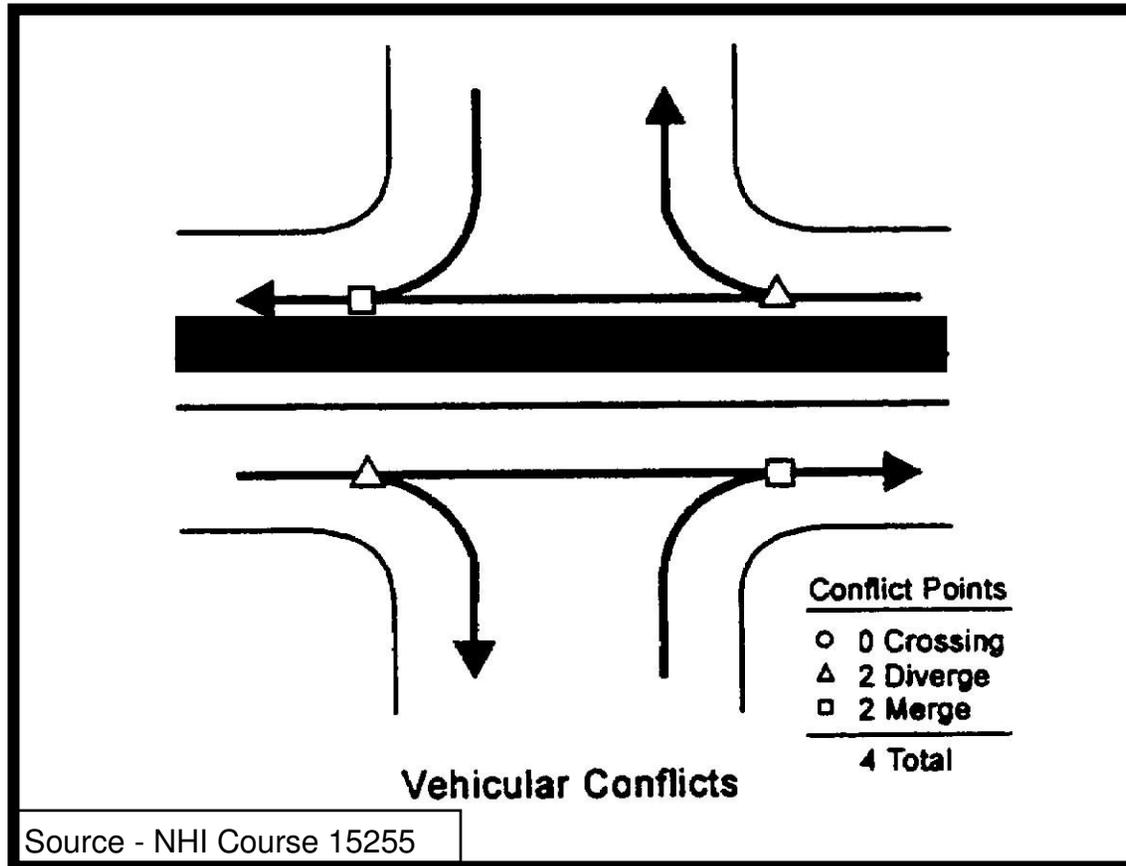
Access Management Guiding Principles For Texas

- “SAFETY and MOBILITY”
 - **Safety**
 - Reducing Conflict Points Reduces Crash Potential
 - ~ 50% of all Crashes are Intersection-Related
 - Driveways are intersections, too!
 - More than 3500 People Die in Texas Crashes Each Year

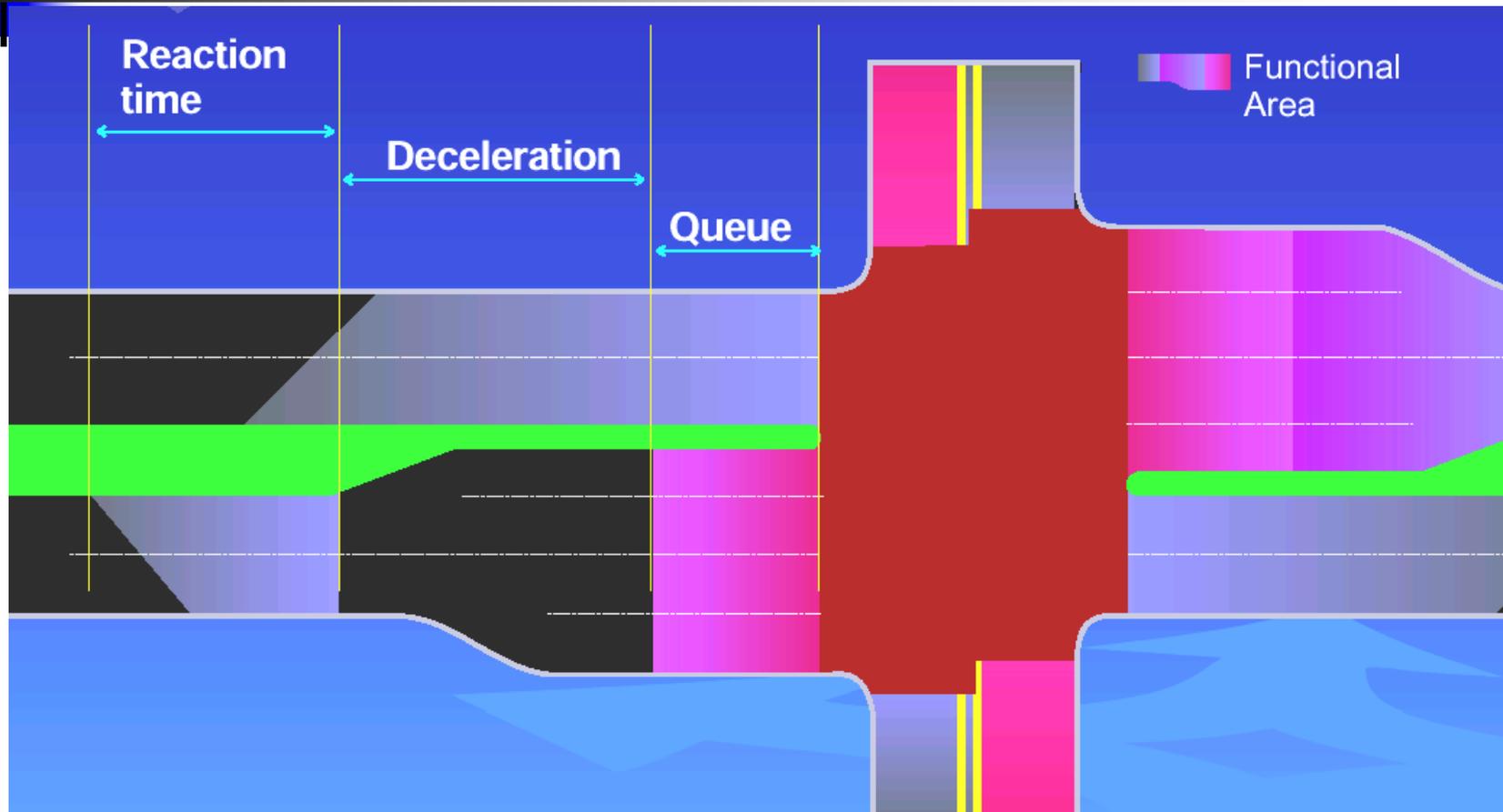
4-Leg Intersection Conflict Points



Conflict Points with Raised Median



Functional Area of an Intersection



Safety Issues

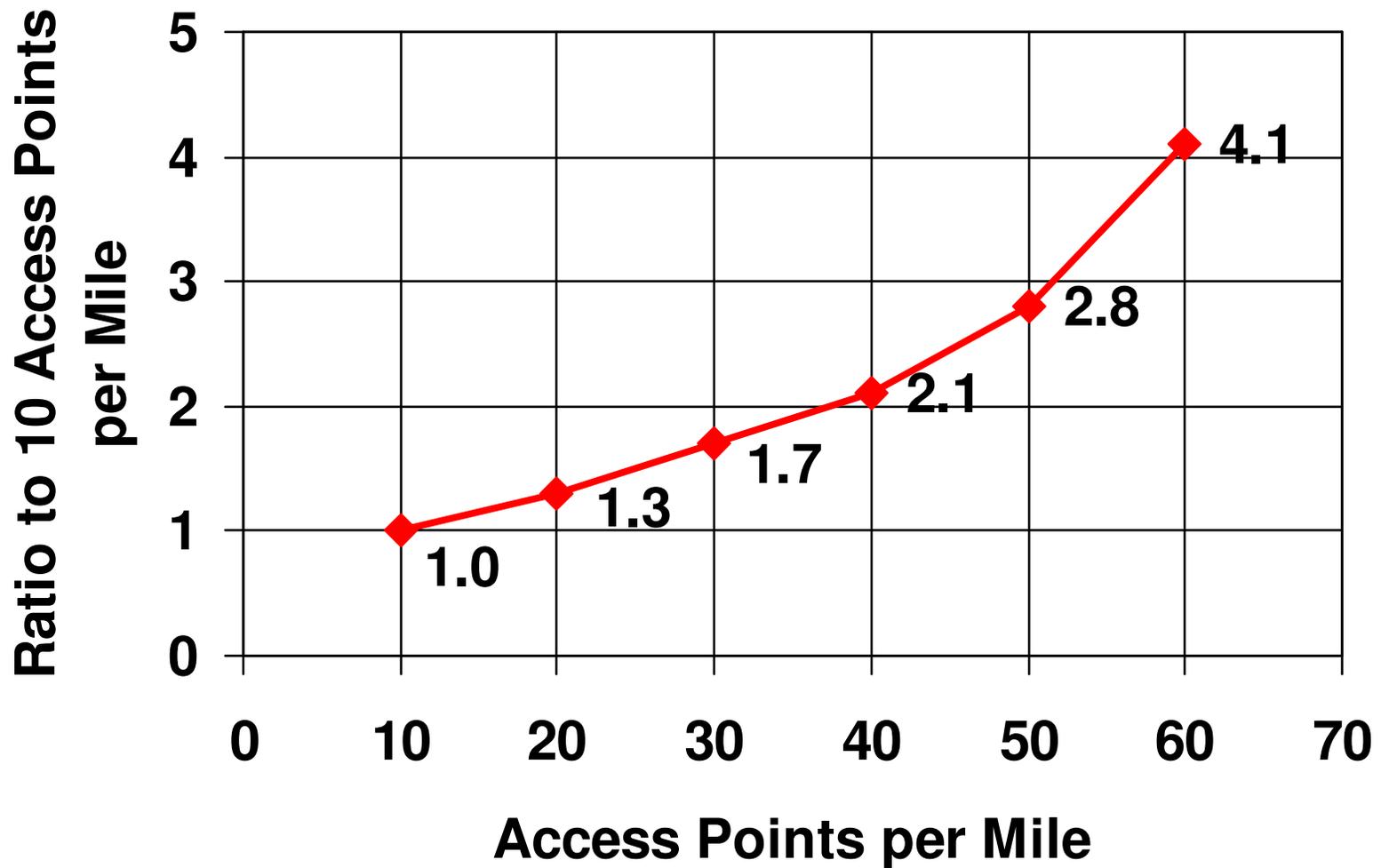
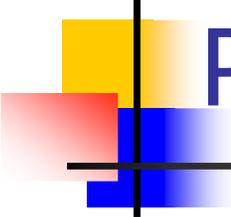


Table 1-1. Accident Rates

Representative Accident Rates (Crashes per Million VMT) by Type of Median – Urban and Suburban Areas			
Total Access Points per Mile (1)	Median Type		
	Undivided	Two-Way Left-Turn Lane	Non Traversable Median
<20	3.8	3.4	2.9
20.01-40	7.3	5.9	5.1
40.01-60	9.4	7.9	6.8
>60	10.6	9.2	8.3
Average Rate	9.0	6.9	5.6

(1) Includes both signalized and unsignalized access points.

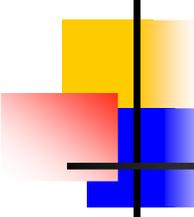


Access Management Guiding Principles For Texas

- “SAFETY and MOBILITY”
 - **Mobility**
 - Allow Through-Traffic to Move More Efficiently
 - Separate Speed Differentials
 - Less Braking and Hard Acceleration

Table 1-2. Access Points and Free Flow Speed

Access Points and Free Flow Speed	
Access points per mile	Reduction in free flow speed, mph
0	0.0
10	2.5
20	5.0
30	7.5
40 or more	10

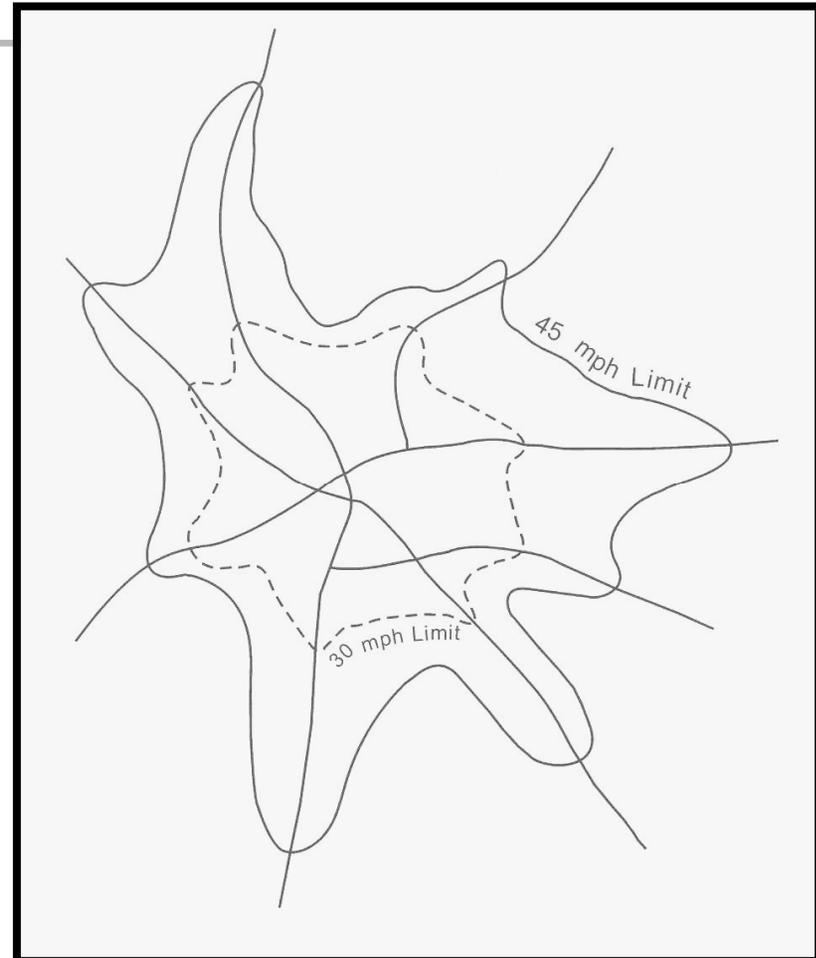


Economic Effects

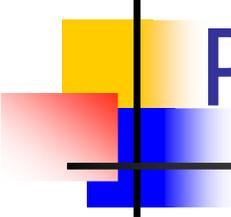
- Access management techniques, in general, are not directly related to retail sales
- Poorly designed access treatments can present traffic hazards and congestion that create a negative image of a center (Urban Land Institute (ULI) Shopping Center Development Handbook)

Economic Effects

- Market area is important to business success
 - Reduction of travel speeds means smaller market areas

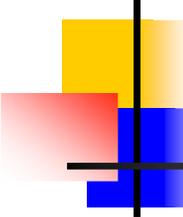


Graphic from *Transportation and Land Development* – Stover and Koepke



Access Management Guiding Principles For Texas

- “Access Management Can Provide Reasonable Access to Developments”
 - Transportation and Land Development Must Exist Together

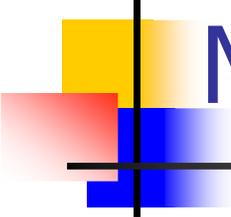


Reasonable Access

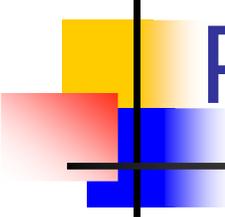
- EXAMPLE Definition

- *The minimum number of connections, direct or indirect, necessary to provide safe ingress and egress to the State Highway System based on the access classification, projected connection and roadway traffic volume, and type or intensity of the land use.*

Other Benefits of Access Management

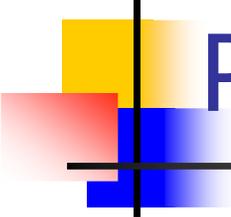


- Financial – can delay or prevent improvements such as “Double and Triple Bypasses”
- Promote properly designed access and circulation systems for development
- Aesthetics – landscaping and overall appearance
- Pedestrian and bicycle safety



Access Management Guiding Principles For Texas

- “Promote Local Government Partnerships”
 - TxDOT Desires to Coordinate and Cooperate in Development and Access Review
 - Ensures Both Agencies are “On The Same Page”
 - Engineering Should be Coordinated with Local Agencies
 - Geometrics, Hydrology, Etc
 - Statewide Implementation Consistency



Promote Local Government Partnerships

- San Antonio Example - Plats
 - Developer submits plats to TxDOT
 - Developer and TxDOT work out issues
 - TxDOT keeps track of number of allowed driveways per plat
 - TxDOT provides comments to city
 - City includes comments on final plat