

LA DOTD's Newest Access Management Presentation tool

Corridor Visualization Explorer



Introduction

Start here

Learn more

Feedback

Share on Facebook

Share on Twitter

Explore

Change the values

See the consequences

Learn



Share

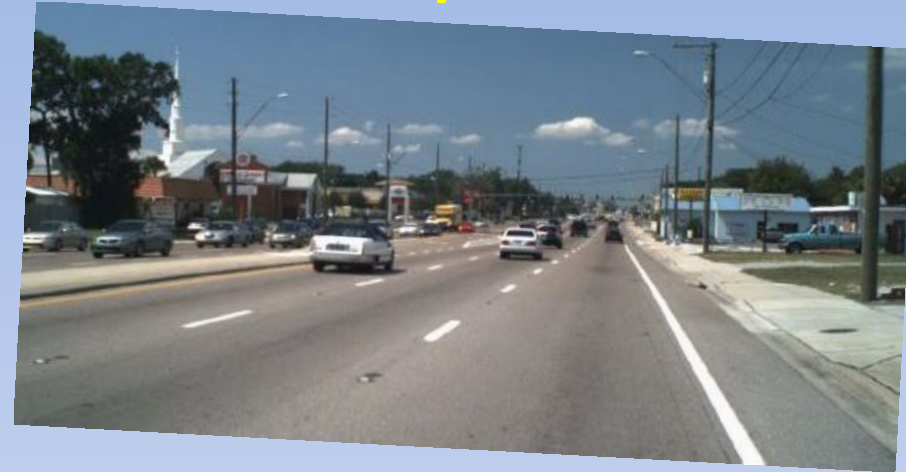


About the CVE Project

Access

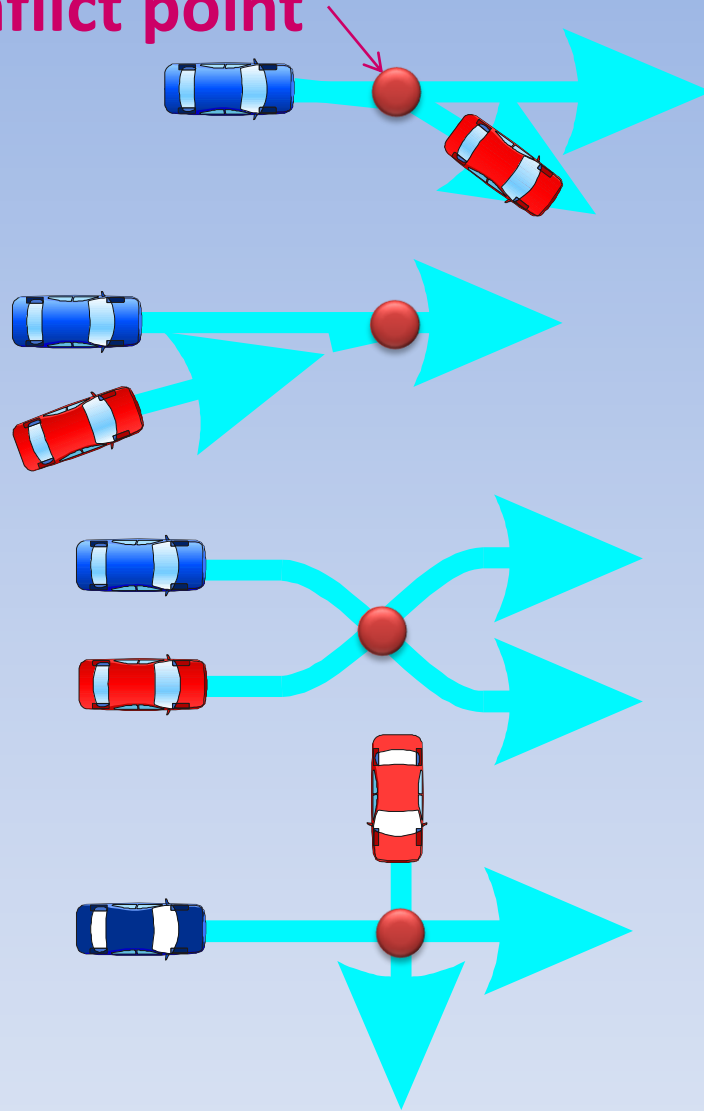


Mobility



Where is the *balance*?

Conflict point

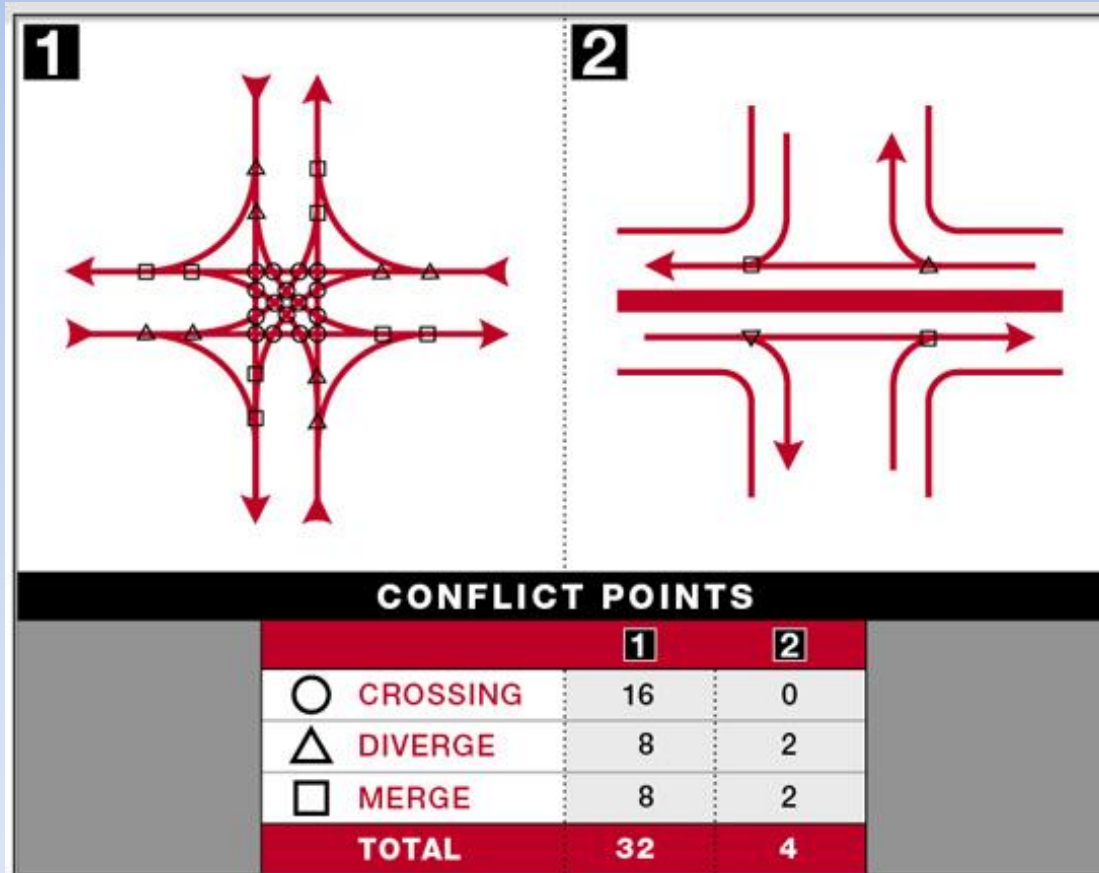


Access Increases Traffic Conflicts

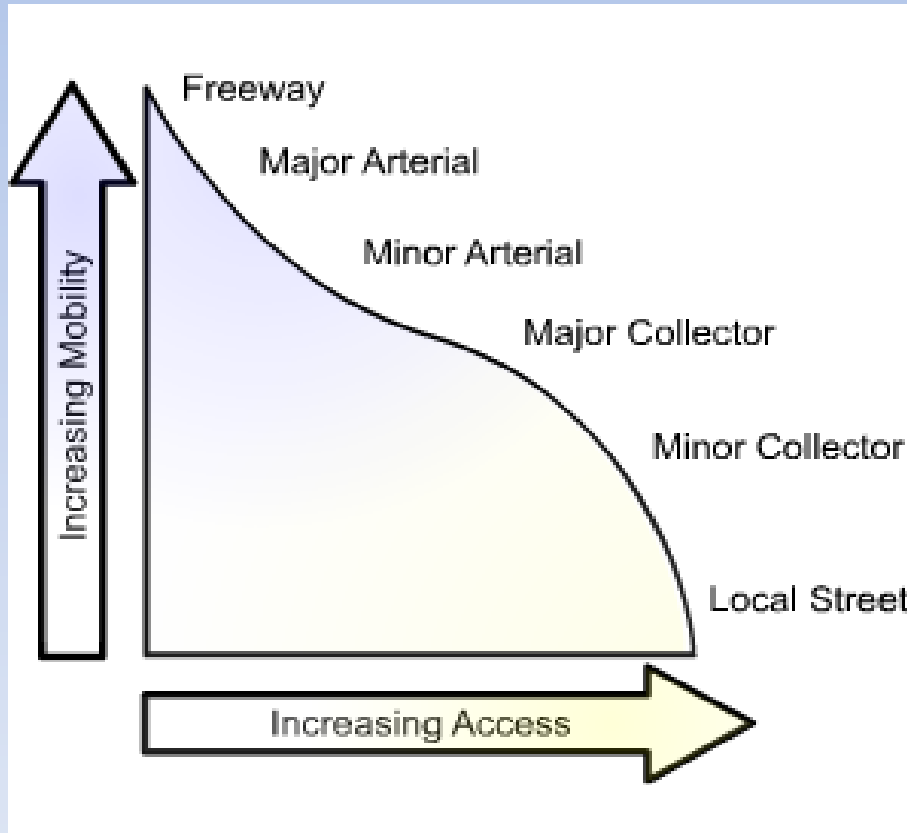
Access Management

improves
safety

by
reducing
conflict
points



Access Management



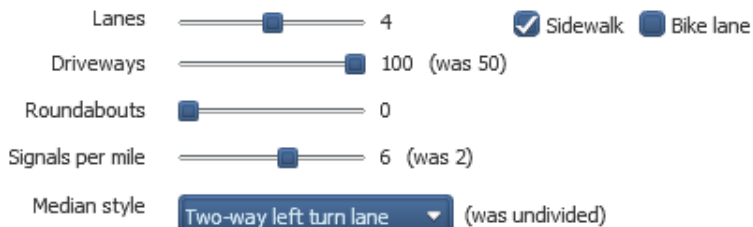
HCM Exhibit 21-7. Access - Point Density Adjustment	
Access Points/mile	Reduction in Free flow speed (mph)
0	0
10	2.5
20	5
30	7.5
>40	10

Unfortunately.....



doesn't always cut it.....

Road characteristics (values shown per mile)



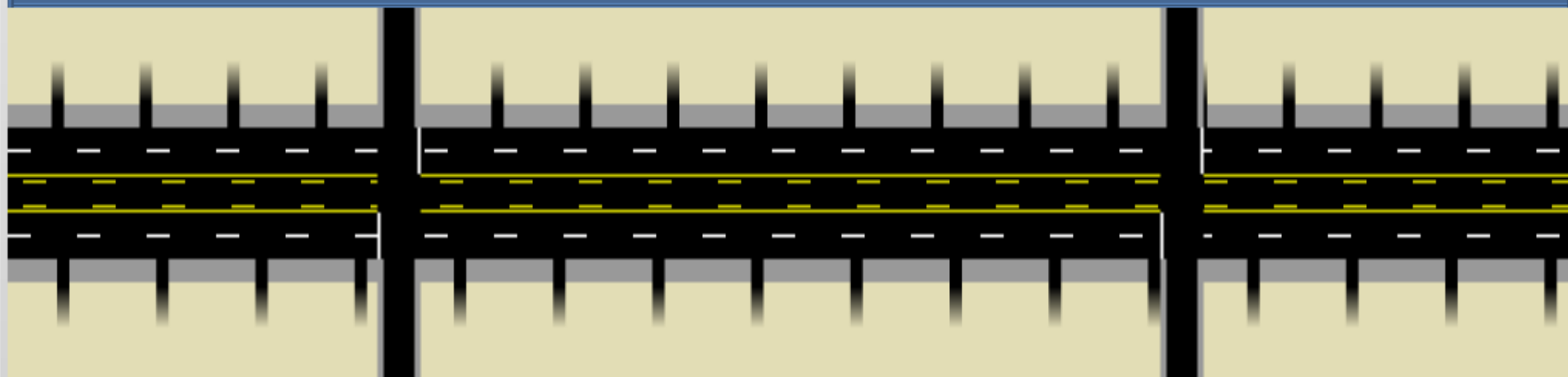
Traffic Conditions



NOTE TO USER

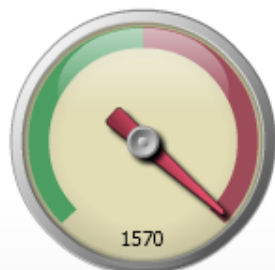
The primary value of this tool is to communicate the principles of access management. Though founded on research and published reports, the values shown are estimates and should be used only for general planning applications. Some relationships may be inferred that are not supported by research. They approximate generalized conditions and do not represent any specific roadway.

Your road (1/3 of a mile)

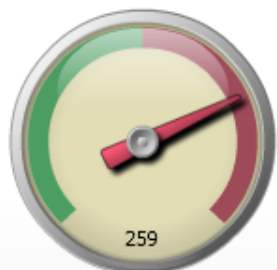
[Show conflict points](#)

Consequences

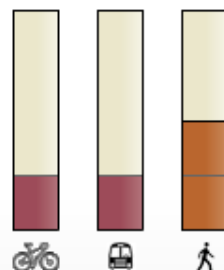
Conflict points



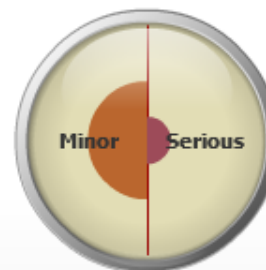
Seconds of delay per vehicle



Quality of service



Crashes



Economic impact

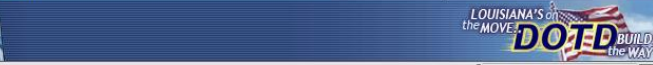


Not specific



NOTE TO USER

The primary value of this tool is to communicate the principles of access management. Though founded on research and published reports, the values shown are estimates and should be used only for general planning applications. Some relationships may be inferred that are not supported by research. They approximate generalized conditions and do not represent any specific roadway.



- La DOTD
- About DOTD
- Doing Business With DOTD
- Employment
- Transportation
- Pre-Construction
- Construction
- Operations
- Programs & Projects
- Public Works & Water Res.
- Publications / Manuals
- GIS / Maps Online
- Contacting DOTD
- Employee Portal

Welcome to DOTD.Louisiana.gov
Philosophy: LA DOTD exists to serve the transportation and water resources needs of the public. Integrity, professionalism, innovation and excellence in

- Aviation
- Highway Safety
- Louisiana Transportation Authority
- Louisiana Transportation Research Center
- Marine & Rail
- New Orleans - CCCD Bridge/Ferries
- Public Transportation
- Public Works and Water Resources
- Traffic Counts
- Traffic Engineering
- Weights & Standards (Permits)



- News in DOTD
- 6/9/2011 - White Castle ferry to return to service
 - 6/2/2011 - Plaquemine ferry to return to service
 - 6/1/2011 - DOTD secures contractor to repair Barataria Bridge
 - 6/1/2011 - Update on State Agency Flood Fighting Efforts in Louisiana
 - 5/25/2011 - DOTD announces new traffic cameras in the Lafayette region
 - 5/18/2011 - DOTD's Complete Streets Policy ranked second in nation
 - 5/17/2011 - Traffic cameras now available between LaPlace and Kenner
 - 5/10/2011 - DOTD reminds citizens to get latest road condition updates through the 511 Traveler Information System
 - 12/4/2008 - Crescent City Connection Audits/Evaluations
- Click Here: To view all DOTD Press Releases

- On the Move
- Secretary LeBas' Project Update on Act 402 of 1976
 - Secretary LeBas' Crescent City Connection (CCCD) Presentation
 - Secretary Sherril LeBas' State of the Department Address
 - Complete Streets Final Report 07-29-2010

- What's New on the Site
- La 3073 Ambassador Caffery/Chemin Metairie Intersection Redesign
 - Weeks Island Bridges Project
 - DOTD Vendor Registration
 - US 90 Interchange at LA 85 Project (New Iberia)
 - LaGov Information For Vendors
 - eStore - DOTD's Online Store



SECRETARY SHERRI LEBAS

Quick Links

- Contact Us
- Email Comments
- Press Releases
- Public Meetings
- Truck Permits

Traffic Information

- Ferry Status
- Moveable Bridge Status
- Traveler Information and Road Closures

Traffic Cameras

- Baton Rouge
- Lafayette
- Hammond/Northshore
- Houma
- Lake Charles
- Monroe/West Monroe
- New Orleans
- Shreveport \ Bossier





- Traffic Engineering
- Traffic Cameras
- Traffic Counts

Traffic Engineering

- > [Corridor Visualization Explorer](#)
- > [Policy For Controlled Access Highways.pdf](#)
- > [Driveway Permits Rule](#)
- > [\(MUTCD\) Manual on Uniform Traffic Control Devices](#)

Traffic Enforcement Systems For Local Governments

A - Traffic Enforcement Systems Policy with cover letter signed by Chief Engineer.pdf	446 kb
A1 - Guide.pdf	312 kb
B - Permitting Process Flow Chart.pdf	240 kb
C - Potential Permit Location Request.pdf	57 kb
D - Example Engineering Report.pdf	2 mb
E - Previously Attempted Red Light Running Countermeasures Checklist.pdf	95 kb
F - Making Intersections Safer title sheet.pdf	128 kb
G - Low Cost Local Road Safety Solution.pdf	1 mb

Traffic Engineering Documents

Access Management Brochure 2010.pdf	9 mb
Access Management Topics from Statewide Meetings.pdf	39 kb
CFI Report (10-07-2007).pdf	10 mb
CVE FinalReport03-11-2011.pdf	1 mb
Driveway Permit Application Process - Chief Cover Letter - 07.06.2009.pdf	263 kb
FHWA Interpretation for MUTCD.pdf	1 mb
La DOTD Traffic Signal Design Manual.pdf	9 mb
Permit Approval Matrix rev12-2007.xls	55 kb
Policy For Controlled Access Highways.pdf	422 kb
Roundabout Brochure Color.pdf	1 mb
Speed Brochure v1.pdf	599 kb
Traffic Impact Requirements Appeal Procedure.pdf	20 kb
Traffic Impact Requirements Appeal Procedure.pdf	45 kb
Traffic Engineering Manual (5-1-2007).pdf	2 mb
Traffic Impact Rule Comments.pdf	1 mb
Traffic Contacts Color (Jan2010).pdf	554 kb
Traffic Impacts Policy 20070611.pdf	542 kb
Traffic Impact Rule Title 70 v2.pdf	67 kb

Vendor Information

Corridor Visualization Explorer



- Introduction
- Start here
- Learn more
- Feedback
- Share on Facebook
- Share on Twitter

Explore

Change the values

See the consequences

Learn

Driveways

Intersections

Share

About the CVE Project

Corridor Visualization Explorer



- Introduction
- Start here
- Learn more
- Feedback
- Share on Facebook
- Share on Twitter

Click to select an opening scenario

Select from one of four different corridor scenarios. This will set benchmark values for Road Characteristics and Traffic Conditions that are changeable. Adjusting those values immediately changes the displays, showing the Consequences for your particular corridor scenario. All calculations are based on a 1-mile segment of roadway... the graphic you see represents only 1/3 of that mile.

Corridor Visualization Explorer

Select your scenario

	<p>Two Lane Urban</p> <p>Roughly 10,000 vehicles travel this road each day, 100 driveways per mile</p>
	<p>Four Lane Undivided</p> <p>Serves roughly 25,000 vehicles each day, 130 driveways per mile</p>
	<p>Four Lane with Two-way Left Turn Lane</p> <p>Serves roughly 25,000 vehicles every day, 150 driveways per mile</p>
	<p>Six Lane Divided</p> <p>A busy six-lane thoroughfare that wisks at least 40,000 vehicles per day, 100 driveways per mile.</p>

Share

Corridor Visualization Explorer

Select your scenario



Two Lane Urban

Roughly 10,000 vehicles travel this road each day. 50 driveways per mile



Four Lane Undivided

Serves roughly 25,000 vehicles each day. 50 driveways per mile



Four Lane with Two-way Left Turn Lane

Serves roughly 25,000 vehicles every day. 50 driveways per mile



Six Lane Divided

A busy six-lane thoroughfare that wisks at least 40,000 vehicles per day. 50 driveways per mile.

Road characteristics (values shown per mile)

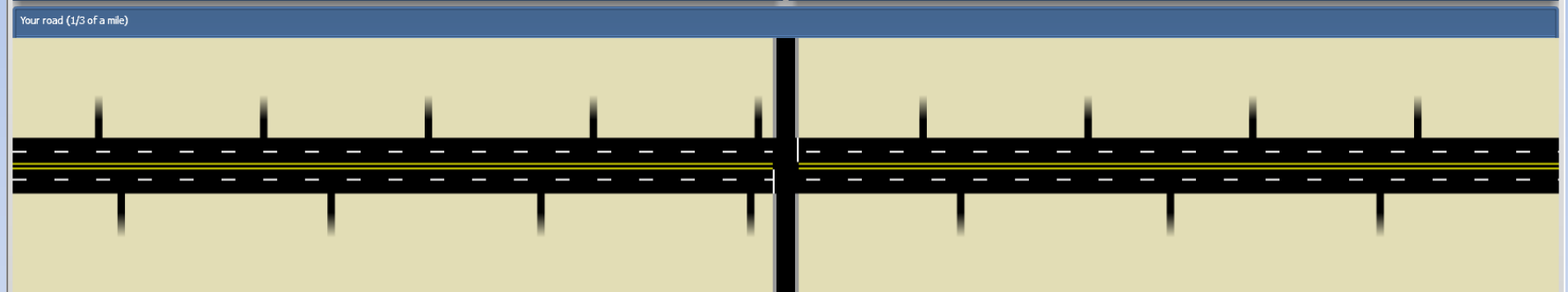
Lanes: 4
Driveways: 50
Roundabouts: 0
Signals per mile: 2
Median style: Undivided

Sidewalk Bike lane

Traffic Conditions

Vehicles per day: 25000
Transit buses per hour: 1

NOTE TO USER
The primary value of this tool is to communicate the principles of access management. Though founded on research and published reports, the values shown are estimates and should be used only for general planning applications. Some relationships may be inferred that are not supported by research. They approximate generalized conditions and do not represent any specific roadway.



Consequences

Conflict points: 815

Seconds of delay per vehicle: 58

Quality of service: Bike, Bus, Ped

Crashes: Minor, Serious

Economic impact: Business, Market Area

Corridor Visualization Explorer


Road characteristics (values shown per mile)

Lanes	<input type="range" value="4"/>	4	<input checked="" type="checkbox"/> Sidewalk	<input checked="" type="checkbox"/> Bike lane
Driveways	<input type="range" value="50"/>	50		
Roundabouts	<input type="range" value="0"/>	0		
Signals per mile	<input type="range" value="2"/>	2		
Median style	<input type="text" value="Undivided"/>			

[Home](#)[Choose another scenario](#)[Learn more](#)[Share on Facebook](#)

Traffic Conditions

Vehicles per  25000

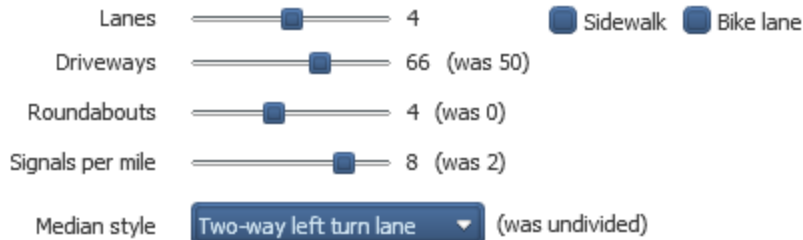
Transit buses per hour  1

NOTE TO USER

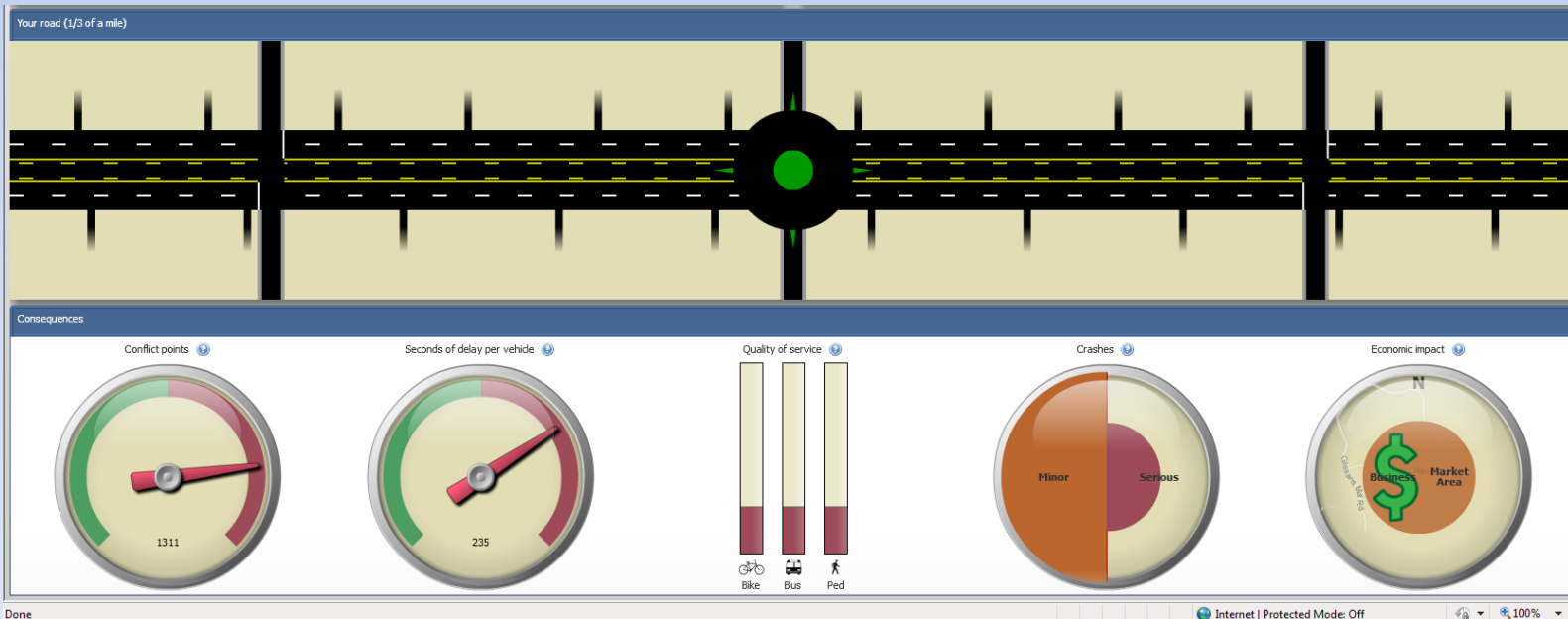
The primary value of this tool is to communicate the principles of access management. Though founded on research and published reports, the values shown are estimates and should be used only for general planning applications. Some relationships may be inferred that are not supported by research. They approximate generalized conditions and do not represent any specific roadway.

Corridor Visualization Explorer

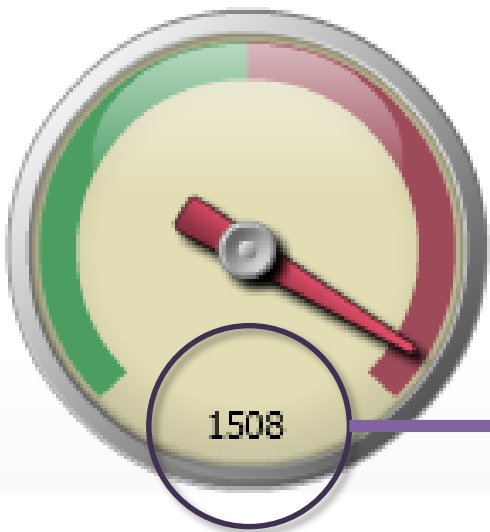
Road characteristics (values shown per mile)



As the settings are adjusted, the schematic of the roadway adjusts to match and the dials provide consequence information



Conflict points 




→ **Conflict points**

← for 1 mile →

→ 1/3 mile shown


Consequences

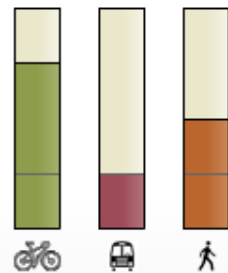
Conflict points 



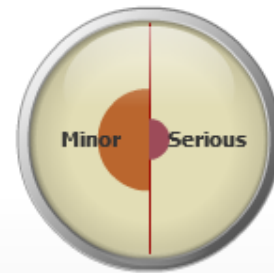
Seconds of delay per vehicle 




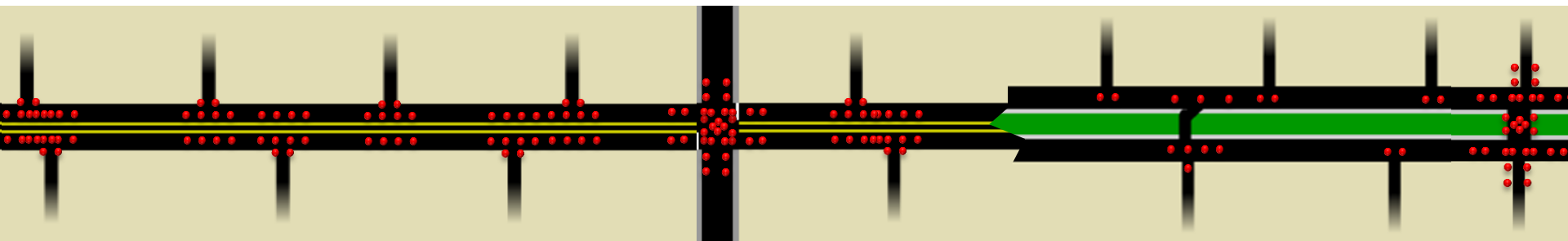
Quality of service 



Crashes 

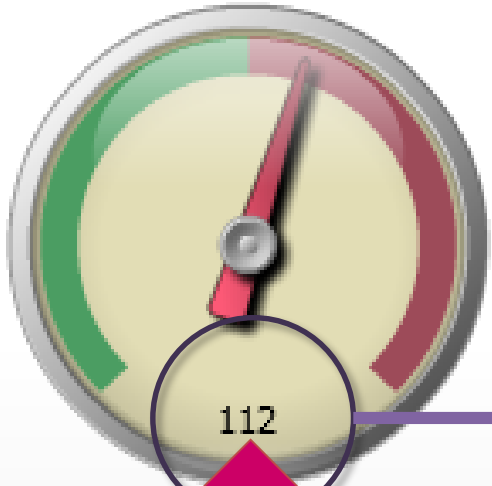


Economic impact 



Seconds of delay per vehicle 

See attachments for more explanation 



Seconds of delay per vehicle per mile

Seconds of Delay needle is set in the middle of the dial based on initial assumptions and displays improving or worsening conditions.

112

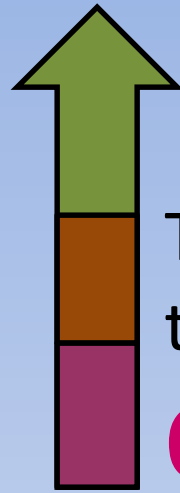
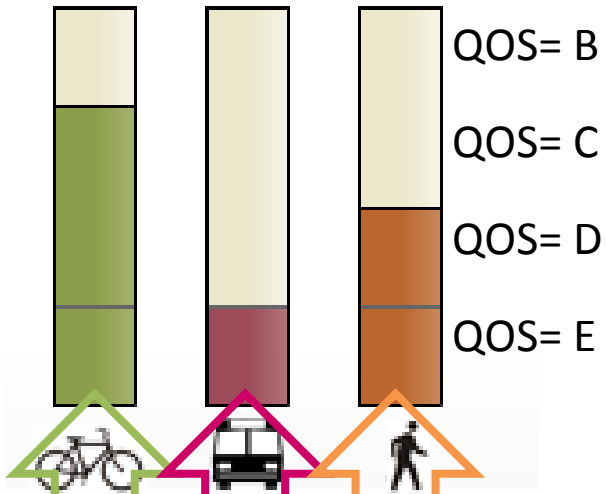
D

Lanes	Median	B	C	D	E
2	Undivided	**	10,500	15,200	16,200
4	Divided	**	25,000	33,200	35,100
6	Divided	**	39,000	50,300	53,100

Calculate LOS from table 

Seconds of Delay were calculated by determining the Level of Service and then converting to Seconds of Delay using LOSPLAN

Quality of service 



The taller the bar,
the better the

Quality of Service

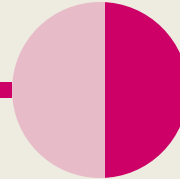
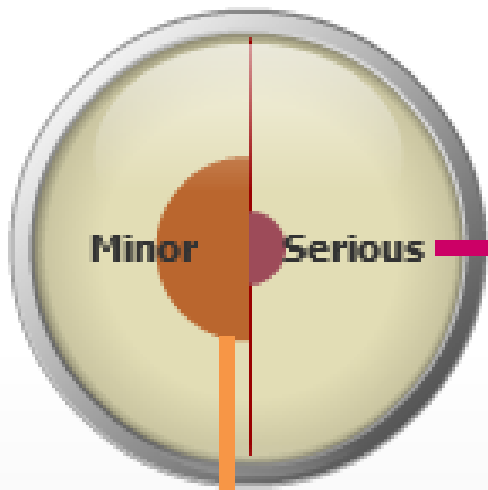
Pedestrian 

Bus Transit 

Bicycle 

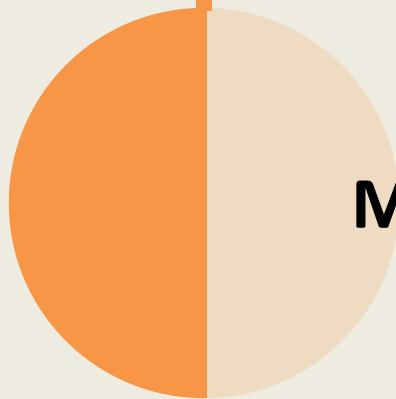
Calculated from Q/LOS Table

Crashes ?




Serious = injury and fatal crashes

The more **Crashes**,
the larger the circles



Minor = property crashes

Crashes were calculated based on data from
NCHRP Report 420 – Impacts of Access Management Techniques

Economic impact 

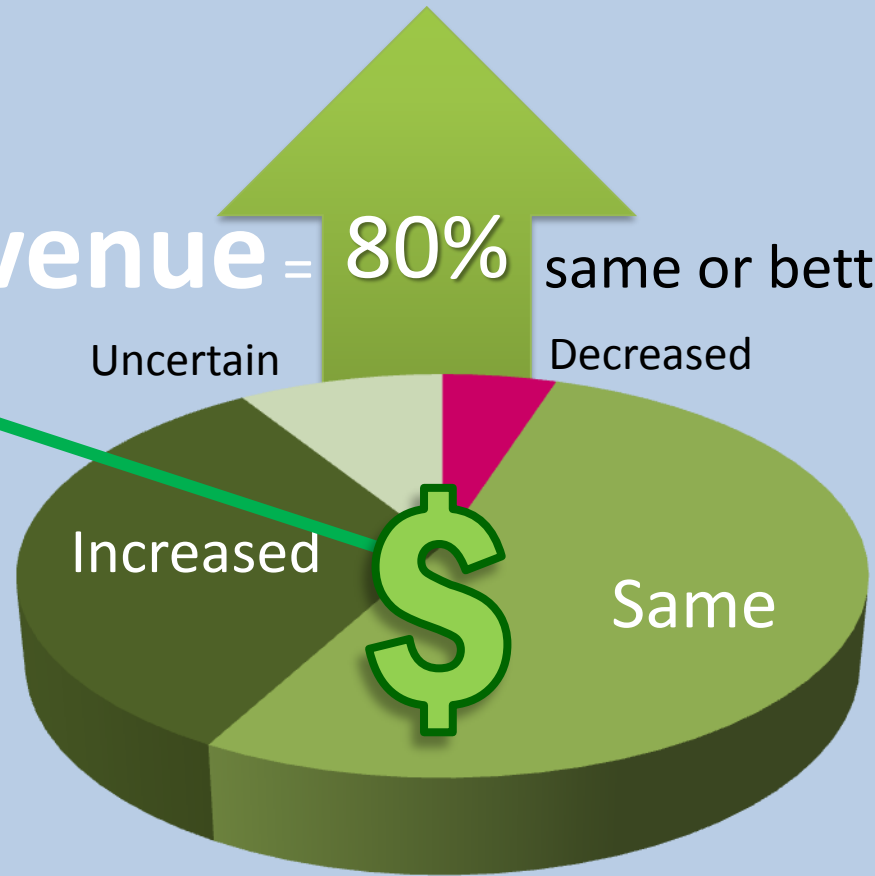


Market area

The larger the market area, the better for business.

Business revenue

Revenue = 80% same or better



The \$ indicator shows the impact of access management on business revenue.*

*Except for convenience stores/gas stations

This tool will help show balance

Scenario Visualization Explorer Choose another scenario

Road characteristics (values shown per mile)

- Lanes: 4
- Driveways: 150
- Roundabouts: 0
- Signals per mile: 7 (was 2)
- Median style: **Two-way left turn lane**
- Sidewalk Bike lane

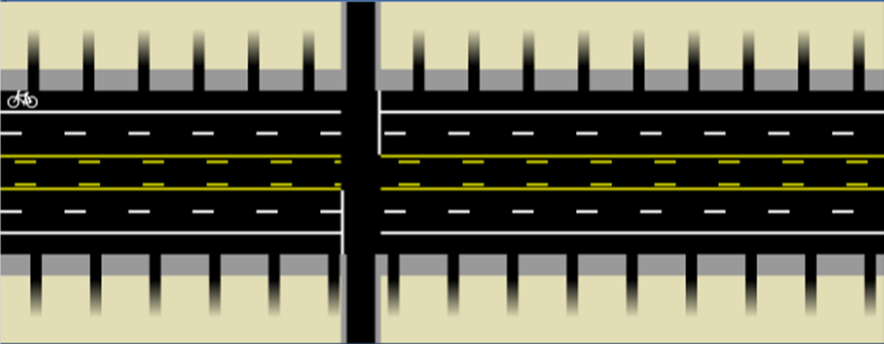
Traffic Conditions

Vehicles per **day**

Transit buses per hour

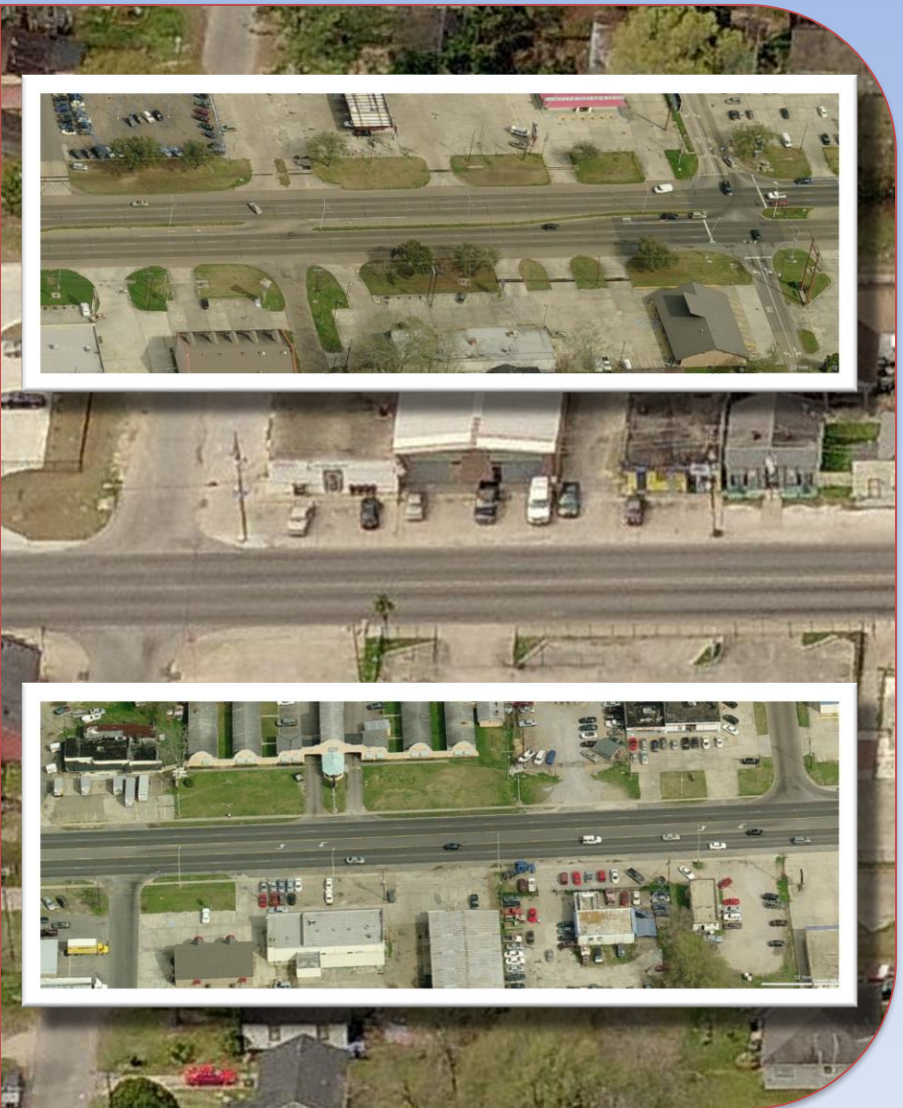
NOTE TO USE
The primary value of this tool is based on research only for general planning purposes. They are not intended for use in a roadway.

Your road (1/3 of a mile)



Consequences

- Conflict points: **2345**
- Seconds of delay per vehicle: **333**
- Quality of service:
 - Bike:
 - Bus:
 - Pedestrian:



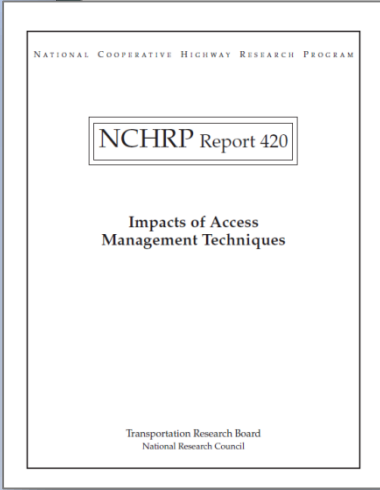
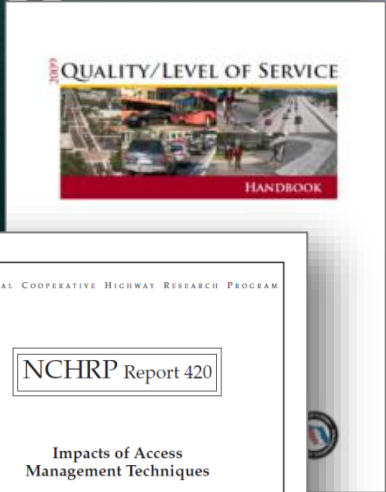
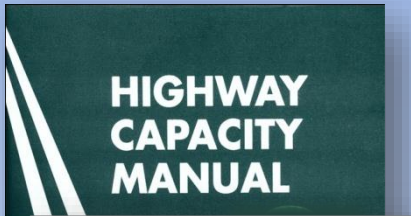


TABLE 1 International Annual Average Daily Volumes for Month's Equivalent Hours

Class	Volume	ADT	ADT	ADT	ADT
STATE-CLASSIFIED ARTERIALS					
Class I (100% of posted speed limit)					
1	10,000	10,000	10,000	10,000	10,000
2	15,000	15,000	15,000	15,000	15,000
3	20,000	20,000	20,000	20,000	20,000
4	25,000	25,000	25,000	25,000	25,000
5	30,000	30,000	30,000	30,000	30,000
Class II (80% of posted speed limit)					
1	10,000	10,000	10,000	10,000	10,000
2	15,000	15,000	15,000	15,000	15,000
3	20,000	20,000	20,000	20,000	20,000
4	25,000	25,000	25,000	25,000	25,000
5	30,000	30,000	30,000	30,000	30,000
Class III (60% of posted speed limit)					
1	10,000	10,000	10,000	10,000	10,000
2	15,000	15,000	15,000	15,000	15,000
3	20,000	20,000	20,000	20,000	20,000
4	25,000	25,000	25,000	25,000	25,000
5	30,000	30,000	30,000	30,000	30,000
UNCLASSIFIED FLOW HIGHWAYS					
1	10,000	10,000	10,000	10,000	10,000
2	15,000	15,000	15,000	15,000	15,000
3	20,000	20,000	20,000	20,000	20,000
4	25,000	25,000	25,000	25,000	25,000
5	30,000	30,000	30,000	30,000	30,000
BI-LEVEL HIGHWAYS					
1	10,000	10,000	10,000	10,000	10,000
2	15,000	15,000	15,000	15,000	15,000
3	20,000	20,000	20,000	20,000	20,000
4	25,000	25,000	25,000	25,000	25,000
5	30,000	30,000	30,000	30,000	30,000
BI-LEVEL HIGHWAYS (Shoulder & Frontage Road)					
1	10,000	10,000	10,000	10,000	10,000
2	15,000	15,000	15,000	15,000	15,000
3	20,000	20,000	20,000	20,000	20,000
4	25,000	25,000	25,000	25,000	25,000
5	30,000	30,000	30,000	30,000	30,000



Tables

CVE

National Research

SAFE ACCESS IS GOOD FOR BUSINESS



US Department of Transportation
Federal Highway Administration

You may be reading this primer because your state transportation agency or local government has told you about plans that will affect access to your business. They may be planning to install a raised median on your roadway, to close a median opening, or to reconfigure your driveway. Perhaps your request for a driveway is under review or the regulating agency has imposed conditions on its approval. Or, maybe the state or local agency is planning a new access policy and you have questions or concerns about the economic effects of these changes.

Whatever the reason, it is important for you to understand the basis for these changes and how they might affect your business. This primer will address questions you may have about access management and its effect on business activity and the local economy. It focuses on economic concerns that may arise in response to proposed access changes or policies, including potential impacts on business activity, freight, and deliveries.

Ten Ways to Manage
Roadway Access
in Your Community

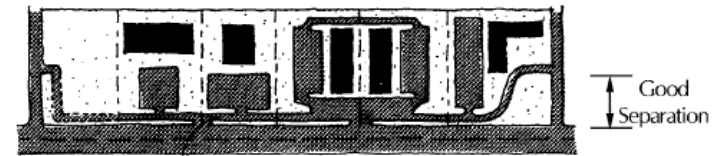
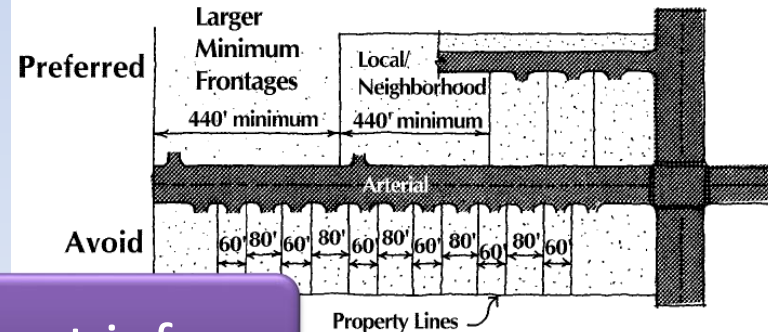
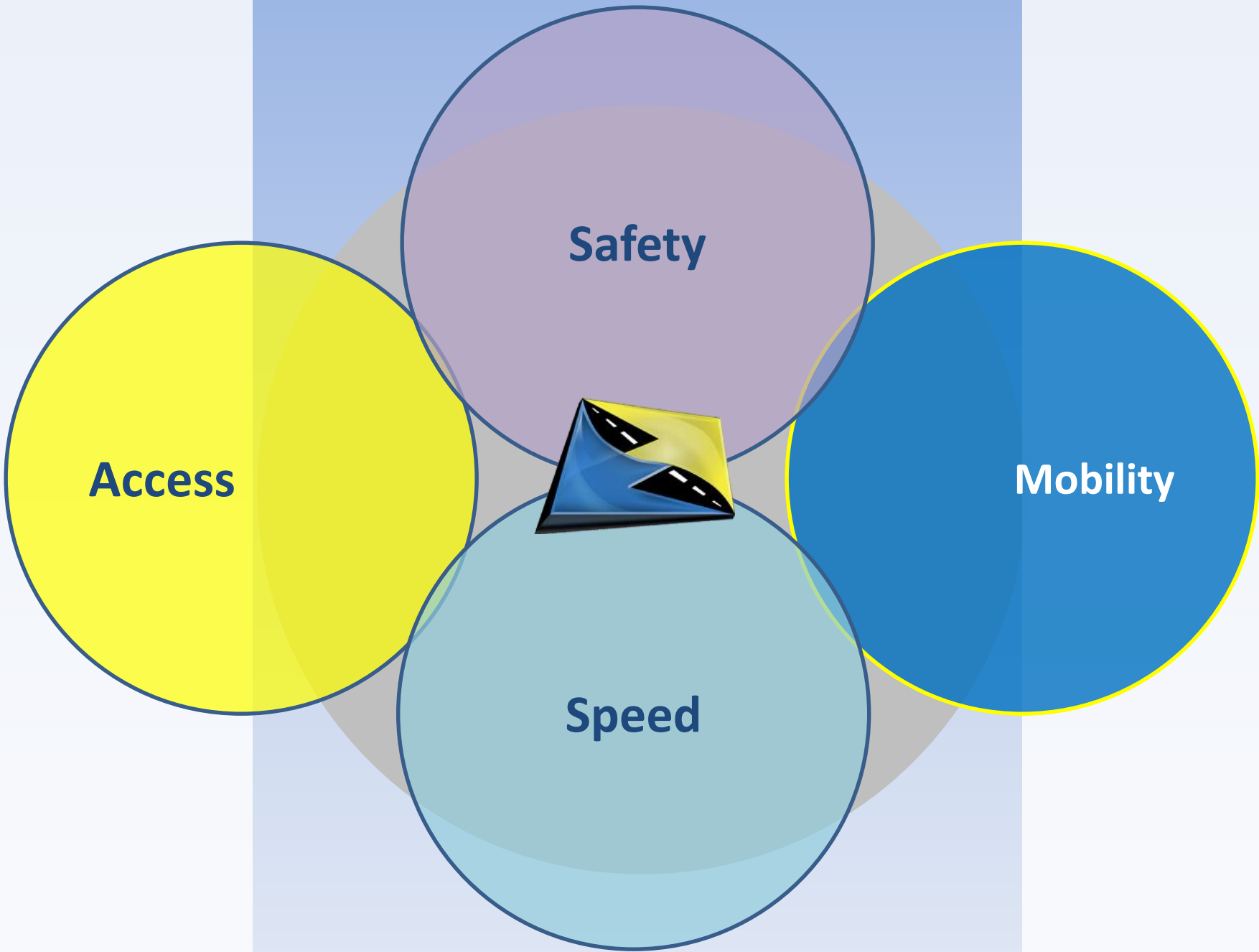


Figure 4. Cross access.



not frontage requirements.

www.accessmanagement.info



Safety

Access

Speed

Mobility

QUESTIONS????

Thank you

Joshua Harrouch, P.E.
LA DOTD Corridor Mgt. Engineer

Joshua.harrouch@la.gov

225-242-4640