State Route 6 (SR 6) Access Management Study

Stakeholder Meeting #2

October 24, 2014

STATE ROUTE 6
ACCESS MANAGEMENT STUDY

Georgia Department of Transportation

Outline

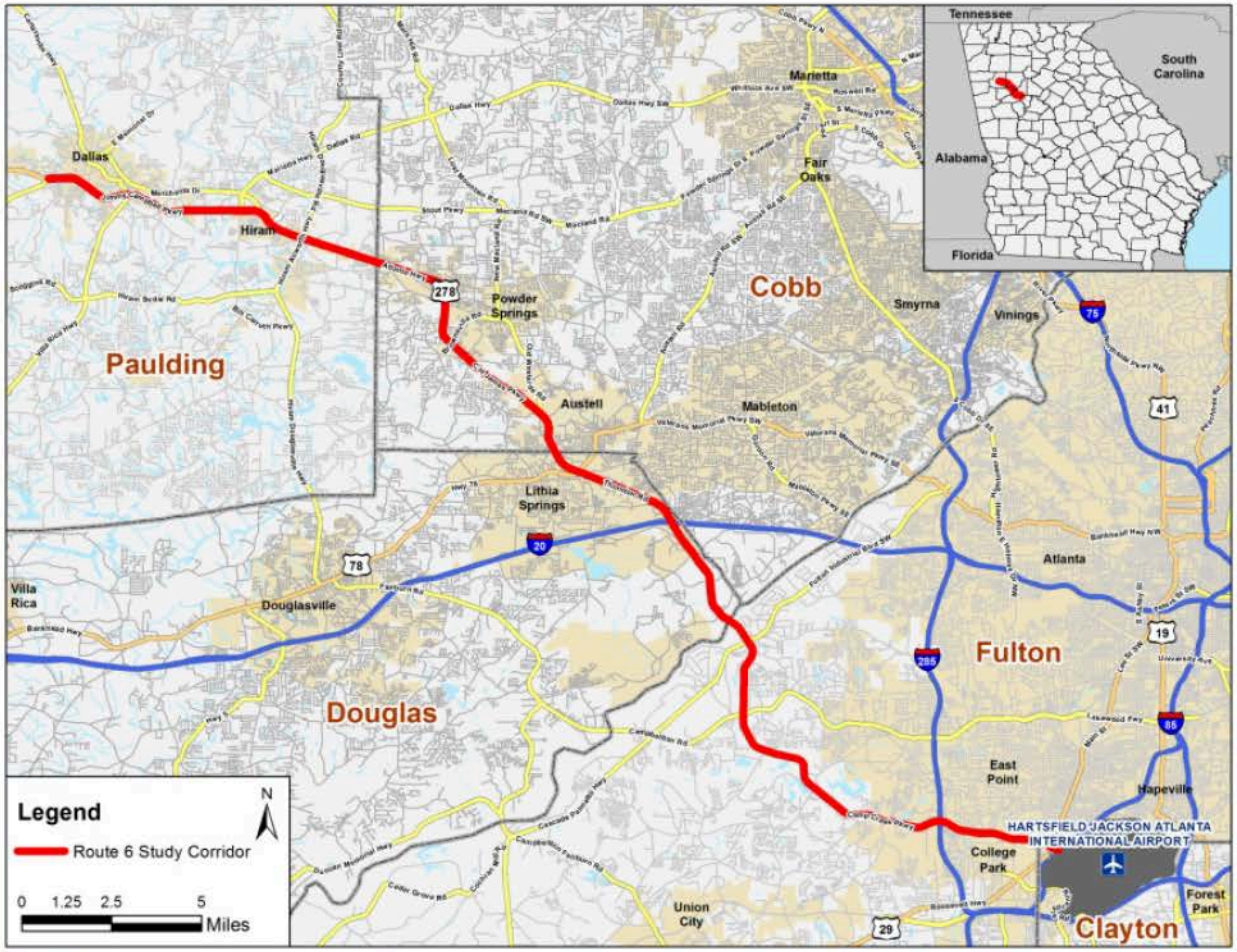
- Meeting purpose & background
- Existing access management regulations
- Future conditions
- Access management strategies
- Corridor vision, goals, and objectives
- Discussion & questions

Meeting Purpose

- **Review existing conditions analysis**
  - Pertinent corridor issues
  - Regional/local access management policies
- **Present future conditions analysis (Baseline)**
  - Scenario 1 - Future conditions with no changes to the corridor
- **Discuss future conditions analyses**
  - Subareas for detailed technical analyses
  - Potential access management solutions
- **Refine corridor vision, goals, and objectives**

Background

- The SR 6 study area is a 32-mile major regional travel corridor from Fulton County to Paulding County



Study Schedule

Winter 2014 – Spring 2014

- Systems inventory & data collection
- ***Stakeholder Meeting #1 – May 22, 2014***

Spring 2014 – Fall 2014

- **Development of corridor plan solutions and scenarios**
- ***Stakeholder Meeting #2 – October 24, 2014***

Fall 2014 – Winter 2015

- Preliminary recommendations
- ***Stakeholder Meeting #3***

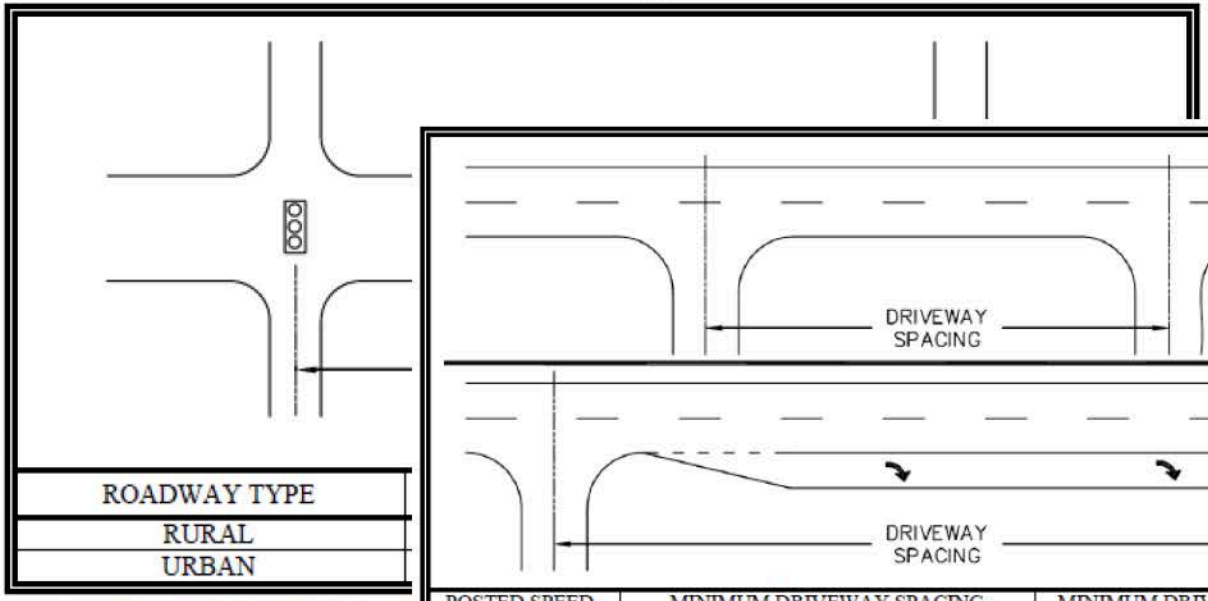
Winter 2015 – Summer 2015

- Final report and implementation plan
- ***Stakeholder Meeting #4***

Existing Access Management Regulations

- **GDOT Regulations for Driveway and Encroachment Control (RDEC 2009)**
  - Minimum driveway spacing
  - Minimum median crossover spacing
  - Minimum signalized intersection spacing
- **Local standards and guidelines**
  - Fulton County Driveway Manual (2005)
  - Cobb County access control standards
  - Douglas County – GDOT Regulations
  - Paulding County Access Management Toolkit

GDOT Standards (RDEC 2009)



POSTED SPEED, MPH	MINIMUM DRIVEWAY SPACING WITHOUT RIGHT TURN LANE (FEET)	MINIMUM DRIVEWAY SPACING WITH RIGHT TURN LANE (FEET)
25	125	125
30	125	219
35	150	244
40	185	294
45	230	369
50	275	419
55	350	444
60	450	494
65	550	550

Non-Ideal Segments

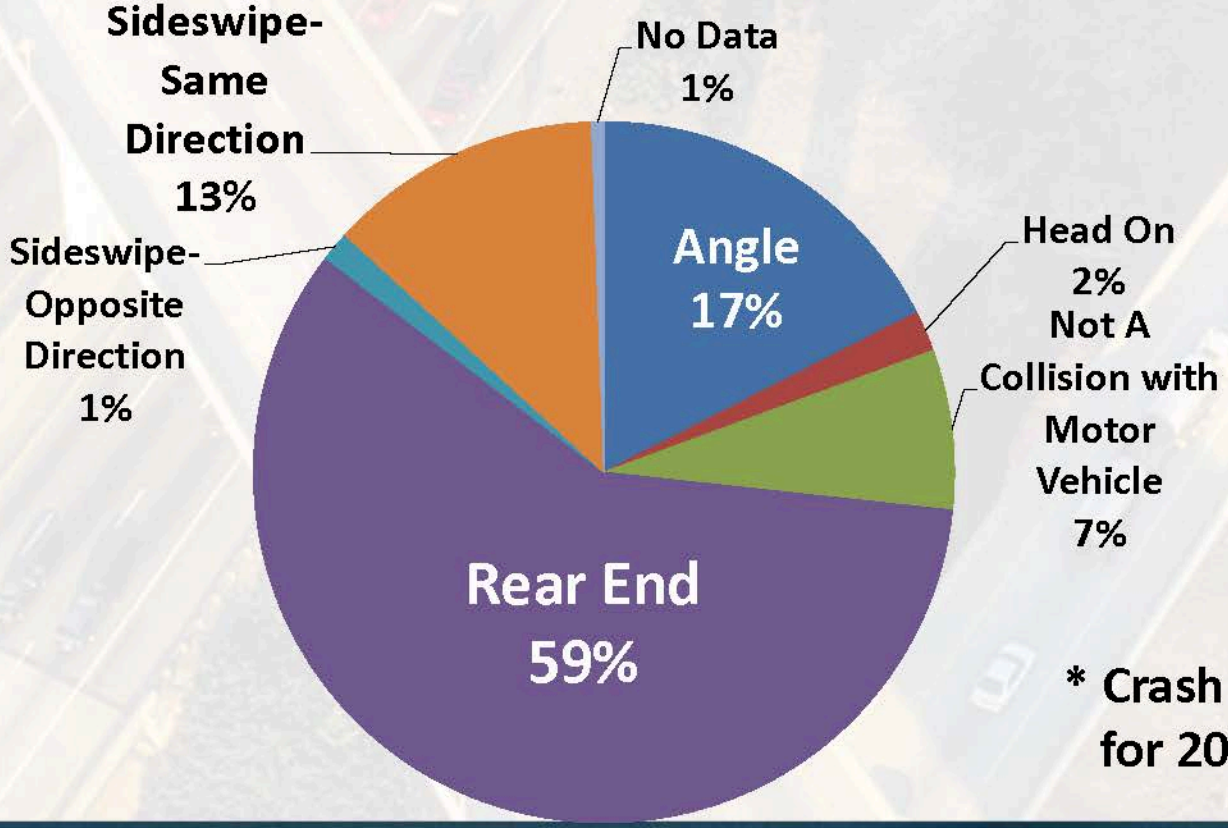
- **Signalized intersection spacing**
  - Hiram Pavilion (Sam's Club) – Lake Rd/Depot Dr
  - SR 92 – Hiram Crossing (Walmart)
  - Hiram Crossing (Walmart) – Pace Rd
- **Driveway spacing**
  - I-20 – Maxham Rd (1.2 mile)
    - **23** NB/WB & **15** SB/EB driveways
  - East Hiram Pkwy/Poplar Springs Rd – Atlanta Hwy/SR 6 Business (2.6 mile)
    - **25** NB/WB & **19** SB/EB driveways

Other Key Issues

- **Congestion at signalized intersections**
  - 54% of signalized intersections operating at LOS D or worse during peak periods
- **Segments with all crash rate types exceeding statewide averages**
  - Airport Dr – Washington Rd (0.7 mile)
  - Washington Rd – Princeton Lake Pkwy (1.9 mile)
  - I-20 – Skyview Dr (0.5 mile)
  - Old Harris Rd – S Main St (1.1 mile)

Other Key Issues – Crash Statistics*

- Total 6,734 crashes, 2,187 injuries, 18 fatalities in last 5 years (2008-2012)
- 10 crashes involving pedestrians



* Crash Statistics for 2008-2012

Crash Statistics

- 131,613 total statewide crashes along Urban Principal Arterials for 2008-2012.
- 6734 crashes along SR 6 during the same time period

Average Crash Rate Comparison

County	SR 6 Crash Rate (2008-2012)	Statewide Crash Rate (2008-2012)
Fulton	921.5	463
Douglas	440.9	463
Cobb	48.1	463
Paulding	384.4	463

Other Key Issues

- **High volumes of truck traffic**
  - A portion of SR 6 is statewide designated freight corridor
  - Whitaker Intermodal facility is a major traffic generator
  - Highest truck volumes along corridor
    - SR 70/Fulton Industrial Blvd adjacent to SR 6 intersection: 2nd highest non-interstate location for truck volumes in Georgia
    - Butner Rd – Enon Rd: 9th highest non-interstate location for truck volumes in Georgia

Other Key Issues

- **Transit, bicycle, and pedestrian facilities**
  - Some MARTA bus lines consolidated/merged during economic downturn
  - No exclusive bike facilities and minimal sidewalks along SR 6
  - Opportunity to expand bike and pedestrian facilities connecting to the Silver Comet Trail

Existing Conditions – Travel Time

- **SR 6 is part of RTOP Program 2**
- **Travel time runs (Aug 2014); RTOP data (May 2014)**
  - Consistent travel times
  - 41 minutes EB (AM peak)
  - 47 minutes WB (PM peak)

Small Group Meeting Notes – Fulton (08/01/14)

- **Need for better access management**
  - Especially between Old Fairburn Rd and SR 154/SR 166 (Campbellton Rd)
  - High speed (55mph) & high volumes corridor
- **Safety concerns**
  - Welcome All Connector and Bakers Ferry Rd
    - High crashes at Welcome All intersection
  - Pedestrian concerns in Butner Rd, Merk Rd, Enon Rd corridor
- **Congestion issues**
  - Princeton Lakes Rd intersection - signal timing issues
  - Butner Rd intersection (improvements planned)
  - FIB intersection – Controlled right-turn lane proposed
  - Bakers Ferry Rd intersection – high truck turning volumes

Small Group Meeting Notes - Douglas (07/25/14)

- **Need for access control**
  - No more traffic signals should be added
  - Quadrant connectivity to bypass SR 6 by utilizing frontage roads
- **Heavy freight movements and Whitaker Intermodal Terminal expansion plan**
- **Safety concerns**
  - Concerns with the heavy truck traffic in Lithia Springs
  - Improved illumination on SR 6 @ SR 8/US 78
  - Pedestrian mobility improvements between I-20 and Maxham Rd
- **Congestion issues**
  - Maxham Rd intersection
  - SR 8/ US 78/US 278/ Bankhead Hwy intersection

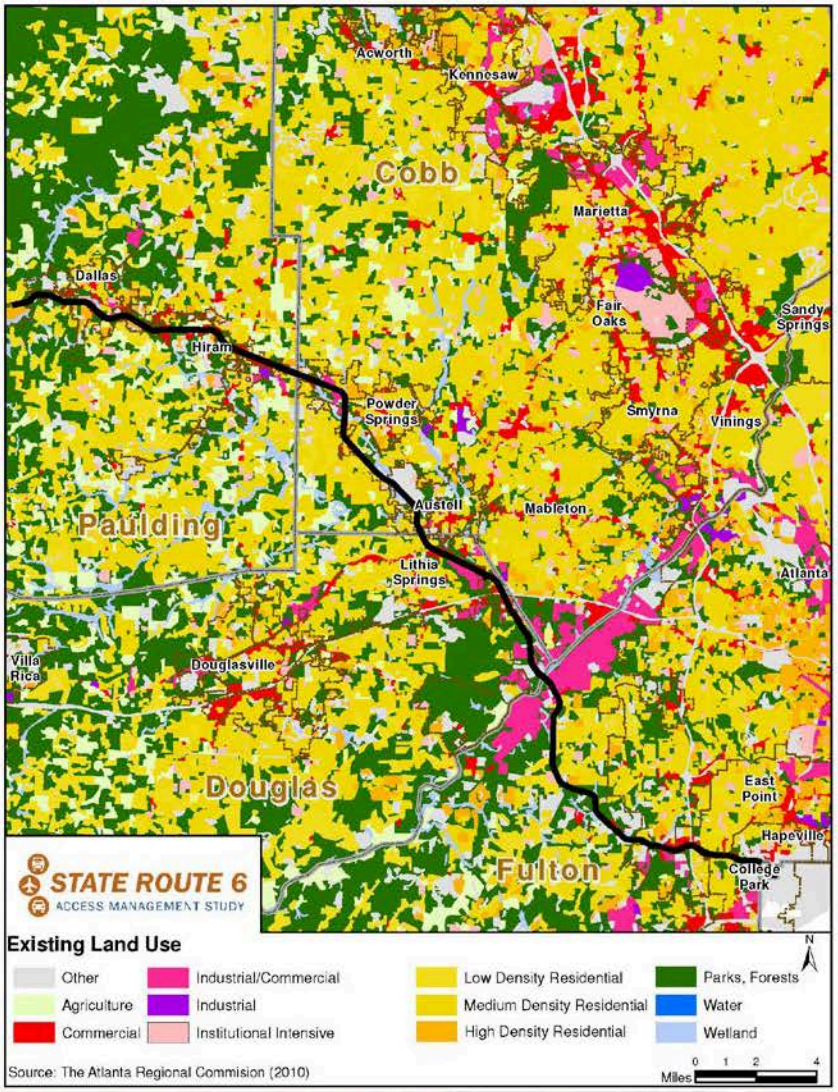
Small Group Meeting Notes – Cobb (07/24/14)

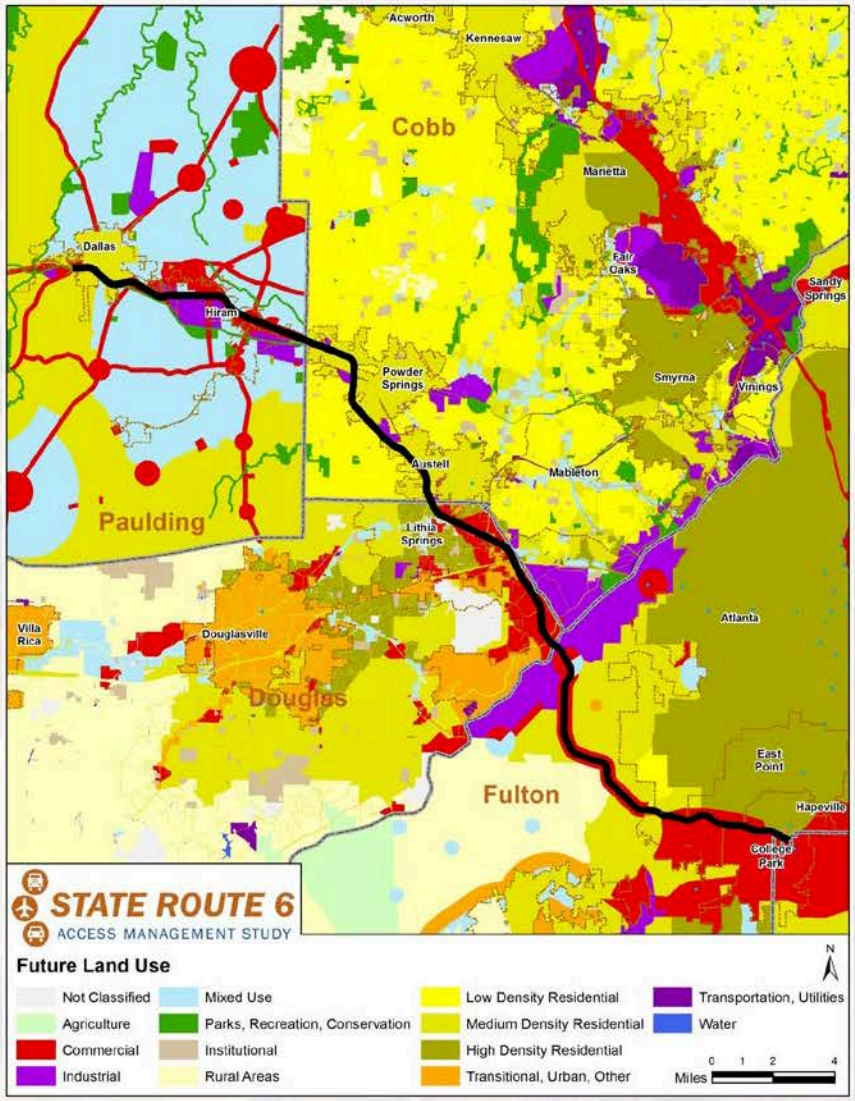
- **Need for access control**
  - No more traffic signals should be added
  - Raised medians and limited access road configuration options discussed
- **Water runoff/flooding**
  - West of Richard D. Sailors Pkwy
  - Rain gardens and raised medians proposed
- **Safety concerns**
  - Garrett Rd intersection – Overturning trucks
  - High crashes at Richard D. Sailors Pkwy intersection
- **Other issues**
  - Increased truck traffic and expansion of the rail yard
  - Congestion on SR 6 getting worse
  - Pedestrian accommodation needed

Small Group Meeting Notes – Paulding (07/24/14)

- **Need for zoning and access control**
  - Limited access and inter-parcel access encouraged
  - Development of frontage roads and inter-roads for access
  - Difficult to enforce access management strategies
- **Safety concerns**
  - High crashes at Hiram Pavilion (Target/Best Buy)
  - SR 6 corridor not pedestrian-friendly
- **Traffic operations**
  - High weaving movements from Paces Rd to SR 92
  - SR 92 intersection – not enough storage lane

Future Conditions





Future Conditions

- **Growth rate calculated from ARC PLAN 2040**
  - County-wide population growth rate identified as baseline reference
  - SR 6 study corridor traffic growth rate was used for future conditions analysis

County	2010 Population	2040 Forecast Population	Total Increase	Percent Increase	SR 6 Traffic Annual Growth Rate (2014-2040)
Fulton	920,581	1,230,497	309,916	33.7%	1.38%
Douglas	132,403	204,829	72,426	54.7%	1.05%
Cobb	688,078	867,037	178,959	26.0%	1.69%
Paulding	142,324	256,410	114,086	80.2%	1.67%

Source: ARC PLAN 2040 Regional Transportation Plan, March 2014 Update

Future Conditions

- **Baseline (No-build) future conditions for 2040**
  - Includes programmed projects and future traffic volumes without any additional access management changes implemented.
  - 79 % of major intersections (signalized & unsignalized) have unacceptable/failing LOS E & F

Intersection LOS	Existing (2012)	Future Baseline (2040)
	%	%
A	8%	0%
B	23%	3%
C	30%	12%
D	21%	6%
E	11%	14%
F	8%	65%

Future Scenarios

- **Identify:**
  - Key subareas that warrant more detailed analysis
  - Expected new development/redevelopment locations
  - Possible access management strategies

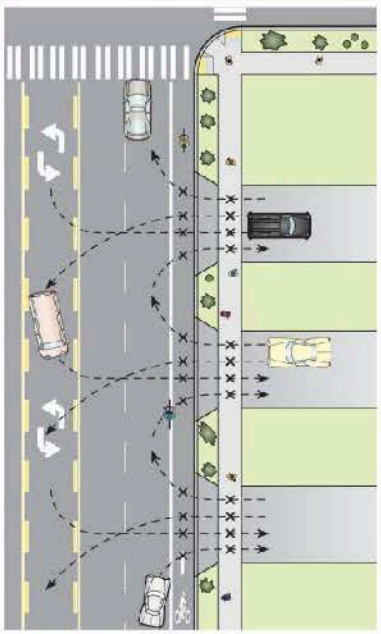
- **Analyze proposed strategies**

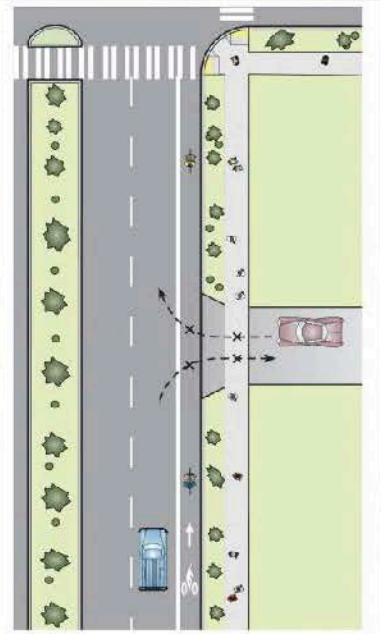
Access Management

- ***"Access Management is the systematic control of the location, spacing, design, and operation of driveways, median openings, interchanges, and street connections to a roadway… The purpose is to provide vehicular access to land development in a manner that preserves the safety and efficiency of the transportation system"***

- Transportation Research Board, Access Management Manual 2003

Uncontrolled accesses create 8 potential conflict points at every driveway and slow down through traffic.





A raised median and consolidating driveways reduce conflict points and improve traffic operation.

Access Management Strategies

Highway Focus

- Raised medians and median openings
- Auxiliary lanes
- Intersection channelization
- Frontage roads
- Grade separations
- Improving signal spacing and coordination
- Limiting or redirecting left turns and cross access

Source: NCHRP Report 548, A Guidebook for Including Access Management in Transportation Planning, TRB 2005

Access Management Strategies

Parcel Focus

- Lay the foundation for access management in your local comprehensive plan
- Limit the number of driveways per lot
- Locate driveways away from intersections
- Connect parking lots and consolidate driveways
- Provide residential access through neighborhood streets
- Increase minimum lot frontage on major streets
- Promote a Connected street system
- Encourage internal access to outparcels

Source: *Ten Ways to Manage Roadway Access in Your Community*, Center for Urban Transportation Research, University of South Florida, 1998
Access Management Best Practices Manual, Karen K. Dixon, Xiang Yi and Lacy Brown, Oregon Department of Transportation, 2012

Corridor Vision

State Route 6 will continue to function as a major thoroughfare in the Atlanta region serving commuters, businesses, residents, freight, pedestrians, and bicyclists. Investments on this corridor will support local and regional economic vitality, mobility, and safety for all users while preserving the essential character of the corridor and minimizing impacts to natural resources. Future access along the corridor will follow a comprehensive corridor plan and will be coordinated among local, regional, and state transportation partners, businesses, and the general public.

Goals and Objectives

Goals	Objectives
G1: Maintain Mobility While Controlling Access	O1.1: Guide access standards for future development
	O1.2: Minimize congestion and travel delay
	O1.3: Maintain travel reliability
	O1.4: Balance the needs of local and through traffic
	O1.5: Accommodate freight movement
G2: Contribute to the Economic Vitality of the Region	O2.1: Support new and existing development through transportation infrastructure
	O2.2: Support connections between activity centers
G3: Improve Safety for All Users	O3.1: Enhance vehicular safety by identifying high crash locations/segments and developing mitigation measures
	O3.2: Enhance bicycle and pedestrian access to activity centers
G4: Preserve Character Areas Along the Corridor	O4.1: Consult local planning documents

Break Out Session

1. Comment on corridor vision, goals, and objectives
2. Identify subareas
3. Identify possible access management strategies

Discussion / Questions