



Mobility Report Card

August 12, 2015
DCHC MPO Board

Proposed Action

Today

- Receive overview of the 2014 Mobility Report Card.
- Release for a minimum 21-day public input period.

Next Month

- Conduct a public hearing and adopt at September MPO Board meeting.













What is the Mobility Report Card?

- First-ever Mobility Report Card for the MPO as a whole.
- Consistently measures transportation system and facility performance.
- Monitors how well area is meeting mobility needs (now and in the past)
- Provides input to CTP, MTP and operations planning
- Towns of Chapel Hill and Carrboro created mobility report cards in both 2003 and 2005.

Report Content

3 ways to review:

- Report Snapshot →
 - 1-page summary, focused on changes
- Executive Summary
- Main Report
 - Methodology
 - Detailed Data and Analysis
 - Summary boxes

<p>CHAPTER 1</p>  <p>VEHICULAR ACTIVITY & LEVEL OF SERVICE</p>	<p>CHAPTER 2</p>  <p>VEHICLE PEAK HOUR INTERSECTIONS</p>	<p>CHAPTER 3</p>  <p>VEHICULAR TRAVEL TIME</p>	<p>CHAPTER 4</p>  <p>VEHICULAR SAFETY</p>
<p>CHAPTER 5</p>  <p>PEDESTRIAN FACILITIES</p>	<p>CHAPTER 6</p>  <p>PEDESTRIAN ACTIVITY</p>	<p>CHAPTER 7</p>  <p>BICYCLE FACILITIES</p>	<p>CHAPTER 8</p>  <p>BICYCLIST ACTIVITY</p>
<p>CHAPTER 9</p>  <p>PED & BIKE SAFETY</p>	<p>CHAPTER 10</p>  <p>TRANSIT SERVICE</p>	<p>CHAPTER 11</p>  <p>TRANSIT RIDERSHIP</p>	<p>CHAPTER 12</p>  <p>MULTIMODAL MOBILITY</p>

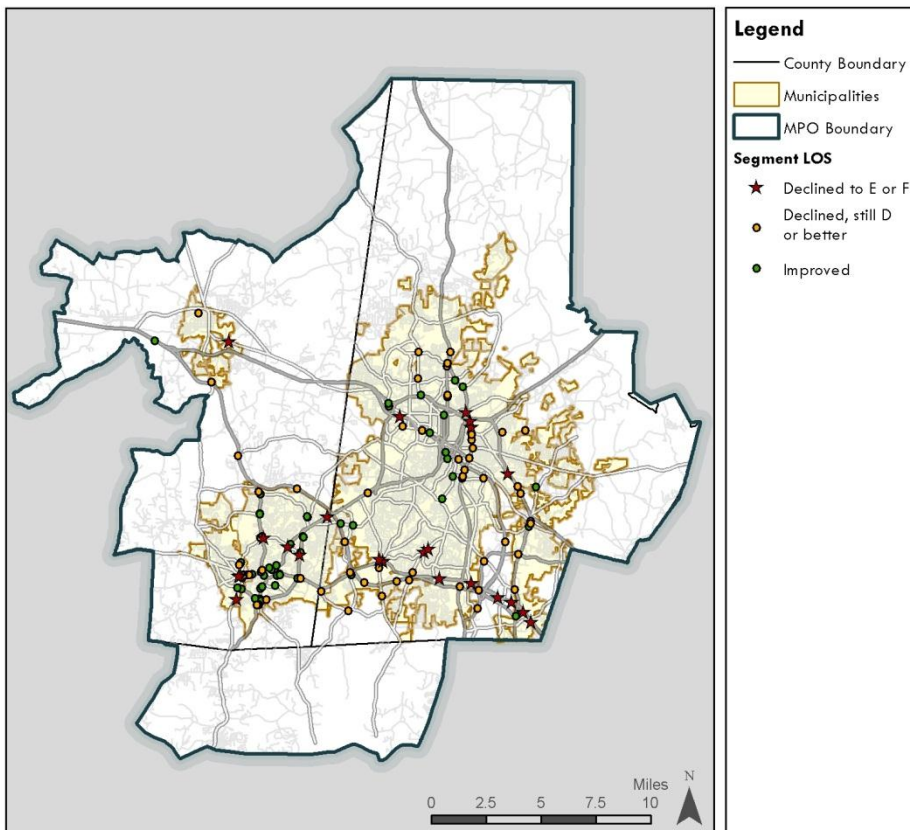
Indicator Summaries

TIP
(10 Year Plan)

Arterial LOS



- Familiar measure – volume divided by capacity.
- 2005-2013 traffic count data for ~1,300 roadway segments.
- Maps and table shows Level of Service (LOS)



Key Findings:

- ▶ 3.8% increase in traffic volume (2005-11).
- ▶ Durham and Chatham Co had highest increases, only Chapel Hill had decrease.
- ▶ National VMT has decreased during same period.
- ▶ 75%+ of region's corridors operating at LOS A.
- ▶ 25% of all roadways had 10%+ increase in volume.

Intersection Operations

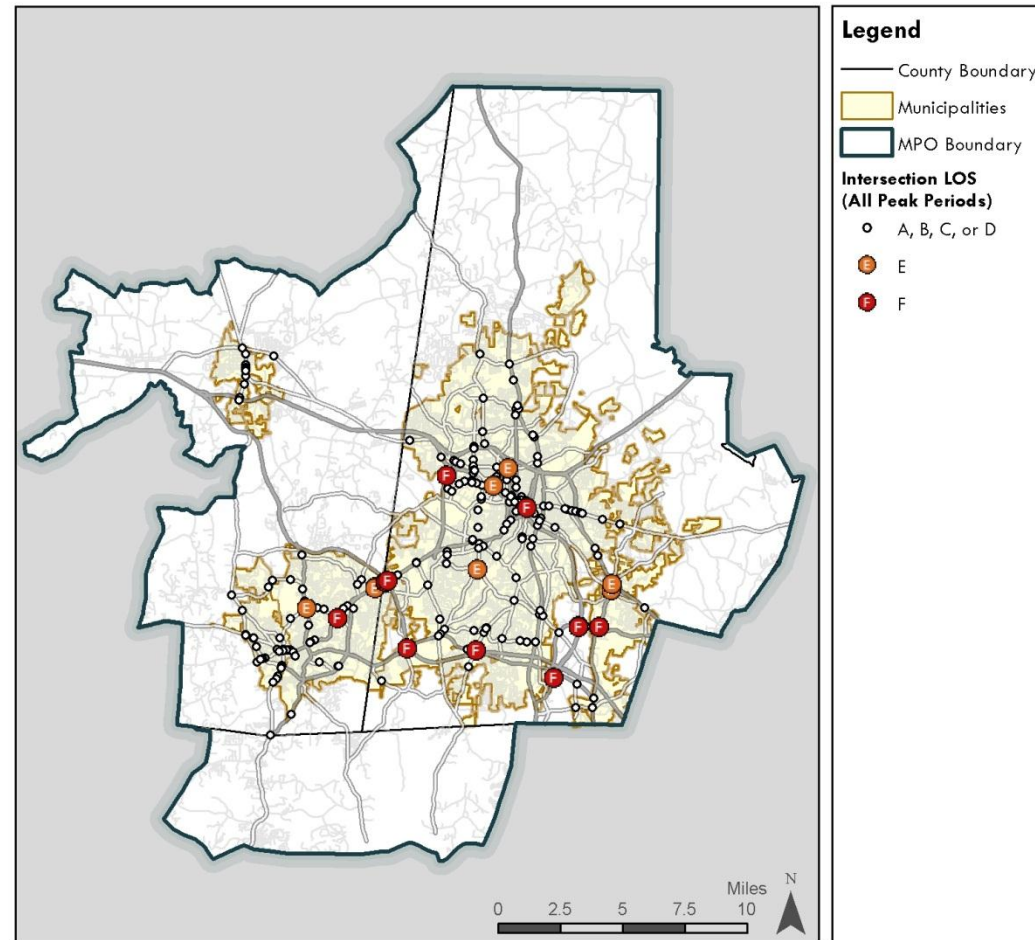
MPO Board 8/12/2015 Item 9

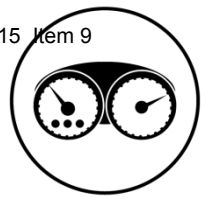


- LOS for ~230 intersections (count turning movements and use Synchro for LOS)
- Maps and tables show LOS am, noon, pm.
- 2005-2011 trend shown when data available.

Key Findings:

- Overwhelming majority of intersections provide acceptable service (LOS A-D)
- Worst delays are on major highways with commercial access

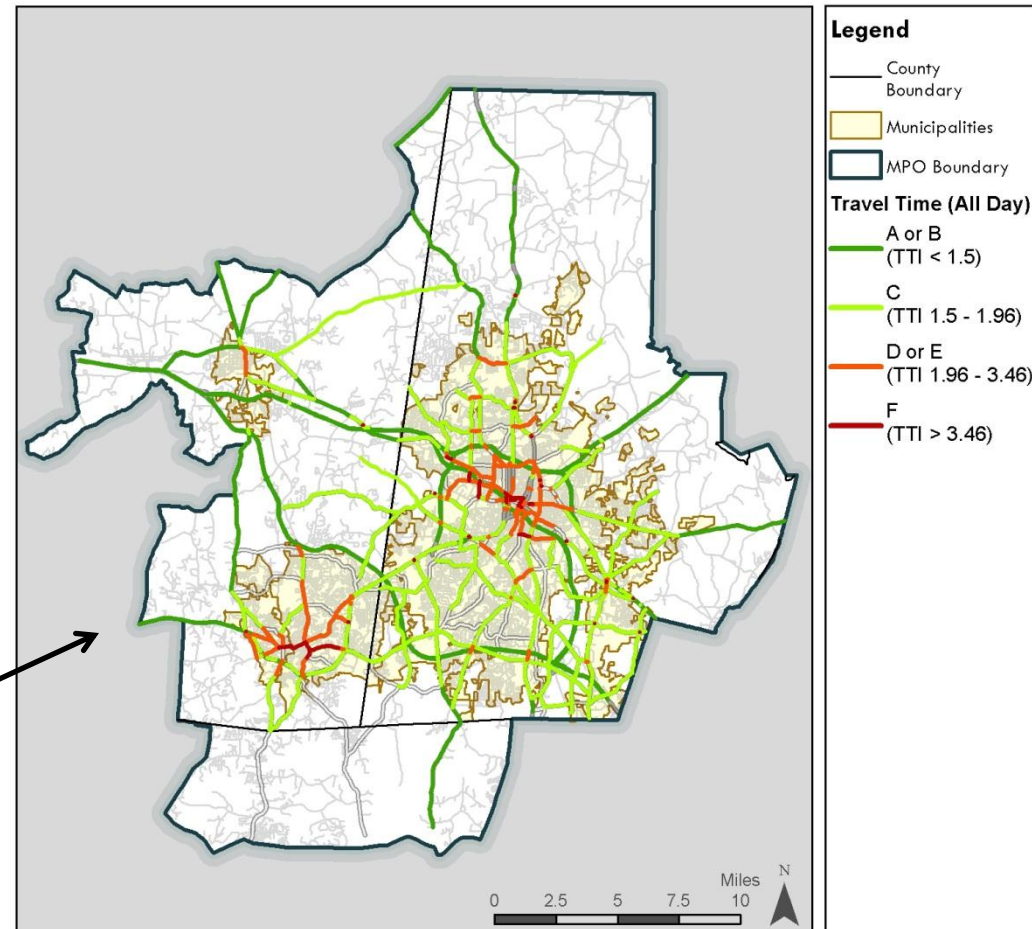




- Travel Time Index (TTI) is the actual travel time divided by the free flowing travel time.
- INRIX data (cell phone GPS) calculated for 95 corridors for three peaks.

Key Findings:

- Average travel time for metro area is 22.8 minutes; national average is 25.5 minutes.
- Central Durham and Chapel Hill have highest concentration of Travel Time congestion (traffic signal density?) .
- Most other segments at LOS C or better.



- 9 or 10 roadway segments are slower during the peak travel times.



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Vehicle Safety

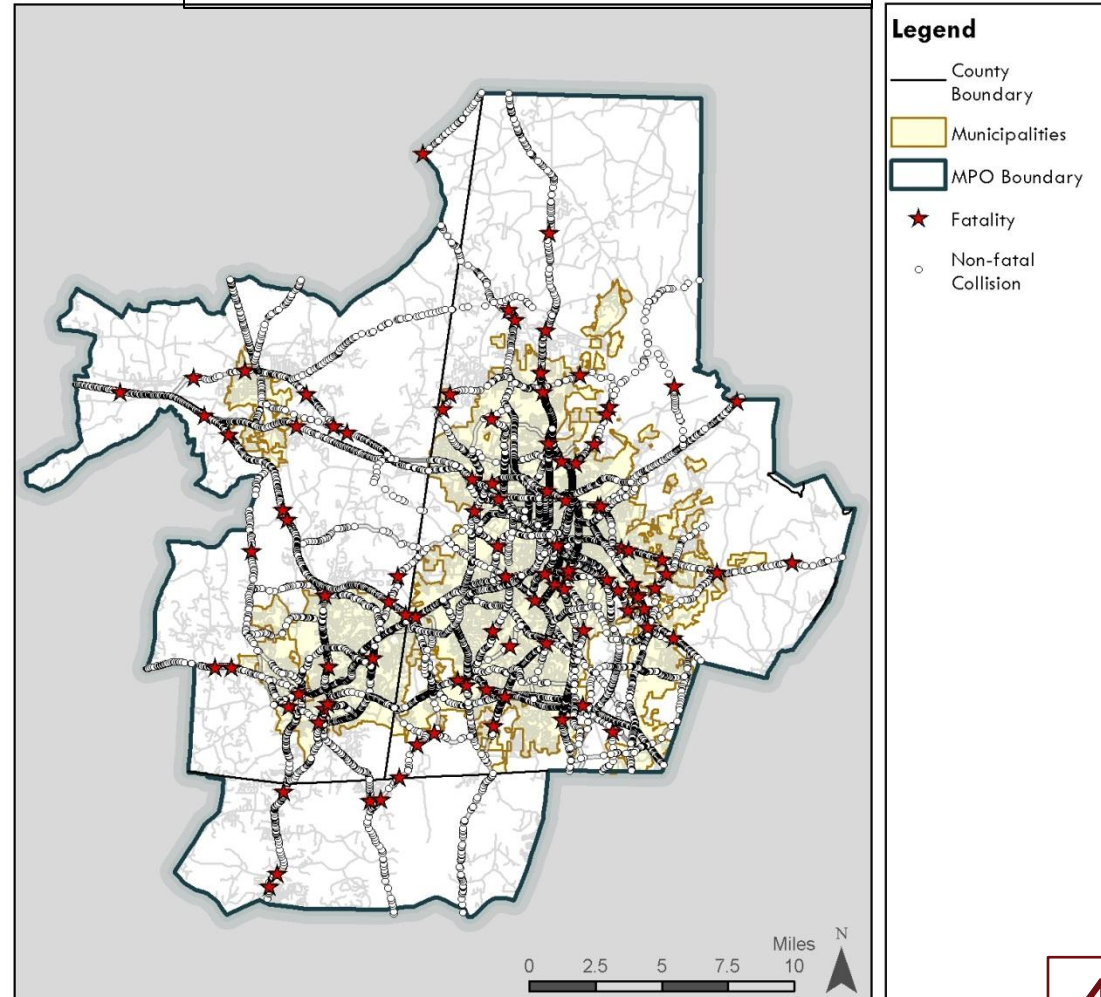


- MPO tracks fatalities, injuries and property damage (2008-2012).
- Track data for 95 corridors.

Key Findings :

- The number of collisions in the region increased each year between 2009 and 2012.
- But, no clear trends in the number of injuries or fatalities.
- About 75% of all collisions only caused property damage

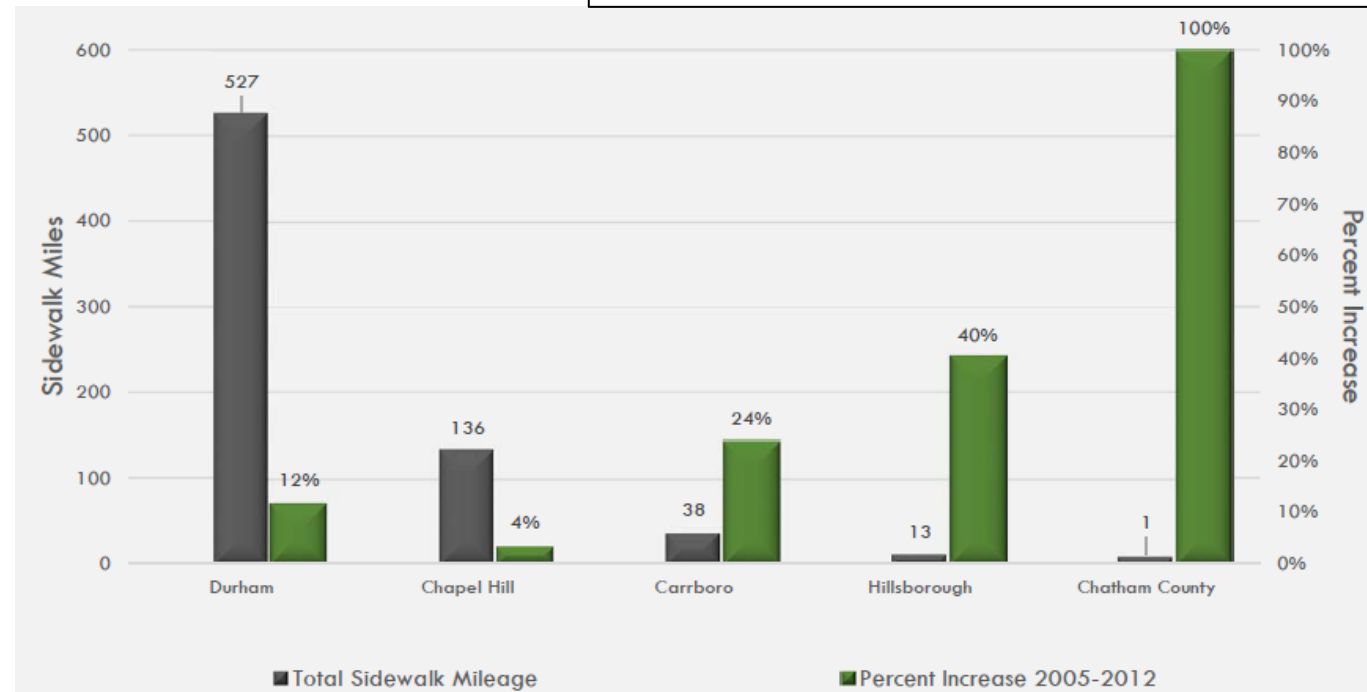
Automobile Collision Locations



Pedestrian Facilities



Sidewalk Miles and Percent Increase



- Measures the miles of existing and added sidewalks from 2005 to 2012.
- Provides maps of existing and new sidewalks.

Key Finding:

- Sidewalk miles up 11% from 2005 to 2012



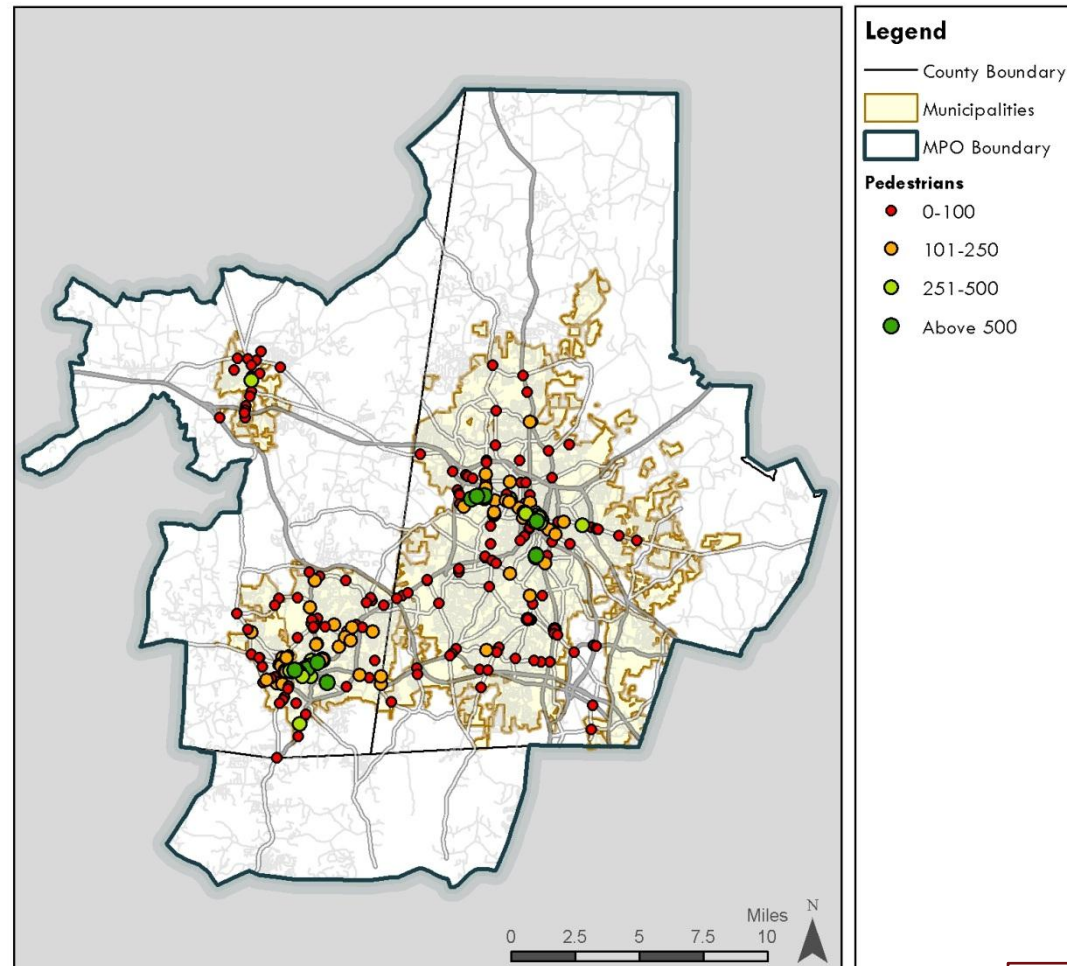
Pedestrian Activity

Pedestrian Counts

- Pedestrian counts at 274 locations.

Key Finding:

- Highest pedestrian activity areas are universities, hospitals and downtowns.
- Highest count, ~7,000, was at South Rd and Stadium Dr at UNC-CH
- More count locations needed in the future.



Bicycle Facilities

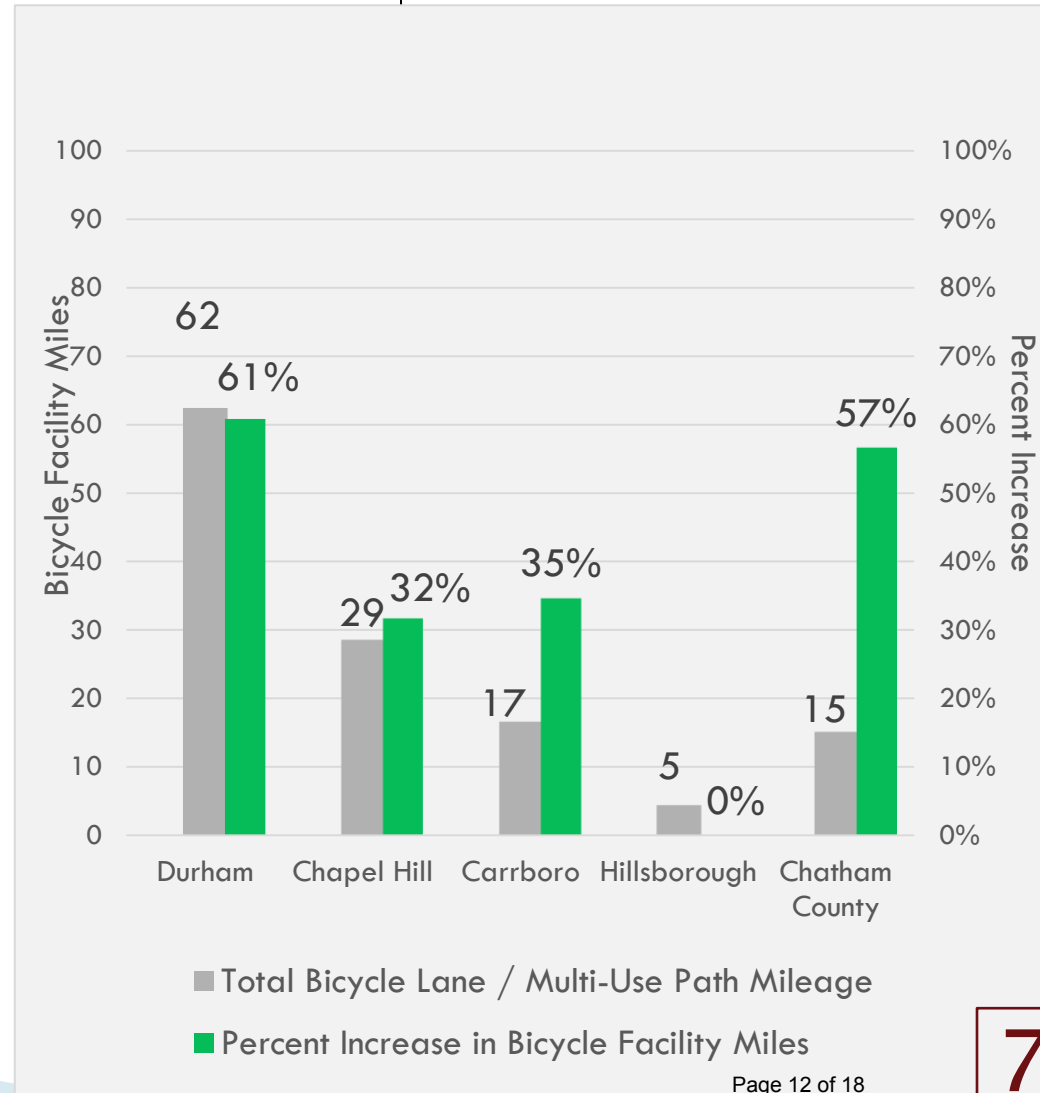


- Measures the miles of existing and added bike facilities 2005 to 2012.

Key Finding:

- Bike lane miles increased 84%.
- Multi-use path miles increased by 19%

Bike Facility Miles and Percent Increase



Bicycle Activity

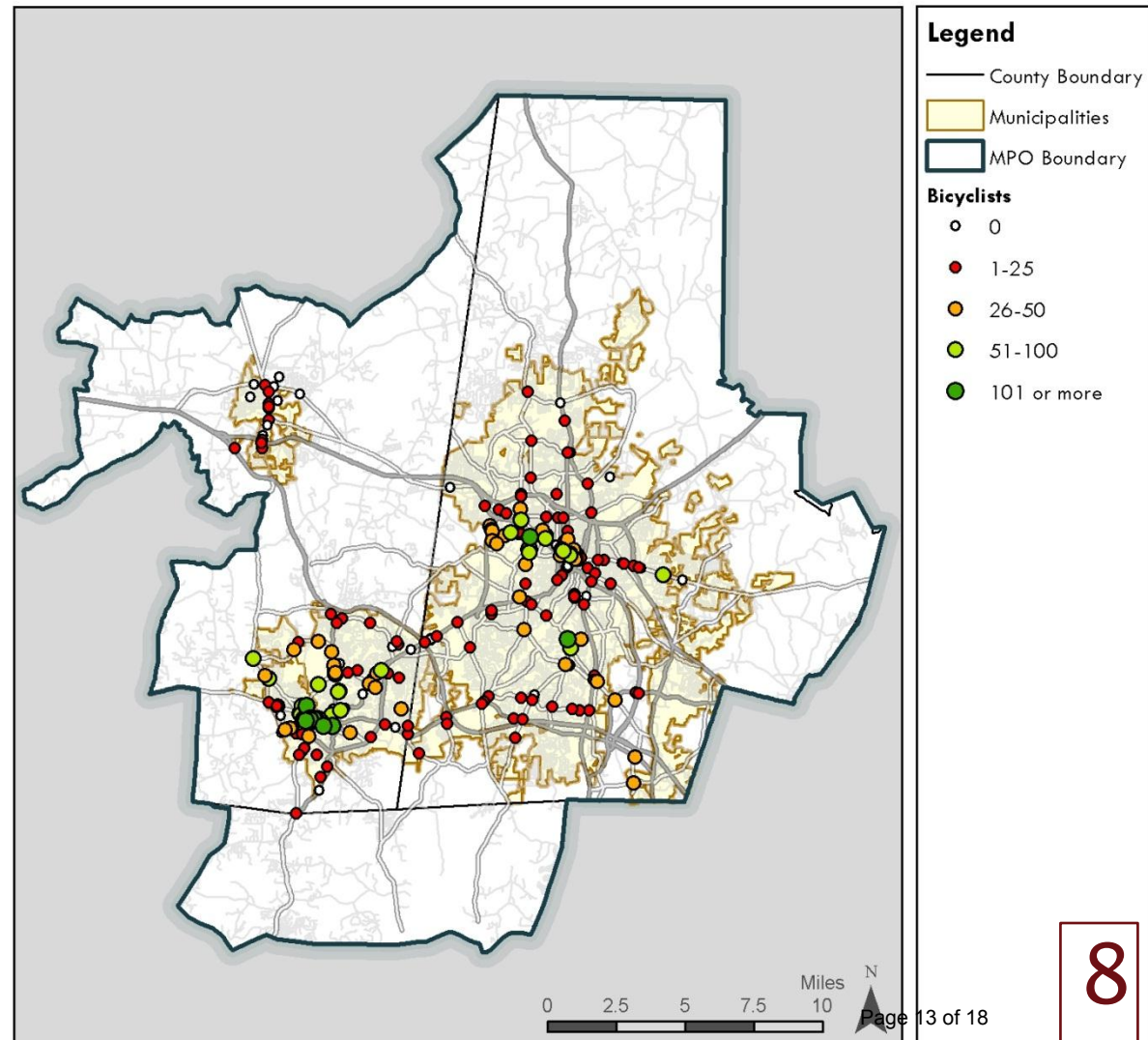


Bicycle Counts

- Bicycle counts at 275 locations.

Key Finding:

- Highest bicycle activity connected universities and downtown to dense residential areas.
- Ten highest counts were in Chapel Hill/Carrboro area.
- More count locations needed in the future.



Pedestrian & Bicycle Safety

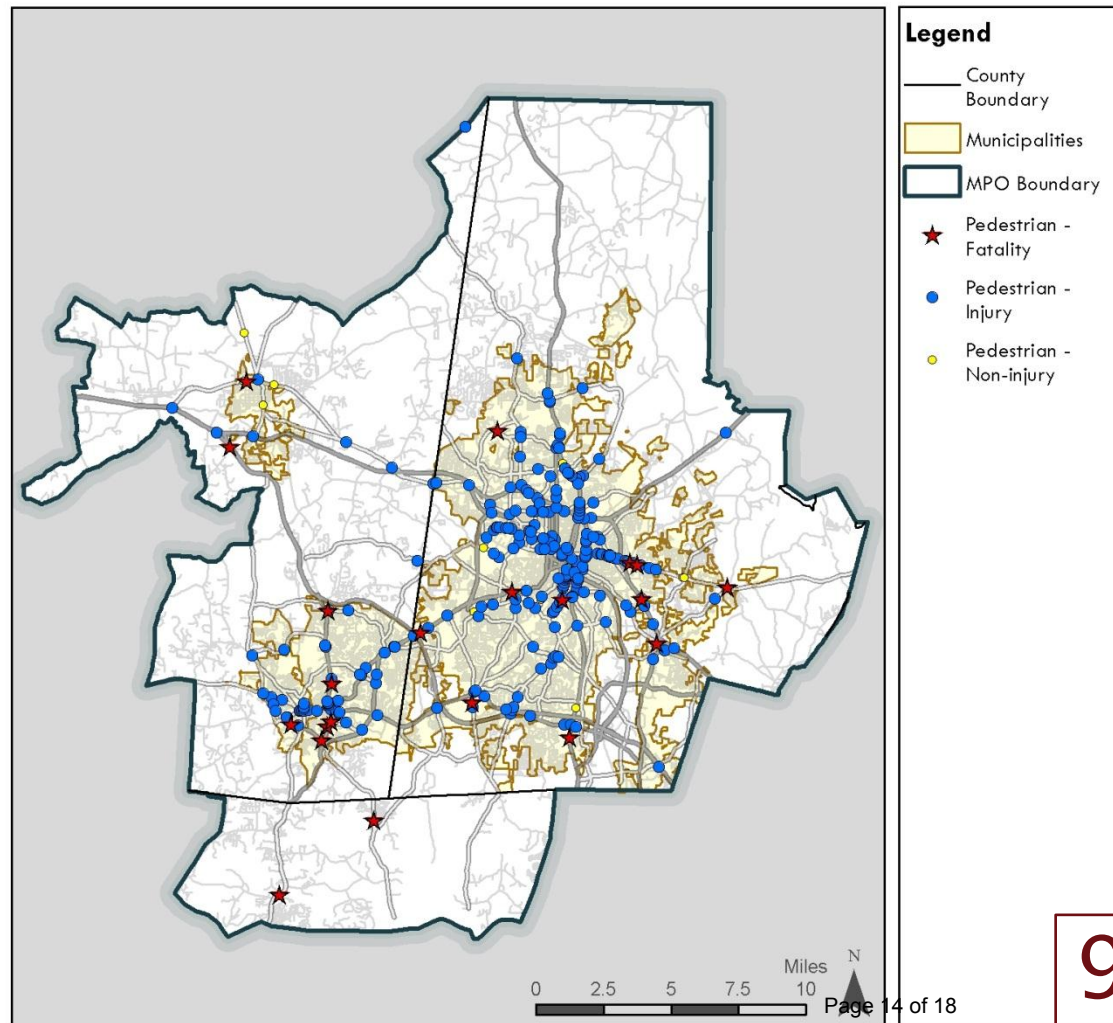


- Data collected for 95 corridors.
- 513 reported crashes (2008-12)
 - 346 pedestrian collisions
 - 167 bicyclist collisions

Key Findings:

- Nearly all crashes (92%) led to injury.
- 21 pedestrian and 2 bicyclist fatalities.
- The only clear trend over the 5-year period is an increase in pedestrian crashes.

Pedestrian Collision Map





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- These are measures of transit coverage and supply such as number of routes and stops, service miles, operating hours and fares.
- No data was collected in 2005 so no trends are available.

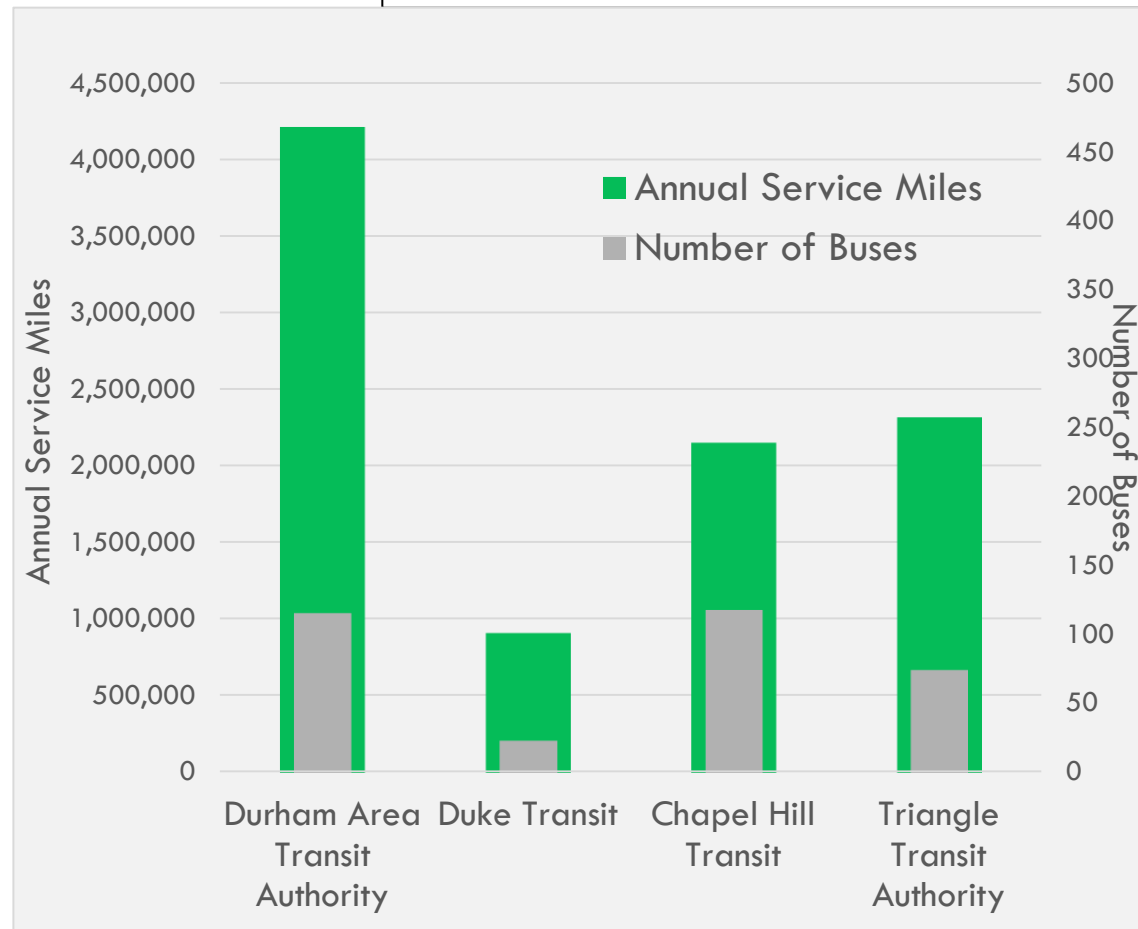
Key Findings:

- MPO area has:
 - 75 fixed routes, 2,000 stops, 246 buses.
 - 83 paratransit buses.
 - Cover ~10 million miles in 2012

Transit Services



Transit Service Miles and Buses



Transit Ridership



FY 2012 Ridership by Agency

- Measure number of trips by system and route – transit version of traffic volume.
- Compares FY 2012 to 2013.

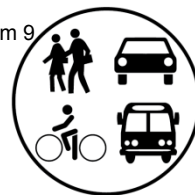
Key Findings:

- 18.3 million total fixed-route riders; 300,000 paratransit riders
- Ridership increased between 2011 and 2012:
 - DATA ridership increased by 2%
 - TTA ridership by than 24%
 - Chapel Hill Transit ridership increased slightly.

	Fixed-Route Ridership	Demand Ridership	Annual Ridership
Durham Area Transit Authority (DATA)	6.3 million	0.18 million	6.5 million
Duke Transit	3 million	0.002 million	3 .002million
Chapel Hill Transit	6.8 million	0.066 million	6.9 million
Triangle Transit Authority (TTA)	1.8 million	0.028 million	1.8 million
TOTAL	18 million	0.3 million	18.3 million

Orange Public Transit (OPT) provided ~30,000 trips.

Multimodal Mobility and Throughput



- Estimate of the number of trips in a corridor by mode.

Key Findings:

- Automobiles are used for 93 percent of trips on the region's busiest corridors:
 - Orange County :92% automobile
 - Durham: 94% automobile
 - Chatham County: 99%+ automobile
- Some corridors were much less auto-dependent:
 - E Main St (Durham): 49% auto
 - Erwin Rd (Durham): 64% auto
 - S Columbia (Chapel Hill): 71% auto
 - Manning Dr (Chapel Hill) 70% auto
 - Main St (Carrboro): 68% auto

Discussion

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Action