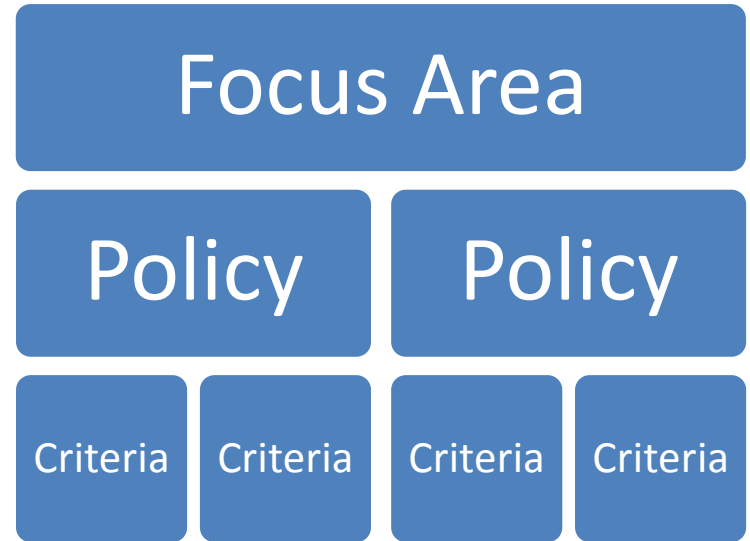
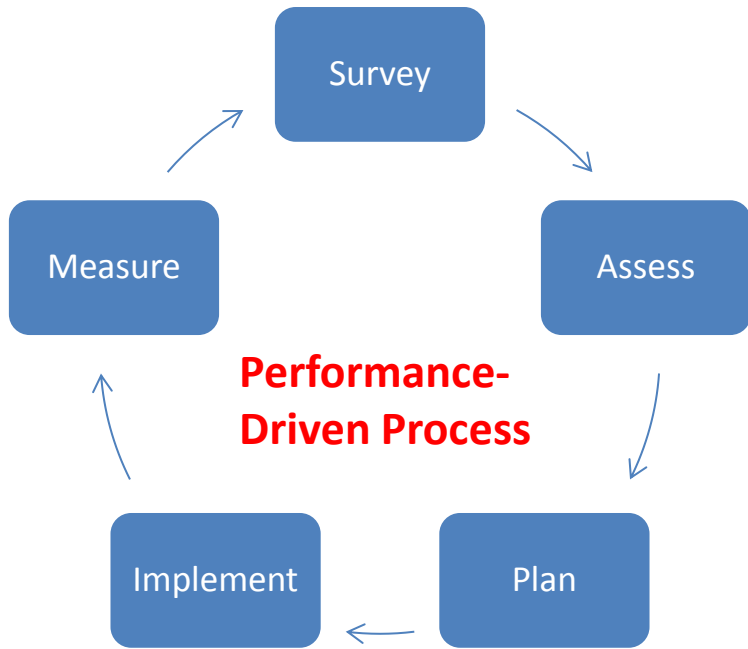


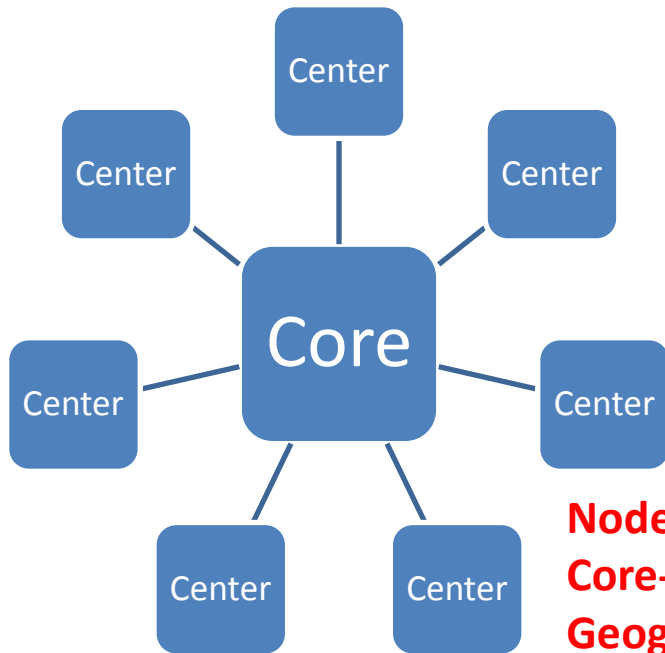
Update on Regional Bicycle, Pedestrian, & Trail Planning

Presented to
TCC

November 21, 2014



Policy-led Outcomes



Node-Corridor & Core-Periphery Geographies



Understanding Users

2007 bicycle & pedestrian policy map

Figure 2.1 – Bicycle Study Network: Strategic Bicycle Corridors

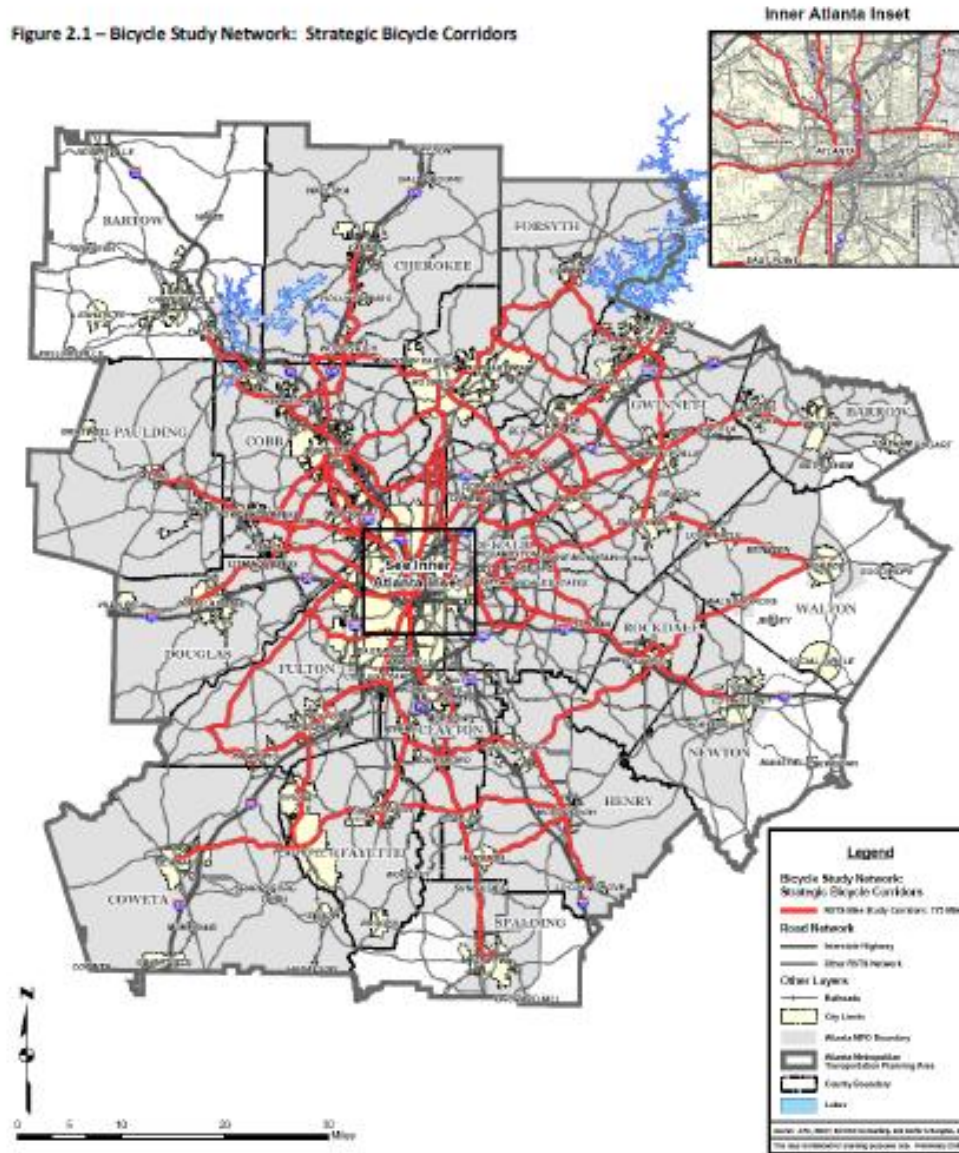
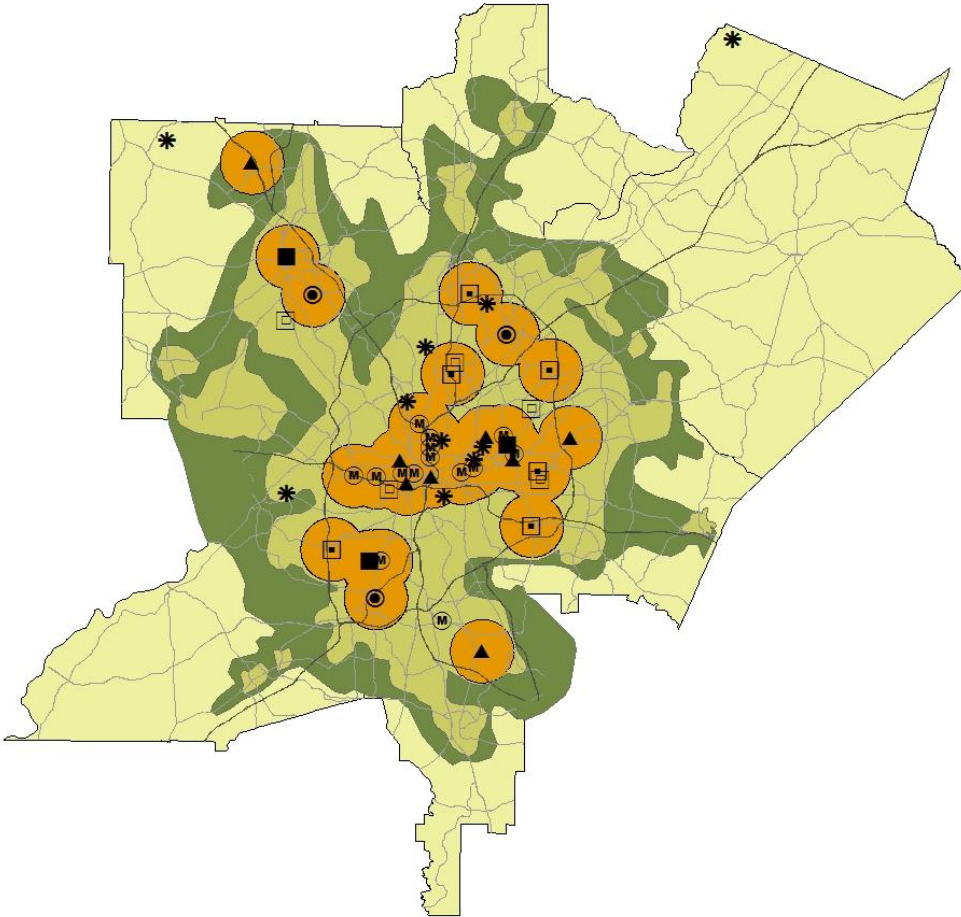


Table 1.2 - Bicycle Goals Matched Against Regional Issues

✓ = Primary issue addressed by goal + = Secondary issue that benefits from achievement of objectives

GOAL or OBJECTIVE	ISSUES						
	CONGESTION MITIGATION	AIR QUALITY	ENVIRONMENTAL JUSTICE	MOBILITY	ACCESSIBILITY	SAFETY	HEALTHY LIVING
1) Provide safe and convenient bicycling throughout the region	+	+	+	✓	+	✓	+
2) Provide safe and convenient bicycle access to schools	+	+	+	+	+	✓	+
3A) Provide safe and convenient bicycle access to LCI study sites	✓	+	+	+	✓	+	✓
3B) Provide safe and convenient bicycle access to Activity or Town Centers	✓	+	+	+	✓	+	+
4A, 4B) Improve bicycling access to MARTA stations	✓	+	✓	+	✓	+	+
4C) Improve bicycling conditions on routes parallel to congested arterials	✓	+	+	+	+	+	+
4D) Improve bicycling conditions in Environmental Justice communities	+	+	✓	+	+	+	+
5A) Provide safe and convenient bicycle access to parks and green space	+	+	+	+	+	+	✓
5B) Identify a long-ride network	+	+	+	+	+	+	✓

A Plan & Program for Its Use as a Mode of Transportation & Recreation

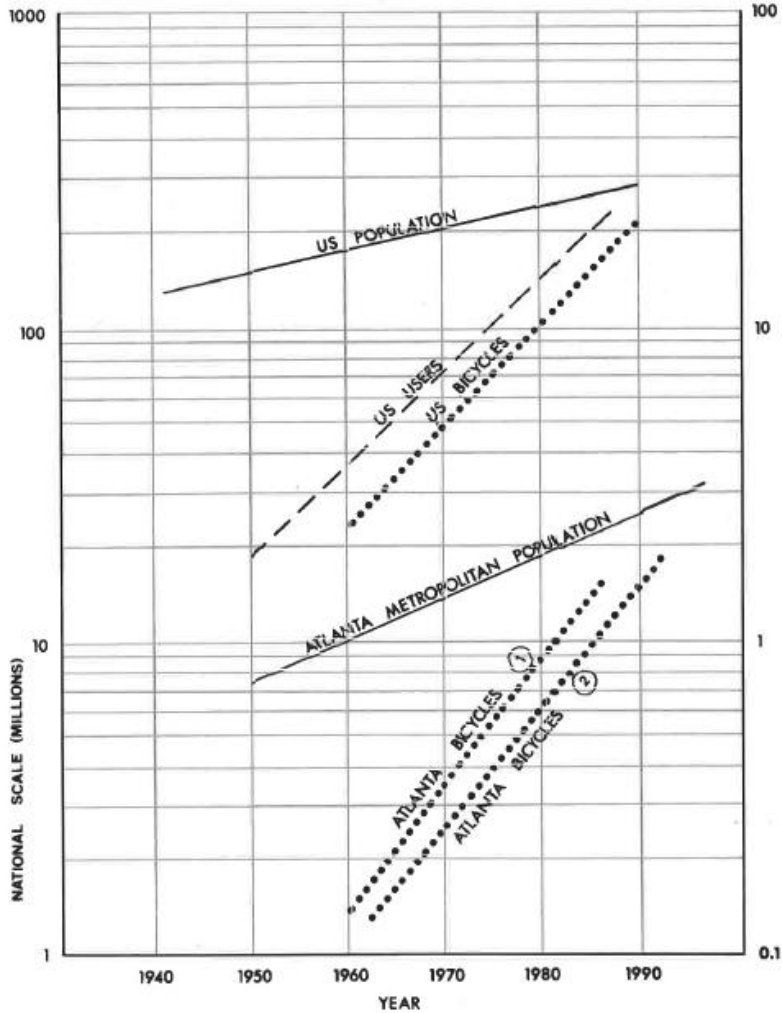


“The use of the bicycle both as a recreational and a transportation vehicle has increased very rapidly in the Atlanta Metropolitan Region. In response to this bicycle ‘boom’, the **ARC**, **GDOT**, and **MARTA** have sponsored this study:

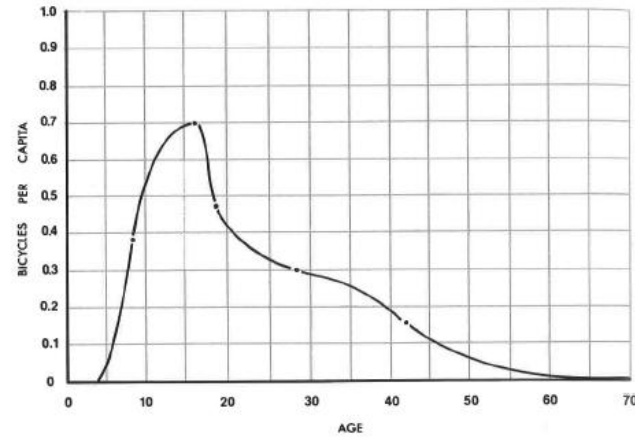
1. To assess current bicycle trends...
2. To develop a conceptual bicycle facility plan...
3. To select and evaluate alternative types of bicycle facilities...
4. To determine the most significant potential funding sources...
5. To research legal constraints...
6. To suggest educational and registration programs...
7. To select an appropriate demonstration project...

[first regional plan in the US!]

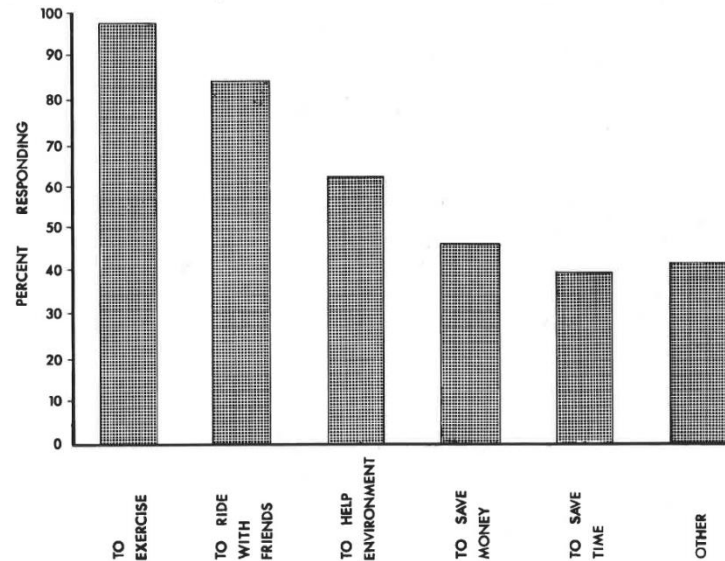
A Plan & Program for Its Use as a Mode of Transportation & Recreation



- ① BASED ON U.S. PER CAPITA
- ② 75% U.S. PER CAPITA



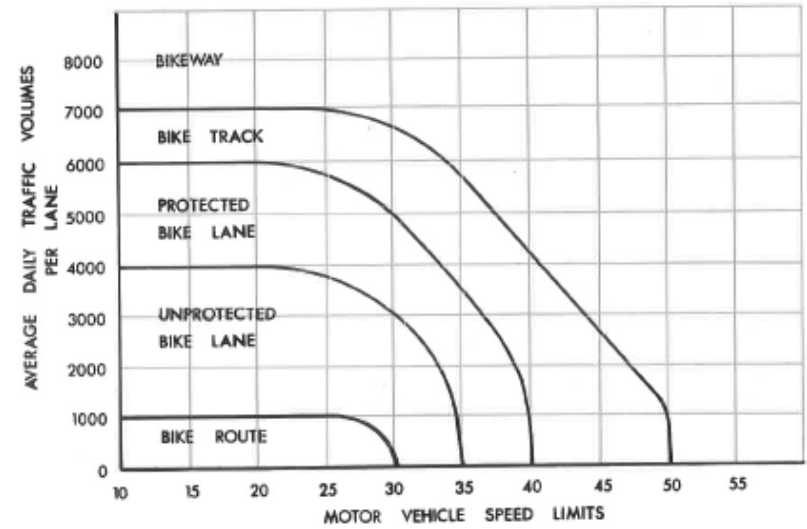
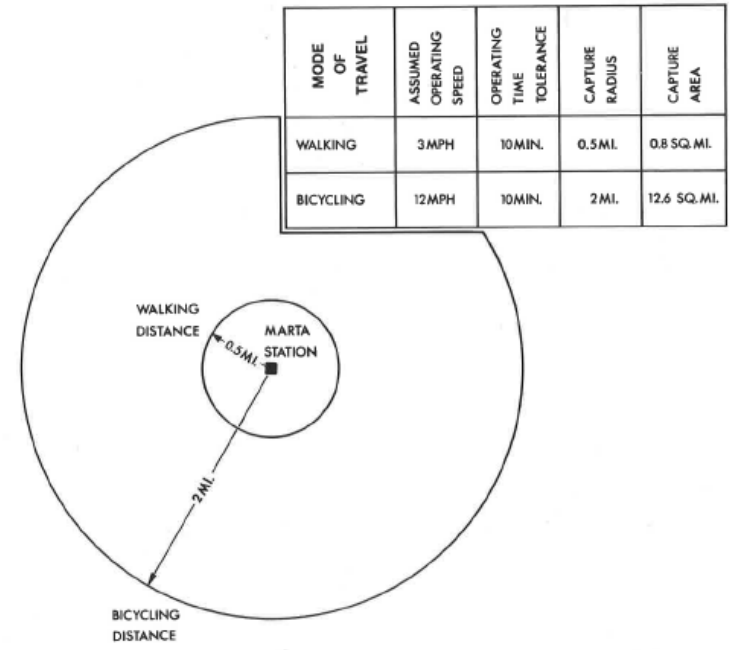
(BASED ON STATISTICS FROM ANN ARBOR, MICHIGAN)



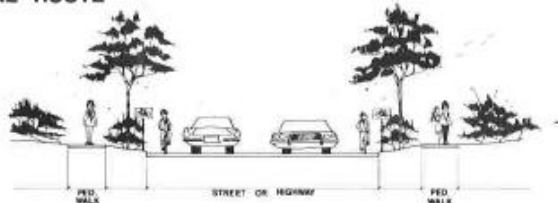
(FROM CALIFORNIA WHEELMAN RESPONSES)

Criteria for Selecting Regional Demonstration Project

1. Must be of regional significance
2. Should be capable of immediate implementation (6-12 mos)
3. Should be heavily used
4. Would desirably serve more than one major trip purpose
5. Should illustrate use of bikeway or bike track treatment
6. Would desirably illustrate multi-use potentials of a linear corridor
7. Should be capable of being integrated into an ultimate regional system



1. BIKE ROUTE



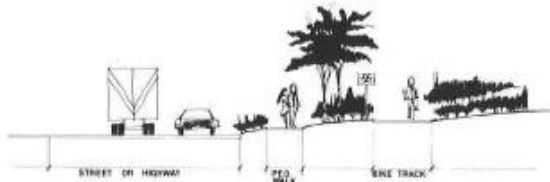
2. BIKE LANE: UNPROTECTED



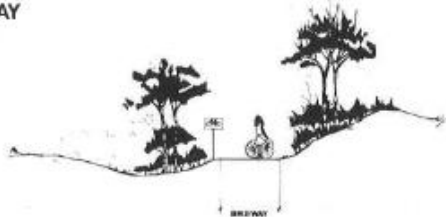
3. BIKE LANE: PROTECTED



4. BIKE TRACK



5. BIKEWAY



4. Protected bike lane (in early 1960's)



5. Bike lane protected by rubber cones



6. A bike track: Improvements within street right-of-way

WHEN ATLANTA WAS THE WORLD'S BICYCLE CENTER

BY MEDORA FIELD PERKERSON

THE man who won the state bicycle championship in 1897 is now in charge of the bicycle repair department of the Western Union Telegraph Co.

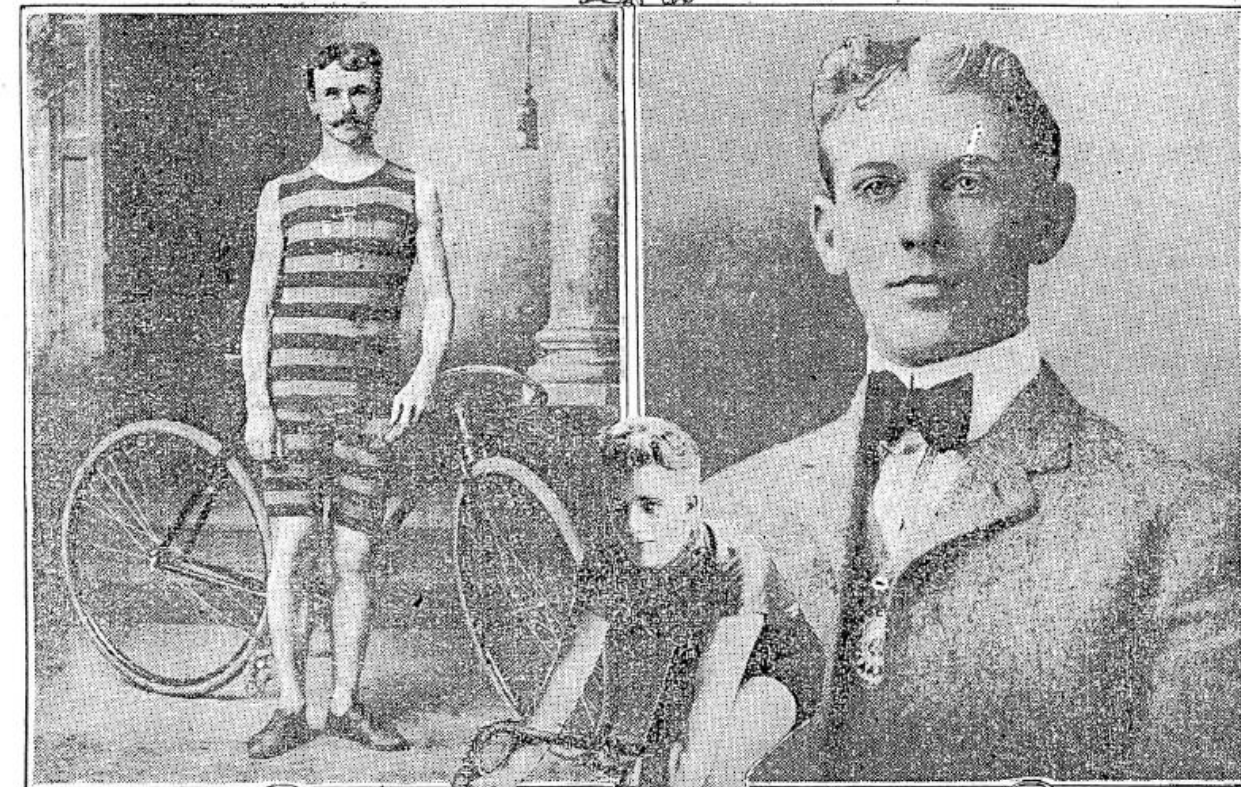
W. C. Johnson is his name, and he participated in the popular applause of the days when Bobby Walthour, Sr., was just riding into the fame that later established him as world champion, and made Atlanta the bicycle racing center of the world. Now, Mr. Johnson is the man behind the last lap of the race that speeds all sorts of tidings to their final destination. There isn't any applause, and Mr. Johnson isn't present to note the reaction from those yellow half-sheets with their casual purple lettering that can mean so much or so little. But he still finds his greatest thrill in a bicycle, and has never learned to like automobiles, because he says they ruined the business which he established after his amateur racing days were over. That was a bicycle shop, where he not only sold bicycles, but rented them by the hour or day to men and to those hardy pioneer ladies who were the first to venture before the public gaze in bloomers. Balloon bloomers, reaching just below the knee, worn by mothers of some of the present-day flappers.

Bicycle Club

Atlanta had a bicycle club in those days, limited to 40 members, some of whom are now Atlanta's most prominent business men, including among others, R. L. Cooney, Edward M. Durant, Linton Hopkins and Frank Edmondson.

During the World's fair, in Chicago, in 1893, a bicycle race was run from Atlanta to that city, staged by the Constitution and The Journal, Edward Durant represented the Constitution, and the late Walter Howard, afterward city editor of The Journal, represented this paper. Mr. Durant says that they sometimes rode eighteen hours a day, and it is a matter of record that they covered the 1,000 miles in fourteen days.

Mr. Johnson recalls the first bicycle



W. C. Johnson, back in the nineties, when he was one of Atlanta's amateur bicycle champions.

the old Adair home, on Peters street.

"A special observation train was put on for the occasion, and the passengers applauded and encouraged the hotly-contesting scratch men as they would catch and pass the handicap riders.

"The spectators enjoyed these races so much that they were run every April for several years. Most of the riders I have forgotten, but some names are still fresh, Ned Chalfant, H. J. Pigott, Ed Durant, Sim Post and R. L. Cooney being among the best.

Bobby Walthour, Sr., at the time when he was world's champion bicycle racer.

to Columbus, Ga., and met about forty riders, including the Dudley brothers, and they never got placed in all six races. Bobby won five, getting the name of "Greedy" Walthour. I got one first and five second races, and Chapman got six thirds."

Czar of Bicycle Racing

This same John Chapman is now called the czar of racing, the Tex Rickard of the game. His career, sketched in a recent article in the Saturday Evening Post by Alfred T. Goulet, great six-day bicycle racer, shows many highlights.

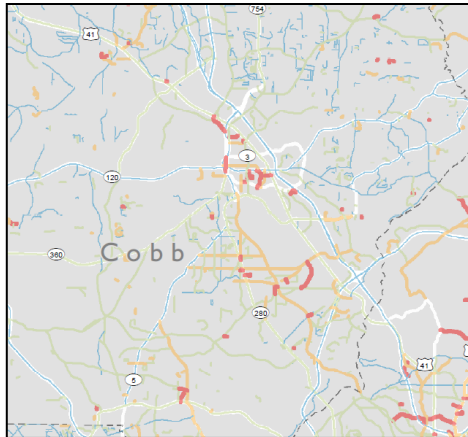
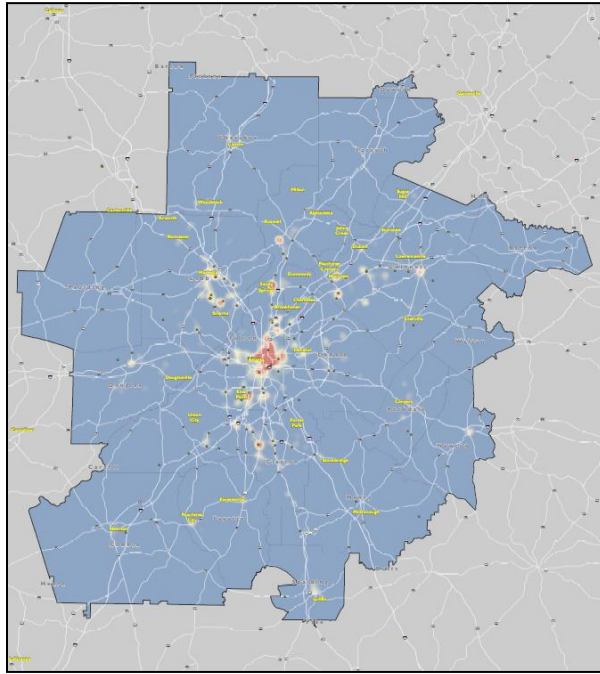
How should we **define key areas & corridors** for non-motorized transportation?

- Where are bicycle and pedestrian activities taking place?
- What are the demographic characteristics of non-motorized transportation users?
- Where are existing pedestrian and bicycle facilities?
- How many pedestrian and bicycle facilities are available?
- What is the quality of pedestrian and bicycle facilities?
- Where are pedestrian and bicycle crashes occurring?

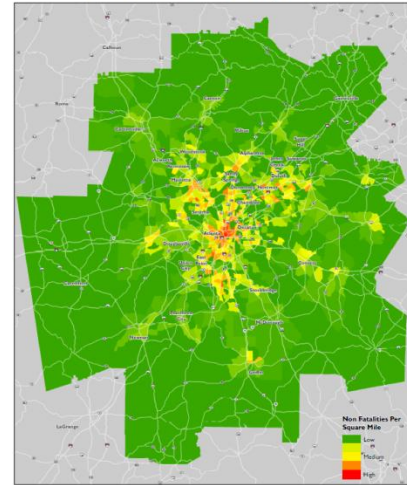
Active Transportation Planning Framework

Safety	Mobility	Economic Competitiveness	Implementation
Crashes	Connectivity	Access	Match
Exposure / Risk Reduction	Mode Shift Opportunities	Demand	Urgency / Timeliness
Crash Reduction / Crash Modification Factors	Level of Service / Traffic Stress	Equity	Supportive Policies & Programs
		Health	Performance Record
			Project Readiness / Maturity of Concept

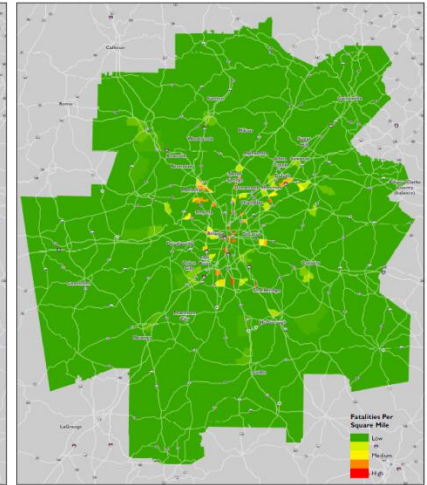
Safety: Crash Distribution & Risk



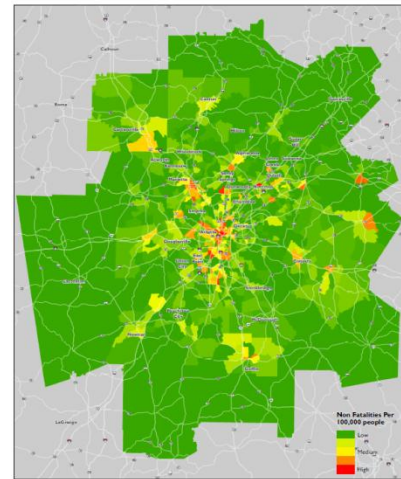
Non Fatalities Per Square Mile



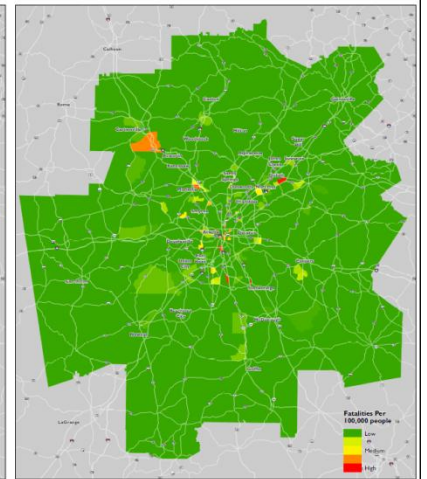
Fatalities Per Square Mile



Non Fatalities Per 100,000 people

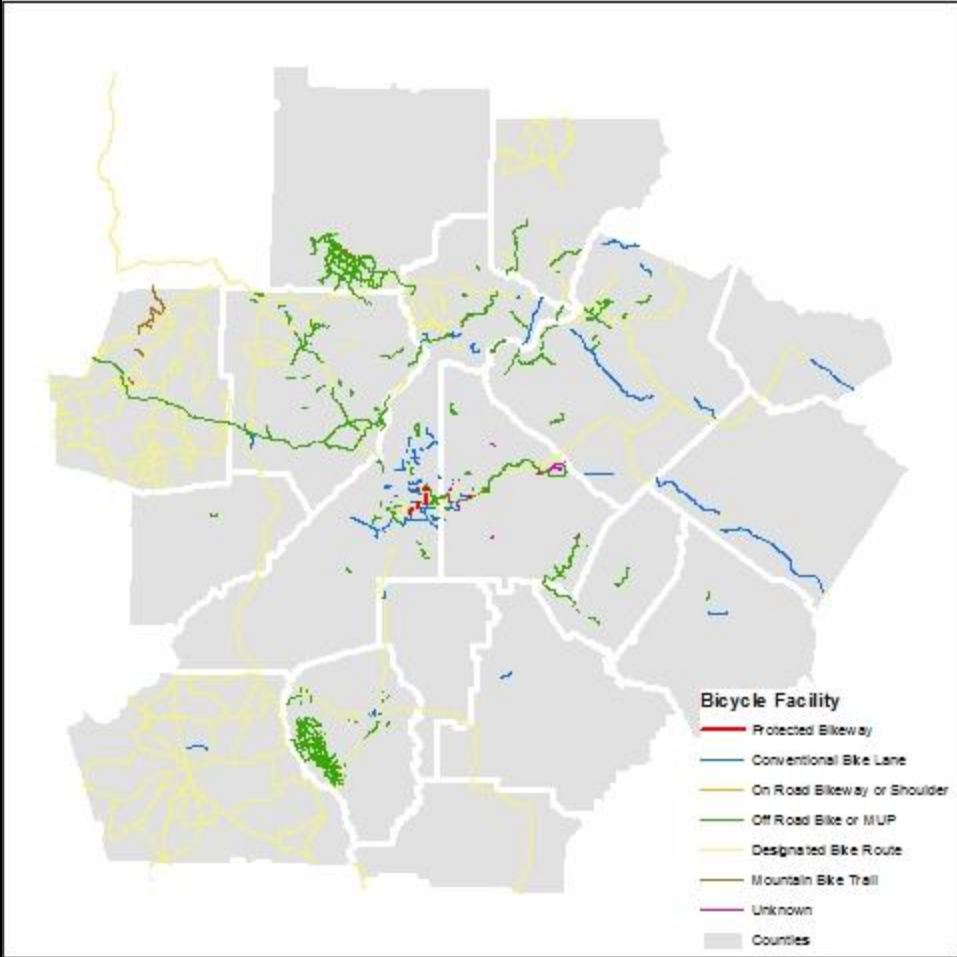
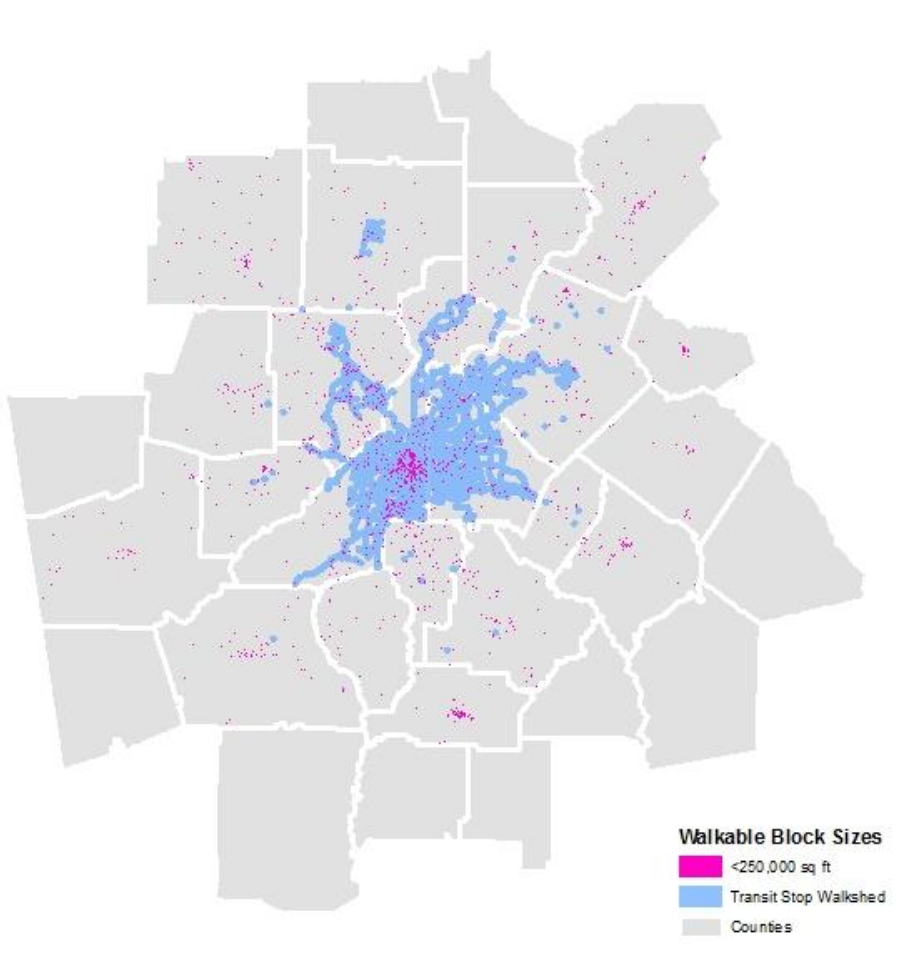


Fatalities Per 100,000 people



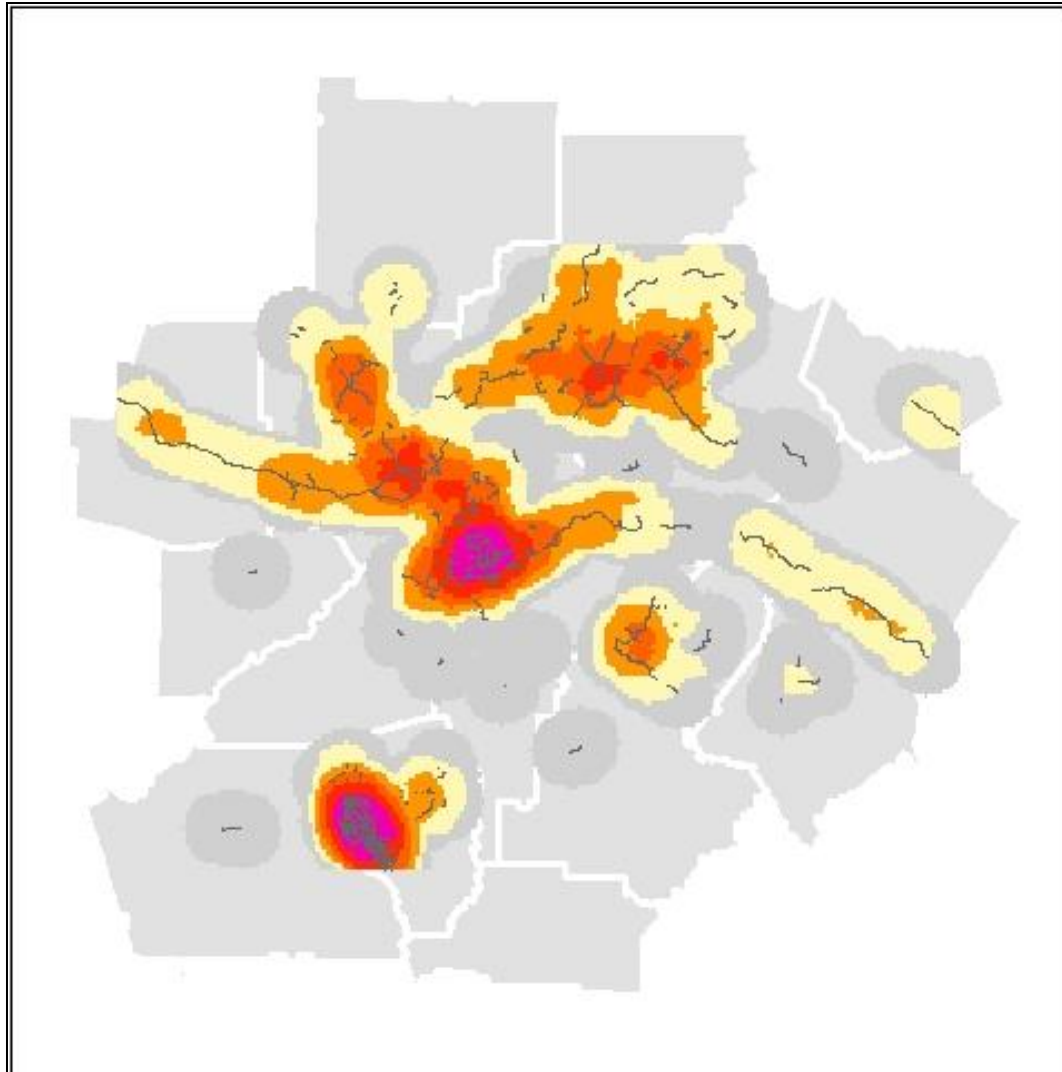
Safety

Connectivity: Walkability & Bikeability



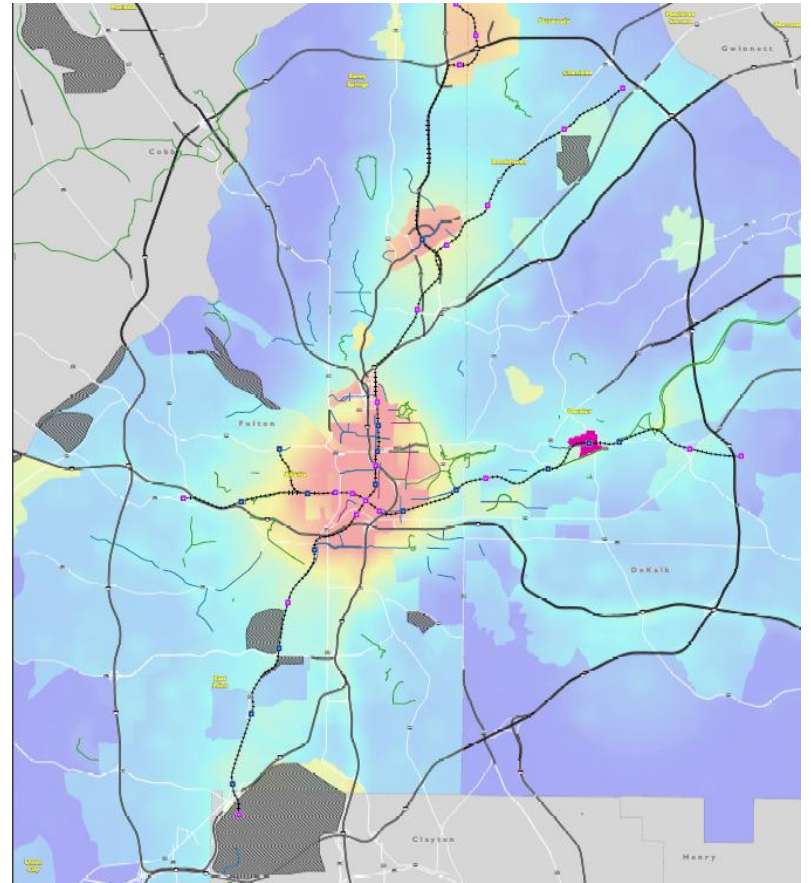
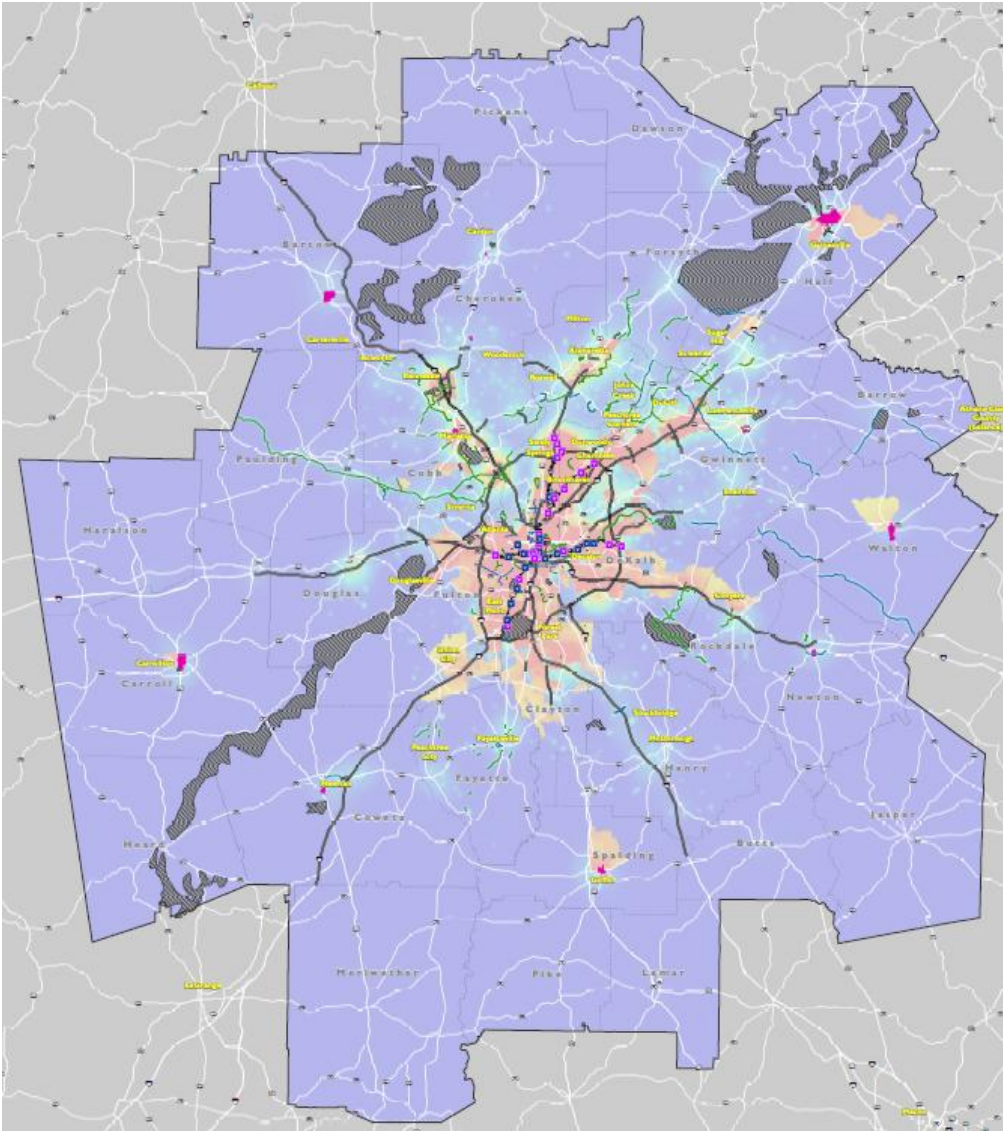
Mobility

Connectivity: Bicycle Network Gaps



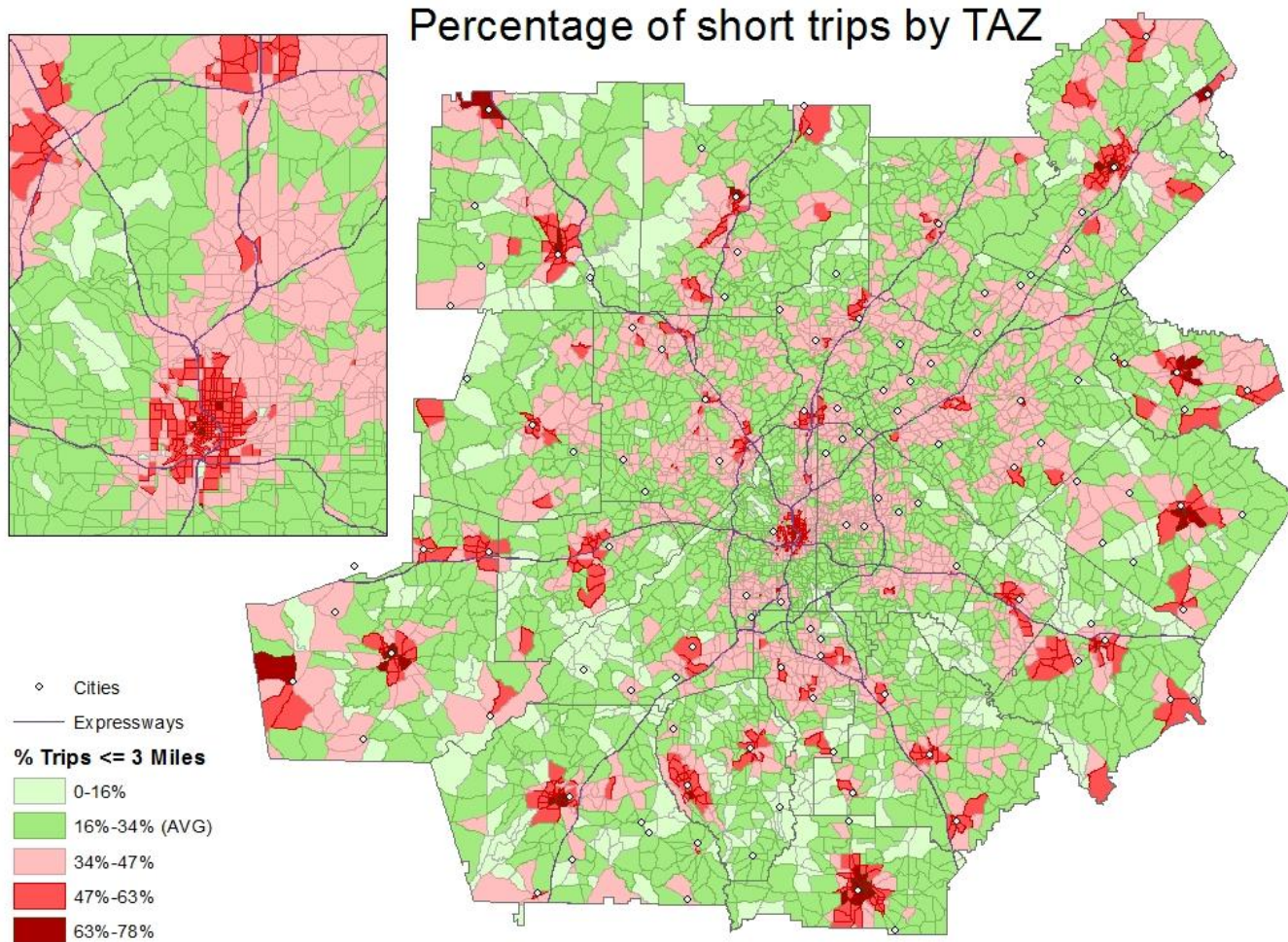
Mobility

Connectivity: Barriers to Travel



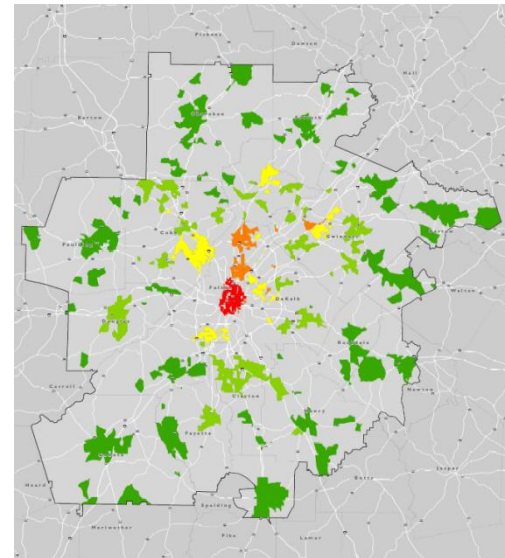
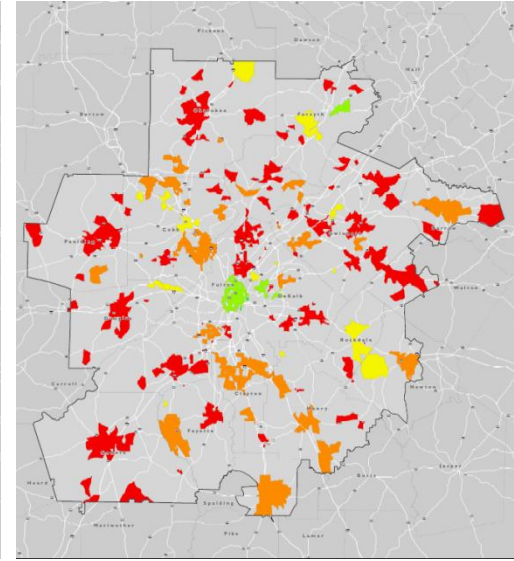
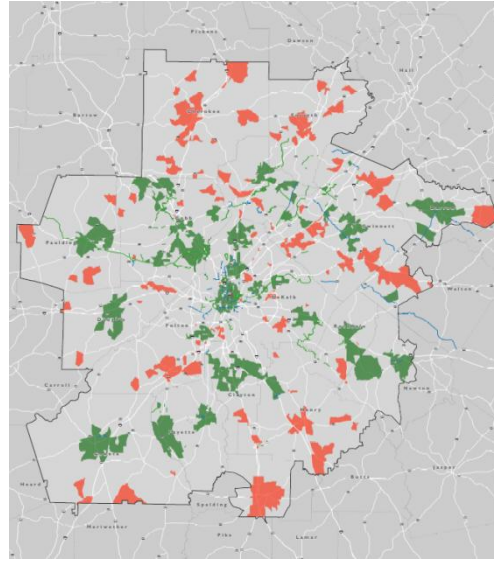
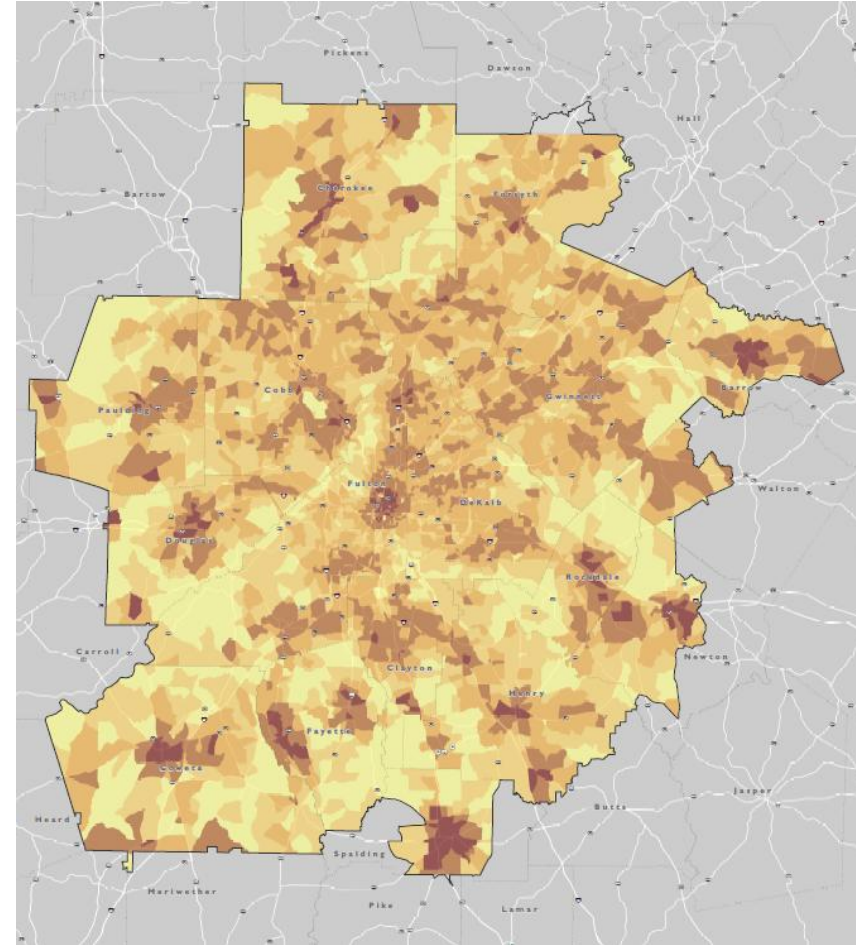
Mobility

Mode Shift Opportunities



Mobility

Mode Shift Opportunity Zones



Level of Service / Traffic Stress (2007)

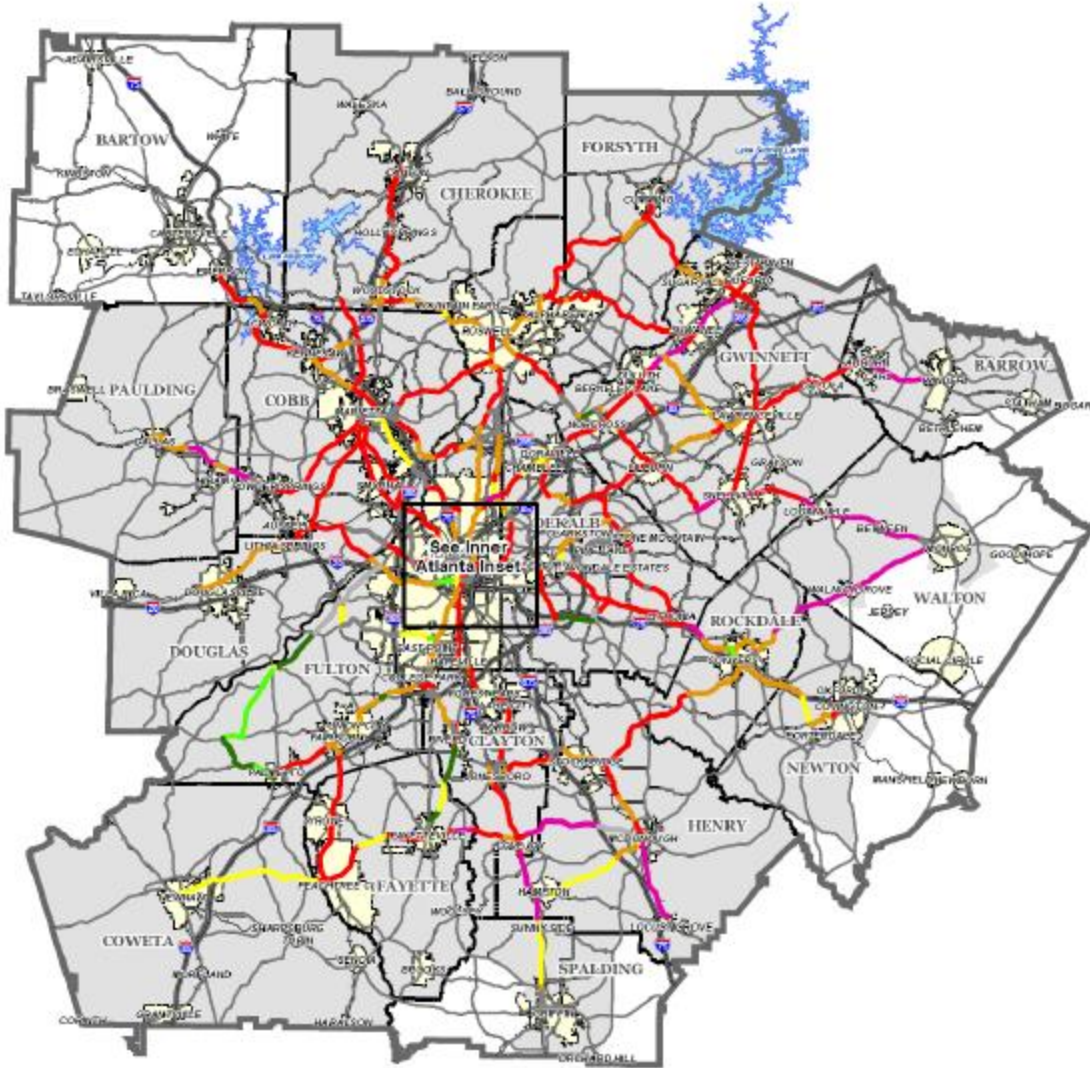


FIGURE 2.2 - Bicycle LOS results for ARC Regional Bicycle Study Network

Distance weighted average for entire network:
4.54= Bicycle LOS "E"

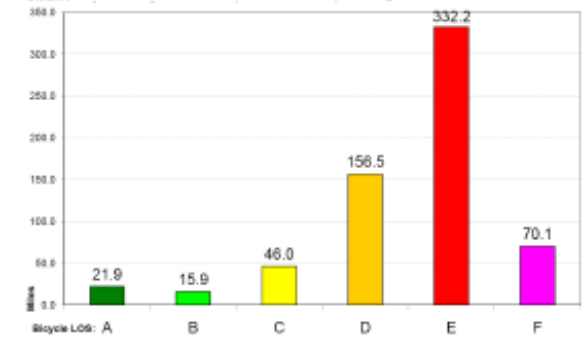
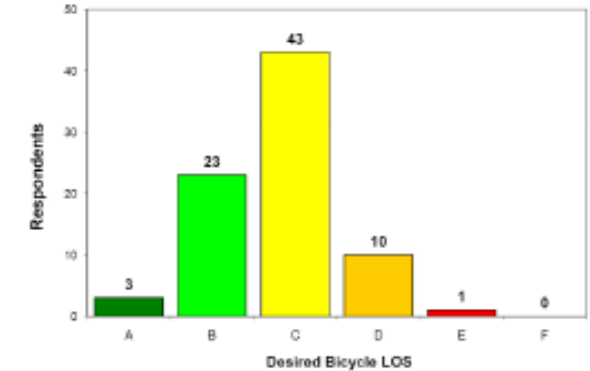
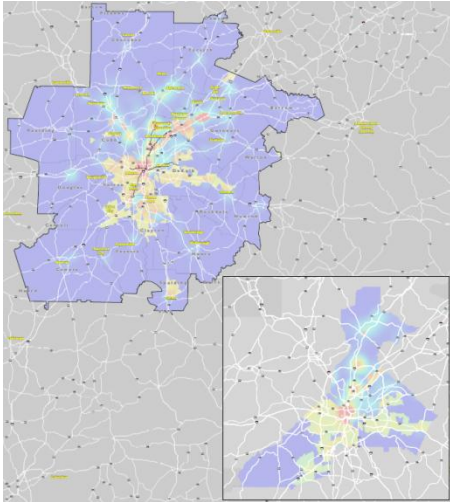
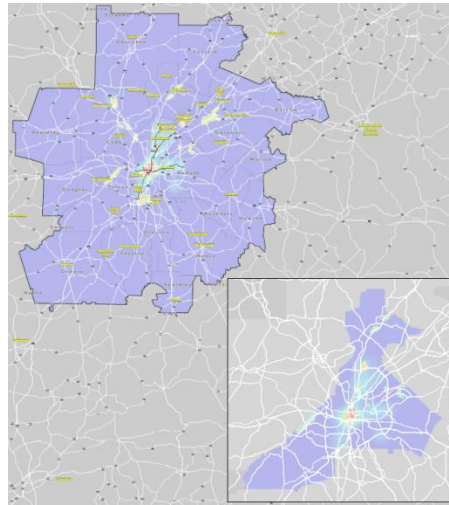
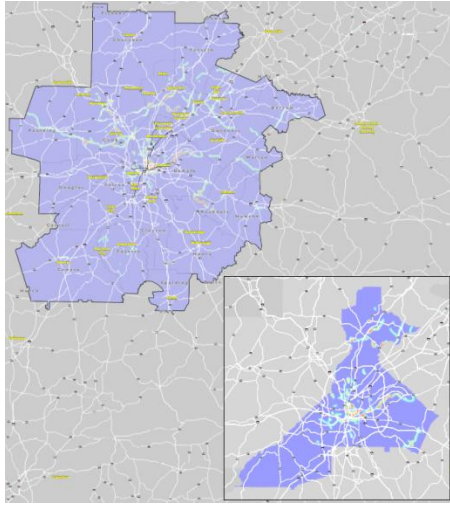


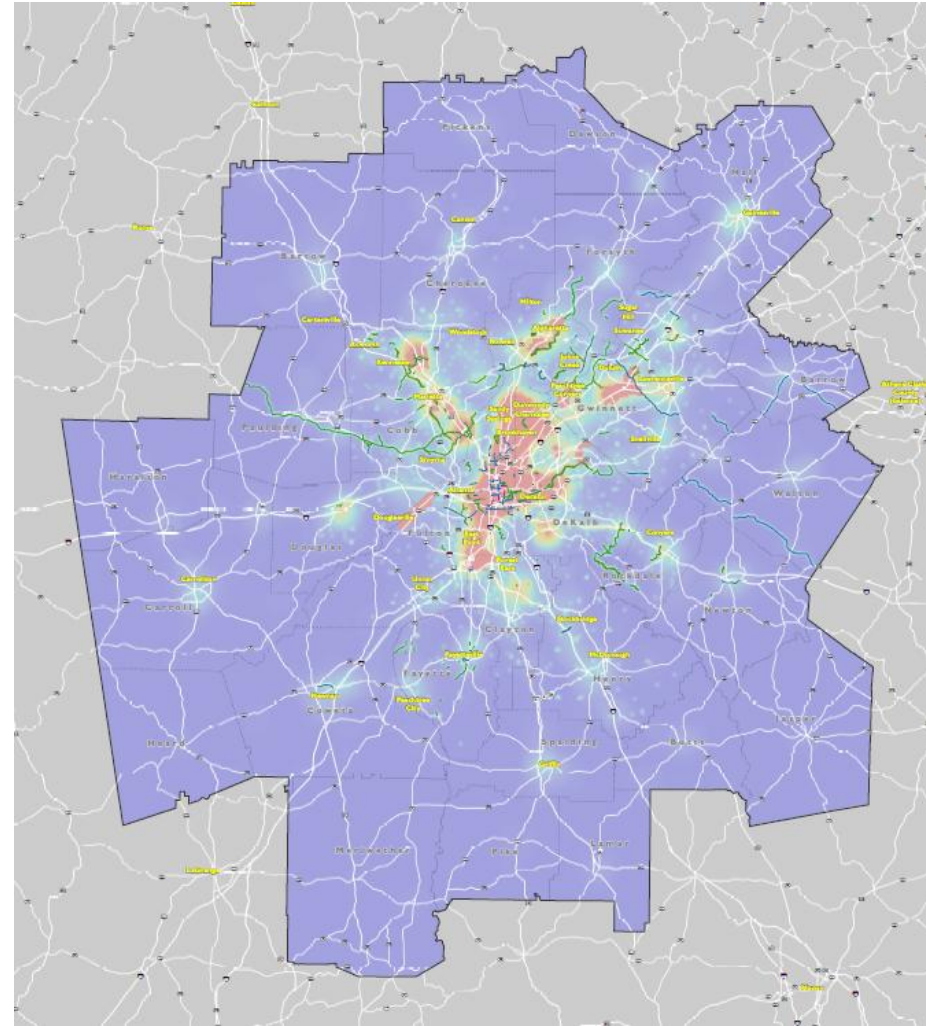
FIGURE 2.5 Desired General Bicycle LOS Among Atlanta Region Workshop Participants, October 2006



Latent Demand: Heat Map

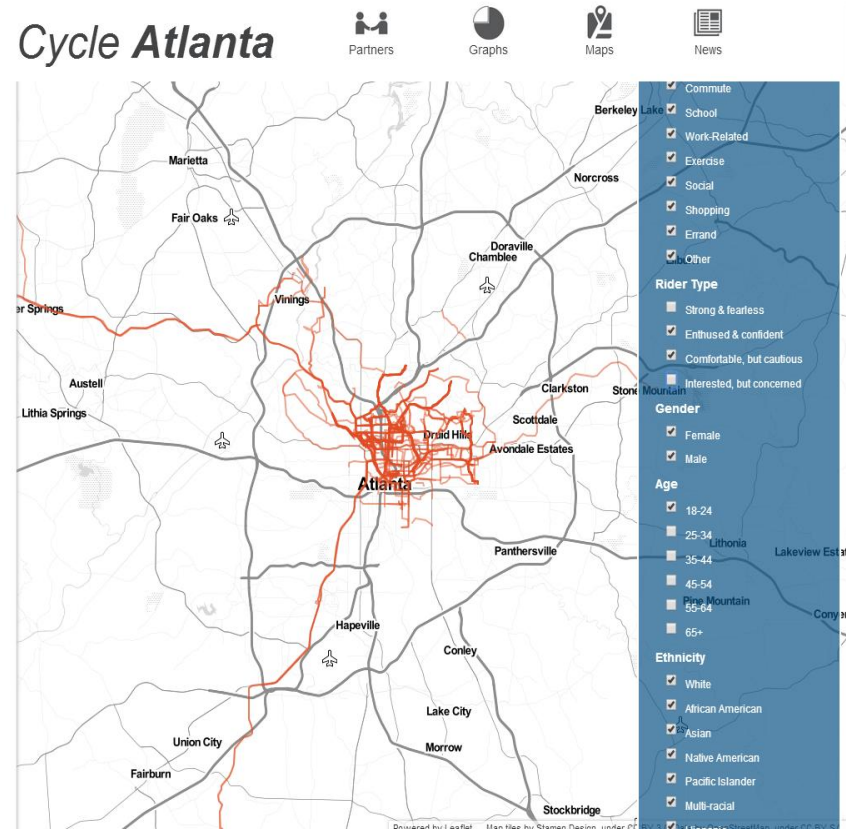
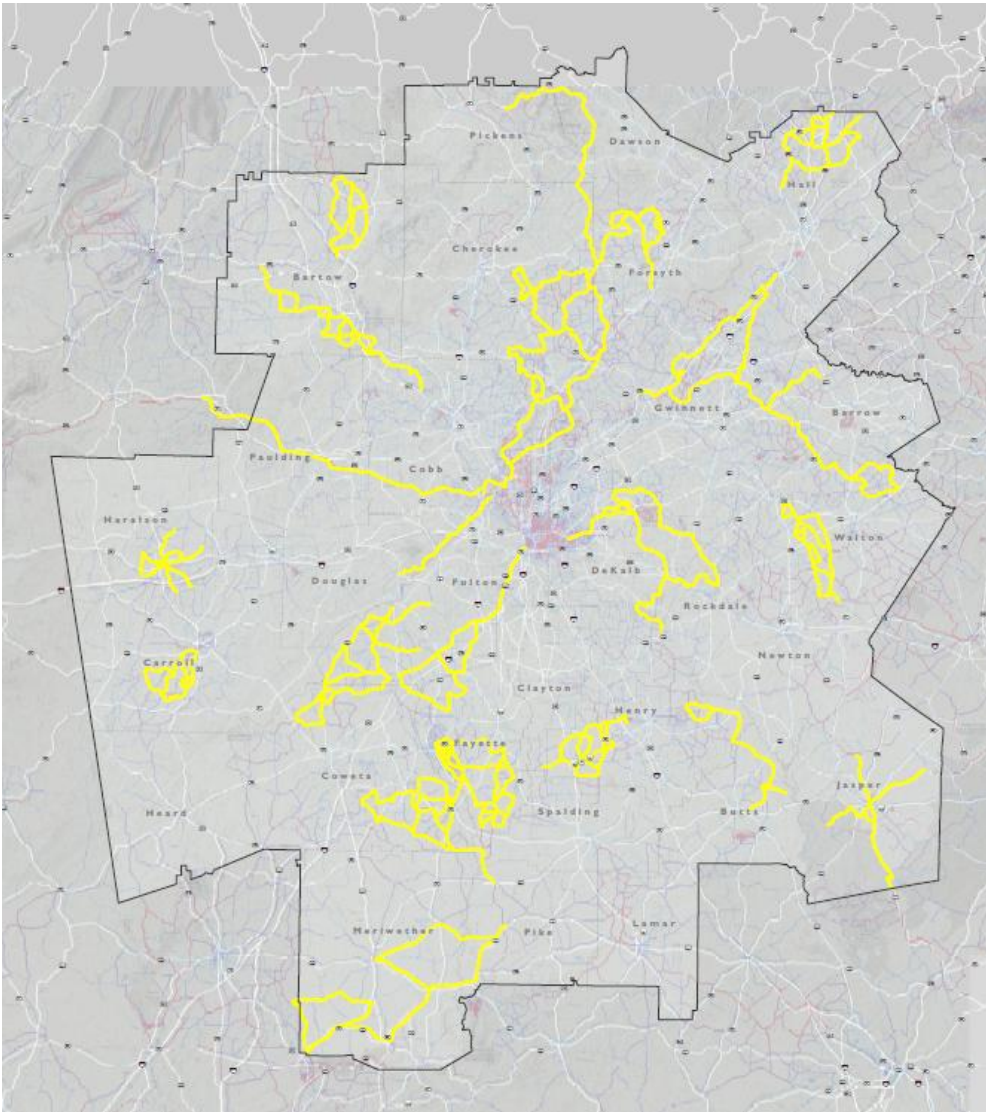


Factor	Weight
Population	16
MARTA Rail	12
Regional Centers	12
Colleges / Universities	10
Total Employment	10
Existing Bikeways	8
Express Bus	8
Bus Service	8
Retail Employment	6
K-12 Schools	4



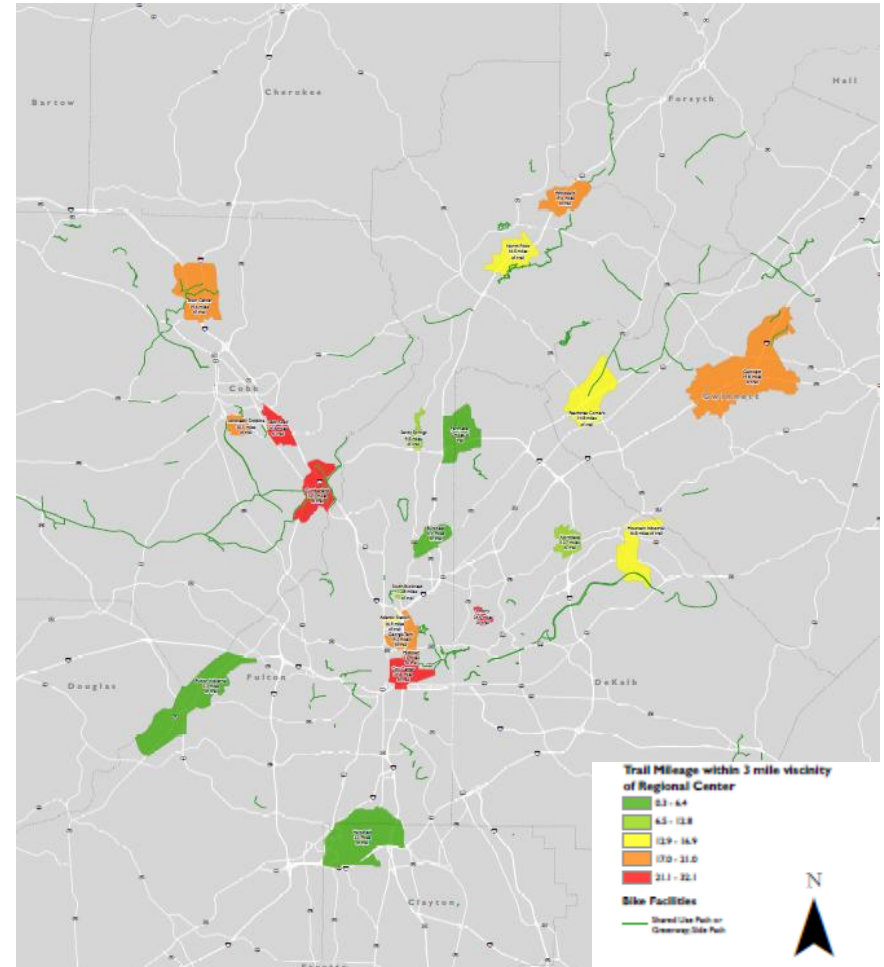
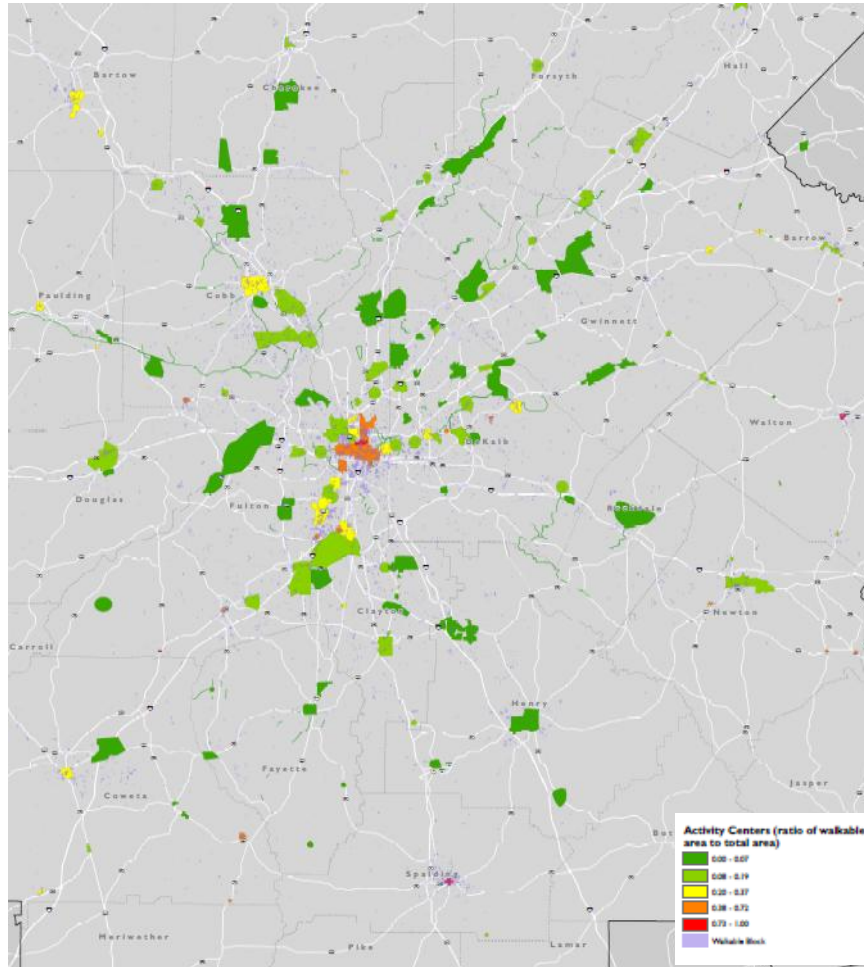
Economic Competitiveness

Actual Demand: “crowdsourcing”



Economic Competitiveness

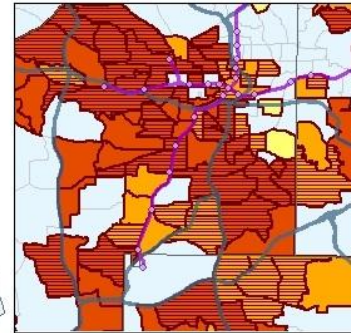
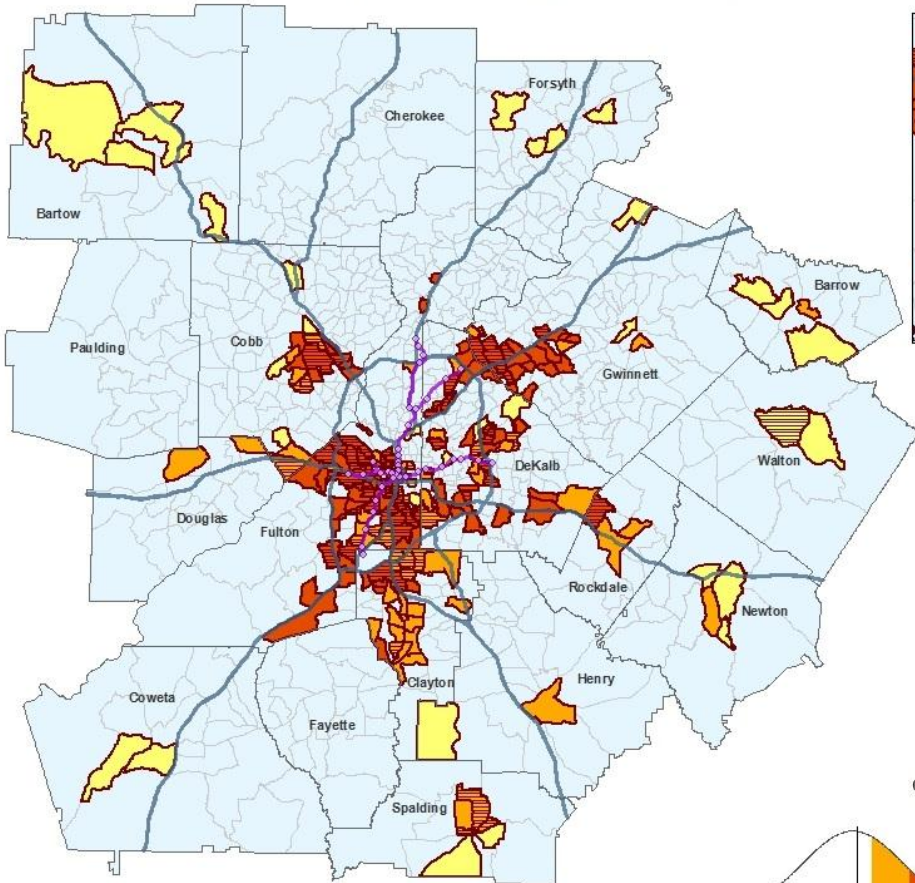
Active Transportation Access to & within Regional Centers



Economic Competitiveness

Equity & Public Health

DRAFT Equitable Target Areas (Method 2 -Focused)



Poverty Concentrations

- Very High
- High
- Low-Medium

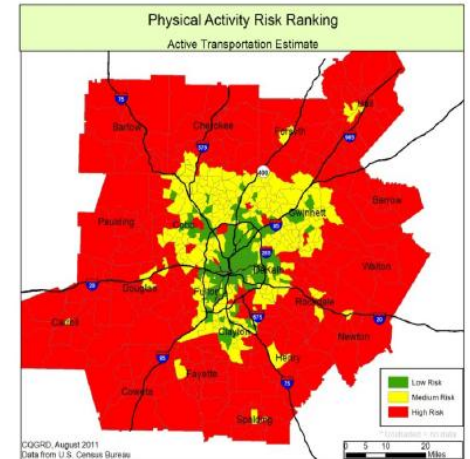
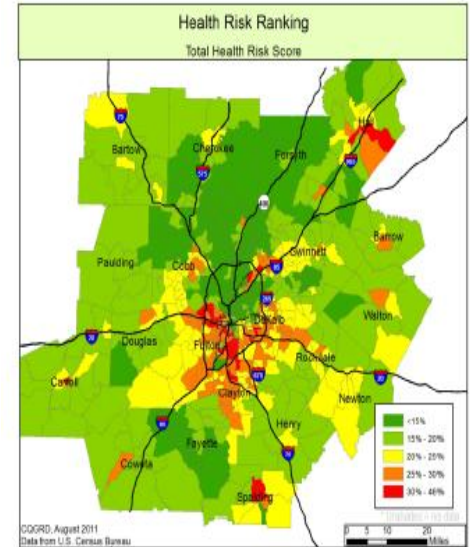
Race Concentrations

- Very High
- High
- Low-Medium

	Medium Range	(avg)
Poverty:	22%-34%	(16%)
African American:	49%-80%	(34%)
Hispanic:	28%-40%	(11%)
Asian:	7%-13%	(5%)
Other Non-White Race:	3%-4%	(2%)

Race based on 2010 Census
Poverty based on 2012 ACS 5-Year

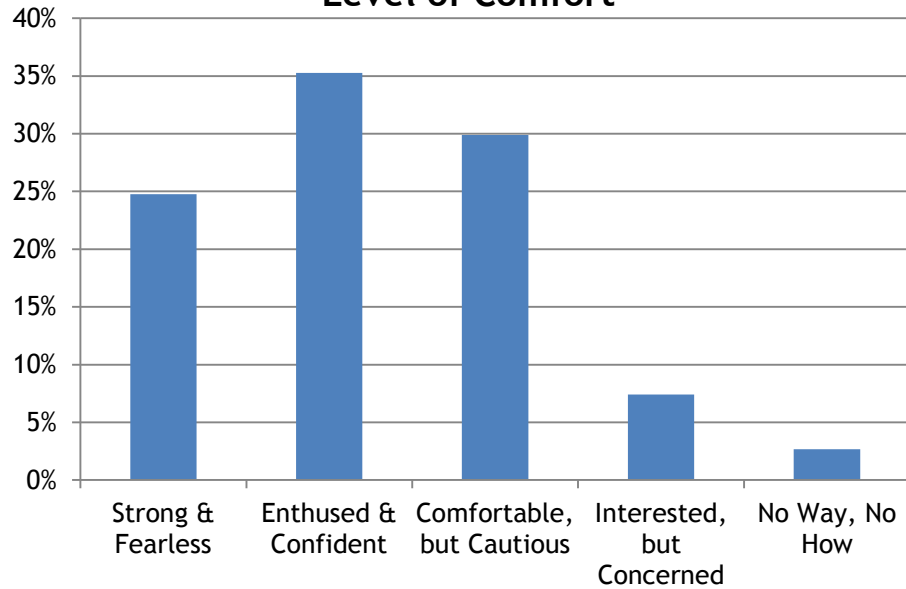
Contact Atlanta Regional Commission: atlantaregional.com 404.463.3272



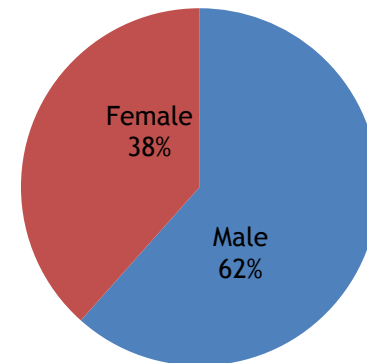
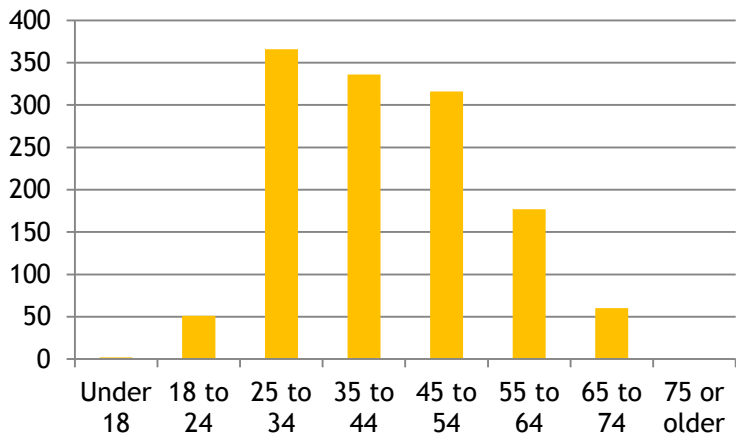
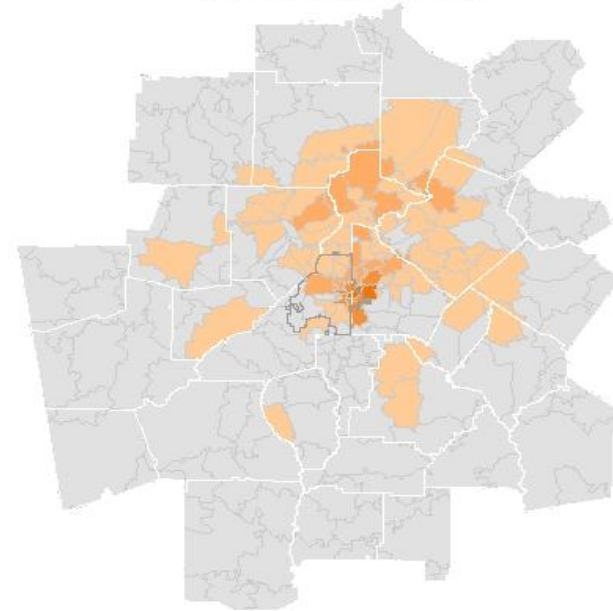
Economic Competitiveness

Surveying Bicycle Riders

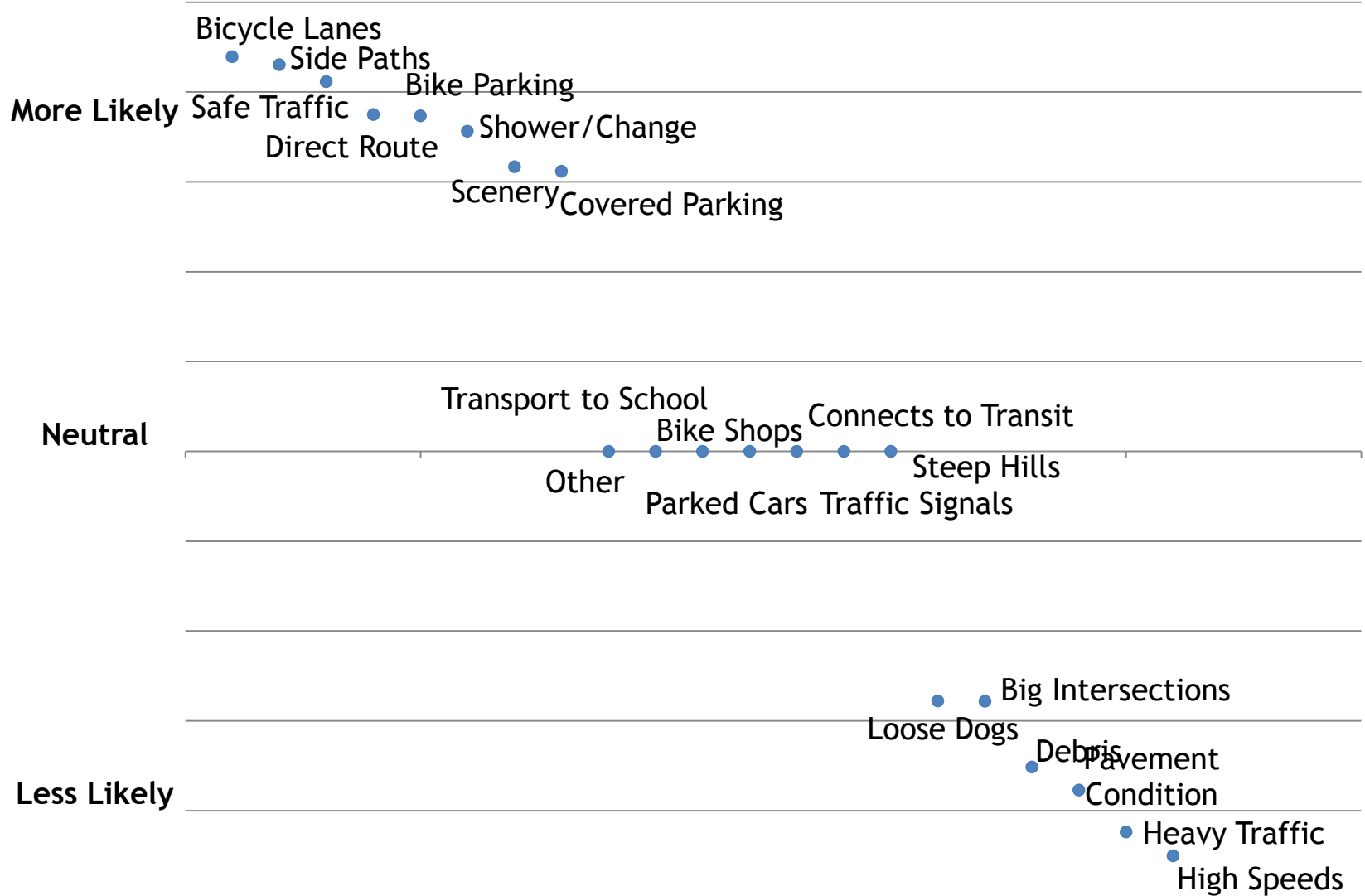
Level of Comfort



Responses by Home Zip Code



Surveying Bicycle Riders



Measuring Non-Motorized Traffic

Figure 2.4 Silver Comet Trail Usage by Gender

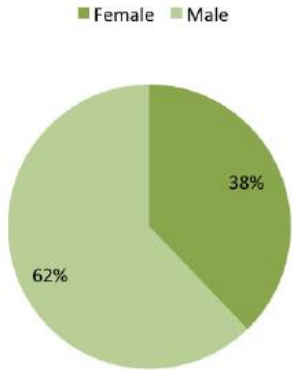
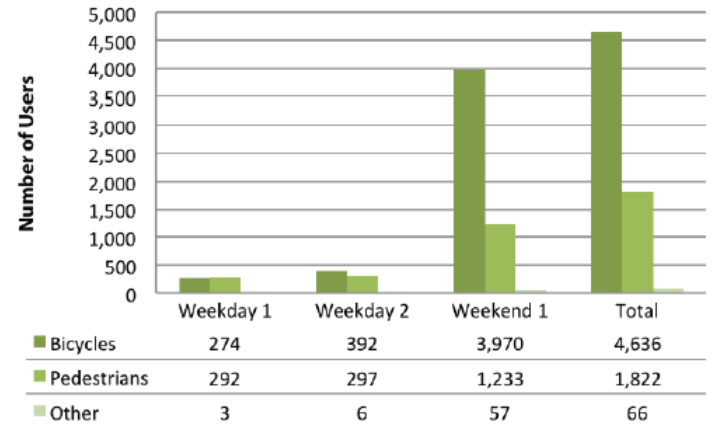
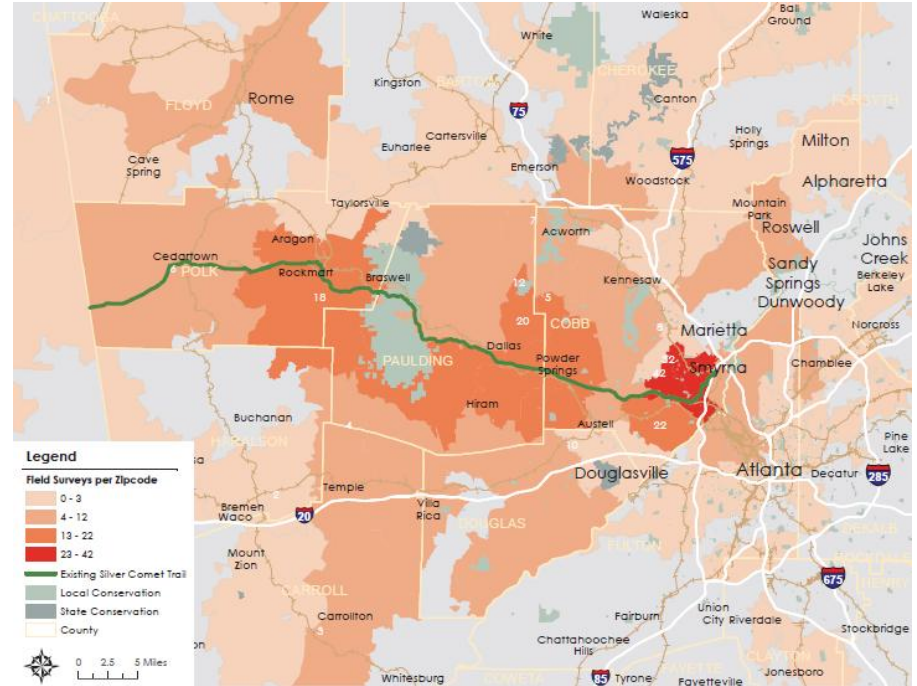
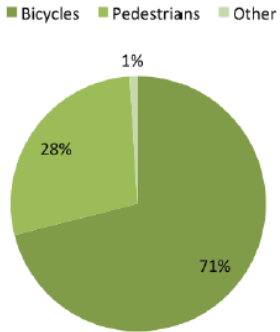


Figure 2.2 Silver Comet Trail Use by User Activity



Next Steps

- Combine data for new perspectives – how do we balance corridors with regional centers?
- Develop typologies – facilities, users, and risk in varying contexts
- Identify regional focus areas – can we combine all of the measures into regional high-priority zones?
- Are there additional analysis that would be useful?

Safety	Mobility	Economic Development / Livability	Implementation
Crashes	Connectivity	Access	Match
Exposure / Risk Reduction	VMT Reduction	Demand	Urgency / Timeliness
Crash Reduction / Crash Modification Factors	Level of Service / Traffic Stress	Equity	Supportive Policies & Programs
		Health	Performance Record
			Project Readiness / Maturity of Concept