



GAINESVILLE-HALL
Metropolitan Planning Organization

RS&H



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Social Media and Big Data for Transportation Planning

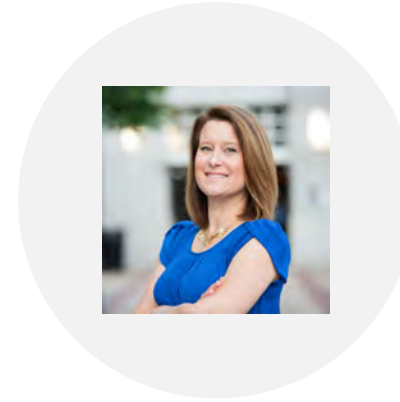
Three Case Studies from GHMPO



JOSEPH BOYD, AICP
GHMPO



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RS&H



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BLUE CYPRESS CONSULTING

Presenters



1

Dawsonville Highway – McEver Road

http://www.ghmpo.org/DocumentCenter/View/1152/Dawsonville-Hiwy-McEver-Rd-Connectivity-Study_Final

2

Jackson County Transportation Plan

<http://www.ghmpo.org/DocumentCenter/View/1314/Final-Report---Jackson-County-Transportation-Plan-September-2019?bidId=>

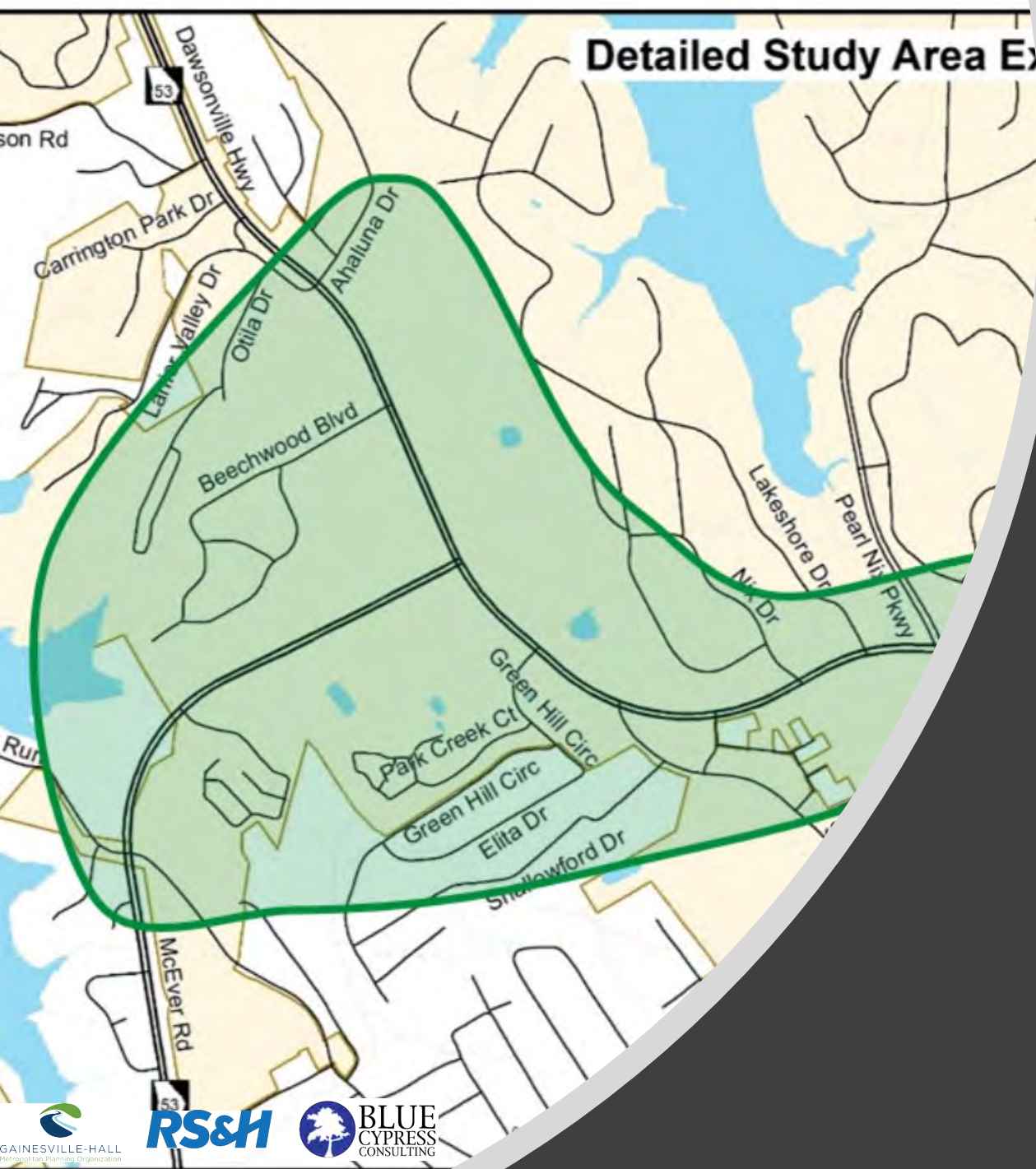
3

GHMPO Regional Transportation Plan

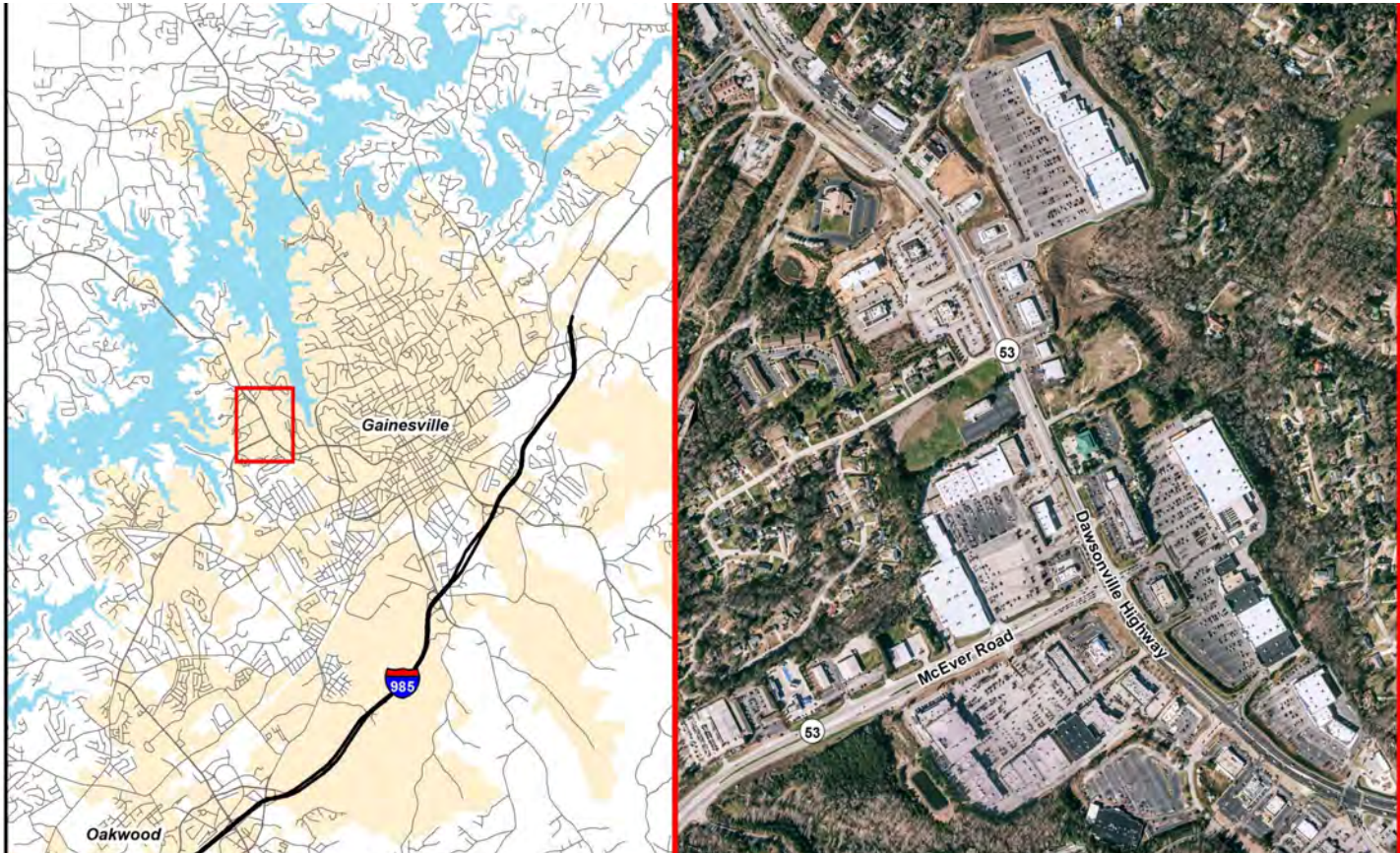
<http://www.ghmpo.org/180/Gainesville-Hall-RTP-2020-Update>

Three Case Studies from GHMPO

Detailed Study Area Ex



Dawsonville Highway – McEver Road Connectivity Study



The Study scope entailed the retail corridor surrounding the Dawsonville Highway and McEver Road Intersection (State Route 53)

Project Location

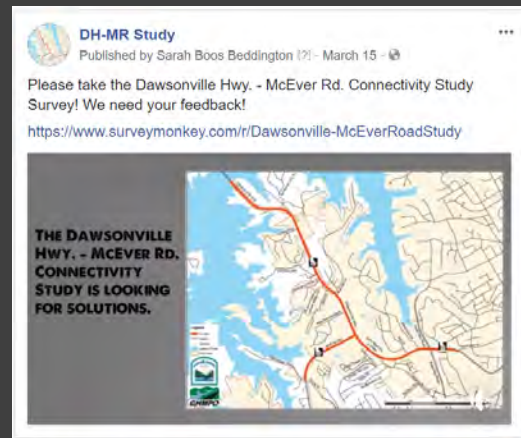


Project Background

- Severe Traffic Congestion
- Rapid Development
 - Mainly retail but some new housing developments in the vicinity as well
- Existing Housing
 - Established neighborhoods to the north and south of the corridor
- Limiting Geography
 - Lake Lanier surrounding three sides of the corridor

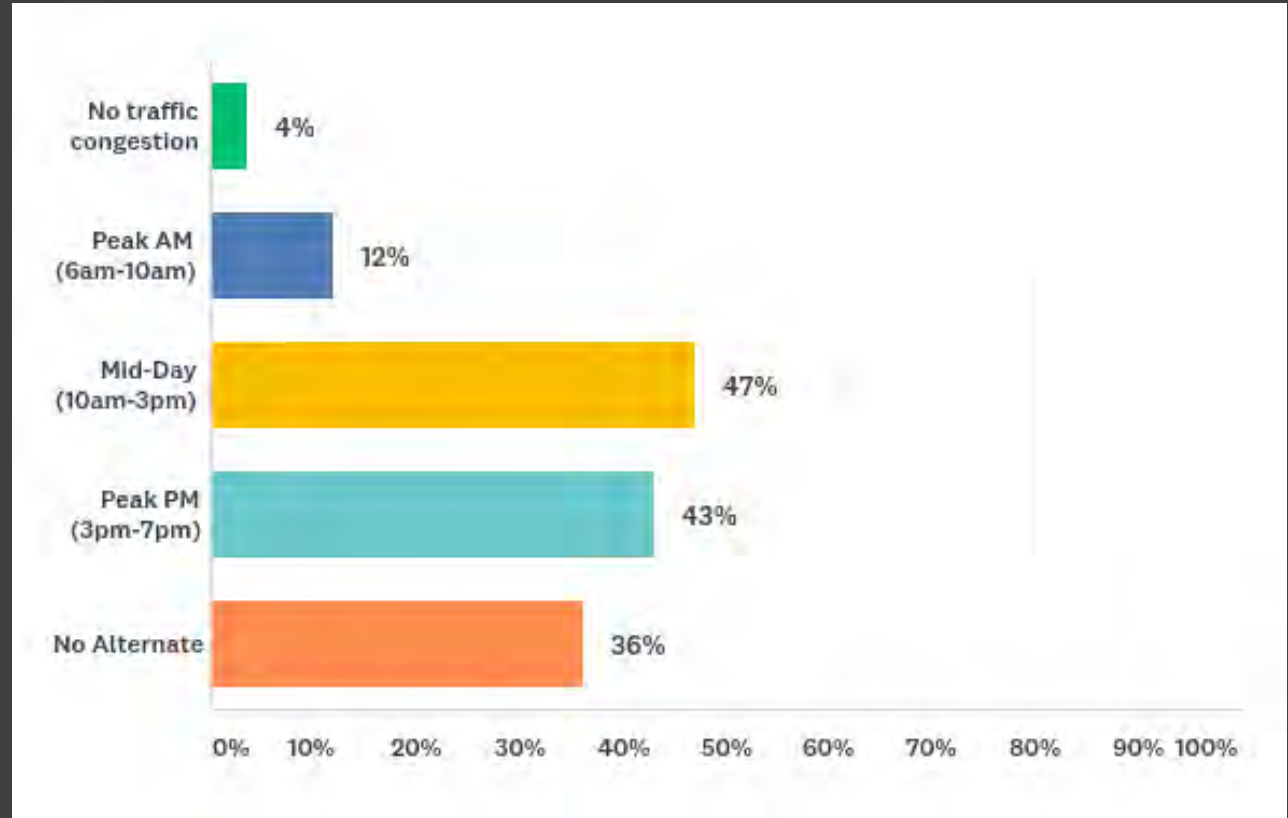
Public Outreach – Social Media

- Facebook geofencing
 - 1,517 people got the ad pushed to their phone
 - Focused on the area directly around the intersection
- Twitter
- Instagram



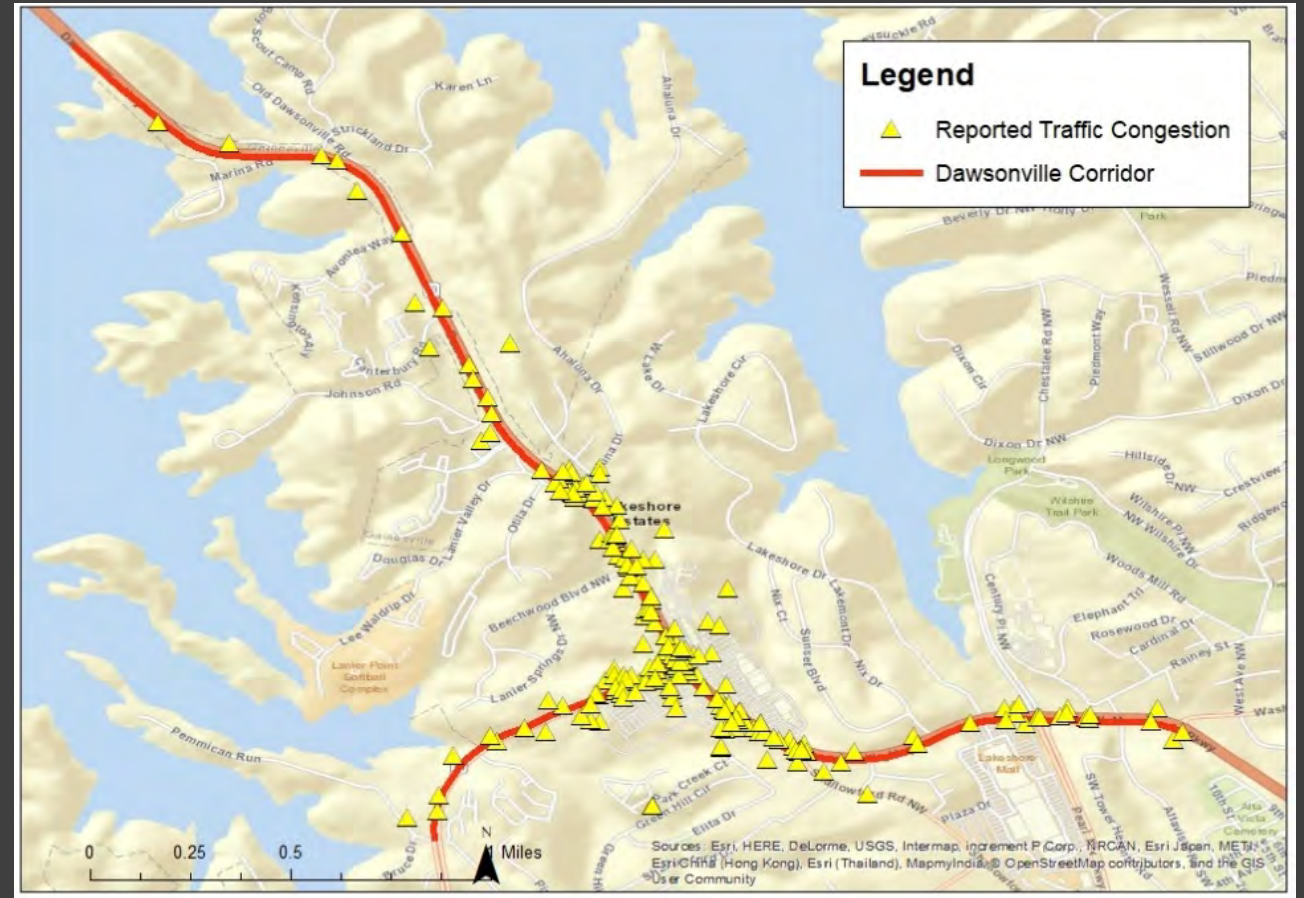
Public Outreach – Survey Response

- Q4. On weekends, do you avoid the Dawsonville Highway - McEver Road study area at certain times due to traffic congestion? (select all that apply)



Public Outreach – Survey Response

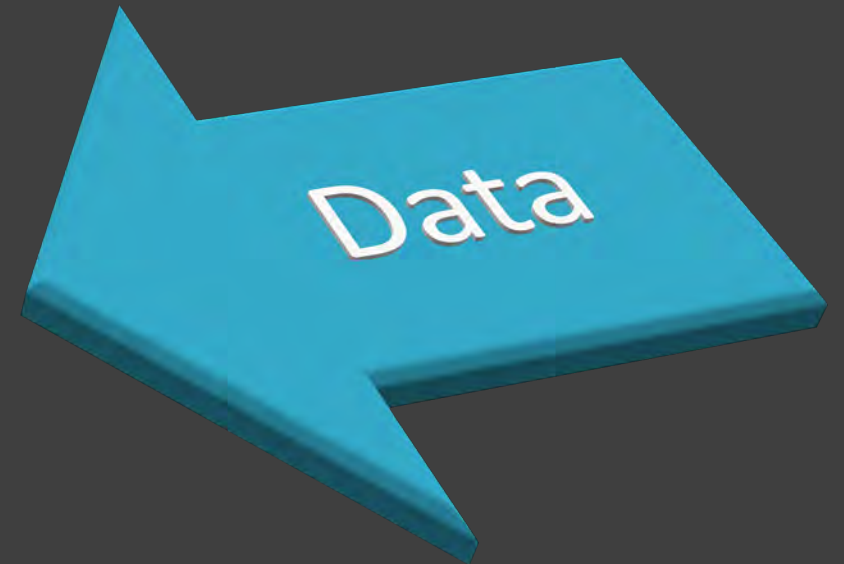
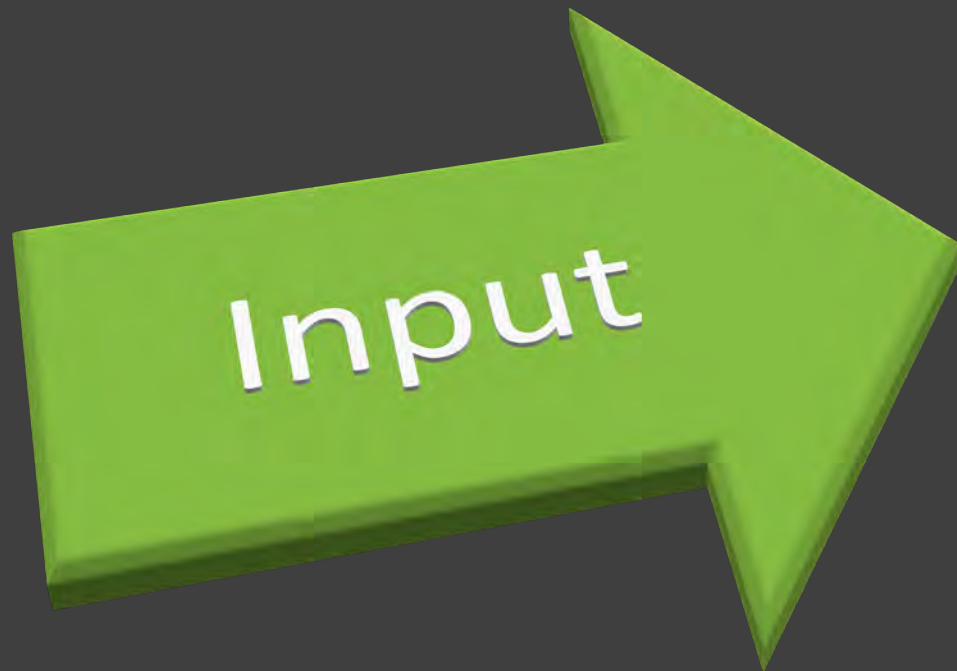
- SurveyMonkey
 - 644 participants
- Wikimapping
 - 110 participants



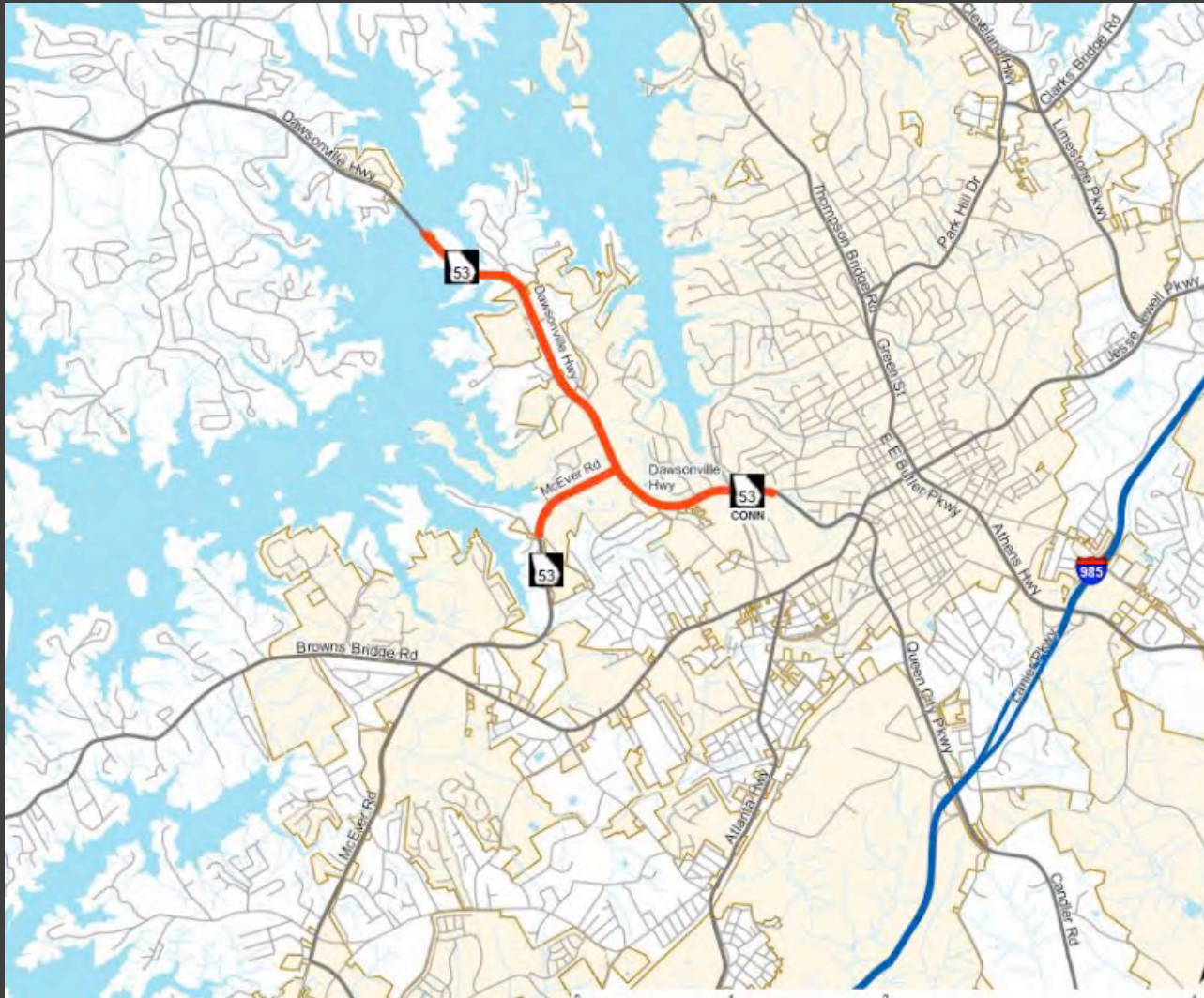


Public Outreach - Meetings

Big Data and Analysis



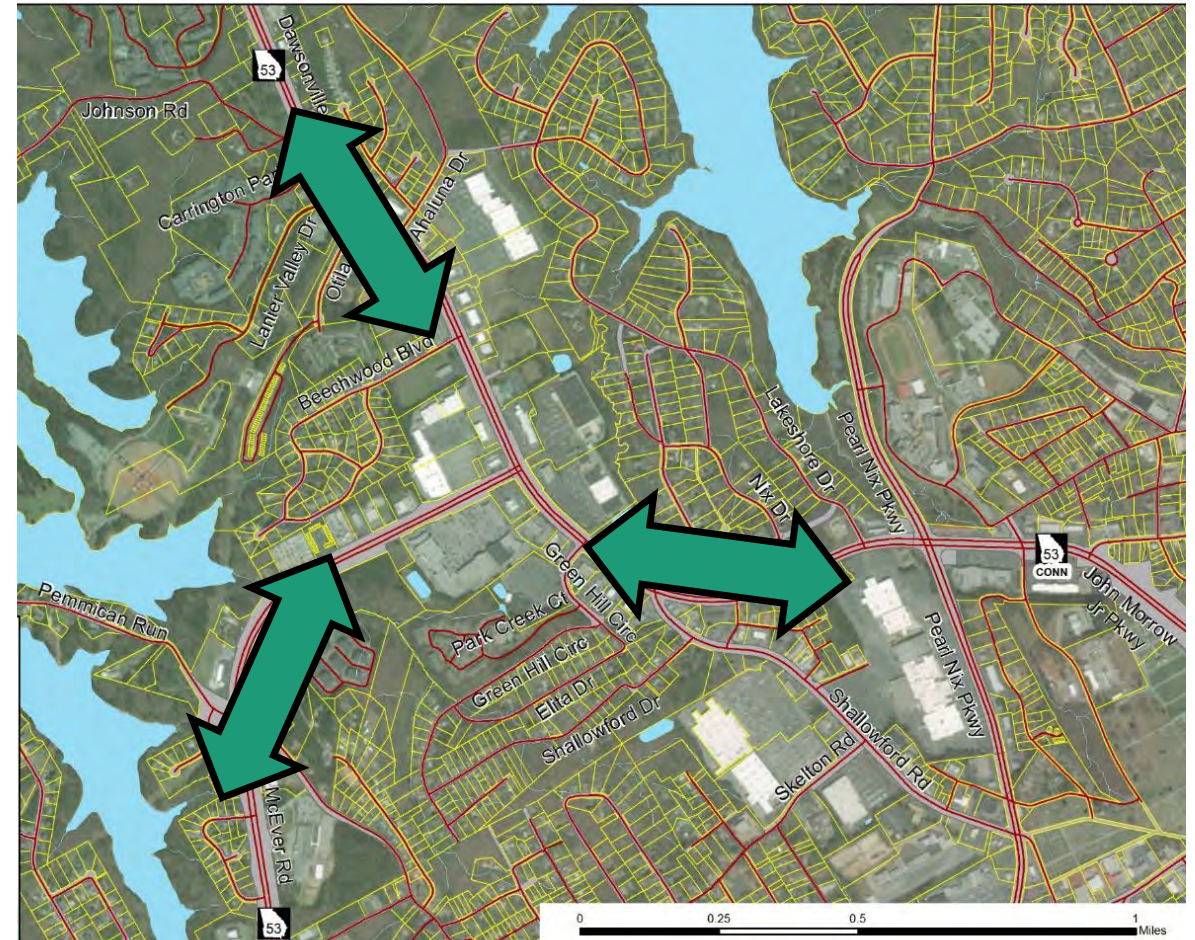
Big Data and Analysis

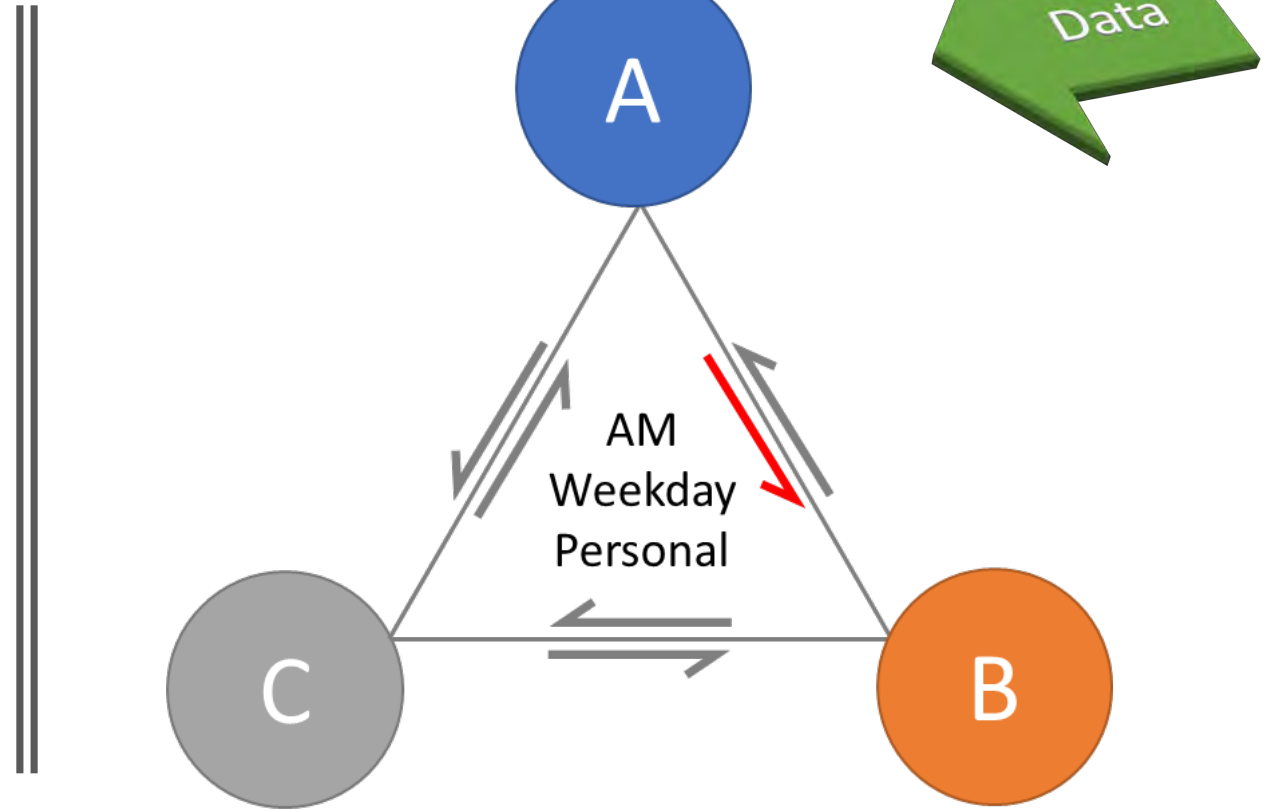
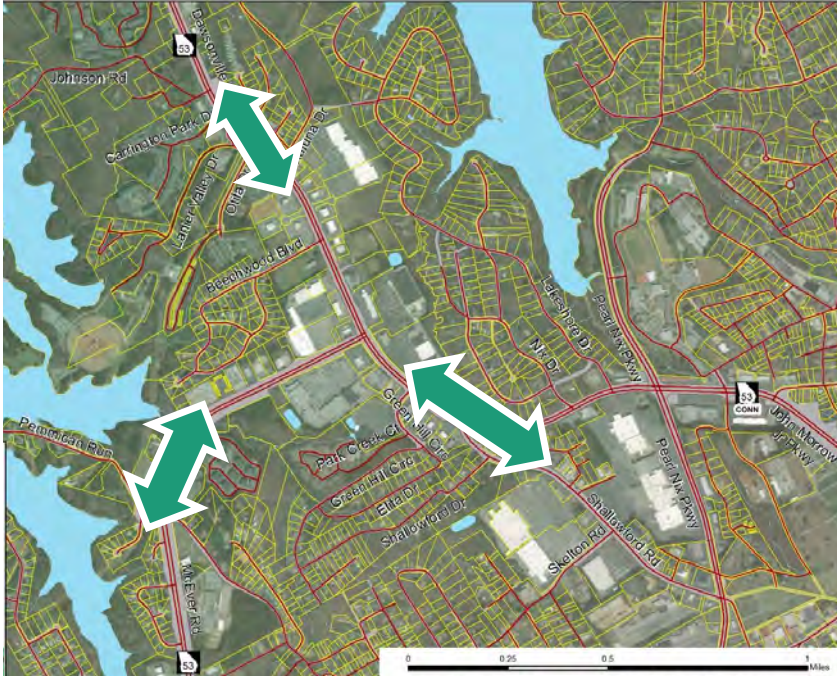


- Origins and Destinations (O&D)
 - Vehicles
 - Trucks
- Congestion “Hot Spots”
 - Locations
 - Time of Day
 - Origins and Destinations
- Safety Concerns

Origins and Destinations

- What?
 - Autos
 - Trucks
- Where?
 - Study area limits (x3)
- When?
 - Weekend/Weekday
 - Time (AM/PM)
- Why?
 - Local trips
 - Through trips





Origins and Destinations

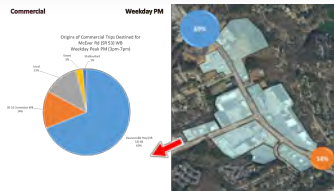
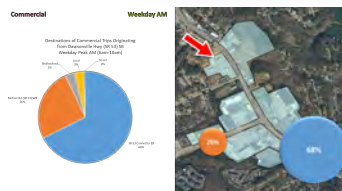
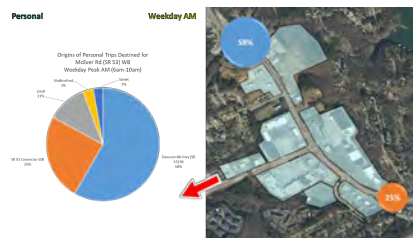
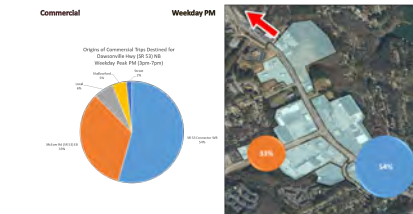
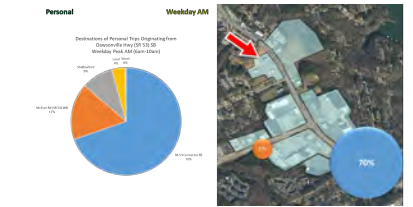
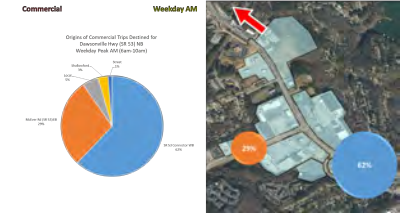
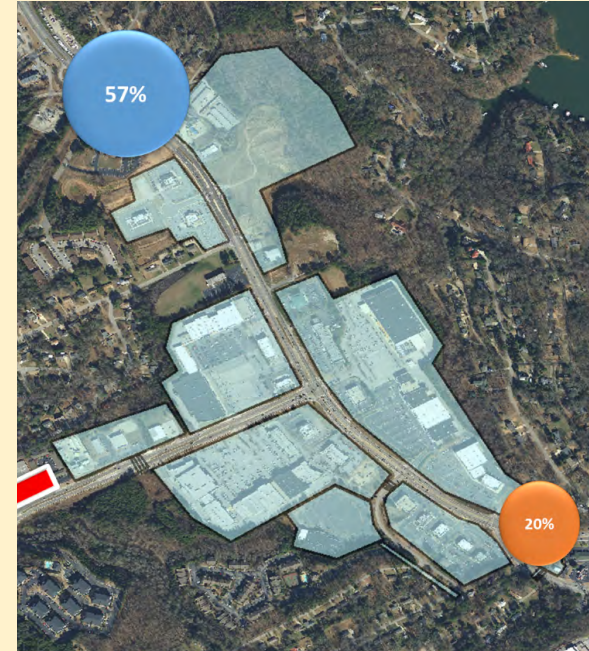
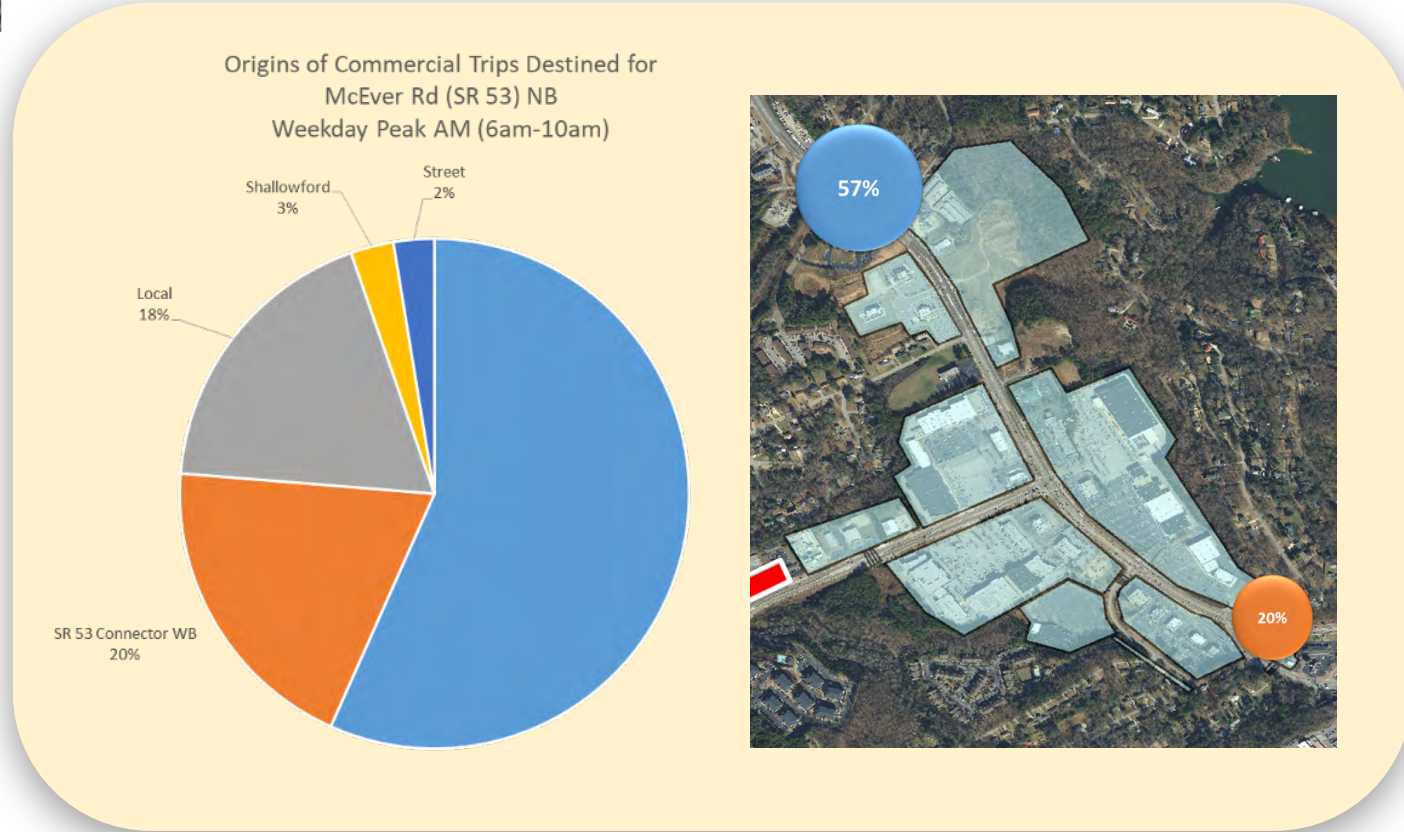
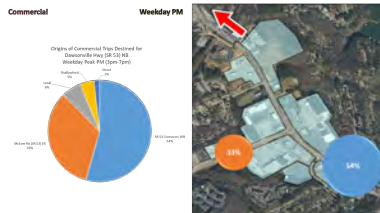
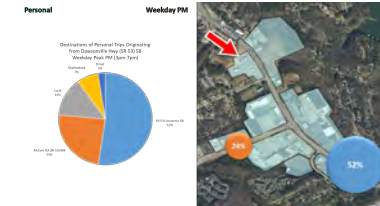
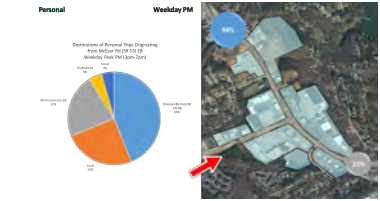
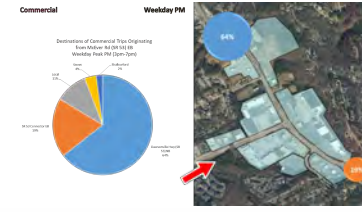
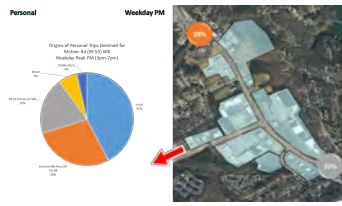
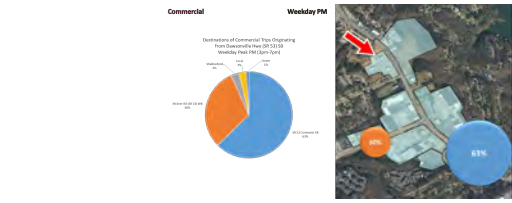


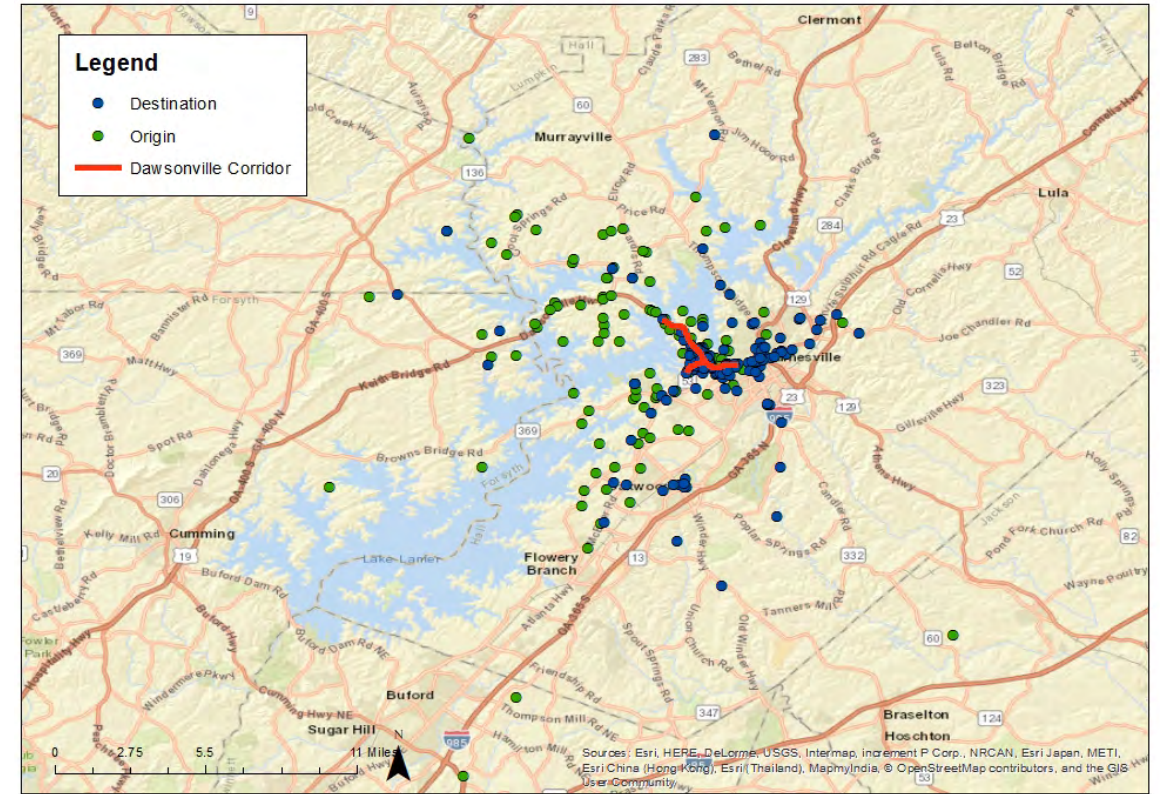
TABLE 15 WEEKDAY ORIGIN-DESTINATION TRIP DISTRIBUTION BY DIRECTION, TIME PERIOD, AND VEHICLE TYPE

Location	Days of Week	Direction	Time Period	Personal						Commercial							
				A	B	C	Core Com.	Shallowford	Other Streets	A	B	C	Core Com.	Shallowford	Other Streets		
A: Dawsonville Highway (North of Ahaluna Drive)	Weekday	Southbound	All Day (12am-12am)		59%	20%	12%		7%	2%		66%	26%	4%		3%	1%
	Weekday	Southbound	Peak AM (6am-10am)		70%	17%	4%		9%	0%		68%	26%	3%		3%	0%
	Weekday	Southbound	Mid-Day (10am-3pm)		53%	22%	16%		6%	3%		63%	27%	6%		3%	1%
	Weekday	Southbound	Peak PM (3 pm-7pm)		52%	24%	14%		7%	3%		63%	30%	3%		3%	1%
	Weekday	Northbound	All Day (12am-12am)		45%	22%	21%		7%	5%		61%	28%	6%		4%	1%
	Weekday	Northbound	Peak AM (6am-10am)		56%	24%	8%		5%	7%		62%	29%	5%		3%	1%
	Weekday	Northbound	Peak PM (3 pm-7pm)		44%	20%	24%		7%	5%		62%	29%	5%		3%	1%
B: Dawsonville Highway (South of Shallowford Road)	Weekday	Southbound	All Day (12am-12am)	40%		13%	38%		2%	7%	69%		9%	17%		1%	3%
	Weekday	Southbound	Peak AM (6am-10am)	44%		20%	26%		3%	7%	68%		9%	18%		2%	3%
	Weekday	Southbound	Mid-Day (10am-3pm)	30%		13%	48%		3%	6%	61%		12%	22%		2%	3%
	Weekday	Southbound	Peak PM (3 pm-7pm)	33%		13%	44%		2%	8%	73%		9%	14%		3%	1%
	Weekday	Northbound	All Day (12am-12am)	44%		12%	33%		2%	9%	78%		9%	10%		1%	2%
	Weekday	Northbound	Peak AM (6am-10am)	69%		13%	11%		1%	6%	79%		9%	9%		1%	2%
	Weekday	Northbound	Peak PM (3 pm-7pm)	51%		11%	28%		1%	9%	77%		11%	9%		1%	2%
C: McEver Road (Northwest of Sherwin-Williams / Aaron's Driveway)	Weekday	Westbound	All Day (12am-12am)	32%	21%		37%		5%	5%	61%	15%		18%		3%	3%
	Weekday	Westbound	Peak AM (6am-10am)	25%	58%		11%		3%	3%	57%	20%		18%		3%	2%
	Weekday	Westbound	Mid-Day (10am-3pm)	30%	20%		39%		7%	4%	57%	16%		22%		3%	2%
	Weekday	Westbound	Peak PM (3 pm-7pm)	28%	20%		42%		4%	6%	69%	14%		13%		1%	3%
	Weekday	Eastbound	All Day (12am-12am)	33%	28%		28%		6%	5%	61%	19%		13%		4%	3%
	Weekday	Eastbound	Peak AM (6am-10am)	24%	43%		21%		6%	6%	65%	15%		14%		3%	3%
	Weekday	Eastbound	Mid-Day (10am-3pm)	29%	24%		33%		9%	5%	56%	23%		15%		4%	2%
Weekday	Eastbound	Peak PM (3 pm-7pm)	44%	22%		25%		5%	4%	64%	19%		11%		2%	4%	

Source: **STREETLIGHTDATA**

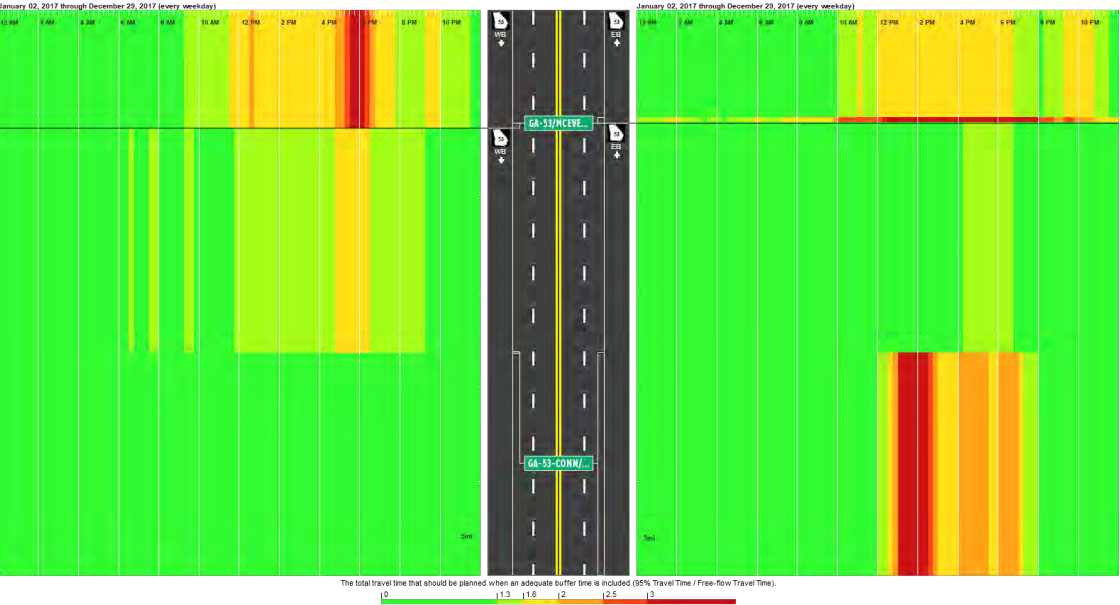
Detailed Analysis





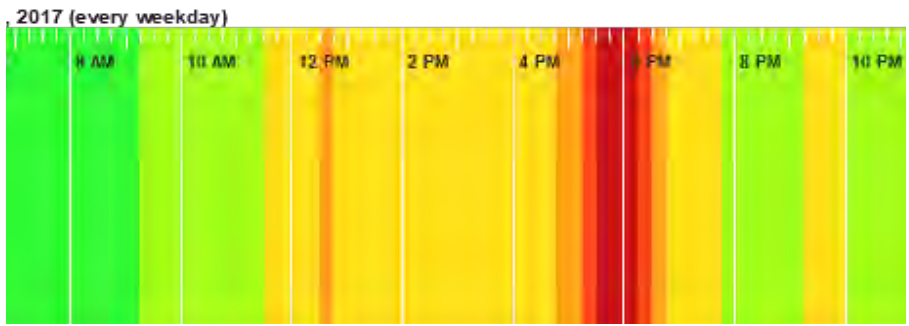
O&D Results: Big Data vs. Survey

Corridor Congestion



Source: INRIX / RITIS

When...

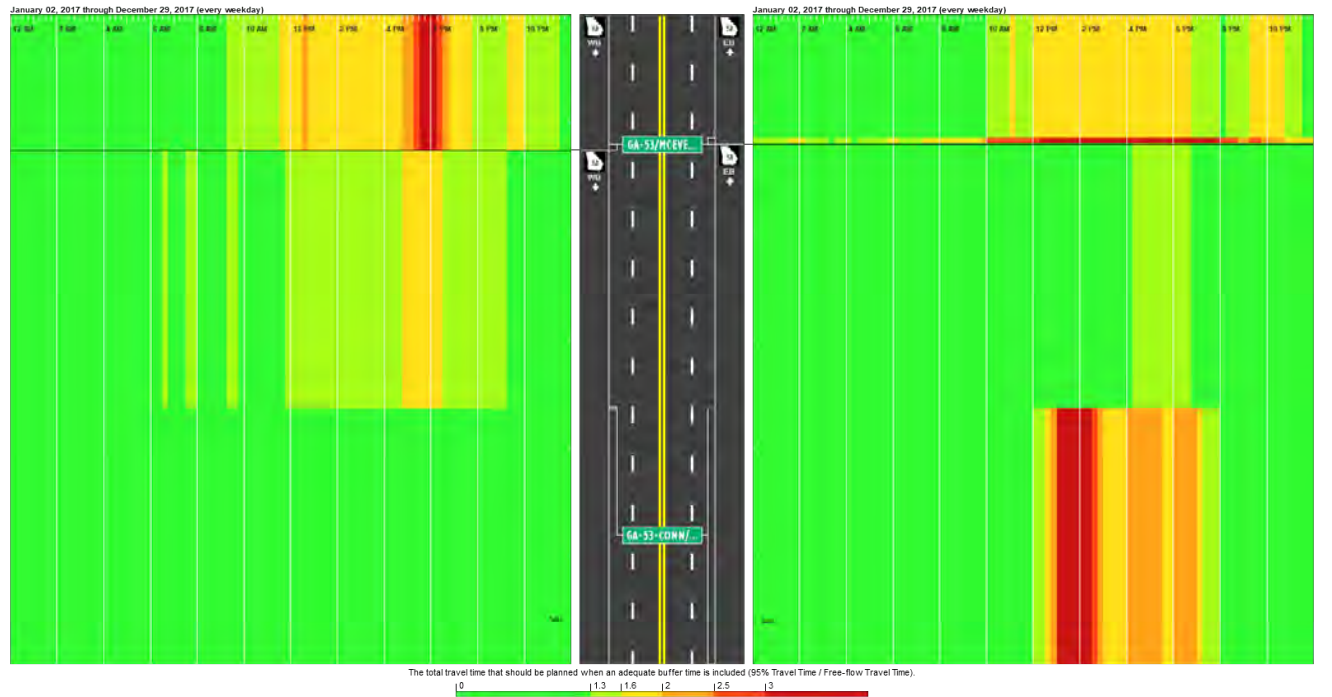
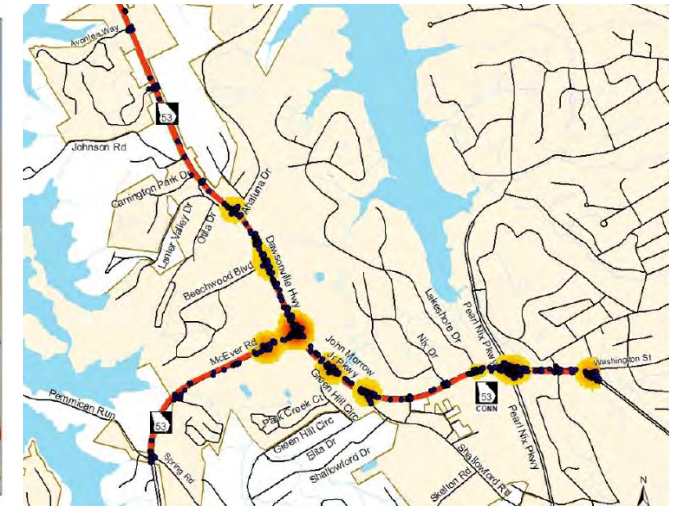
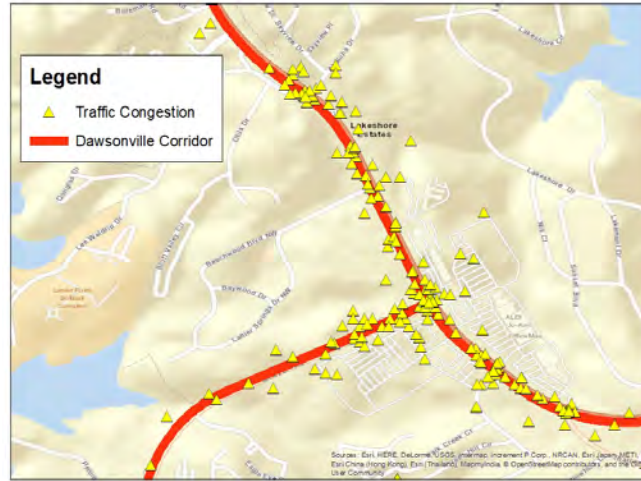


Where...



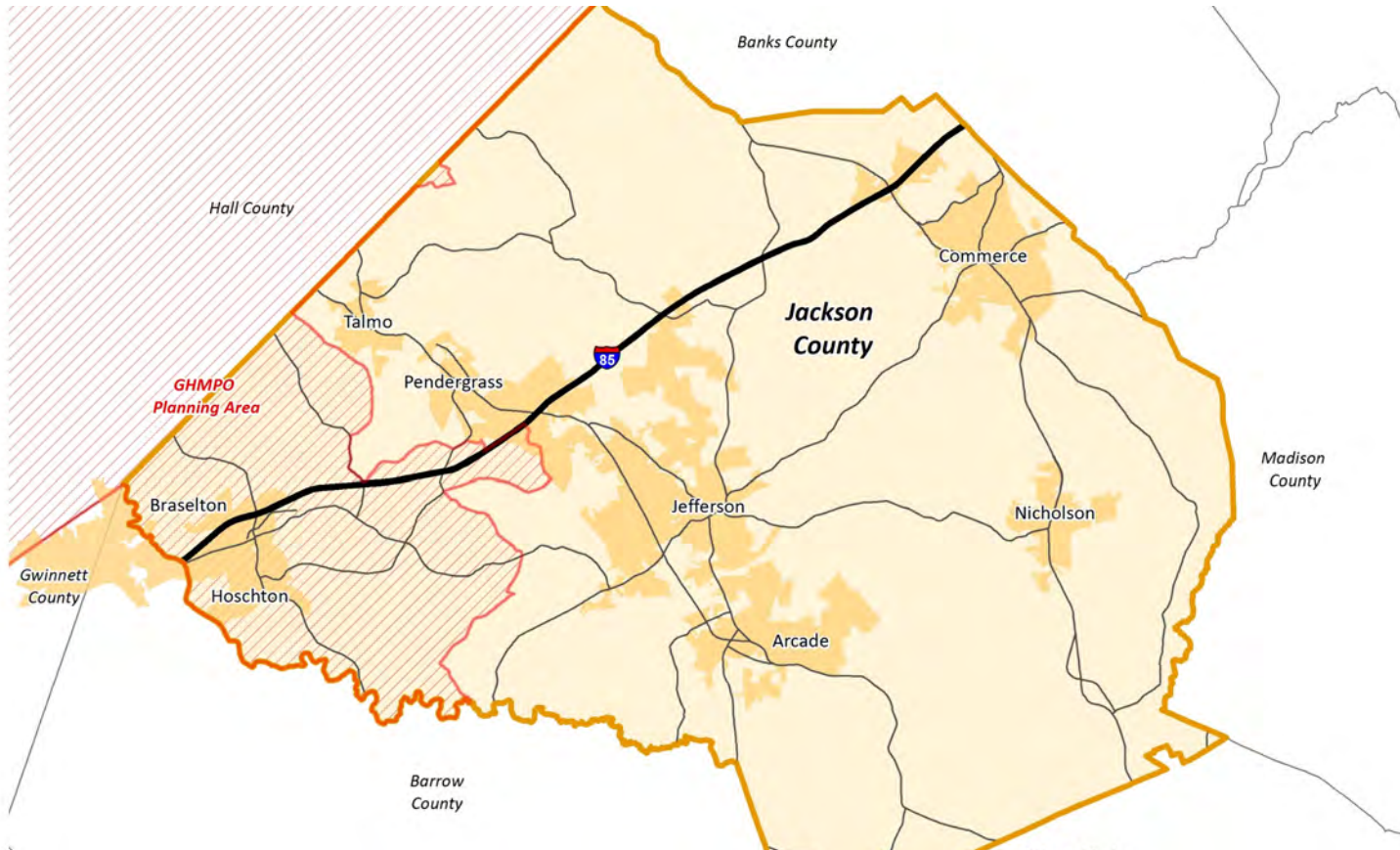
Congestion & Safety

Big Data vs. Survey





Jackson County Transportation Plan



All of Jackson County,
including cities

Project Location

Project Background

- Why Was it Needed?
 - No update to the county-wide transportation plan since 2008
 - Better coordination between County and Cities desired
 - Jackson County growing
 - Rapid industrialization along I-85
- Background
 - The southwestern portion of urbanized Jackson County and the cities of Braselton and Hoschton joined GHMPO following the 2010 US Census
 - First stand-alone plan produced in partnership with GHMPO

Jackson County Transportation Plan

Digital Public Input Results

VIEWS

13,141

RESPONSES

10,217

SUBSCRIBERS

135

PARTICIPANTS

831

COMMENTS

567

IMPRESSIONS

19,318

Nuestra encuesta es cerrada pero por favor, vuelva pronto para que los resultados de la encuesta

Plan de Transporte del Condado de Jackson

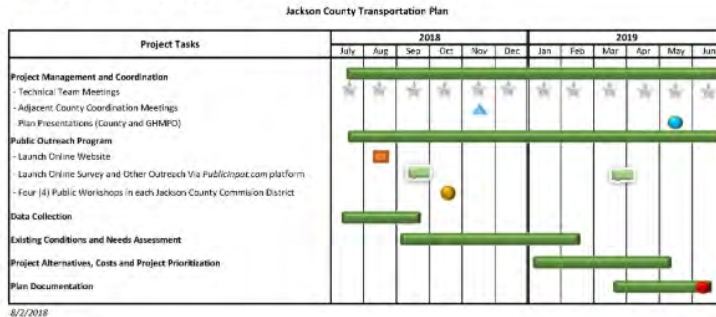
Descripción del Proyecto

Condado de Jackson está en el proceso de creación y adopción de un plan de transporte en todo el condado que ayudará a la hora de definir las necesidades de transporte, las metas y prioridades. El plan incluye las ciudades de Jefferson, Comercio, Braselton y Hoschton en el condado de Jackson, así como todas las áreas no incorporadas del condado de Jackson. El plan incluirá una evaluación de las necesidades y recomendaciones para mejorar el transporte de proyectos de transporte para fomentar una comunidad sana, habitable y exitosa. Las recomendaciones de mejoras de transporte pueden incluir proyectos tales como:

- Carreteras mejoras operativas y de capacidad
- Para peatones y ciclistas mejoras
- recomendaciones de tránsito

El proceso de desarrollo del plan incluirá la participación del público y solicitar la opinión de los ciudadanos interesados, propietarios de negocios y todos los interesados en la comunidad. Usted será capaz de proporcionar información durante todo el proceso de planificación a través de esta página interactiva proyecto. Aquí también se encuentra el calendario de eventos del proyecto y próximas actualizaciones del proyecto.

Cronograma del proyecto



Si desea recibir las actualizaciones del proyecto, por favor proporcione su información de contacto.

Email

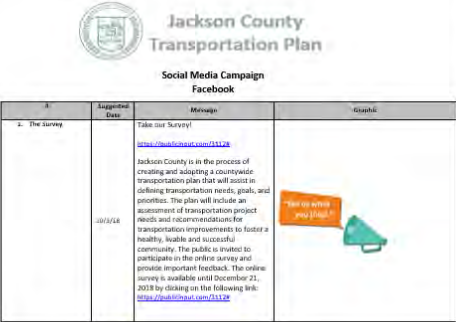
Email Address

Enviar

Hacer continuación

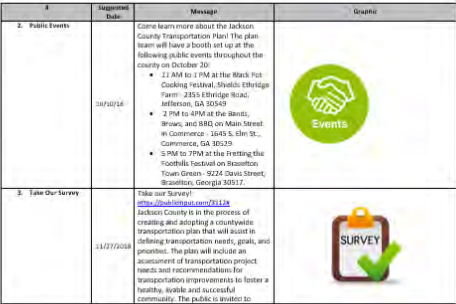
Public Outreach –
PublicInput

Social Media Campaign Matrix




Jackson County Transportation Plan
Social Media Campaign Facebook

#	Suggested Date	Message	Graphic
1. The Survey	08/17/18	Take our Survey! http://www.jacksoncounty.com/11128	




Jackson County Transportation Plan

#	Suggested Date	Message	Graphic
2. Public Events	10/20/18	Come learn more about the Jackson County Transportation Plan! The plan team will have a booth set up at the following public events throughout the county on October 20: <ul style="list-style-type: none"> • 11 AM to 1 PM at The Black & Red Cooking Festival, 21616 Ehring Farm, 2835 Ehring Road, Jefferson, GA 30769 • 2 PM to 4 PM at the Bank, Show, and Sale on Main Street in Commerce, 1845 S. Elm St., Commerce, GA 30529 • 2 PM to 7 PM at the Trading the Toothbills Festival on Reardon Farm Ground, 9224 Davis Street, Braselton, Georgia 30517 	
3. Take Our Survey	11/27/2018	Take our Survey! http://www.jacksoncounty.com/11128 Jackson County is in the process of creating and adopting a countywide transportation plan that will assist in defining transportation needs, goals, and priorities. The plan will include an assessment of transportation project needs and recommendations for transportation improvements to foster a healthy, viable and successful community. The public is invited to:	



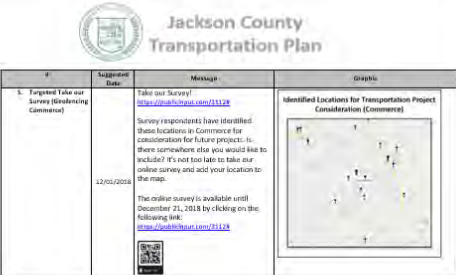
Jackson County Transportation Plan

#	Suggested Date	Message	Graphic
4. Take our Survey	12/01/2018	participate in the online survey and provide important feedback. The online survey is available until December 21, 2018 by clicking on the following link: http://www.jacksoncounty.com/11128	




Jackson County Transportation Plan

#	Suggested Date	Message	Graphic
4. Targeted Take our Survey (Identifying Potential)	12/01/2018	Take our Survey! http://www.jacksoncounty.com/11128 Survey respondents have identified these locations in Jefferson for consideration for future projects. Is there somewhere else you would like to be included? It's not too late to take our online survey and add your location to the map. The online survey is available until December 21, 2018 by clicking on the following link: http://www.jacksoncounty.com/11128	




Jackson County Transportation Plan

#	Suggested Date	Message	Graphic
5. Targeted Take our Survey (Identifying Comments)	12/01/2018	Take our Survey! http://www.jacksoncounty.com/11128 Survey respondents have identified these locations in Commerce for consideration for future projects. Is there somewhere else you would like to be included? It's not too late to take our online survey and add your location to the map. The online survey is available until December 21, 2018 by clicking on the following link: http://www.jacksoncounty.com/11128	



Jackson County Transportation Plan

#	Suggested Date	Message	Graphic
6. Let Survey Post (Don't Miss Out)	12/04/2018	Great job Jackson County! So far, your survey comments have led to a maintenance project list that includes fixing potholes and other minor maintenance repairs. It's not too late to leave your feedback! The survey is open till December 21, 2018 and can be accessed by clicking on the following link: http://www.jacksoncounty.com/11128	
7. Needs Assessment	2019 Q1	The Jackson County Transportation Plan has assessed the transportation project needs within Jackson County with the help of many Jackson County citizens, business owners and other stakeholders. Please visit the Project website to review the identified needs: https://www.jacksoncounty.com/11128	



Jackson County Transportation Plan

#	Suggested Date	Message	Graphic
8. Release of Draft Recommendations	2019 Q2	The Jackson County Transportation Plan recommendations for transportation improvements within the County are now available for review on the project website: http://www.jacksoncounty.com/11128 . Please come see how Jackson County plans to foster a healthy, viable and successful community.	

Social Media and Survey - Results

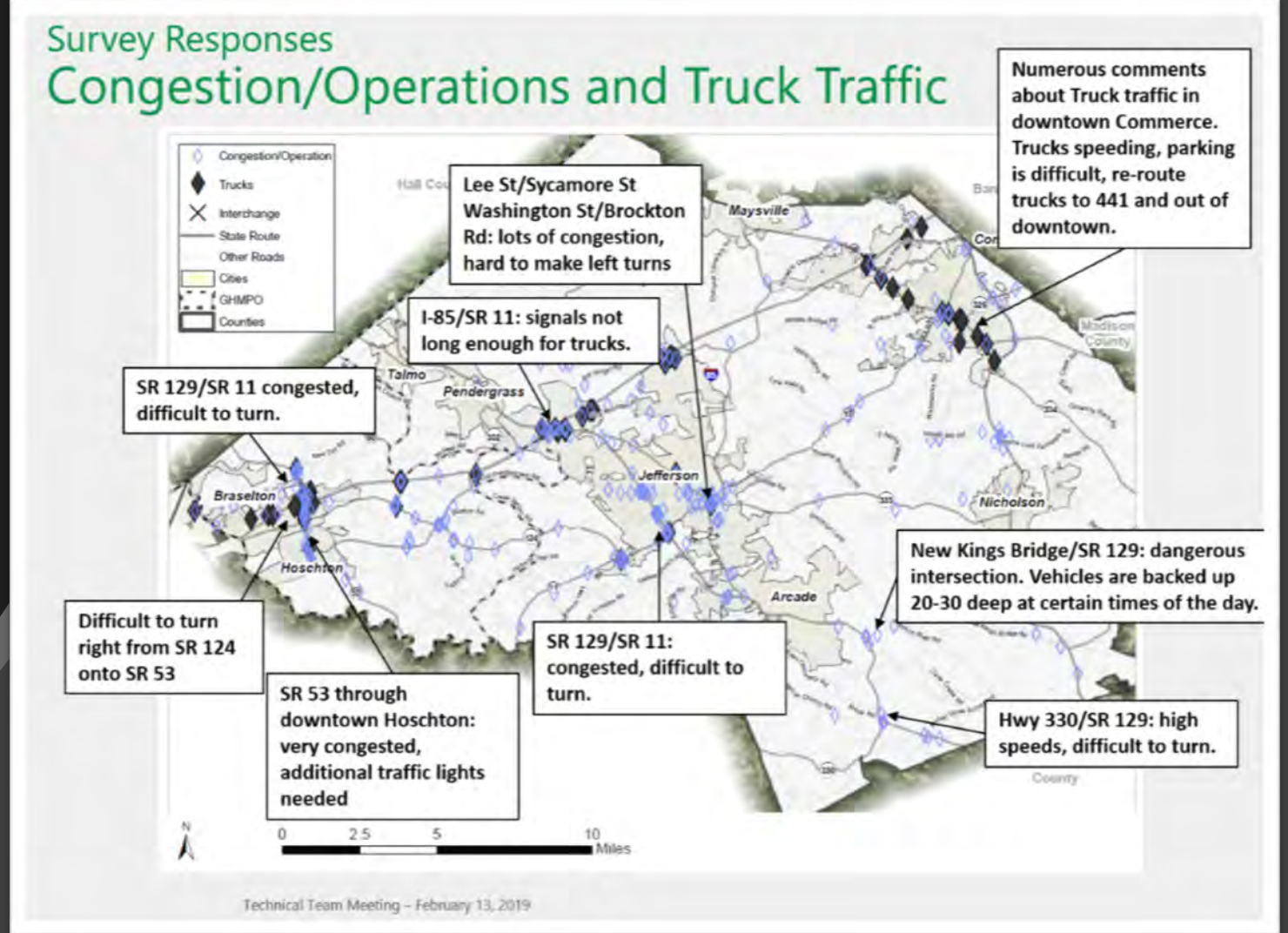
Date	Subject	Impressions *	People Reached **	Link Clicks	Comments
10/4 to 10/18	Survey	8,730	5,903	457	9
10/9 to 10/18	Event	5,243	3,439	106	0
10/9 to 10/18	Event	2,682	2,310	53	0

Survey Participants	Live	Work
Inside Study Area	217	211
Outside Study Area	260	282
Total	477	493

79%	Traffic congestion (including intersection operations)	Rank: 2.06	287 ✓
78%	Improve condition of roads (fix potholes and pavement)	Rank: 2.57	286 ✓
59%	Widen existing roads	Rank: 3.48	214 ✓
53%	Increase set truck routes to direct truck traffic	Rank: 3.68	195 ✓
47%	Increase number of pedestrian and bicycle facilities	Rank: 4.64	173 ✓
44%	Improve condition of interstates	Rank: 4.87	159 ✓
45%	Create new roadways	Rank: 5.00	165 ✓
43%	Increase attractiveness of roads (landscaping)	Rank: 5.52	157 ✓
32%	New fixed-route bus services (bus follows the same route and stops at determined locations on a pre-determined schedule)	Rank: 6.80	115 ✓
31%	Additional on-demand bus services	Rank: 7.82	112 ✓

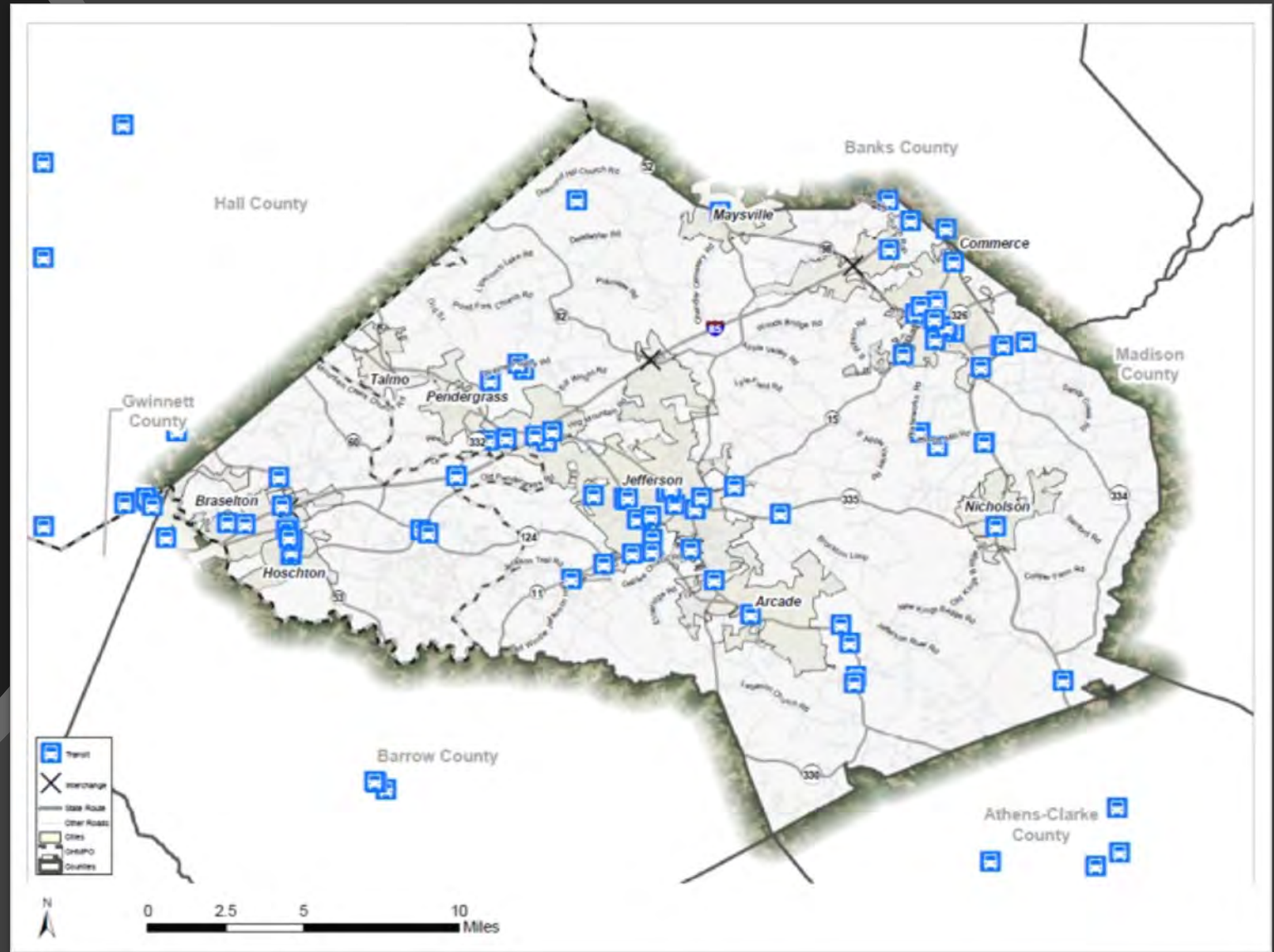
Public Outreach – Survey Response

- Please drop a pin on any specific locations that you deem as a problem area in Jackson County and explain the location and problem



Public Outreach – Survey Response

- Please drop a pin where you would like to see a bus stop

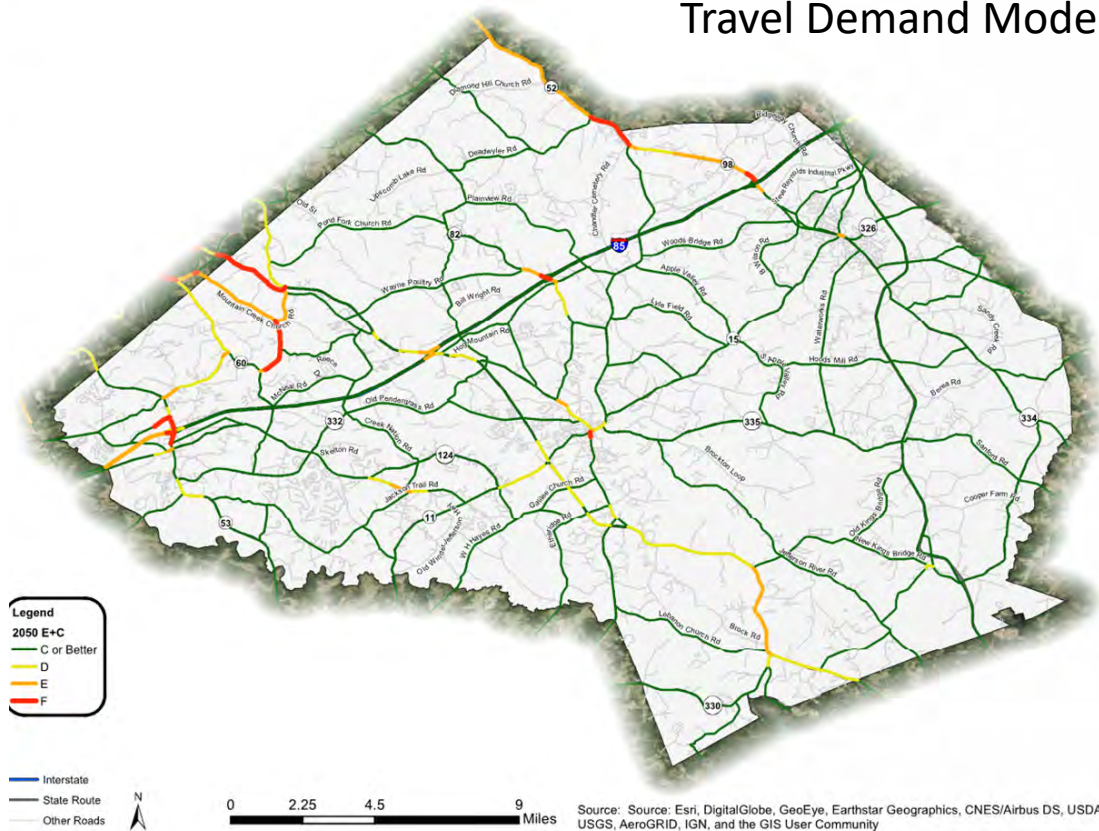




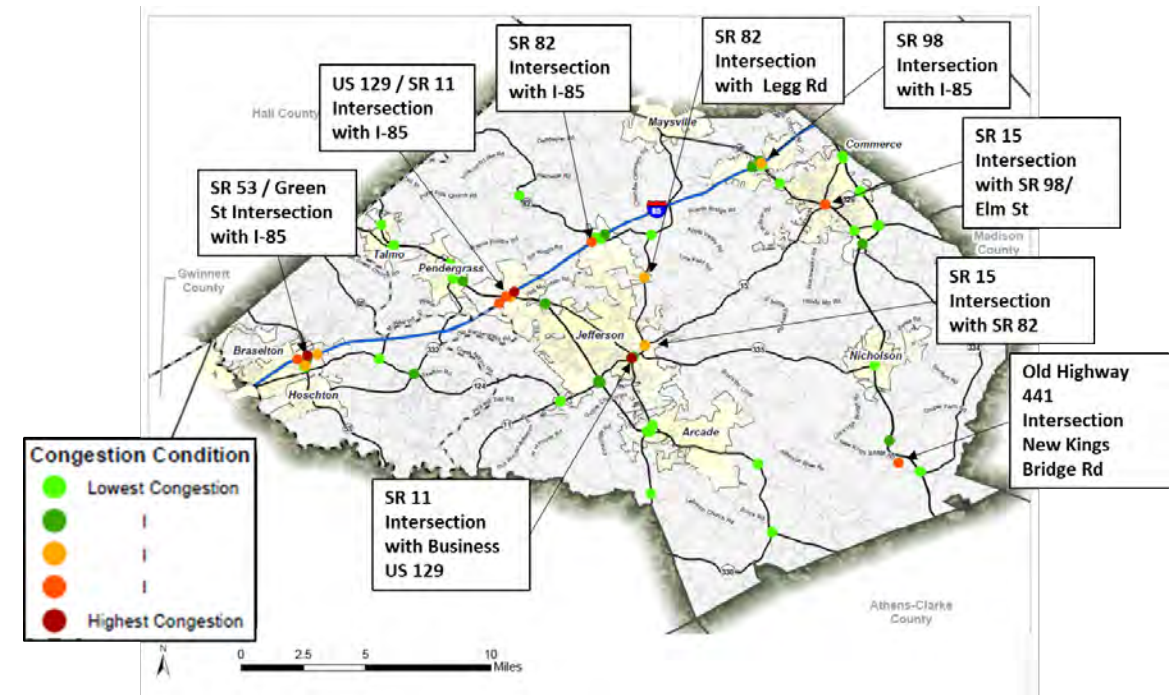
Public Outreach – Pop-Ups as Meetings

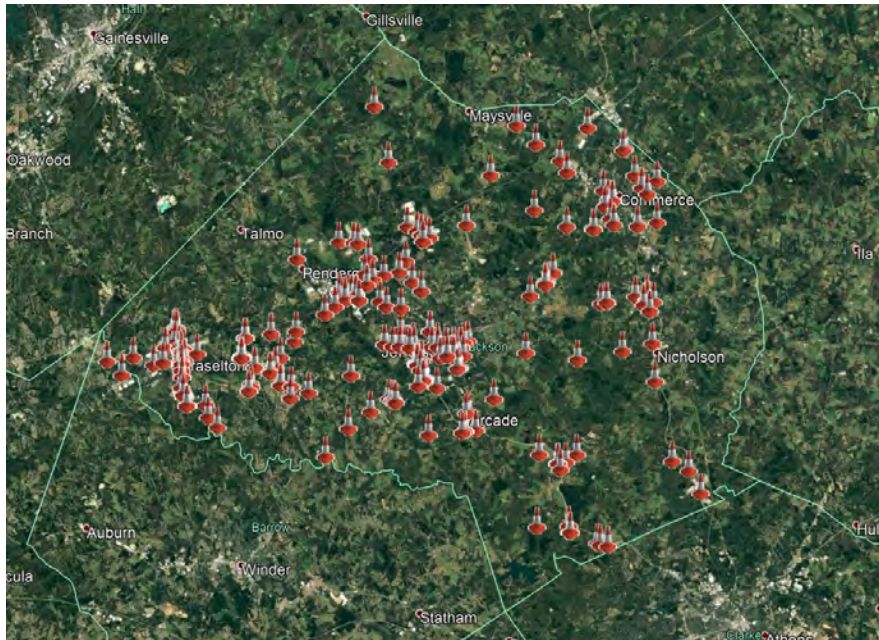
Congestion (Big) Data

Travel Demand Model



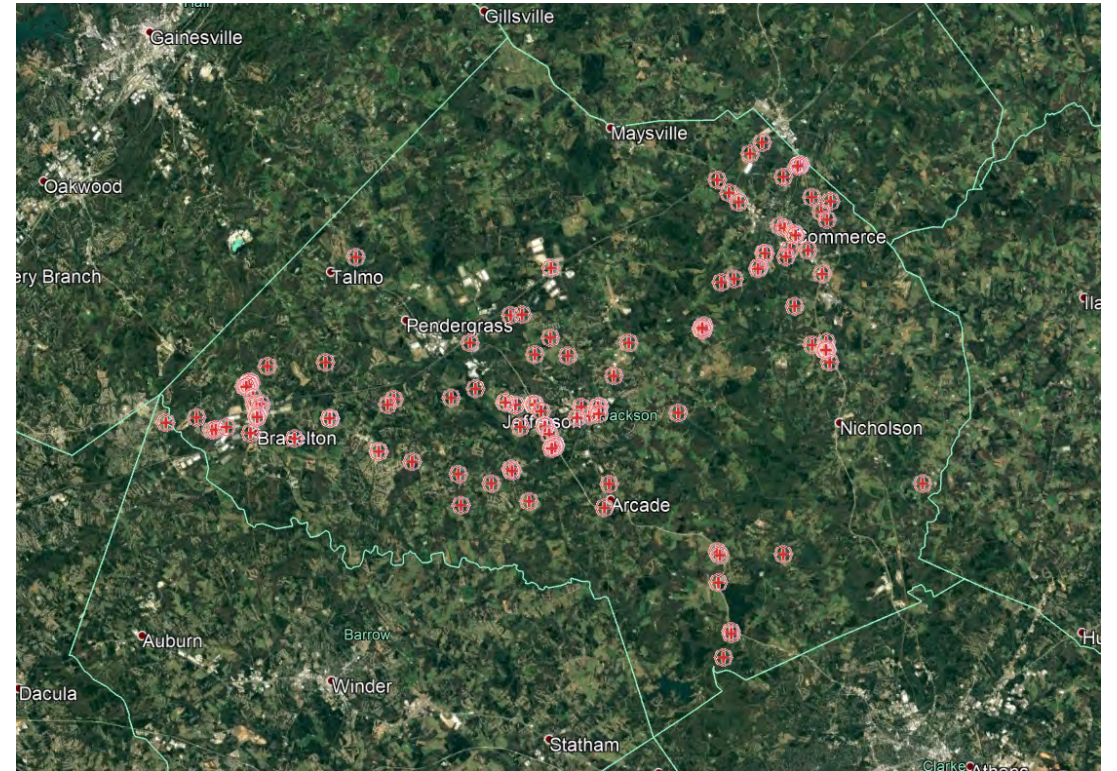
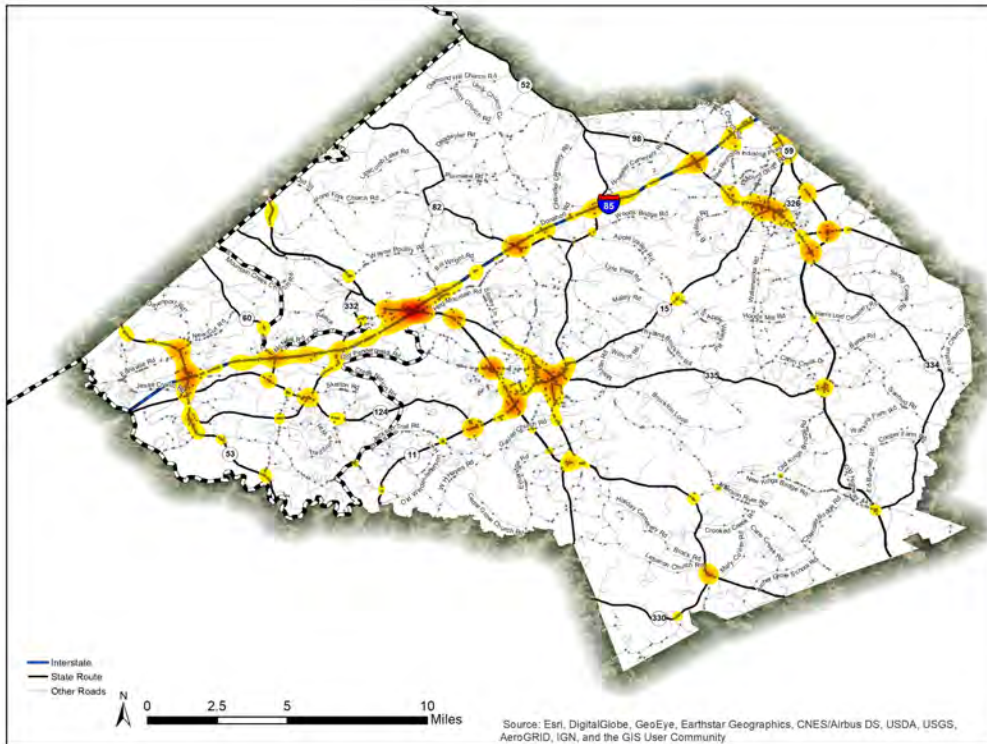
RITIS/INRIX Bottlenecks



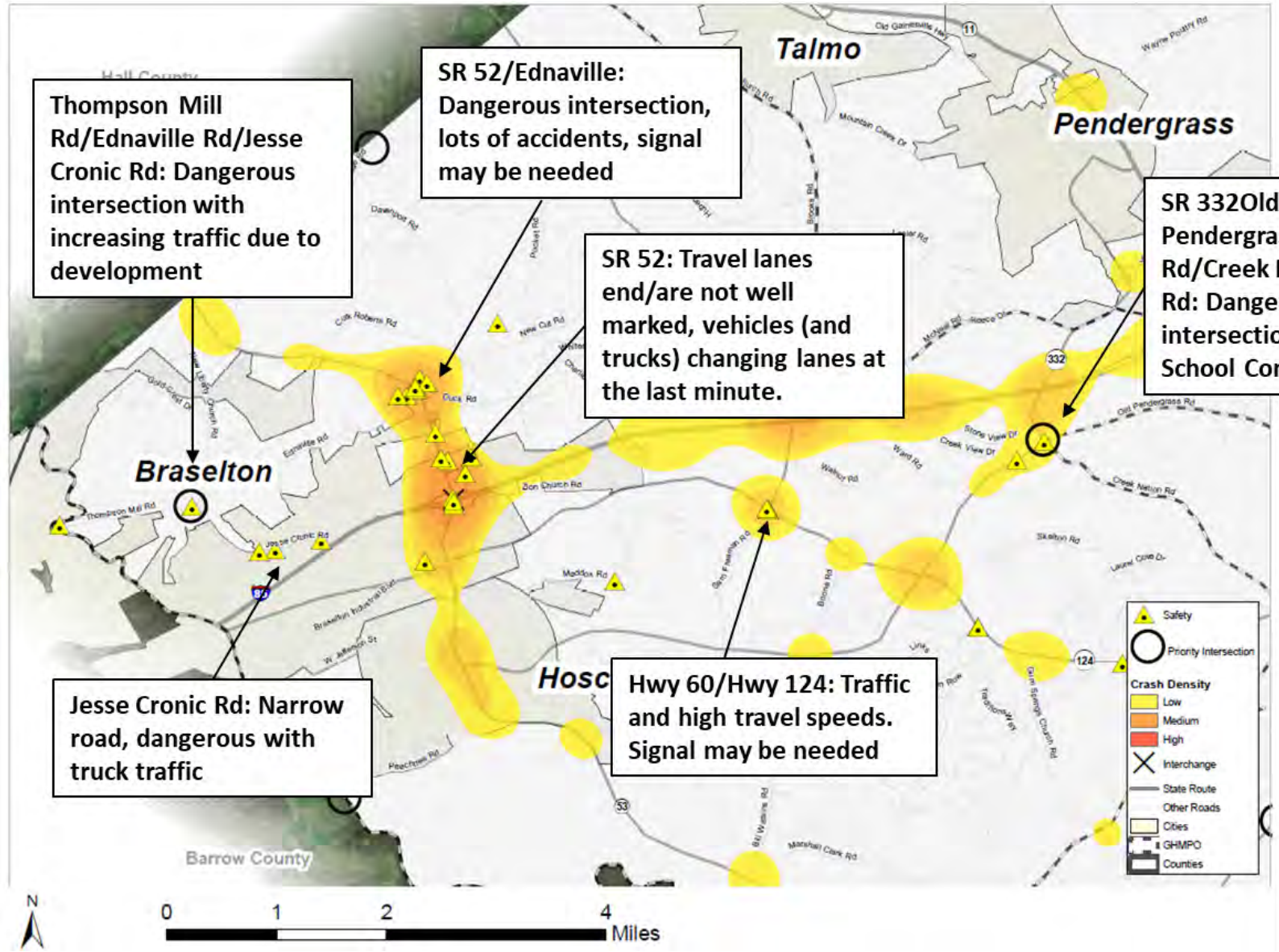


Survey Input: Clusters / Trends?

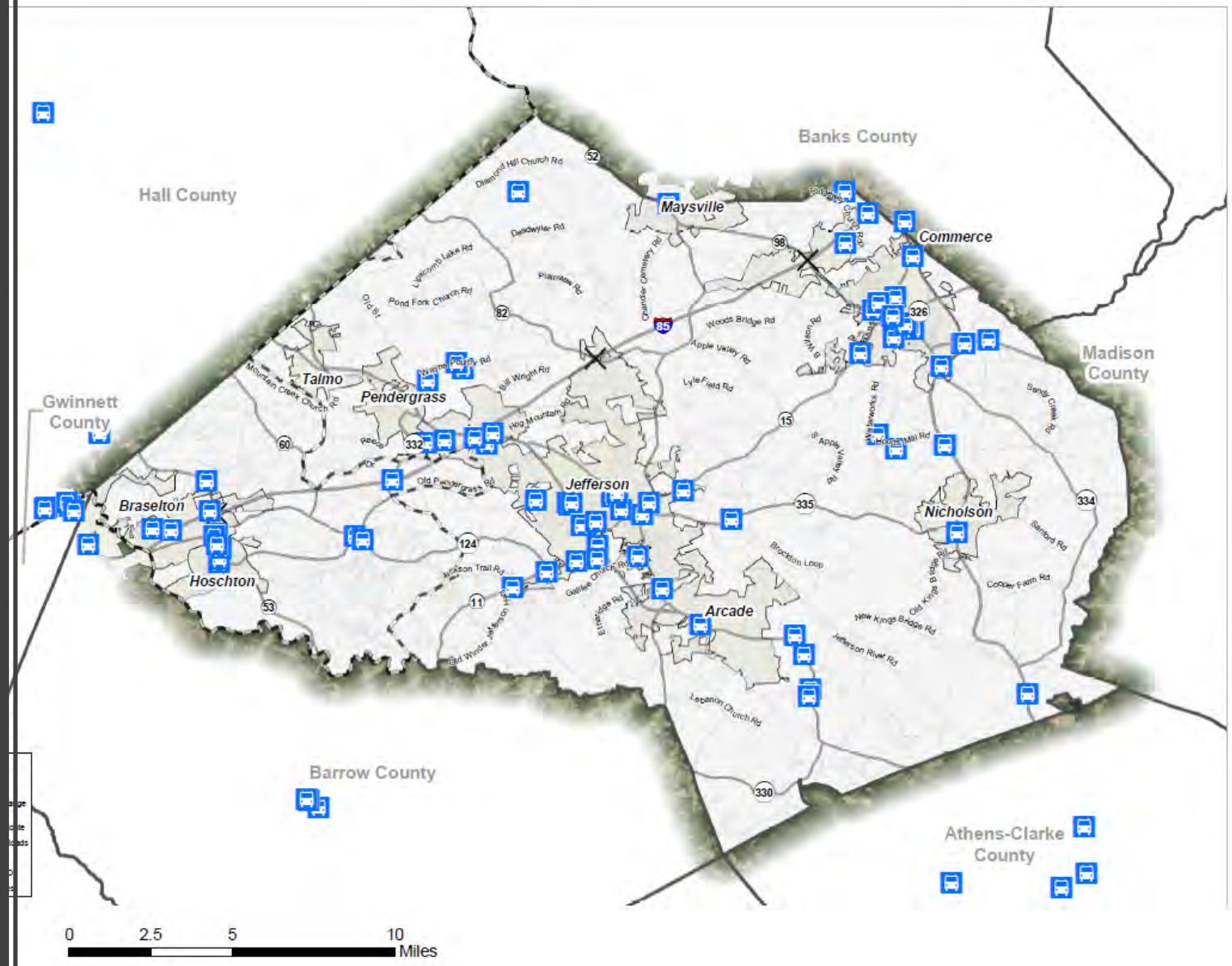
Safety Data vs. Survey



Deep Dive...
 Causes and
 Potential
 Solutions



Transit Propensity?





GHMPO Regional Transportation Plan



GAINESVILLE-HALL
Metropolitan Planning Organization



BLUE
CYPRESS
CONSULTING



Project Location

- Entire GHMPO Area

Project Background

- Federal Requirement
 - MPOs are required to update their Regional Transportation Plan (RTP) every 4-5 years
 - RTP must plan for 25+ year horizon
- Communities Evolve
 - New developments may spur new transportation needs
 - Previously planned projects may no longer be needed
 - Community priorities may change
- Funding Sources May Change
 - Funding is not guaranteed, may go up or down
 - New funding sources may become available (HB 170)

1. Take the online survey, and sign up for email updates (bottom of this page).

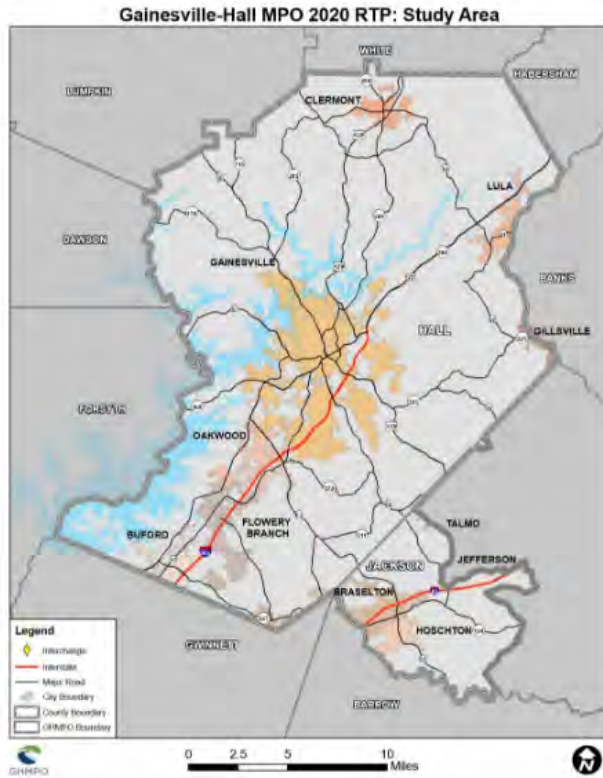
2. Attend a public meeting:

- August 19, 2019 - 5:30 to 7:00 PM, location TBD
- August 20, 2019 - 5:30 to 7:30 PM, location TBD

3. Check the [project website](#) for updates.

Project Survey

Thank you for helping GHMPO plan the future of its transportation system. To start the online survey, please click on "Continue" in the green box at the bottom of this page. The online survey is available until June 9, 2019.



If you would like to receive project updates, please provide your contact information below.

Email

Email Address

Submit

Gainesville, GA, USA [Map](#)

The project team will set up a booth to answer questions about the 2020 RTP

AUG

19

Public Meeting for Gainesville-Hall 2020 Regional Transportation Plan

Mon, Aug 19, 5:30pm [Add to calendar](#)

TBD [Map](#)

The project team will hold a public meeting to share initial results

Past event

AUG

20

Public Meeting for Gainesville-Hall 2020 Regional Transportation Plan














Tue, Aug 20, 5:30pm [Add to calendar](#)

TBD [Map](#)

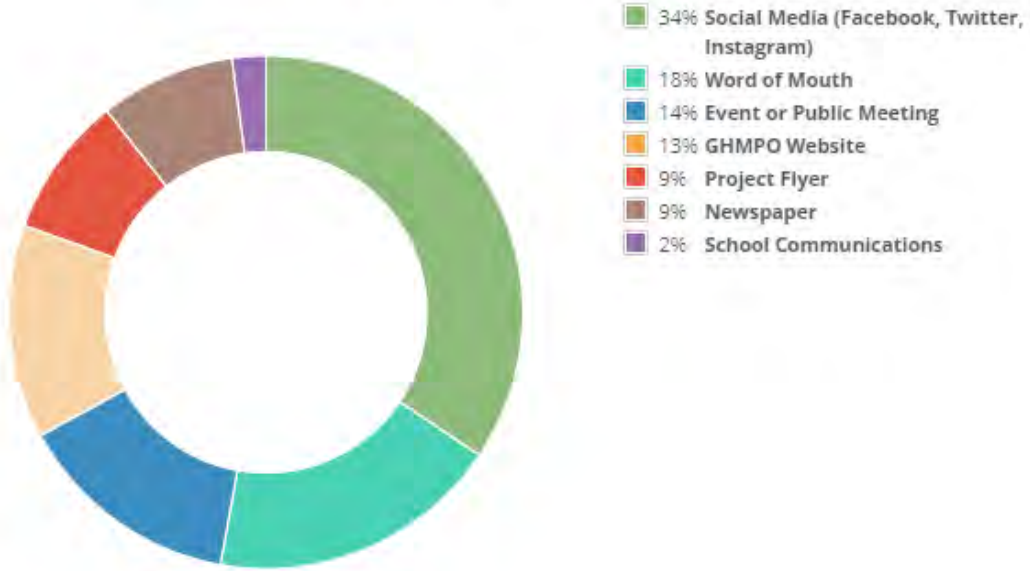
Past event

Public Outreach – Public Input

Social Media Campaign Matrix

#	Suggested Date	Message	Graphic
1. Project Kick-off	6/1/2018	<p>GHMPO 2020 Regional Transportation Plan Social Media Campaign</p> <p>Gainesville Hall Metropolitan Planning Organization is developing the 2020 Regional Transportation Plan. Projects will be selected for implementation in the short, mid, and long term over a thirty-year period. Projects will include a wide variety of transportation related improvements including potential new roads, road widening, and intersection improvements. We are also looking at improvements for transit, bicycles, and pedestrians.</p> <p>Please visit our webpage for more information and to leave feedback. www.gainesvillehall.com/2018</p> 	
2. Survey Kick-off	6/1/2018	<p>Take our Survey!</p> <p>Gainesville Hall Metropolitan Planning Organization is developing the 2020 regional transportation plan. Projects will be selected for implementation in the short, mid, and long term over a thirty-year period. Projects will include a wide variety of transportation related improvements including potential new roads, road widening, and intersection improvements. We are also looking at improvements for transit, bicycles, and pedestrians. The public is invited to participate in the online survey and provide important feedback.</p> <p>The online survey is available until May 24, 2018 by clicking on the following link: www.gainesvillehall.com/2018</p> 	
3. Survey Reminder	4/11/2019 5/1/2018 5/16/2018 5/27/2018	<p>Don't miss your chance to take the Gainesville Hall Metropolitan Planning Organization 2020 Regional Transportation Plan Survey. We need your feedback to help us plan the future of Gainesville's transportation system.</p> <p>The survey is open until May 24, 2018 and can be accessed by clicking on the following link: www.gainesvillehall.com/2018</p> 	
4. Event 1	5/14/2018	<p>Don't miss more about the Gainesville Hall Metropolitan Planning Organization 2020 Regional Transportation Plan! The planning team will have a booth set up at the Annual Greater Hall Chamber of Commerce Transportation Forum.</p> <p>When: Month T 5:30 to 7:00 p.m. Where: Continuing Education Building, Auditorium (University of North Georgia's Gainesville Campus)</p> 	
5. Event 2	5/02/2018	<p>Don't miss more about the 2020 Regional Transportation Plan Update at the April 1st, 2018 Community Meeting to be held from 2:00 to 4:00 in the GCHM Center's Chamber of Commerce room.</p>  <p>Please "Take Our Survey!" www.gainesvillehall.com/2018</p>	
6. Event 3	4/12/2018	<p>Don't miss a chance to learn more about the Gainesville Hall Metropolitan Planning Organization 2020 Regional Transportation Plan! The planning team will have a booth set up at the Gainesville Spring Chicken Festival.</p> <p>When: April 13, 2018 10:00 a.m. - 4:00 p.m. Where: Longwood Park, 120 Pearl St. Parkway, Gainesville, GA 32601</p> 	
7. Event 4	May 2018 to 2018	<p>Final Event - Hispanic Alliance Public Meeting - Immigration Forum</p>	

How did you hear about our survey? (please select one)



Survey Title	Response Count	Response Rate	Link Clicks	Comments
Genesville-Hall 2020 Regional Transportation Plan 2/15/2020 through 2/16/2021 (1,000 Potential Respondents)	7,954	3,873	45	0
Genesville-Hall 2020 Regional Transportation Plan 2/15/2020 through 2/16/2021 (1,000 Potential Respondents)	4,922	3,397	49	0
Genesville-Hall 2020 Regional Transportation Plan 2/15/2020 through 2/16/2021 (1,000 Potential Respondents)	1,602	1,159	11	0
Genesville-Hall 2020 Regional Transportation Plan 2/15/2020 through 2/16/2021 (1,000 Potential Respondents)	1,865	1,514	9	0

Social Media - Results

Auto-Detected Key Words beta

Key Word	Mentions	if	Positive	Neutral	Negative
congestion	3		0	0	3
traffic	2		1	0	1
Train	2		0	0	2

Showing 1 to 3 of 3 entries

[Reply to Multiple](#) [Tag Multiple](#) [Tagging Rules](#)

Often congested on SR 211 between Friendship / L. I. Parkway and Chateau Elan area.
3/1/2019 1:40 PM

Traffic on Jesse Jewel/369 is notoriously slow moving. This is especially pronounced in the area of the City, Brenau, and the hospital. Land use decisions appear not to have been made with any or much foresight v
3/1/2019 12:39 PM aforster@mycoi.com

Traffic

985 should have been widen instead of building another exit ramp
3/1/2019 12:31 PM

Turning west on Dawsonville Hwy from McEver Road is a mess and is not getting better.
3/4/2019 8:34 AM

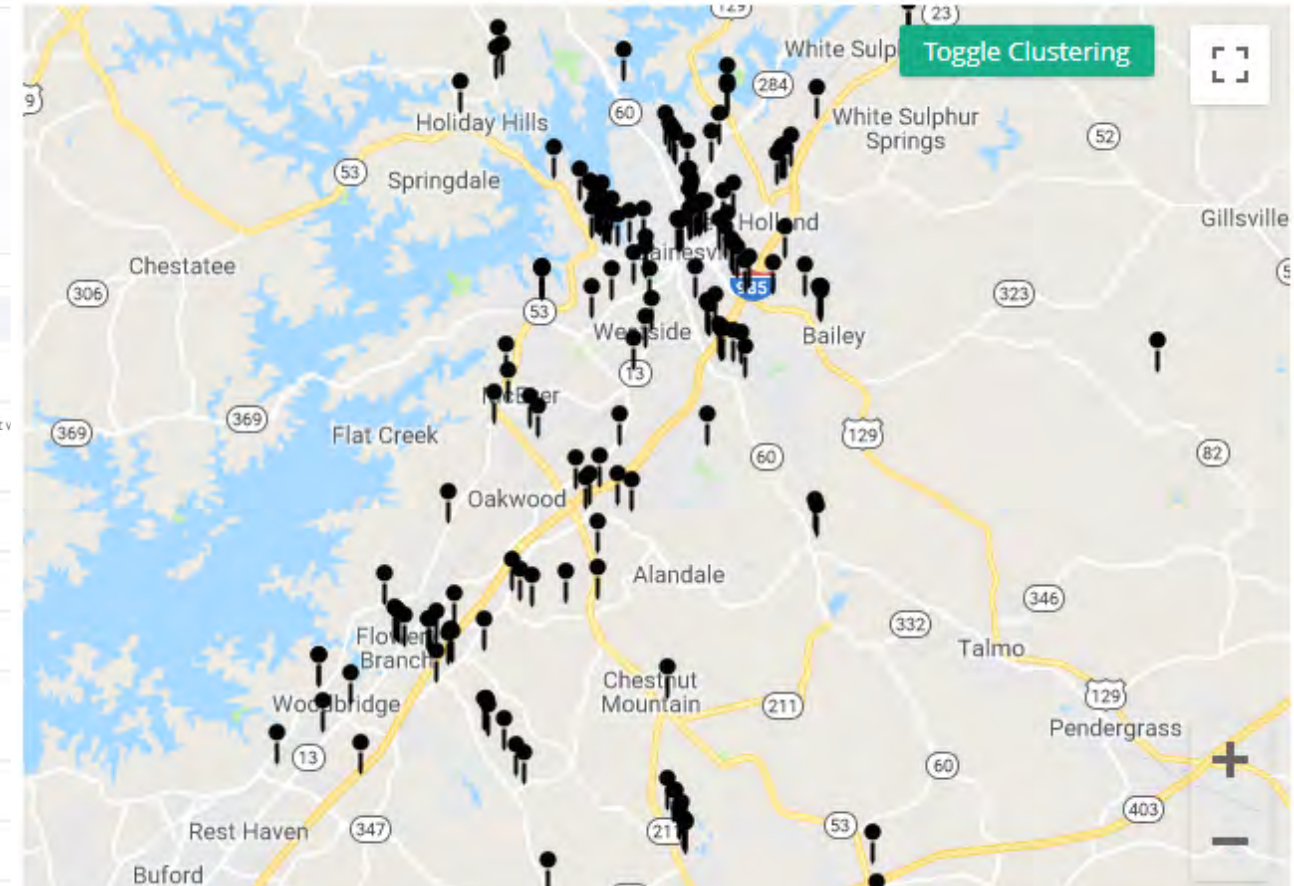
Intersection of McEver and Hwy 53 seems to always be congested.
3/1/2019 6:25 PM

Traffic is tertiable here at this light.
3/2/2019 8:30 AM

Traffic

53 heading to Oakwood and past the UNG College is horrible each morning. This will only get worse as the college/community adds apartments. It takes me 1 hour to go 16 miles each morning- unreal.
3/2/2019 8:54 AM

Congestion in morning
3/2/2019 8:57 AM




Public Outreach – Survey Response

Add points to the map to indicate congestion, and leave us a comment

Public Outreach – Survey Response

- Add a point(s) to the map to indicate a location where you would like to see bus service offered.



The map displays the Atlanta metropolitan area with several black pins indicating locations where bus service is requested. The pins are clustered in the central and northern parts of the city, including areas like Westside, West Peachtree, and the area around Cumming. A green box labeled "Dawson Forest City of Atlanta Tract" is visible in the northwest. A "Toggle Clustering" button is in the top right corner.

I do not want public transportation.
6 months ago 8 Agree

Hall campus of Lanier Tech
7 months ago 6 Agree

This historic downtown area needs bus service
7 months ago 4 Agree

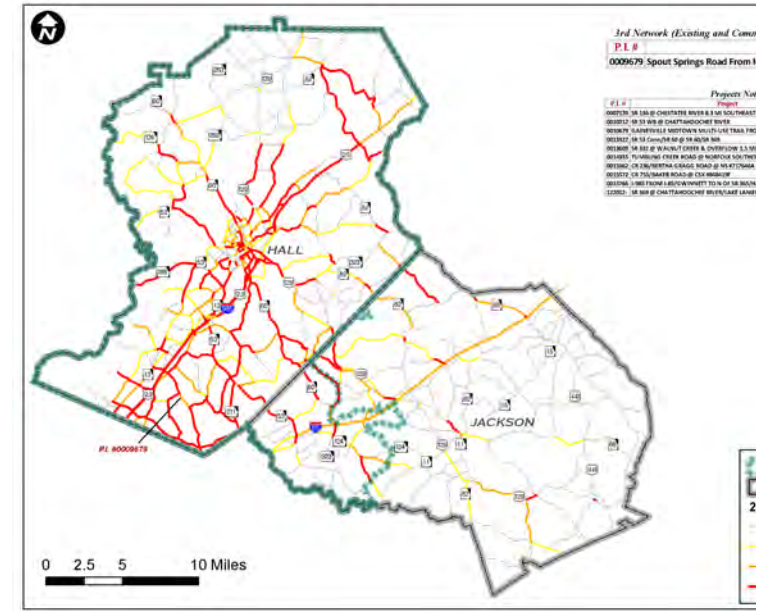
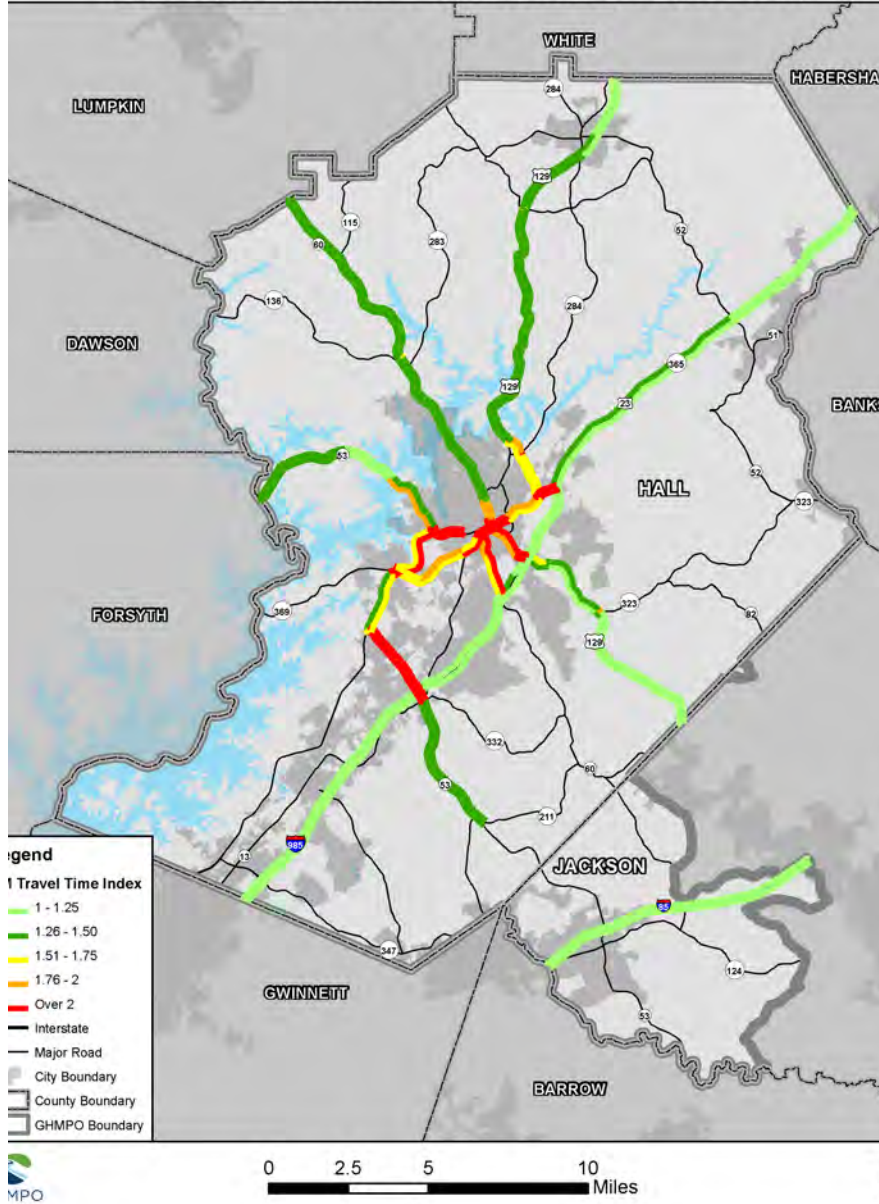
Atlanta lost the Amazon deal because they don't have adequate public transportation to support major growth. I would seriously hate it if we ended up losing major business investments to our area for the same reason. We need to plan for growth, not just now. Public transportation will

[Show all 39 Comments](#)

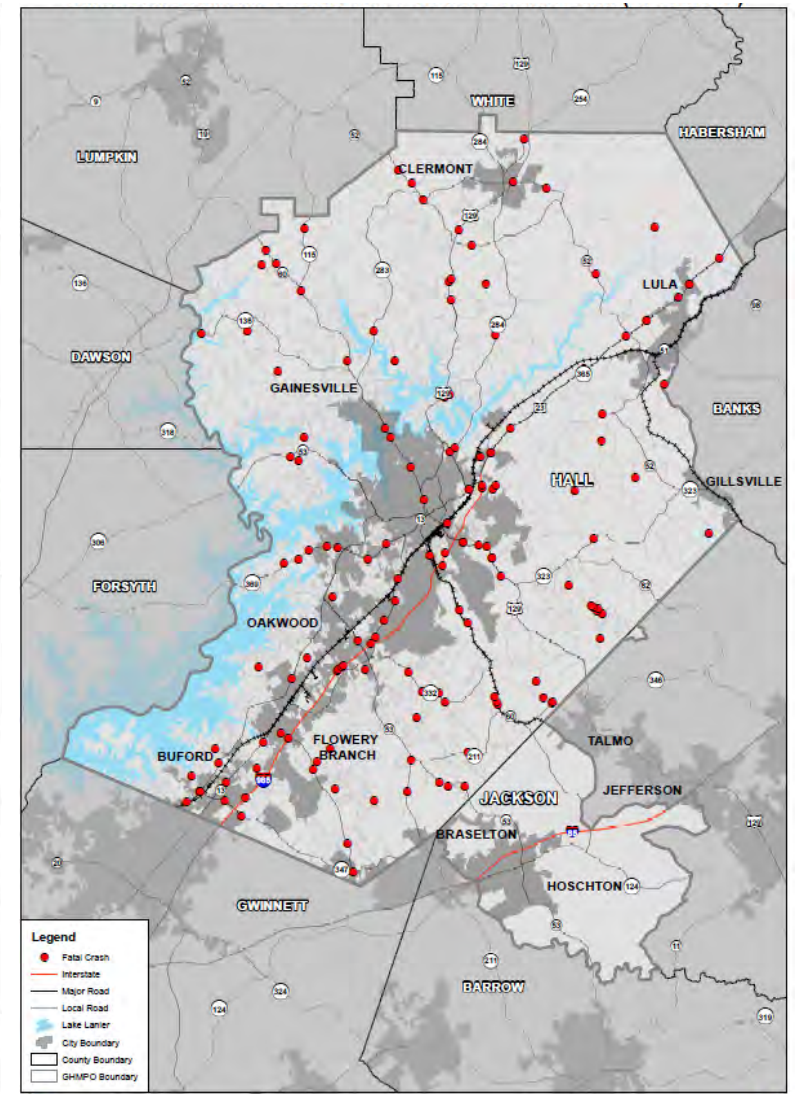
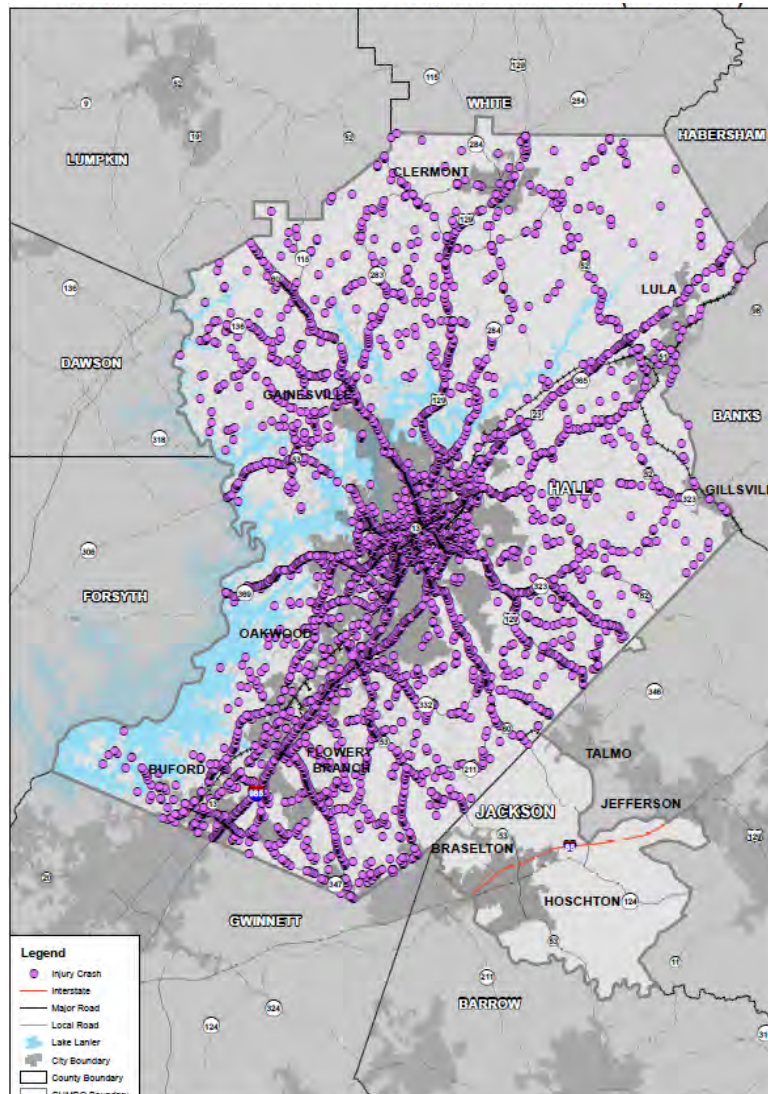
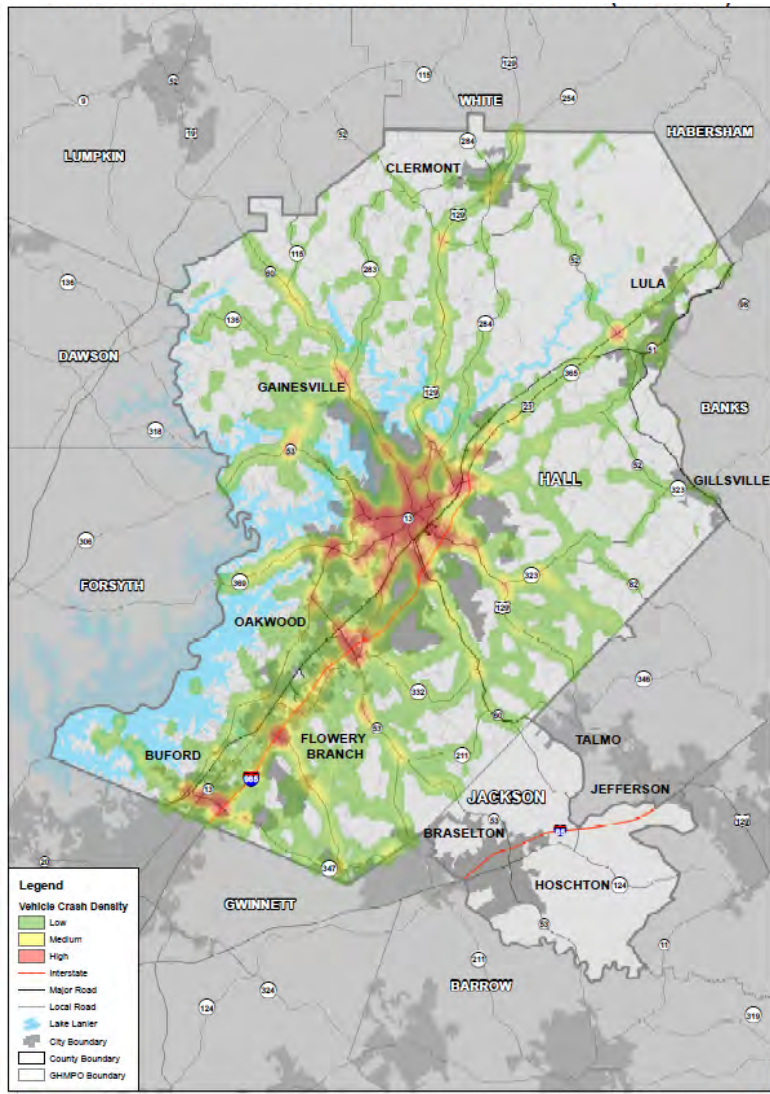


Public Outreach – Pop-Ups and Meetings

Gainesville-Hall MPO 2020 RTP: Travel Time Index

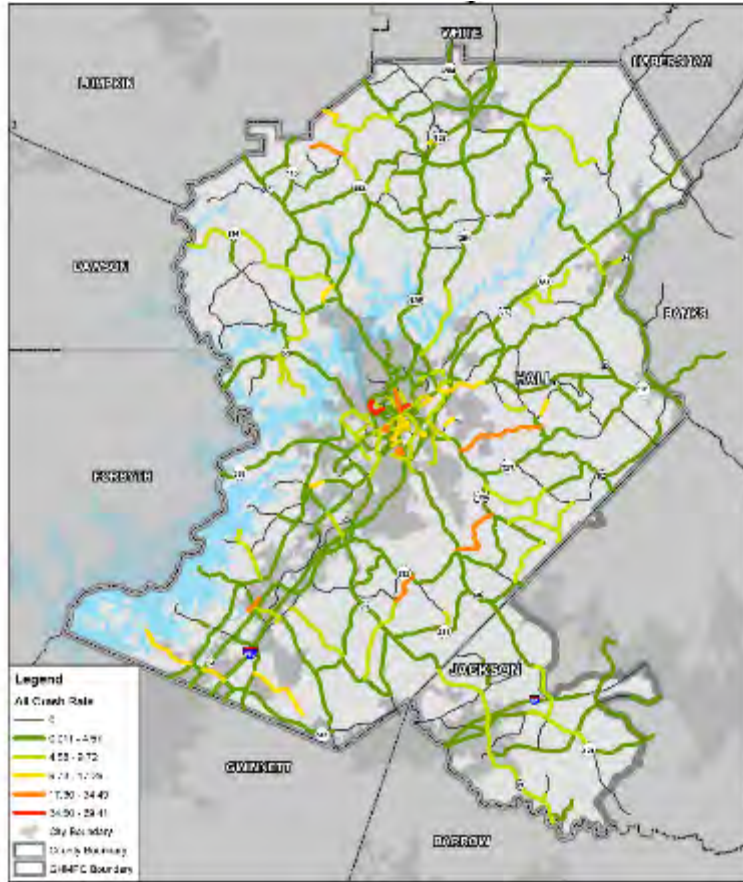


Travel Demand and
Travel Time Index Data

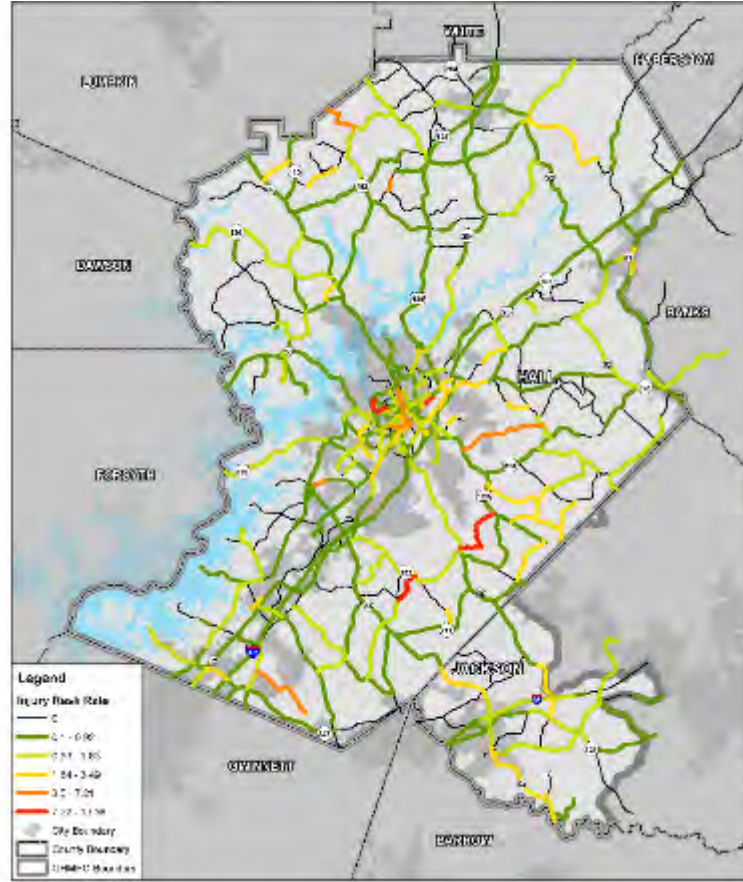


Safety Analyses – Crash Locations

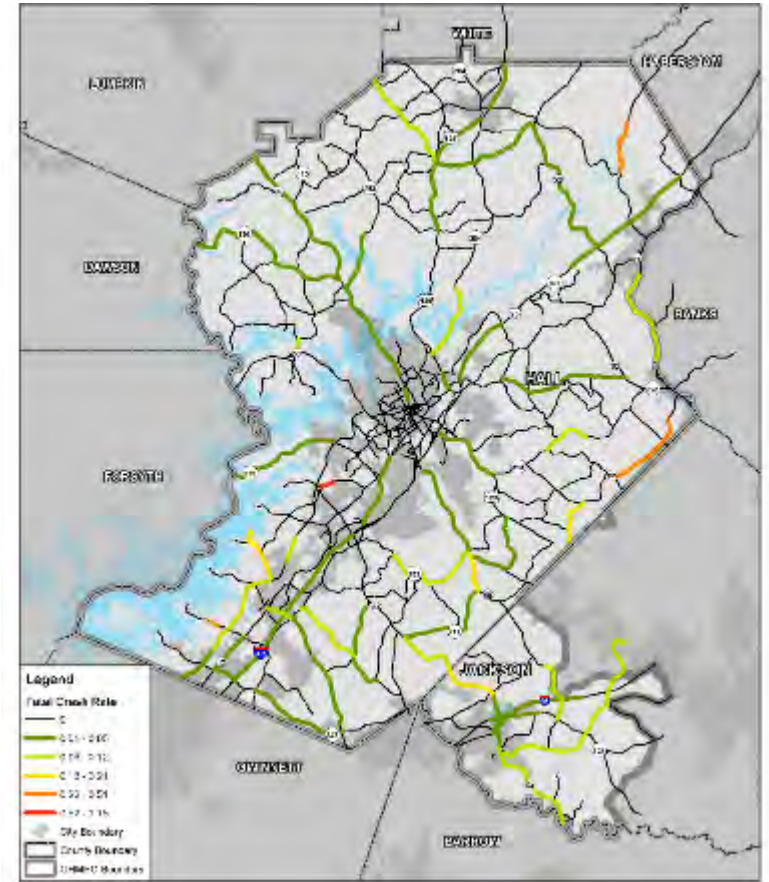
ALL CRASHES



INJURY CRASHES

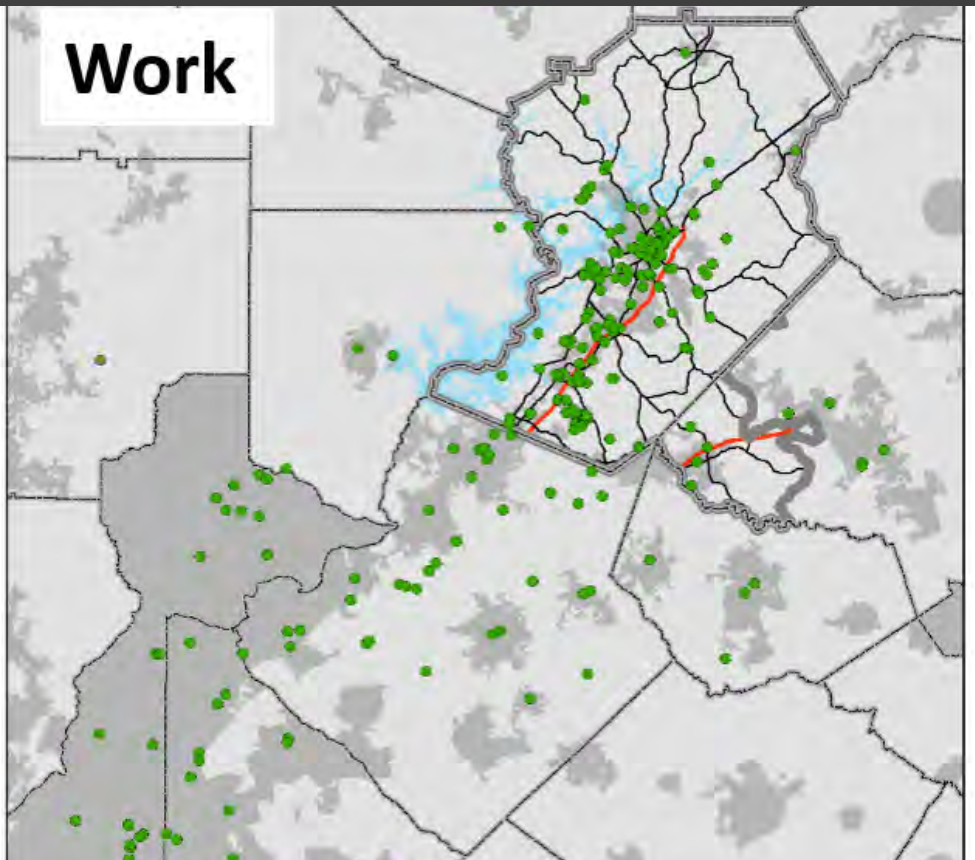


FATALITY CRASHES

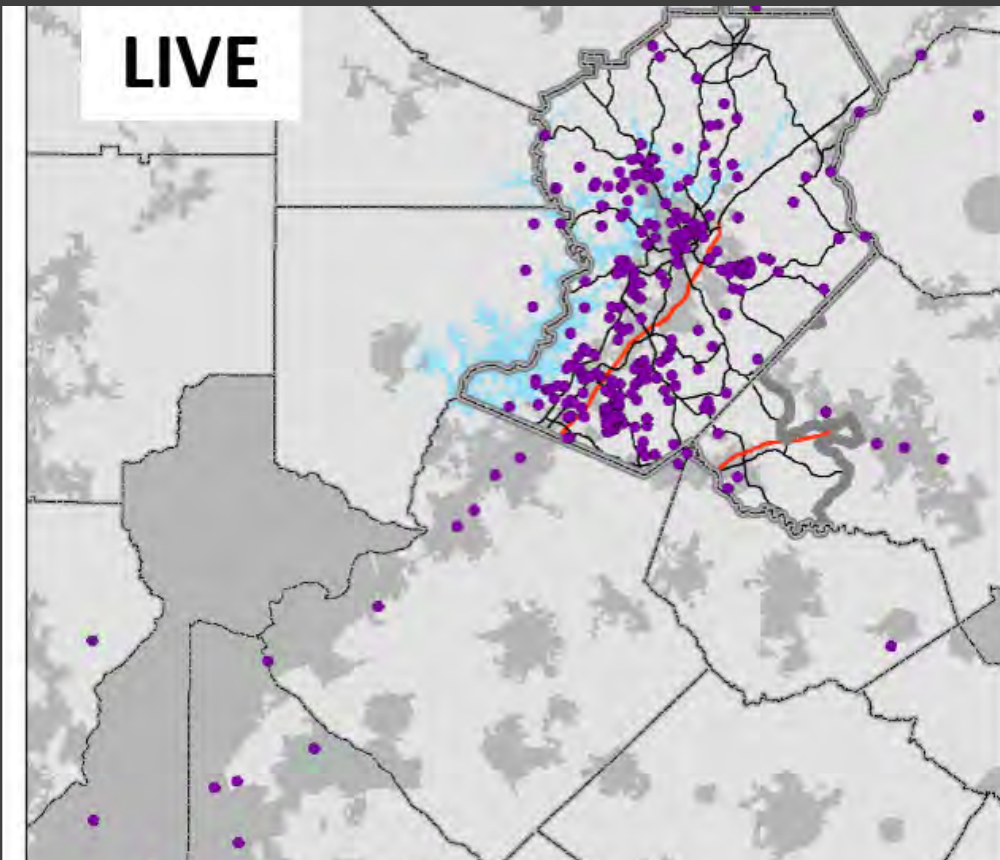


Safety Analyses – High Crash Segments

Work

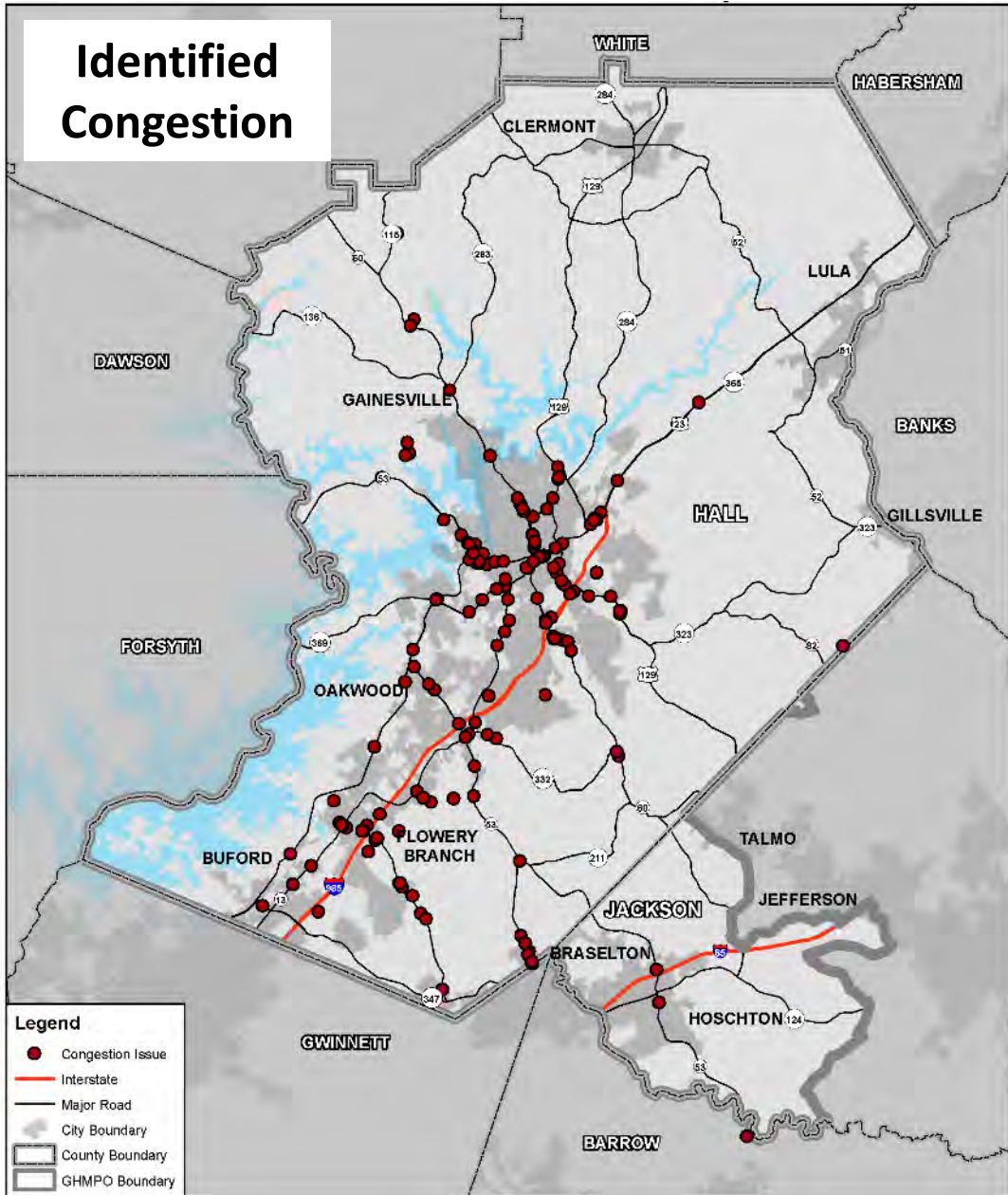


LIVE

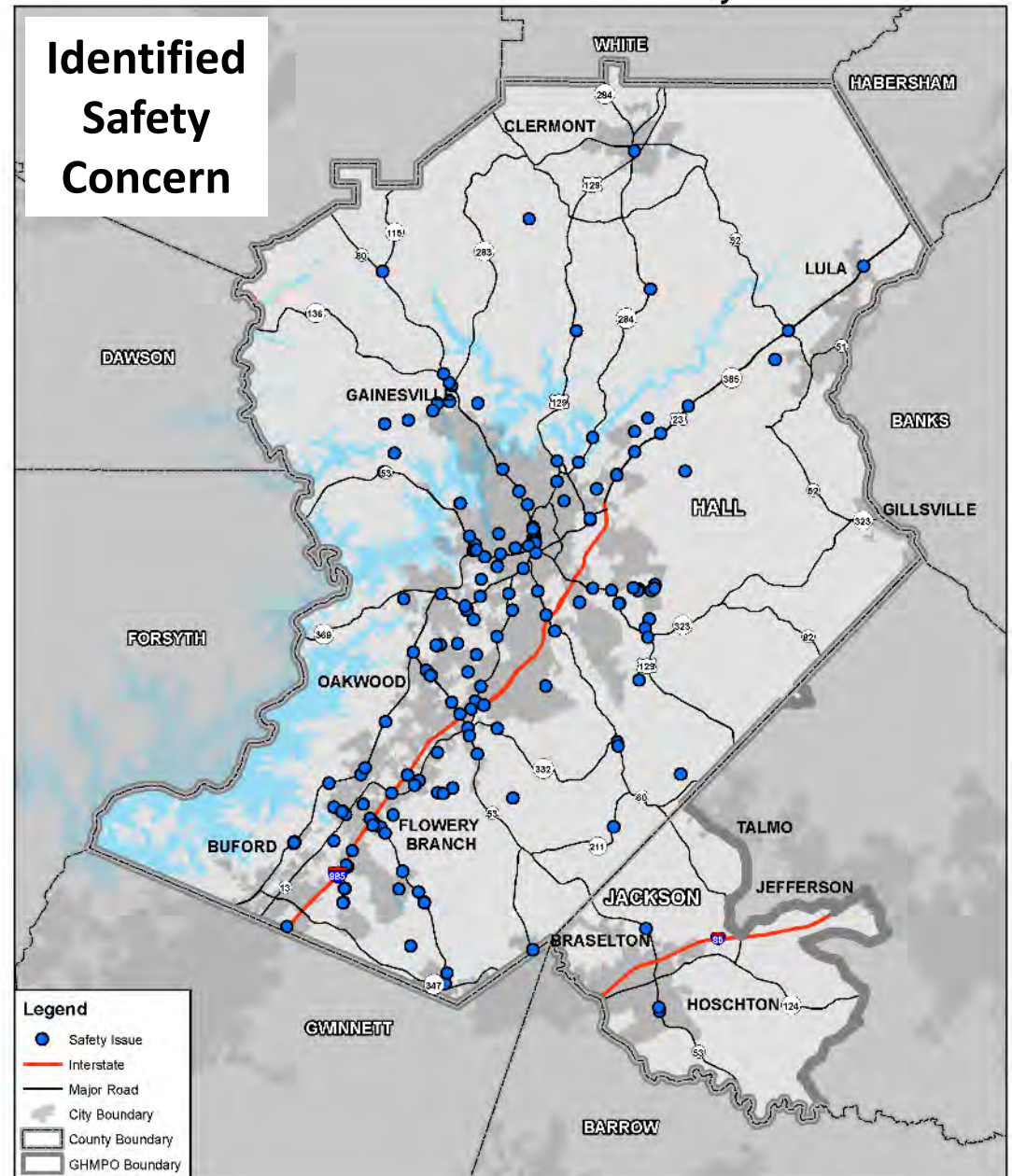


Where do you live and Work?

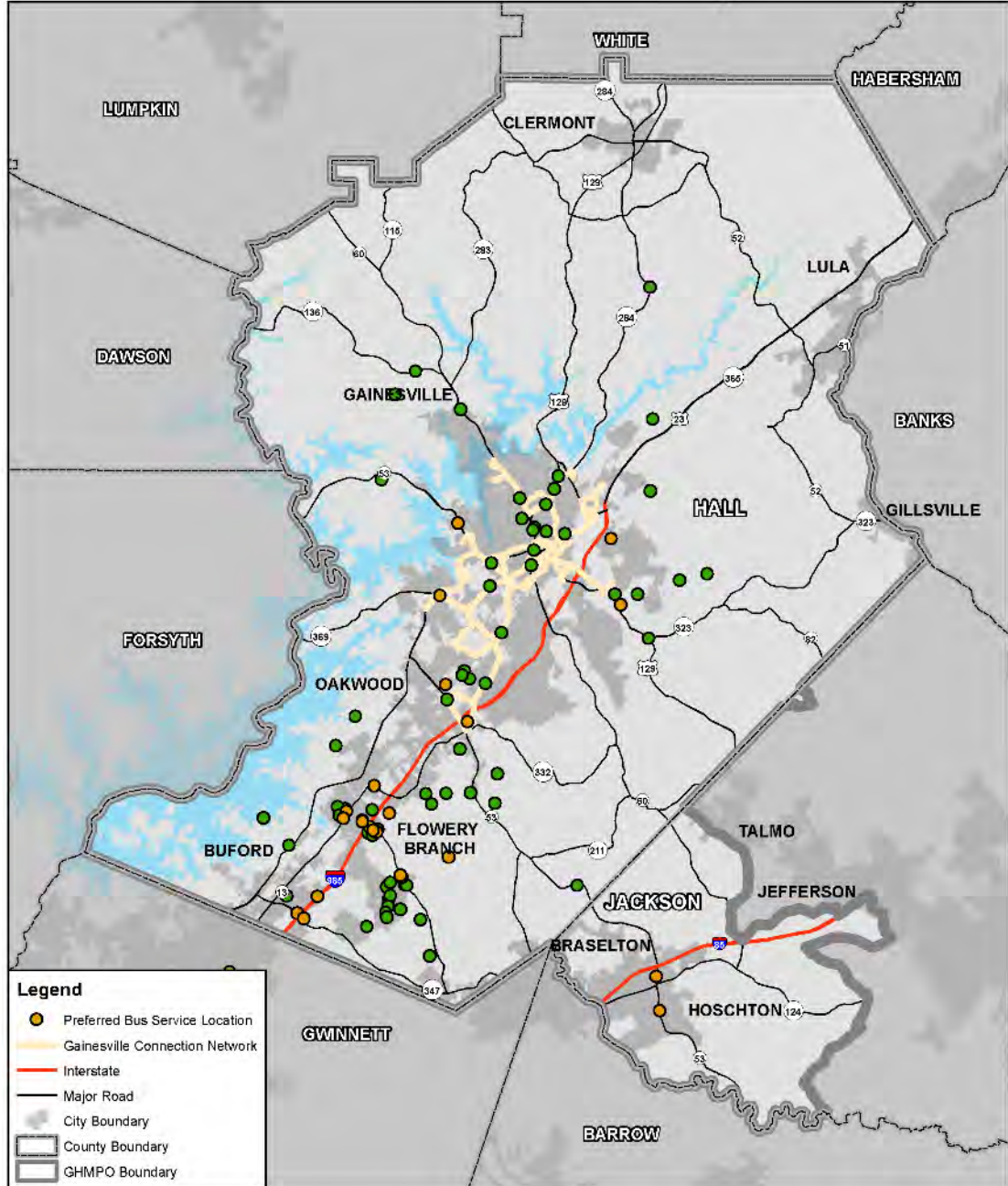
Identified Congestion



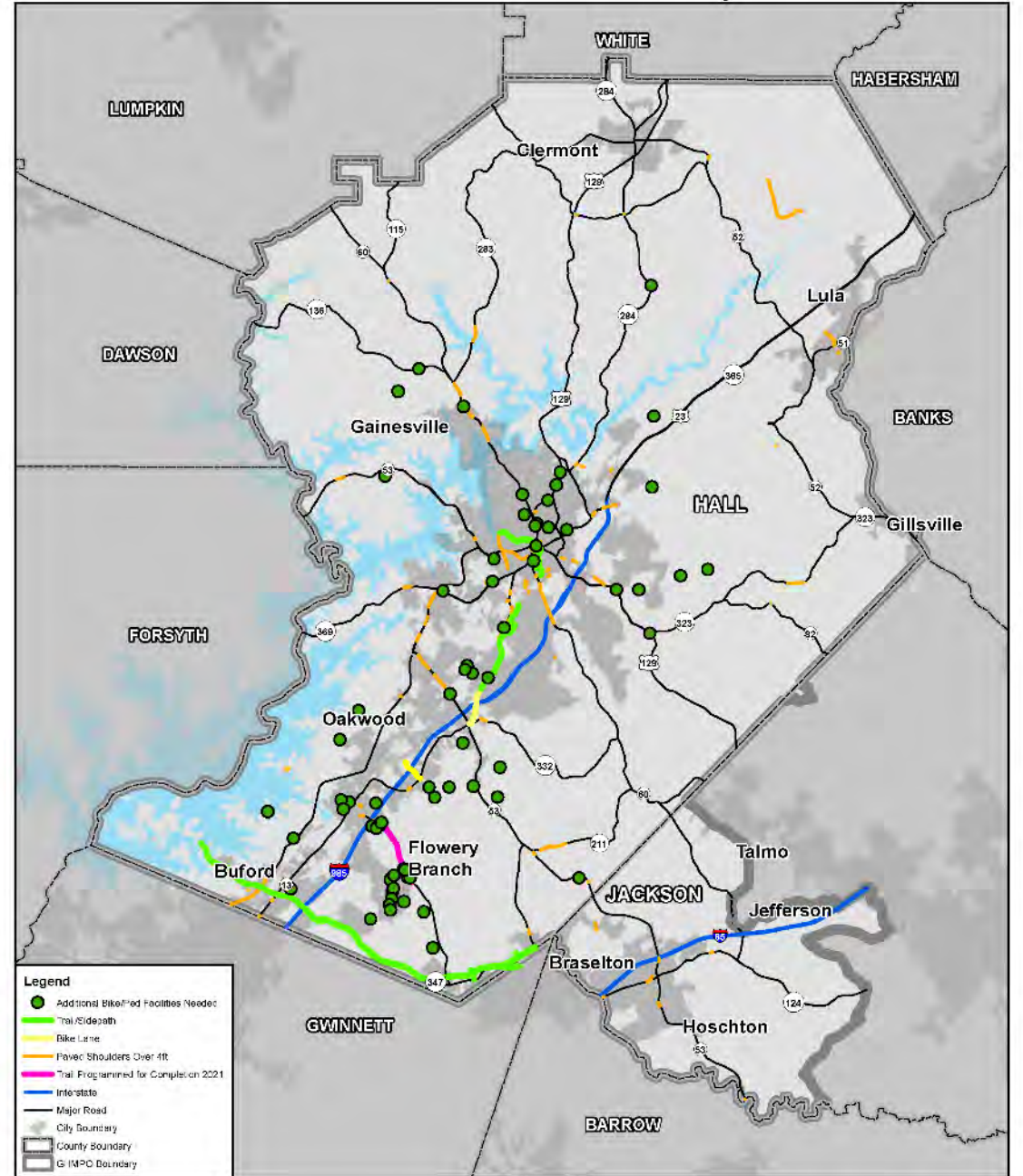
Identified Safety Concern



Bus Service – Desired Locations



Bike and Pedestrian Facilities – Desired Locations



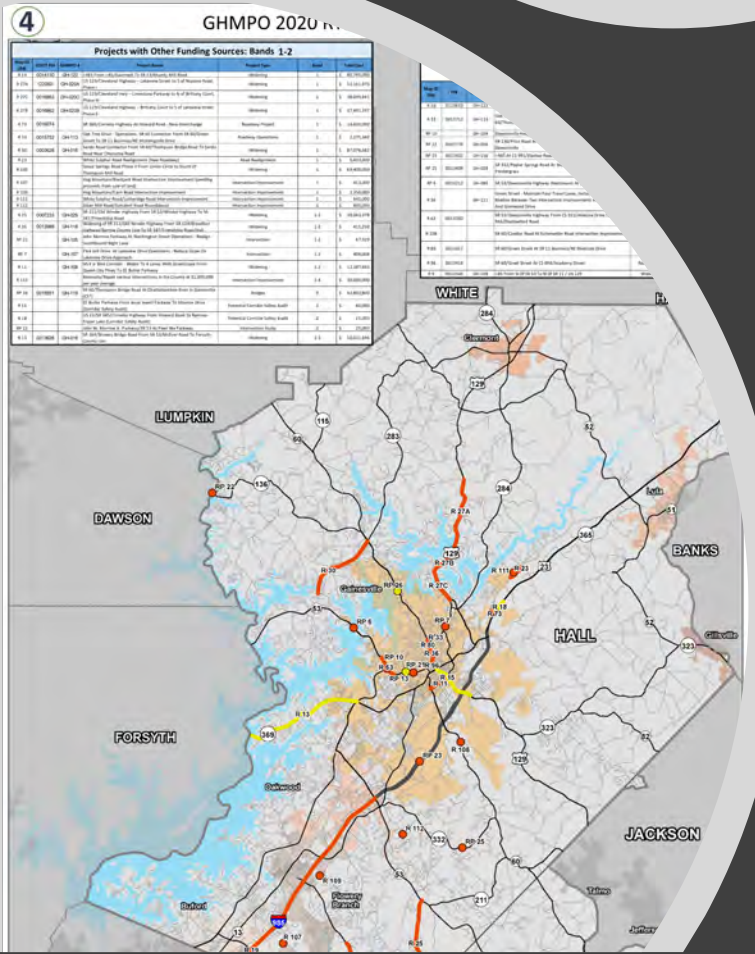
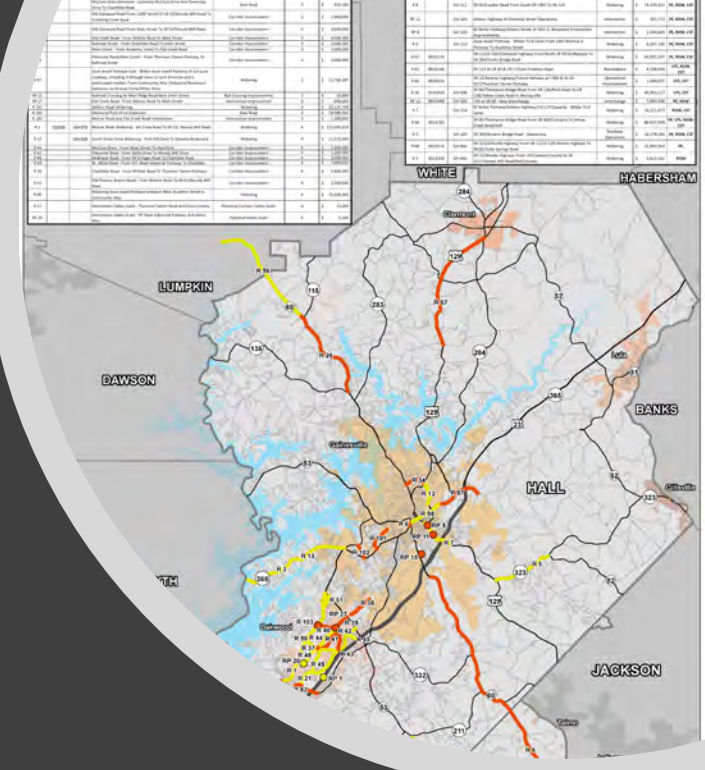
Incorporating Performance-Based Planning

Quantitative

Criteria	Reported Metric
Truck Use	Percent
Congestion	2015 Base Year Volume-to-Capacity (V/C)
	2050 Base Year V/C
	Change in V/C (2015 to 2050)
Safety	Bike/Ped Crashes (All, Injury & Fatality)
	Crash Rates (All, Injury & Fatality)

Qualitative

Category	Criteria
Freight	Supports Freight
Tourism	Supports Tourism
Other	Planned Bike/Ped Facilities
	Existing / Planned Transit
	Regional Multimodal Connections
	Improved Access to Airport
	Impacts to Natural Resources
	Impacts to Historic Resources
Outreach	Local Support



Recommendations!



GAINESVILLE-HALL
Metropolitan Planning Organization



RS&H

Thank you and Questions

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