

2045

Metropolitan Transportation Plan

Technical Report #5 Plan Development

Hattiesburg-Petal-Forrest-Lamar
Metropolitan Planning Organization

DRAFT
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1.0 Introduction

This report describes how the Metropolitan Transportation Plan (MTP) was developed and details the associated information and planning process that was used. It builds on the other technical reports and addresses the following topics:

- Public and Stakeholder Involvement
- Visioning and Strategies
- Project Development
- Environmental Analysis and Mitigation
- Project Prioritization
- Financial Plan
- Implementation Plan

Figure 1.1: Metropolitan Transportation Planning Process



2.0 Public and Stakeholder Involvement Phase 1

The first phase of the planning process – Listening and Learning – was designed to learn about people’s values regarding transportation in the region and hear their big ideas for the future. It also provided an opportunity to meet with key stakeholders in the region and learn about upcoming plans and the region’s long-term trends.

Input was gathered from over 200 people which informed the plan's goals and priority projects. Stakeholders also provided input on areas of future growth with assisted in forecasting future socioeconomic data for the regional travel demand model.

2.1 How We Engaged

Stakeholder Meeting

A stakeholder meeting was held in both counties to hear input from stakeholders who came from a variety of fields, such as local government, industries, or community organizations.

- The first meeting, in Lamar County, was held on Tuesday, March 26, 2019 from 1 P.M. to 3 P.M. at the Lamar Park Community Center in Hattiesburg, MS.
 - Three (3) stakeholders attended.
- The second meeting, in Forrest County, was held on Thursday, March 28 from 1 P.M. to 3 P.M. at the Hattiesburg Historic Train Station in Hattiesburg, MS.
 - Seventeen (17) stakeholders attended.

The purpose of these meetings was to learn about priorities, brainstorm ideas for improving transportation, and identify major growth areas.

Public Meeting and Online Survey

A public meeting was held in both counties to gather input from the community.

- 16 people attended the meeting held in Lamar County on March 26, 2019 from 4 P.M. to 6 P.M. at the Lamar Park Community Center in Hattiesburg, MS.
- 23 people attended the second meeting held in Forrest County on March 28, 2019 from 4 P.M. to 6 P.M. at the Hattiesburg Historic Train Station in Hattiesburg, MS.

Attendees at each meeting participated in three (3) activities in which they learned about the plan and shared their priorities and big ideas.

A pop-up event accompanied the Hattie Hundred Bike Ride on Saturday, April 27, 2019. 15 people stopped by the engagement table. Eight (8) people completed the budget allocation exercise and several people completed surveys.

From March 21, 2019 through May 2, 2019, an online survey was available that replicated the surveys at public meetings and pop up event. During that period, 134 people answered the online survey and 14 people answered paper surveys at the public meetings and the pop-up event.

Table 2.1: Phase 1 Public and Stakeholder Activity

Activity	People Engaged
Stakeholder Meetings	20
Public Meetings	39
Pop Up Event	15
Online Survey	134
Total	208

2.2 Stakeholder Input

The attendees of the two stakeholder meetings participated in three (3) exercises.

The first exercise was an interactive polling exercise that asked about transportation priorities, challenges, and concerns. Figures 2.1 through 2.4 and Tables 2.2 and 2.3 show the results from these polls. Key takeaways include:

- Maintaining roads and infrastructure was voted the top priority, followed by reducing rush hour congestion and improving safety.
- Public opposition was voted as the biggest challenge to implementing projects, followed by shifting priorities in the region and environmental and community impacts.
- “Too much traffic for the road to handle” was voted as the number one cause of congestion.
 - “Waiting at intersections” and “unattractive alternatives to driving” were voted the next top causes of congestion.
- The intersection of US-98 and Westover Drive was most frequently named as needing safety improvements.
 - Other participants named intersections along Hardy St or US-49 as needing safety improvements.
- Hardy St/US-98 was voted the most congested corridor by half of the participants, followed by the intersection of Hardy St/US-98 and Westover Drive.

In a second exercise stakeholders were asked to mark areas where they expected future development and to indicate what kind of development this would be (residential, commercial, industrial, recreational, or educational/medical). Figure 2.5 shows these areas of anticipated development.

The third exercise asked stakeholders to mark areas in the MPO that they thought needed transportation improvements or where they knew of planned projects. These could include projects for roadways, bicycle and pedestrian infrastructure, transit, freight, or any other transportation need. Figures 2.5 and 2.6 map this input.

Figure 2.1: Transportation Priorities Ranked in Order of Importance

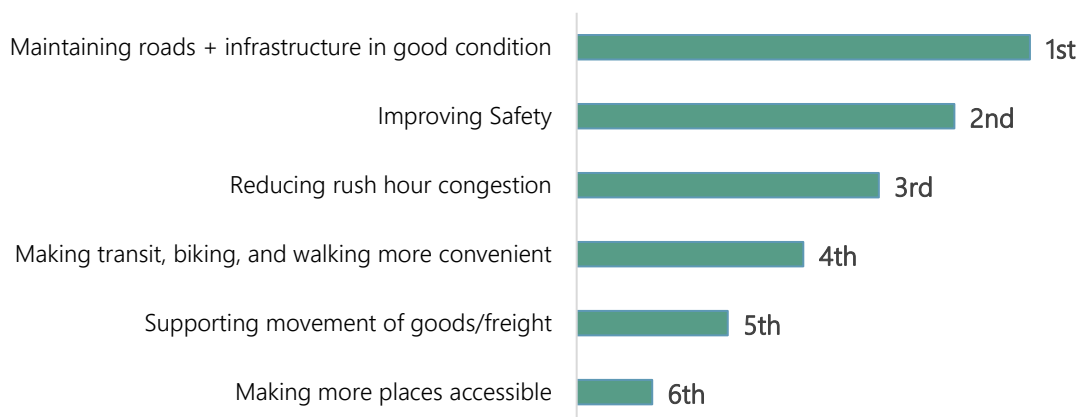


Figure 2.2: Biggest Challenges to Implementing Projects

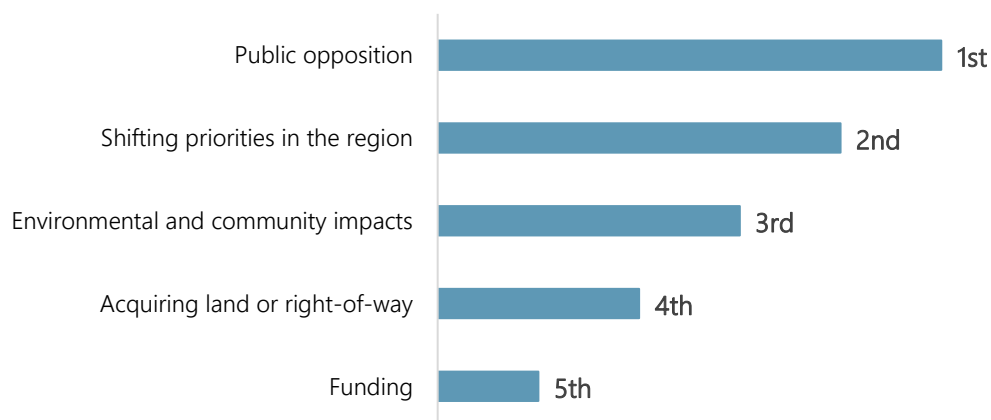


Figure 2.3: Biggest Causes of Congestion in the Region

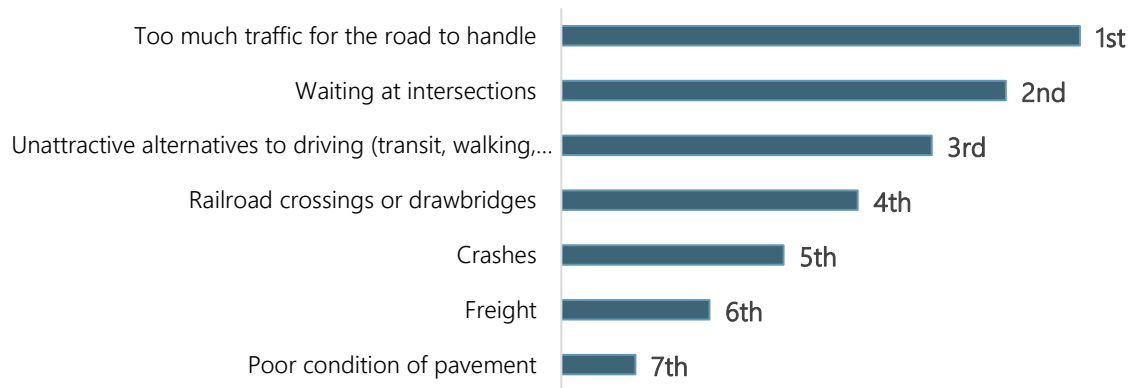


Figure 2.4: Rank These Potential New Funding Sources

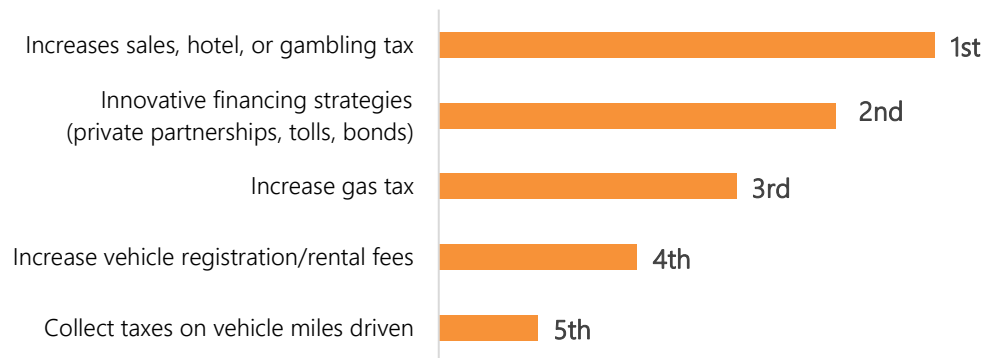


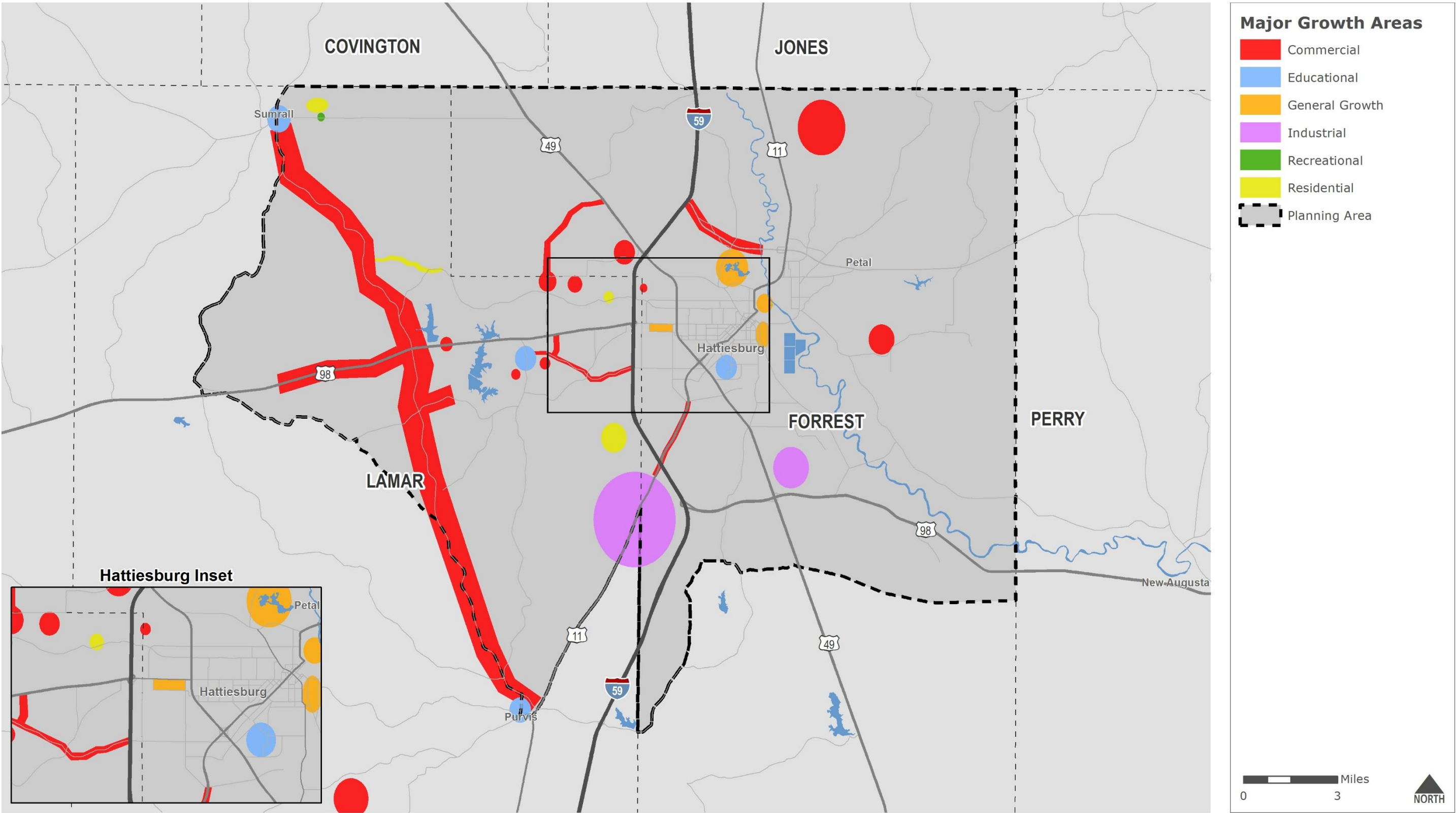
Table 2.2: Intersections or Corridor Most In Need of Safety Improvements

Intersection	Times Mentioned
US-98 at Westover Dr	4
Hwy-49 at I-59	3
Hwy-49 at Hardy St	3
E Gandy Pkwy (Corridor)	3
Hardy St at I-59	3
US-11 (Veterans Memorial Dr) at Sullivan Kilrain Rd	2
Hardy St at 40th St	1

Table 2.3: Most Congested Intersections or Corridors

Intersection	Times Mentioned
Hardy St/US-98 (Corridor)	10
Hardy St/US-98 at Westover Dr	3
Oak Grove Rd (Corridor)	1
Oak Grove Rd at Westover Dr	1
US-49 at Hardy St	1
4th St at Hardy St	1
4th St at Westover Dr	1

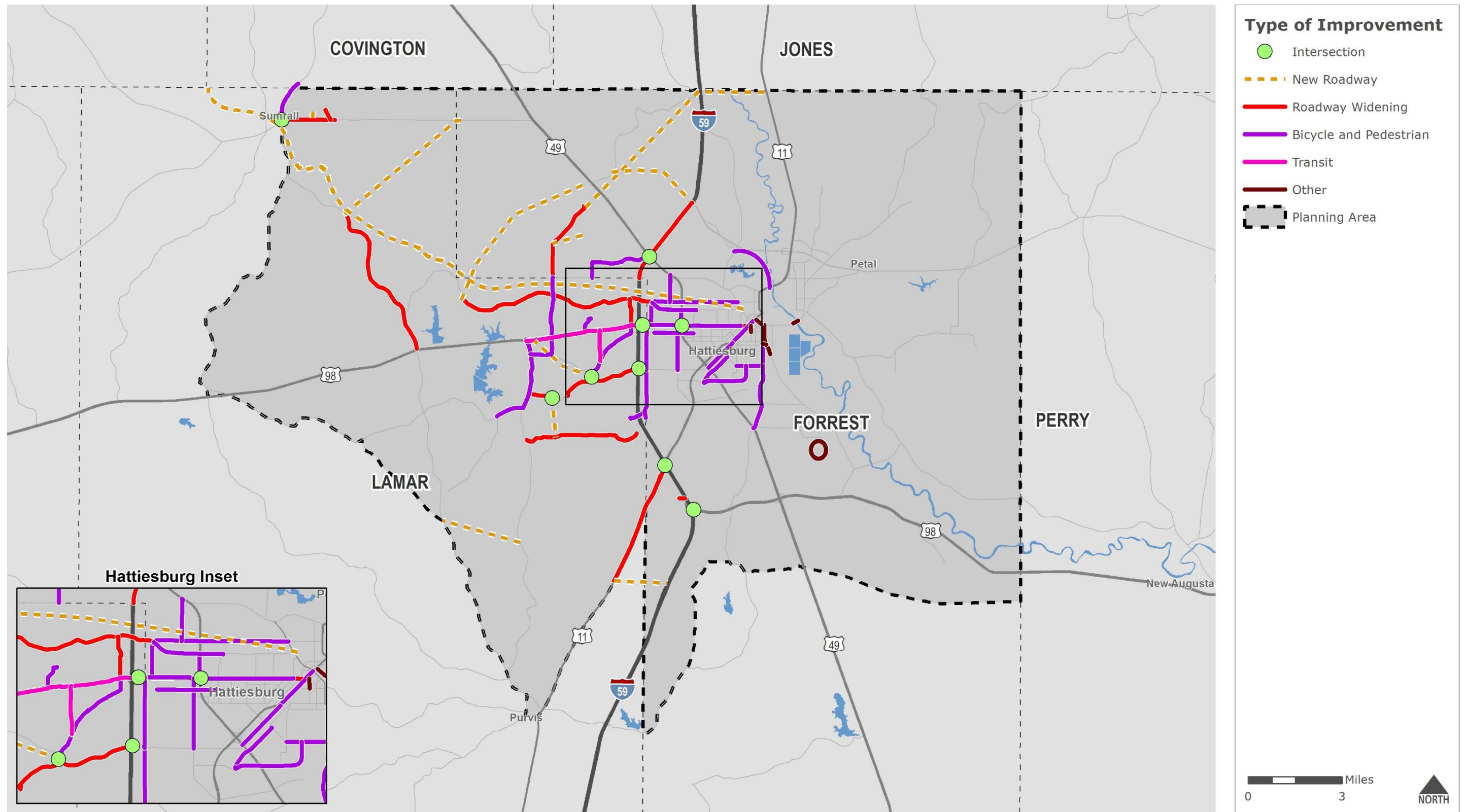
Figure 2.5: Anticipated Growth Areas, According to Stakeholders



Data Sources: Neel-Schaffer, Inc.

Disclaimer: This map is for planning purposes only.

Figure 2.6: Big Ideas for Transportation Improvement from Stakeholders



Data Sources: Neel-Schaffer, Inc.

Disclaimer: This map is for planning purposes only.

2.3 Public Input

The public meeting, online survey, and pop-up event sought resident input to better understand regional priorities and needs by asking about the following topics:

- General transportation priorities
- Budget allocation priorities
- Perceived safety issues
- Perceived high levels of congestion
- Ideas for improving transportation in the region

The exercises at the public meeting and survey questions were identical. A total of 144 surveys were completed from the public meeting and online survey. Survey participants were not required to answer all questions. Table 2.4 shows how respondents self-identified and Table 2.5 shows how participation varied by zip code.

Table 2.4: Public Survey Respondent Self-Identification by Group

Type of Respondent	Count
General Public	97
Government/Public Agency	26
Elected Official	9
Major Employer	5
Other	5
Advocacy Group	2
Total	144

Table 2.5: Public Survey Respondent Self-Identification by ZIP Code

ZIP Code	Area	Count
39402	West Hattiesburg	64
39401	Hattiesburg	45
39429	Columbia	8
39465	Petal	7
39406	Hattiesburg: USM	5
39482	Sumrall	4
Total	All	133

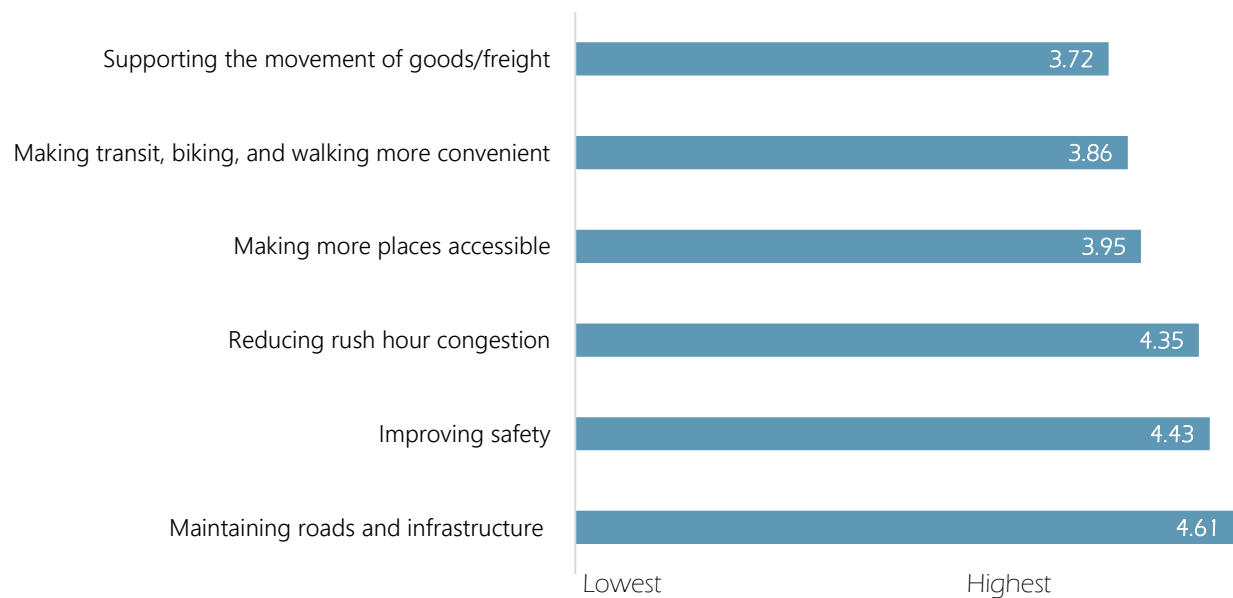
Table 2.6: Votes per Transportation Priority

Priority	1- Least Important	2	3	4	5- Most Important
Maintaining roads and infrastructure	2	1	3	25	98
Reducing rush hour congestion	3	4	14	25	85
Making more places accessible	7	11	20	33	60
Making transit, biking, and walking more convenient	6	10	28	37	56
Supporting the movement of goods/freight	6	10	30	48	42
Improving safety	2	2	13	26	12

Public Priorities Exercise

Participants were asked to independently rank six (6) transportation priorities from 0 to 4, with 0 being least important and 4 being most important.

Figure 2.7: Average Priority Ranking



Public Budget Allocation Exercise

Participants were asked to imagine they had \$100 to spend on transportation projects and to allocate their money in increments of \$10 among nine different categories. Participants allocated the most funding to "Maintaining existing roadways" and "Improve bicycle conditions".

Figure 2.8: Budget Allocation Results

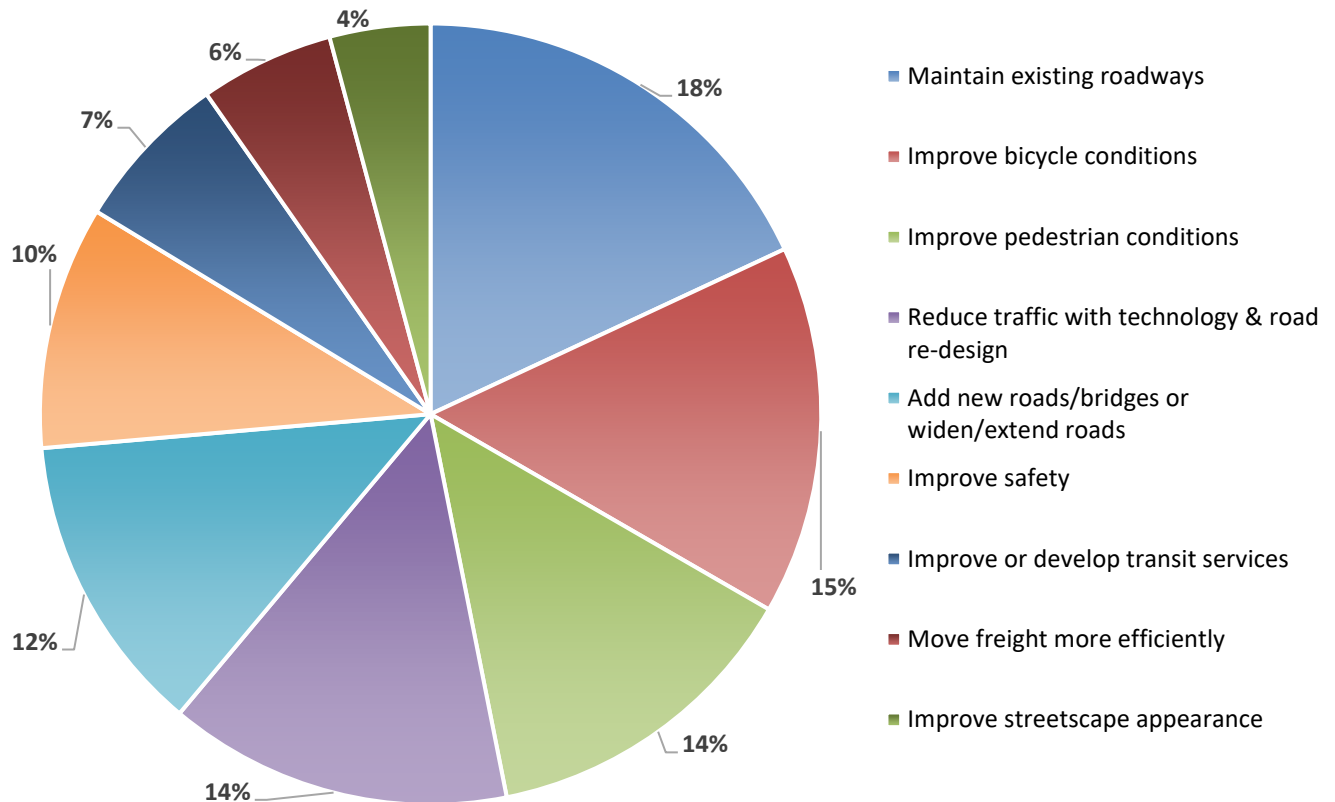


Table 2.7: Budget Allocation Responses

Priority	\$ Allocated	% Allocated
Maintain existing roadways (pavement, bridges, signage, striping)	520	18%
Improve bicycle conditions	440	15%
Reduce traffic with technology and roadway re-designs (smart traffic signals, intersection improvements, left-turn lanes in medians)	410	14%
Improve pedestrian conditions	390	14%
Add new roads and bridges or widen/extend existing ones (expand roadway network)	360	13%
Improve safety (traffic calming, re-design dangerous areas)	290	10%
Improve or develop transit services	190	7%
Move freight more efficiently	160	6%
Improve streetscape appearance (trees/plants, decorative lighting/pavement)	120	4%

Roadway Safety Concerns Exercise

Respondents were asked which intersection or corridor is most in need of safety improvements and which are most congested during rush hour. Tables 2.8 through 2.11 show these results and they are mapped in Figures 2.9 and 2.10. Key takeaways include:

- Hardy Street/US 98 was overwhelmingly named as the most congested.
 - Eighty (80) percent of respondents named it as the most congested corridor, and 87 percent of the intersections that were identified as most congested occurred along Hardy St/US 98.
- Hardy Street/US 98 was also named by almost 60 percent of participants as the corridor most in need of safety improvements.
- Many different intersections were named as most in need of safety improvements, but Hardy Street at US 49 and Hardy Street at 40th Avenue received the most mentions.

Table 2.8: Most Congested Intersections

Corridor	Times Mentioned
Hardy St at US-49	16
Hardy St at I-59	9
Hardy St at US-98	8
Hardy St at 38th St	5
Hardy St at 40th Ave	5
Hardy St at Westover Dr	3

Mentioned twice: Lincoln Rd & W 4th St; Lincoln Rd & Oak Grove Rd; Hardy St & 4th St; Hardy St & US-98; 4th St & Westover Dr; US-49 & I-59.

Mentioned once: Evelyn Gandy Pkwy & I-59; Hardy St & 34th Ave; US-98 & N Pine St; Hardy St & 28th Ave; Mobile St & E Front St; US-98 & Weathersby Rd

Table 2.9: Most Congested Corridors

Corridor	Times Mentioned
Hardy St/ US-98	37
Lincoln Rd	4
I-59	3
40th Ave	2

Mentioned once: 4th St; US-49

Table 2.10: Intersections Most In Need of Safety Improvements

Corridor	Times Mentioned
Hardy St at 40th Ave	7
Hardy St at US-49	7
US-98 at I-59	5
Hardy St at Westover Dr	3
US-49 & I-59	3
US-98 at Cross Creek Parkway	3

Mentioned twice: US-49 & MS-42; US-49 & William Carey Pkwy; Hardy St & I-59. Mentioned once: 38th St & 4th Ave; US-49 & Rawls Springs Rd; US-49 & US-98; 4th St & Weathersby Rd; Eastside Ave & E Florence Ave; James St & Edwards St; I-59 & Lincoln Rd; Evelyn Gandy Pkwy & Byrd Pkwy; Evelyn Gandy Pkwy & Byrd Pkwy; Evelyn Gandy Pkwy & I-59; I-59 & US-42; Hardy St & Turtlecreek Dr; Hardy St & 4th St; Hardy St & Cole St; Hardy St & Weathersby Rd; US-49 & Edwards St; Hardy St & Lamar Blvd; Lincoln Rd & Oak Grove Rd; Hardy St & N 25th St; US-98 & Westover Dr; Railroad Rd

Table 2.11: Corridors Most In Need of Safety Improvements

Corridor	Times Mentioned
US-98/Hardy St	30
W 4th St	4
Lincoln Rd	4
US-49	3
Broadway Drive by Walmart	3

Mentioned once: Cross Creek Pkwy; J Ed Turner Dr; US-11; I-59; Railroad St; Oak Grove Rd

Big Ideas Exercise

Respondents were also asked an open-ended question, “What BIG IDEAS do you have for improving transportation in the region? Think about getting around by all modes- driving, riding transit, walking, biking, etc.” Two-thirds of survey respondents answered this question. Answers ranged across modes and discussed some specific areas, however, clear trends appeared within the answers. These trends are discussed below, beginning with the most frequently mentioned improvements. Figure 2.10 maps these big ideas.

Pedestrian

Twenty (20) people want to see more sidewalks in Hattiesburg, particularly along Hardy Street. They also mentioned the need to make crossings safer for pedestrians.

Table 2.12: Public Input Ideas for Pedestrians

Idea	Times Mentioned
Create sidewalks along Hardy St and through Midtown	7
Increase sidewalk coverage	6
Create a circuit of multimodal trails that connects to Longleaf Trace	3
Build more sidewalks along 4th St	3
Implement a public campaign on jaywalking and pedestrian safety	2
Create a pedestrian bridge over 4th St to USM campus	1
Create a pedestrian bridge over Hardy St to USM campus	1
Create sidewalks along 28th Ave connecting University Heights to campus	1
Increase pedestrian accessibility to destinations	1
Add sidewalks along Lincoln Rd, 40th Ave., 7th St	1
Maintain sidewalks	1
Add safe walkways across US-49 and mall	1
Link West Hattiesburg and Downtown with safe walkways	1
Add trails through wooded areas	1
Add sidewalks in West Hattiesburg	1
Add sidewalks along Old Highway 11	1
Add sidewalks along Lincoln Rd between Oak Grove Rd and Old Highway 11	1

Reducing Congestion

Many respondents discussed Ideas to reduce vehicular congestion in the city. One popular idea was to make an outer loop to provide an alternative to Hardy St. Some people want this outer loop to bypass Hardy St, while others want it to connect to downtown. Other ideas to reduce congestion included widening roads and building a bridge over railroads so cars are not stuck behind trains.

Table 2.13: Public Input Ideas for Roadways

Idea	Times Mentioned
Create a "ring road" around downtown	10
Use smart signals along US-98	5
Create a ramp off I-59 and Lincoln Rd	4
Widen Lincoln Rd	4
Create a bypass in Bellevue connecting US-98 W and US-98 E	3
Increase police enforcement of running red lights	3
Widen US-49	3
Increase police enforcement of poor driving behavior	2
Expand 4th St	2
Add cross street over I-59	2
Widen I-59	2
Widen roads	2
Fix potholes	1
Widen Hwy-42 from US-49 to Epley Rd	1
Straighten/Widen Epley Rd	1
Widen Hwy-589	1
Create North-South route across Hattiesburg	1
Create carpool roads	1
Reroute 4th St to end east of USM campus	1
Reroute W 7th Ave to be an East-West corridor	1
Redesign Cross Creek Pkwy to reduce crashes	1
Create a roundabout at Weathersby Rd and Oak Grove Rd	1
Widen Old US-11 from US-98 to Richburg Rd	1
Widen Oak Grove Rd to three lanes from Westover Dr to Old Highway 11.	1
Add back entrance to Chick-Fil-A to reduce backlog along US-98	1
Improve road and intersection marking	1
Remove 3 lane roads	1
Add a roundabout at US-11 and Sullivan Kilrain Rd	1
Remove speed bumps	1
Extend Lincoln Rd	1

Idea	Times Mentioned
Extend Hwy 42 to US-49	1
Improve safety at I-59 S Gandy exit	1
Connect I-59 to Oak Grove Rd	1
Extend Gandy Rd to US-49 and Rawls Spring	1
Add access to I-59 between Lincoln and Hardy Rd	1

Transit

Approximately 14 percent of respondents mentioned transit when answering this question, suggesting that transit was not a priority to the surveyed population. Respondents want more frequent service, including weekend service.

Some people remarked that the bus system could be easier to understand and more widely marketed. A handful of respondents desire intercity connections to the Gulf Coast and Jackson. Some would like a shuttle to downtown running at half hour intervals, possibly west of Hattiesburg along U.S. Highway 98.

Table 2.14: Public Input Ideas for Transit

Idea	Times Mentioned
More frequent service (every 5-10 minutes; at night and weekends)	3
Make bus easier to use	3
Create rail service from Gulf Coast to Jackson	2
Shuttles to downtown (every 20-30 minutes)	2
Transit station	1
Transit parking	1
Mobility as a service model	1
Scooters	1
More bus stops	1
Connect transit and rideshare	1
Electric buses	1
Light rail along Hardy St	1
Buses connect more often	1
Stop near Forrest General Hospital	1
Improved Hardy St service	1

Bicycle

Nearly 20 people mentioned creating more bicycle infrastructure. Some people would like to see multi-use paths, especially ones that connect to destinations of interest. Others mentioned creating bike lanes in the city. Some people would also like Bike/Ped education for all users of the road.

Table 2.15: Public Input Ideas for Bicycling

Idea	Times Mentioned
Create family friendly bike options across US-49, Hardy St, and Lincoln Rd	3
Add more bike lanes	3
Create bike trails across the city from Downtown through Midtown	2
Create more bike paths that are clearly marked	2
Create marked bike lanes to access Longleaf Trace	1
Create safe crossings across Hardy St	1
Improve safety biking along Longleaf Trace and downtown	1
Add bike lanes along Hardy St, 40th Ave, W. 7th St, W. 4th St	1
Create a bike trail in West Lamar close to US-98	1
Make more places accessible by bike	1
Create safe bicycling campaign	1

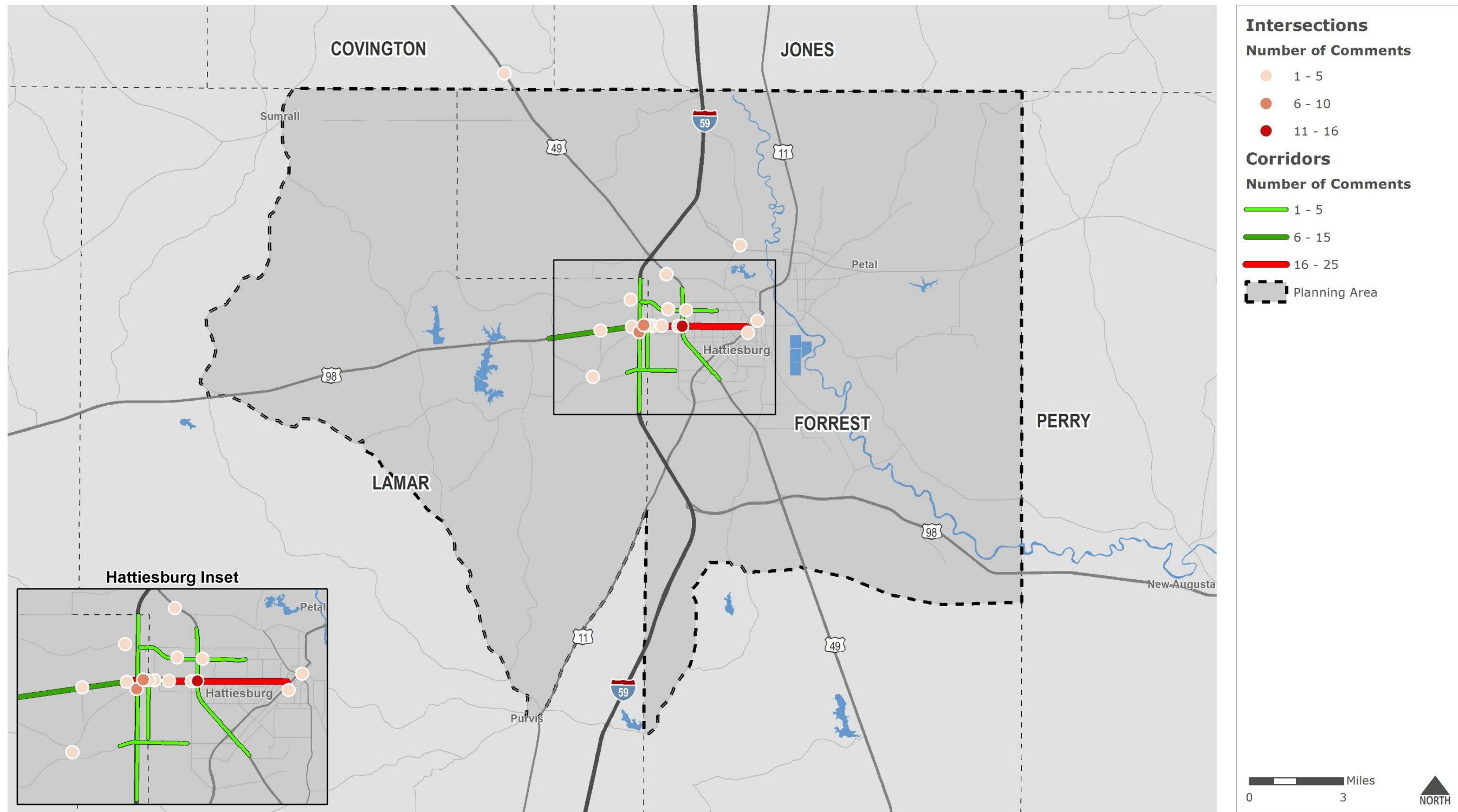
Other Ideas

Some other ideas mentioned include promoting electric vehicles, implementing a fuel tax, and improving downtown lighting.

Table 2.16: Other Public Input Ideas

Idea	Times Mentioned
Promote Electric Vehicle infrastructure	3
Implement a fuel tax	2
Improve downtown lighting	2
Increase transportation funding	2
Study a vehicle miles driven tax	1
Add Bluebird scooters across the city	1
Add more destinations along Longleaf Trace (i.e. restaurants, shopping)	1

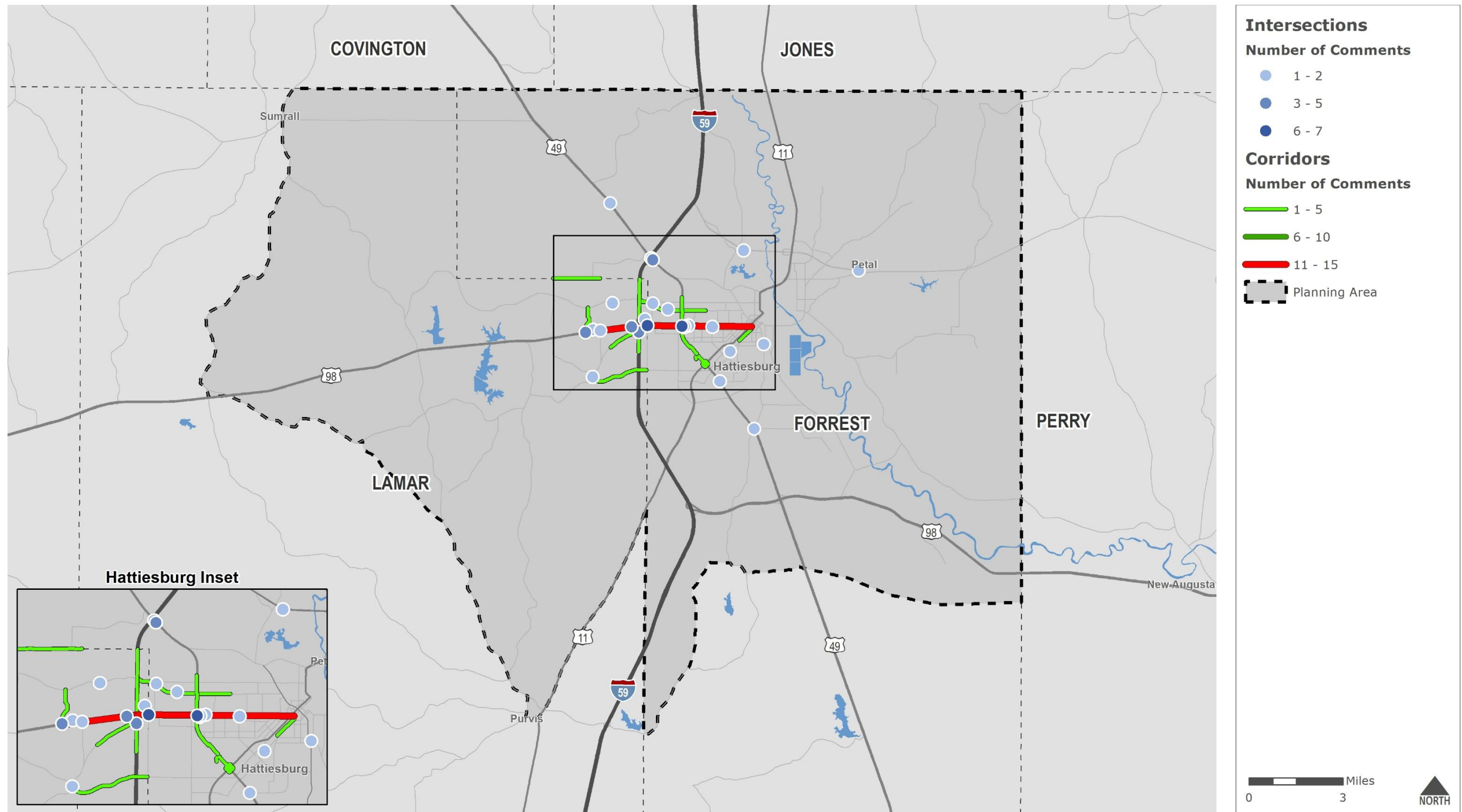
Figure 2.9: Most Congested Roadways During Rush Hour, According to Public Survey



Data Sources: Neel-Schaffer, Inc.

Disclaimer: This map is for planning purposes only.

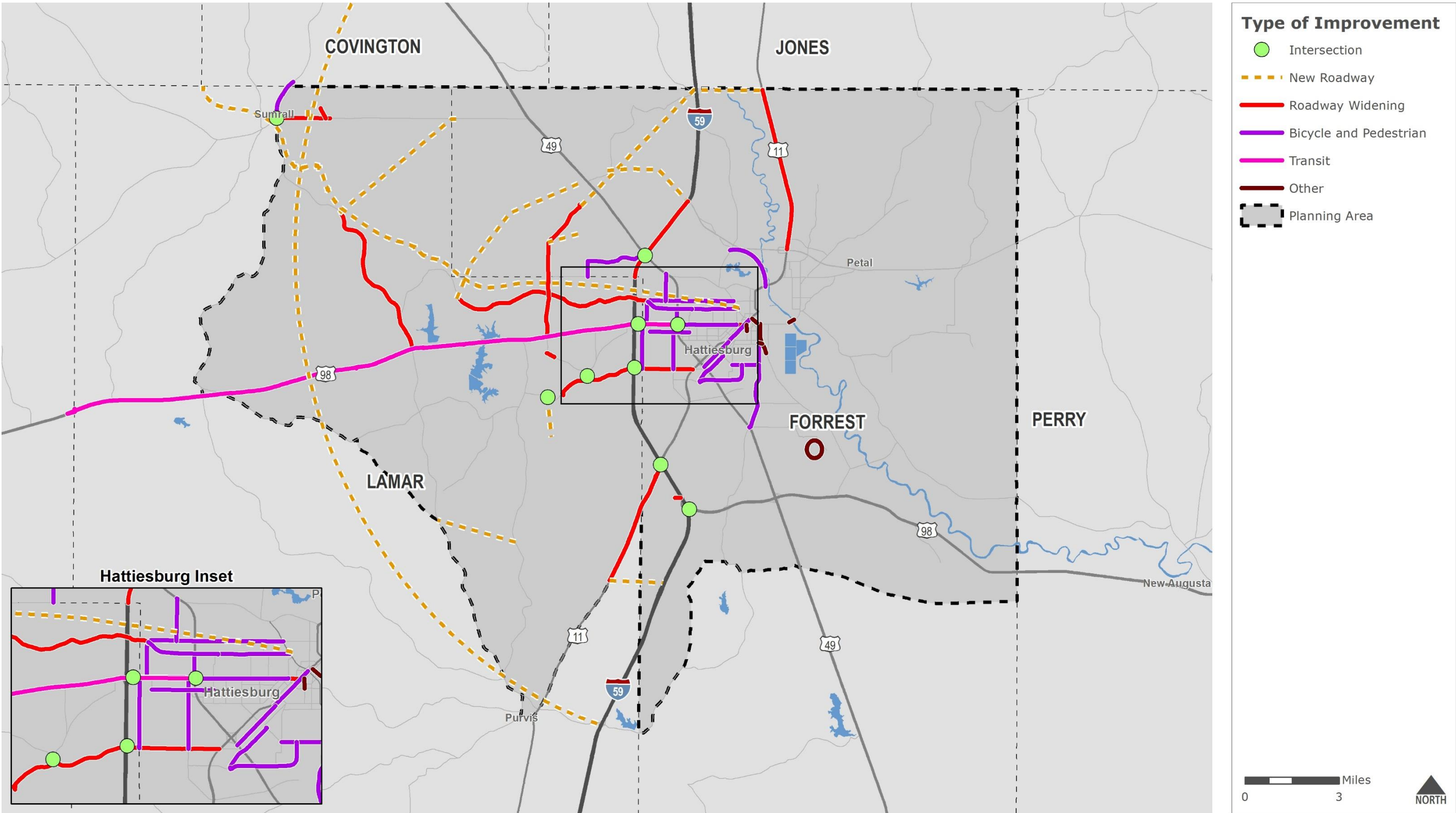
Figure 2.10: Roadways Most in Need of Safety Improvements, According to Public Survey



Data Sources: Neel-Schaffer, Inc.

Disclaimer: This map is for planning purposes only.

Figure 2.11: Big Ideas from Public Meeting Map



Data Sources: Neel-Schaffer, Inc.

Disclaimer: This map is for planning purposes only.

3.0 Public and Stakeholder Involvement Phase 2

During this phase, the public and stakeholders reviewed the draft plan and provided input to refine and finalize the plan.

3.1 How We Engaged

Public Meeting

Virtual Public Meeting is scheduled for October 27 at 6 P.M. Additional information will be added once Phase 2 is completed.

3.2 Stakeholder Input

[WILL BE ADDED ONCE PHASE 2 IS COMPLETE]

3.3 Public Input

[WILL BE ADDED ONCE PHASE 2 IS COMPLETE]

4.0 Visioning and Strategies

Using public and stakeholder input from the Listening and Learning phase of the project, a long-term vision was developed followed by supporting goals and objectives. These goals and objectives are consistent with national goals set forth in federal transportation legislation.

4.1 Vision and Strategic Framework

The graphic on the next page shows the long-term vision, goals, and objectives for the Metropolitan Planning Area. These reflect local priorities as well as national transportation goals.

The graphic also illustrates the overall strategic framework and how the goals and objectives support the vision. Strategies and the implementation plan address the goals and objectives and are discussed later.

Figure 4.1: Vision and Strategic Framework



4.2 Goals and Objectives

For each goal, objectives were identified that clarify and expand upon the goal statement. These activity-based objectives are used later to identify specific strategies that help the MPO achieve its stated goals.



Goal 1: Improve and expand transportation choices

- Objective 1.1: Improve mobility and access across the region for pedestrians and bicyclists.
- Objective 1.2: Make public transportation a viable choice as a mode of transportation.
- Objective 1.3: Support shared mobility options to put more people into fewer vehicles.
- Objective 1.4: Support convenient and affordable access to local and regional air, rail, and water transportation.



Goal 2: Improve safety and security

- Objective 2.1: Reduce motor vehicle crash fatalities and serious injuries.
- Objective 2.2: Reduce pedestrian and bicycle crash fatalities and serious injuries.
- Objective 2.3: Strategically enhance corridors for safety and context.
- Objective 2.4: Support coordination among local and state stakeholders to improve enforcement of traffic regulations, transportation safety education, and emergency response.
- Objective 2.5: Increase the redundancy and diversity of the transportation system to provide emergency alternatives for evacuation and access during disruptive man-made, or natural incidents.



Goal 3: Provide a reliable and high performing transportation system

- Objective 3.1: Enhance regional connectivity.
- Objective 3.2: Maintain the transportation infrastructure and assets in a good state of repair.
- Objective 3.3: Improve mobility by reducing traffic congestion and delay.
- Objective 3.4: Prepare for technological advances that will efficiently and dynamically manage roadway demand, capacity, and overall systems operations.



Goal 4: Support the economic vitality of the region

- Objective 4.1: Improve the transportation system to enhance economic competitiveness and provide access to national and global markets.
- Objective 4.2: Use transportation improvements to provide equitable benefits across the region.
- Objective 4.3: Use transportation improvements to support vibrant activity centers that are consistent with local plans for growth and economic development.
- Objective 4.4: Improve the mobility of freight by truck, rail, and other modes.
- Objective 4.5: Support a fiscally constrained 25-year Metropolitan Transportation Plan that addresses existing and future needs while maximizing projected revenues.



Goal 5: Manage the relationship of transportation, community, and environment

- Objective 5.1: Make the transportation system resilient, especially to effectively manage and mitigate stormwater runoff.
- Objective 5.2: Minimize or avoid adverse impacts from transportation improvements to the natural environment and the human environment (historic sites, recreational areas, environmental justice populations).
- Objective 5.3: Improve mobility for underserved communities.
- Objective 5.4: Provide an inclusive setting for regional transportation decision-making.
- Objective 5.5: Support the reduction of transportation-related greenhouse gas emissions and the improvement of air quality through fleet fuel management and the reduction of congestion.
- Objective 5.6: Provide access to active transportation options, healthcare facilities, and healthy foods.

4.3 Relationship with Planning Factors

Federal legislation requires the Metropolitan Transportation Plan to consider the following ten planning factors:

- 1) Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
- 2) Increase the safety of the transportation system for motorized and non-motorized users
- 3) Increase the security of the transportation system for motorized and non-motorized users;
- 4) Increase accessibility and mobility of people and freight;
- 5) Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
- 6) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- 7) Promote efficient system management and operation;
- 8) Emphasize the preservation of the existing transportation system;
- 9) Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
- 10) Enhance travel and tourism.

Table 4.1 shows how these planning factors are addressed by each goal area.

4.4 National Goals and Performance Measures

Following federal legislation and rulemaking, the Federal Highway Administration and Federal Transit Administration have moved to performance-based planning and have established national goals and performance measures. These national goals and performance measures are summarized below.

The MTP goals and objectives are consistent with these national goals and federal performance measures, as indicated in Table 4.1.

- **Safety** - To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
 - Number of fatalities
 - Rate of fatalities per 100 million VMT
 - Number of serious injuries
 - Rate of serious injuries per 100 million VMT
 - Number of non-motorized fatalities and serious injuries
- **Infrastructure Condition** - To maintain the highway infrastructure asset system in a state of good repair
 - Percentage of Interstate pavements in Good condition
 - Percentage of Interstate pavements in Poor condition
 - Percentage of non-Interstate NHS pavements in Good condition
 - Percentage of non-Interstate NHS pavements in Poor condition
 - Percentage of NHS bridges by deck area in Good condition
 - Percentage of NHS bridges by deck area in Poor condition
- **Congestion Reduction** - To achieve a significant reduction in congestion on the National Highway System
 - Annual hours of peak-hour excessive delay per capita*
 - Percent of non-single-occupant vehicle travel
- **System Reliability** - To improve the efficiency of the surface transportation system
 - Percent of the person-miles traveled on the Interstate that are reliable
 - Percent of the person-miles traveled on the non-Interstate NHS that are reliable

- **Freight Movement and Economic Vitality** - To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
 - Truck Travel Time Reliability (TTTR) Index
- **Environmental Sustainability** - To enhance the performance of the transportation system while protecting and enhancing the natural environment.
 - Total emissions reduction*
- **Transit Asset Management** - To maintain transit assets in a state of good repair.
 - Percentage of track segments that have performance restrictions
 - Percentage of revenue vehicles that exceed useful life benchmark
 - Percentage of non-revenue vehicles that exceed useful life benchmark
 - Percentage of facilities rated less than 3.0 on TERM Scale

**only required for areas designated as nonattainment or maintenance for certain pollutants*

Current Performance

The MPO adopted performance targets for the required federal performance measures and is monitoring performance for these measures over time. The graphic below summarizes how the MPO and region are performing today for these performance measures.

For more detailed information, see *Technical Report #3: Transportation Performance Management*.

Figure 4.2: Current Transportation Performance Overview






Safety	Pavement	Bridge Conditions	Travel Time Reliability	Truck Time Reliability	Transit State of Repair
					
Needs Improvement	Needs Improvement	Good	Good	Good	Poor
Good	Meets Target	Needs Improvement	Does Not Meet Some Targets	Poor	Does Not Meet Most Targets

Table 4.1: Relationship between Goals, Objectives, Performance Measures, and Federal Planning Factors

	Objectives	Performance Measures	Federal Planning Factors
Goal 1: Improve and expand transportation choices	<p>1.1 Improve mobility and access across the region for pedestrians and bicyclists.</p> <p>1.2 Make public transportation a viable choice mode of transportation.</p> <p>1.3 Support shared mobility options to put more people into fewer vehicles.</p> <p>1.4 Support convenient and affordable access to local and regional air, rail, and water transportation.</p>	No associated federal performance measures.	<p>(4) Increase accessibility and mobility of people and freight</p> <p>(6) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight</p>
Goal 2: Improve Safety and Security	<p>2.1 Reduce motor vehicle crash fatalities and serious injuries.</p> <p>2.2 Reduce pedestrian and bicycle crash fatalities and serious injuries.</p> <p>2.3 Strategically enhance corridors for safety and context.</p> <p>2.4 Support coordination among local and state stakeholders to improve enforcement of traffic regulations, transportation safety education, and emergency response.</p> <p>2.5 Increase the redundancy and diversity of the transportation system to provide emergency alternatives for evacuation and access during disruptive man-made or natural incidents.</p>	<p>Safety</p> <p>> Number of fatalities</p> <p>> Rate of fatalities per 100 million VMT</p> <p>> Number of serious injuries</p> <p>> Rate of serious injuries per 100 million VMT</p> <p>> Number of non-motorized fatalities and serious injuries</p> <p>Transit Safety</p> <p>> Transit-related fatalities, injuries, and safety events by mode</p> <p>> Rate of transit-related fatalities, injuries, and safety events by mode</p> <p>> Mean distance between major mechanical failures by mode</p>	<p>(2) Increase the safety of the transportation system for motorized and non-motorized users</p> <p>(3) Increase the security of the transportation system for motorized and non-motorized users</p>

	Objectives	Performance Measures	Federal Planning Factors
<p>Goal 3: Provide a reliable and high performing transportation system</p>	<p>3.1 Enhance regional connectivity.</p> <p>3.2 Maintain transportation infrastructure and assets in a good state of repair.</p> <p>3.3 Improve mobility by reducing traffic congestion and delay.</p> <p>3.4 Prepare for technological advances that will efficiently and dynamically manage roadway demand and capacity and overall systems operations.</p>	<p>NHS Travel Time Reliability > Percent of the person-miles traveled on the Interstate that are reliable > Percent of the person-miles traveled on the non-Interstate NHS that are reliable</p> <p>Freight Reliability > Truck Travel Time Reliability (TTTR) Index</p> <p>Bridge Conditions > Percentage of NHS bridges by deck area in Good condition > Percentage of NHS bridges by deck area in Poor condition</p> <p>Pavement Conditions > Percentage of Interstate pavements in Good condition > Percentage of Interstate pavements in Poor condition > Percentage of non-Interstate NHS pavements in Good condition > Percentage of non-Interstate NHS pavements in Poor condition</p> <p>Transit Asset Management > Percentage of revenue vehicles that exceed useful life benchmark > Percentage of non-revenue vehicles that exceed useful life benchmark > Percentage of facilities rated less than 3.0 on TERM Scale</p>	<p>(1) Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency</p> <p>(4) Increase accessibility and mobility of people and freight</p> <p>(6) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight</p> <p>(7) Promote efficient system management and operation</p> <p>(8) Emphasize the preservation of the existing transportation system</p> <p>(9) Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation</p>
<p>Goal 4: Support the economic vitality of the region</p>	<p>4.1 Improve the transportation system to enhance economic competitiveness and to provide access to national and global markets.</p> <p>4.2 Use transportation improvements to provide equitable benefits across the region.</p> <p>4.3 Use transportation improvements to support vibrant activity centers and that are consistent with local plans for growth and economic development.</p> <p>4.4 Improve the mobility of freight by truck, rail, and other modes.</p> <p>4.5 Support a fiscally constrained 25-year Metropolitan Transportation Plan that addresses existing and future needs while maximizing projected revenues.</p>	<p>No associated federal performance measures.</p>	<p>(1) Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency</p> <p>(4) Increase accessibility and mobility of people and freight</p> <p>(5) Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns</p> <p>(6) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight</p> <p>(10) Enhance travel and tourism</p>

	Objectives	Performance Measures	Federal Planning Factors
Goal 5: Manage the relationship of transportation, community and environment	<p>5.1 Make the transportation system resilient, especially to effectively manage and mitigate stormwater runoff.</p> <p>5.2 Minimize or avoid adverse impacts from transportation improvements to the natural environment and the human environment (historic sites, recreational areas, environmental justice populations).</p> <p>5.3 Improve mobility for underserved communities.</p> <p>5.4 Provide an inclusive setting for regional transportation decision-making.</p> <p>5.5 Support the reduction of transportation-related greenhouse gas emissions and the improvement of air quality through fleet fuel management and the reduction of congestion.</p> <p>5.6 Provide access to active transportation options, healthcare facilities, and healthy food.</p>	No associated federal performance measures.	<p>(5) Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns</p> <p>(9) Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation</p>

4.5 Strategies

These strategies, identified from a technical needs assessment and stakeholder and public input, will help the region achieve the transportation goals previously stated.



Responsibly Improve Roadway System

Funding for new roads and widening roads is limited. The MPO will prioritize roadway expansion projects that have a high benefit/cost ratio.



Redesign Key Corridors and Intersections

This plan has identified major corridors that should be redesigned to be safer, more efficient, and more accessible to bicyclists and pedestrians. These corridors can be found in the list of non-capacity roadway projects.



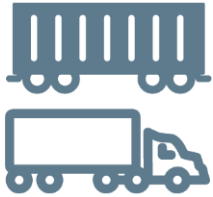
Rapidly Expand Biking and Walking Infrastructure

There were frequent comments from public input advocating for better walking and biking conditions. The MPO should encourage more bicycle and pedestrian projects and encourage bicycle and pedestrian improvements as part of planned roadway projects.



Redesign and Enhance Public Transit

The MPO will work with stakeholders to redesign existing transit services in the region and explore opportunities for new mobility options, such as microtransit. The MPO will also continue to encourage rider experience upgrades, such as bus stop and technology improvements.



Address Freight Bottlenecks and Needs

The MPO should prioritize projects that reduce delay for freight vehicles to support local businesses and industry.



Prioritize Maintenance

The MPO should proactively address pavement conditions, bridge conditions, and transit asset management. Additional studies may be worthwhile to collect maintenance data on roadways outside of the National Highway System.



Establish a Safety Management System

The typical traffic safety program includes a crash record system, identification of hazardous locations, engineering studies, selection of countermeasures, prioritization of projects, planning and implementation, and evaluation.



Monitor Emerging Technology Options

Transportation technology is changing rapidly but much is still uncertain. The MPO should continue to monitor trends in emerging mobility options and consider partnerships with mobility companies and pilot programs as appropriate.

5.0 Project Development

This chapter summarizes how committed and potential transportation projects were identified and how cost estimates were developed for these projects.

5.1 Project Identification

Roadway Projects

A preliminary list of roadway projects was developed for both capacity and non-capacity roadway projects. Each list included the following:

- All projects included in the current Transportation Improvement Program (TIP)
- Projects from the 2040 MTP
- Projects addressing needs frequently cited in public input
- Projects identified in stakeholder consultation and in existing plans
- Projects that addressed any remaining needs identified in the Needs Assessment

The list of projects was refined with stakeholders and some projects were removed or modified in scale/scope based on feasibility assessments.

Bicycle and Pedestrian Projects

Bicycle and pedestrian projects included in the current TIP were incorporated into the MTP. Outside of these projects, no other stand-alone bicycle and pedestrian projects were identified.

Instead, the MPO will continue to work with its local agencies to identify and prioritize bicycle and pedestrian projects along high priority bicycle and pedestrian corridors. These corridors were identified based on existing plans like the MPO Pathways Master Plan (2015) and the Needs Assessment.

Furthermore, bicycle and pedestrian improvements must be part of the overall design phase of all projects and included unless restrictions apply, consistent with FHWA guidance.

Transit Projects

At a minimum, the MTP assumes that existing transit services will continue to operate at current levels and that vehicles will be kept in a good state of repair.

5.2 Estimating Project Costs

Roadway Project Cost Estimates

Cost estimates for some projects were available from existing studies or preliminary engineering work from local governments or MDOT. For the remaining projects, order-of-magnitude cost estimates were developed using MDOT's Chart for Preliminary Cost Estimates. These typical construction cost estimates for various types of improvements are shown in Table 5.1.

Cost estimates for studies were based on similar projects. No cost estimates were made for maintenance projects such as bridge and pavement projects.

Table 5.1: Typical Roadway Costs by Improvement Type

Improvement Type	Average Cost (2019 dollars)	Unit
New 4 Lane Freeway	\$17,500,000	Mile
New 2 Lane Roadway	\$5,900,000	Mile
New 4 Lane Arterial	\$12,000,000	Mile
Interstate Widening	\$9,900,000	Mile
Interstate Rehab - 2 Lane	\$2,000,000	Mile
Interstate Rehab - 4 Lane	\$2,600,000	Mile
Arterial Widening	\$3,500,000	Mile
Center Turn Lane	\$3,250,000	Mile
Overlay	\$700,000	Mile
ITS	\$425,000	Mile
New Bridge - 2 Lane	\$2,400,000	Each
New Bridge - 4 Lane	\$4,100,000	Each
Traffic Signal	\$1,250,000	Each
RR Crossing	\$200,000	Each
Intersection Improvement	\$900,000	Each
Interchange Improvement	\$6,250,000	Each
New Interchange	\$24,000,000	Each
Underpass	\$12,000,000	Each
Overpass	\$6,750,000	Each

Note: Total Costs include Construction, Engineering, Right-of-Way & Utilities

Bicycle and Pedestrian Project Cost Estimates

Bicycle and pedestrian project costs included in the TIP were incorporated into the MTP. Outside of these projects, no other stand-alone bicycle and pedestrian projects were identified. Instead, the MPO will continue to work with its local agencies to identify bicycle and pedestrian projects. High priority bicycle and pedestrian corridors are identified later and the MPO should encourage local agencies to implement projects along these corridors. Furthermore, incidental bicycle and pedestrian improvements may be implemented alongside planned roadway projects.

Transit Project Cost Estimates

The annual cost of operating public transit in the MPO was taken from the current levels of expenditures shown in the TIP. Future operating costs forecasted the annual cost shown in the TIP by an inflation factor of one (1) percent per year.

Capital transit projects for FY 2020-2024 were provided in the TIP and these were used as provided. Future capital costs were estimated by analyzing the ratio of average annual capital costs to average Vehicle Revenue Miles (VRM) since 2011. Annual capital costs and VRM data came from the National Transit Database. This ratio was then applied to current VRM to estimate current capital costs and forecast into the future at an annual inflation rate of one (1) percent.

6.0 Environmental Analysis and Mitigation

6.1 The Environment and MTP

The MTP must consider the impacts of transportation on both the natural and human environment. By providing appropriate consideration of environmental impacts early in the planning process, the plan increases opportunities for inter-agency coordination, enables expedited project delivery, and promotes outcomes that are more environmentally sustainable.

Table 6.1 shows resources typically considered in environmental impact evaluations. This chapter focuses on these resources and their implications in the Hattiesburg-Petal-Forrest-Lamar (HPFL) Metropolitan Planning Area (MPA).

Table 6.1: Typical Environmental Resources Evaluated

Resource	Importance
HAZMAT Sites	Health hazards, costs, delays, liability for both state and federal projects on either existing or acquired right-of-way
Air Quality	Public health, welfare, productivity, and the environment are degraded by air pollution
Noise	Noise can irritate, interrupt, and disrupt, as well as generally diminish the quality of life
Wetlands	Flood control, wildlife habitat, water purification; applies to both state and federally funded projects
Threatened and Endangered Species	Loss of species can damage or destroy ecosystems, to include the human food chain
Floodplains	Encroaching on or changing the natural floodplain of a water course can result in catastrophic flooding of developed areas
Farmlands	Insure conversion compatibility with state and local farmland programs and policies
Recreation Areas	Quality of life; neighborhood cohesion
Historic Structures	Quality of life; preservation of the national heritage
Archaeological Sites	Quality of life; preservation of national and Native American heritage
Environmental Justice	To avoid, minimize, or mitigate disproportionately high impacts on minorities and low-income populations; basic American fairness

Source: MDOT, MARIS

6.2 Air Quality and Change in Climate

Air Quality and Transportation

Highway vehicles and non-road equipment are mobile sources of air pollutants, some of which are known or suspected by the Environmental Protection Agency (EPA) to cause cancer or other serious health and environmental effects. Mobile sources, via the combustion of fossil fuels, release nitrogen dioxide and Volatile Organic Compounds (VOC), which chemically react in the presence of heat and sunlight to form ground-level ozone. Ground-level ozone can trigger a variety of health problems such as asthma and can also have harmful effects on sensitive vegetation and ecosystems. Mobile sources also contribute to climate change when combustion of fossil fuels release nitrous oxide and carbon dioxide.

The EPA regulates vehicle emissions and fuel efficiency through its vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy (CAFE) standards. It also regulates and monitors pollutants considered harmful to public health and the environment through the National Ambient Air Quality Standards (NAAQS) authorized by the Clean Air Act (1970). The EPA has set NAAQS for six (6) principal “criteria” pollutants. These are listed in Table 6.2 along with the current standards.

All counties within the MPA are currently in attainment of the NAAQS.

In 2015, the EPA revised the primary and secondary ozone standards to 70 parts per billion (ppb), down from the current 75 ppb, and retained their indicators (O_3), forms [fourth-highest daily maximum, averaged across three (3) consecutive years] and averaging times (eight hours). The HPFL MPA is not anticipated to immediately be affected by the 70 ppb standard. Therefore, it was recommended that Forrest and Lamar Counties be designated as attainment/unclassifiable for the 2015 NAAQS.

Transportation conformity is a process required of MPOs pursuant to the Clean Air Act Amendments of 1990 (CAAA of 1990) to ensure that Federal funding and approval are given to those transportation activities that are consistent with air quality goals.

The CAAA requires that transportation plans, programs, and projects in nonattainment or maintenance areas that are funded or approved by the FHWA be in conformity with the State Implementation Plan (SIP), which represents the state’s plan, to either achieve or maintain the NAAQS for a particular pollutant.

Should either of the counties within the MPA ever exceed NAAQS and are designated as a nonattainment or maintenance area, the MTP will be subject to a conformity analysis. If this were to occur in the future, the transportation model, which forms the basis of transportation decision-making, provides numeric outputs that may be utilized in regional air quality modeling.

Table 6.2: National Ambient Air Quality Standards (NAAQS) as of 2020

Pollutant	Primary/Secondary	Averaging Time	Level	Form
Carbon Monoxide	primary	8-hours	9 ppm	Not to be exceeded more than once per year
		1-hour	35 ppm	
Lead	primary and secondary	Rolling 3 month average	0.15 µg/m ³	Not to be exceeded
Nitrogen Dioxide	primary	1-hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years
	primary and secondary	Annual	53 ppb	
Ozone	primary and secondary	8-hours	0.070 ppm	Annual fourth-highest daily maximum 8-hr concentration, averaged over 3 years
Particle Pollution	primary	Annual	12.0 µg/m ³	annual mean, averaged over 3 years
	secondary	Annual	15.0 µg/m ³	annual mean, averaged over 3 years
	primary and secondary	24-hours	35 µg/m ³	98th percentile, averaged over 3 years
	primary and secondary	24-hours	150 µg/m ³	Not to be exceeded more than once per year on average over 3 years
Sulfur Dioxide	primary	1-hour	75 ppb	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
	secondary	3-hours	0.5 ppm	Not to be exceeded more than once per year

Source: EPA

Note: ppm - parts per million

ppb - parts per billion

µg/m³ - micrograms per cubic meter

Change in Climate

The current scientific belief holds that the planet is going through a period of warming. This changing trend in climate is believed



to be caused by the increase in Greenhouse Gases (GHGs), which has only been increased through human behavior through the use of fossil fuels. According to the EPA, the transportation sector generated the largest share of GHG emissions in the United States in 2018, responsible for over 28 percent. The MPO understands the need for air quality within the area and is taking several steps to address this new challenge.

Effects of Climate Change

Geographically, the Hattiesburg MPA is inland and away from the coast, but inland flooding, tornadoes and hurricanes are still considered a direct threat to the area. These events can impact the area over time. The most obvious and immediate effect of climate change has been the increased global temperature, which has a large impact on the transportation system. The increased heat warps the steel of railroad tracks, stresses bridge joints, and affects pavement conditions. Pavement that has been softened by heat to which it was never designed can buckle and rut under high truck volumes. This in turn creates a need for further maintenance and the use of more material, which itself is carbon-based.



The rising temperatures are not the only major impact that has been observed with the recent climate change. Storms have been rising in intensity with the shift in the climate and “Superstorms” such as Katrina, Sandy, and Harvey are becoming a more regular occurrence. Mississippi has seen direct impacts of weather extreme amplification recently in the historic Pearl River Flood in February of 2020 as well as three (3) EF4 tornadoes that passed near Hattiesburg within one week of each other;

one passing less than ten (10) miles south of downtown Hattiesburg. Fifty-eight (58) hurricanes have been recorded in or near Hattiesburg since 1930. The largest was Hilda in 1964; with the most recent being Lee in 2011.

Recent storms with a high intensity over a short period of time are becoming common and can result in flash floods. These flash floods trap motorists and deposit large amounts of water on the impervious surfaces of the roadways. This water eventually becomes surface runoff, which can pool and damage a roadway’s substructure. This impact is worse near major rivers, leading to potential disasters that can affect roadways and other infrastructure.

A strategy that the MPO can employ to deal with this need is the increased inspection of bridges and roadways. This will ensure that the infrastructure is structurally sound and that erosion from storms has not degraded it. Drainage for the infrastructure is also important and should be inspected to ensure that roadways will not contribute to runoff.

Climate Change Strategies

The transportation system is the largest contributor to GHGs, contributing over one-quarter of the total amount. These gases come from vehicle emissions and air conditioning. Vehicle emissions are increased when a vehicle is idling and less efficient. This contribution to GHGs makes the transportation sector a priority to address climate change. There are several strategies that may be employed in order to reduce the impact of transportation on climate change.

Introducing Low-Carbon Fuels

This strategy explores the use of fuels from alternative sources which produce less carbon and are more efficient. These fuels include ethanol, biodiesel, natural gas, and more. Additional low-carbon fuels include alternatives such as hybrids, electric vehicles, and hydrogen fuel. In an effort to reduce emissions, the local transit systems have been making the switch to hybrid buses.

Reduction of High-Carbon Activities

Single occupancy vehicles and motorcycles are comparatively inefficient modes of transportation that produce GHGs. Strategies can be implemented that encourage transportation users to choose alternative transportation modes which reduce the emissions on the transportation system. These include the use of carpooling, increased transit ridership, and the reduction of unnecessary trips.

The construction and maintenance of transportation systems can also contribute to GHGs, as many of the products used in these processes are carbon-based. The use of lower-carbon materials during construction and maintenance would aid with this strategy.

Improving System Efficiency

The transportation network is the system by which people, goods, and services are moved through the area. This strategy encourages the use of an efficient transportation system to reduce travel time, reduce idling vehicles, and increase quality of traffic operations. This can be achieved through the use of:

- ITS,
- Traffic signal retiming and coordination,
- TDM, and
- Other means to reduce congestion and idling vehicles.

Additional Strategies

The strategies listed on the previous page cover the key methods that can be used to reduce the effect of GHGs from transportation sources. The following strategies may also be deployed:

- Reducing the amount of travel necessary for transportation users
- Increasing vehicle occupancies for all modes
- Establishing transportation pricing
- Encouraging non-vehicular travel
- Promoting trip-chaining
- Improved freight logistics
- Using LED lights in traffic signals

6.3 Environmental Regulations

Planning Requirements

Federal regulations (23 C.F.R. §450) require the MTP to address environmental concerns by consulting with relevant stakeholder agencies and discussing potential environmental mitigation activities.

The plan should involve consultation with state and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation. This should include a comparison of the plan with State conservation plans or maps and inventories of natural or historic resources, if this information is available.

The plan must discuss types of potential environmental mitigation activities related to the implementation of the plan. This includes potential areas for these activities to occur and activities which may have the greatest potential to mitigate the effects of the plan projects and strategies. Mitigation activities do not have to be project-specific and can instead focus on broader policies, programs, and strategies. The discussion must involve consultation with federal, state, and tribal land management, wildlife, and regulatory agencies.

Defining Mitigation

The National Environmental Policy Act (1970), or NEPA, established the basic framework for integrating environmental considerations into federal decision-making. Federal regulations relating to NEPA (40 C.F.R. 1508) define mitigation as:

- Avoiding the impact altogether by not taking a certain action or parts of an action.
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- Compensating for the impact by replacing or providing substitute resources or environments.

6.4 The Natural Environment

Wetlands, Waterways, and Flooding

Transportation projects were evaluated for proximity to wetlands, impaired waters, flood zones, and navigable waters. While transportation projects should be sensitive to all bodies of water, these water bodies merit special attention for the following reasons:

- Wetlands have many environmental benefits, most notably:
 - Water purification,
 - Flood protection,
 - Shoreline stabilization,
 - Groundwater recharge,
 - Streamflow maintenance, and
 - Fish and wildlife habitat.
- Impaired waters are already too polluted or otherwise degraded to meet the state water quality standards.
- Both wetlands and impaired waters are protected by the Clean Water Act.
- Encroaching on or changing the natural floodplain of a water course can result in catastrophic flooding of developed areas.
- Structures built across navigable waterways must be designed in consultation with the Coast Guard, as required by the Coast Guard Authorization Act of 1982.



Figure 6.1 displays the proposed MTP transportation projects along with the location of wetlands and impaired waters. Figure 6.2 displays the proposed MTP transportation projects and flood zones.

Navigable waterways are defined as waters that have been used in the past, are now used, or are susceptible to use as a means to transport interstate or foreign commerce up to the head of navigation. There are no navigable waterways within the MPA that are part of the U.S. Army Corps of Engineers Navigable Waterway Network.

Mitigation

This early in the planning stage, there are not enough resources available to assess project level impacts to specific wetlands. As individual projects proceed through the MDOT project delivery process and NEPA process, it is anticipated that project sponsors will:

- Ensure that transportation facilities constructed in floodways will not increase flood heights
- Take steps to avoid wetland and flood zone impacts where feasible
- Consider strategies which minimize potential impacts to wetlands and flood zones
- Provide compensation for any remaining unavoidable impacts through activities to restore or create wetlands
- Projects near impaired waters should consider measures to improve the quality of these waters.

Spotlight: Stormwater Mitigation

In urban areas, unmanaged stormwater often leads to excessive flooding. This flooding can damage property and create environmental and public health hazards by introducing contaminants into new areas. Without proper drainage and stormwater mitigation efforts, new transportation projects have the potential to exacerbate existing stormwater issues.

Transportation Related Strategies

- During project design, minimize impervious surfaces and alterations to natural landscapes.
- Promote the use of “green infrastructure” and other low-impact development practices. Examples include the use of rain barrels, rain gardens, buffer strips, bioswales, and replacement of impervious surfaces on property with pervious materials such as gravel or permeable pavers.
- Adopt ordinances that include stormwater mitigation practices, including landscaping standards, tree preservation, and “green streets”.
- Develop a Standard Urban Stormwater Mitigation Plan at multiple levels; including state, region, and municipality. Efforts should be made to coordinate these plans, even though multiple agencies would have them in place.



Wildlife

The test projects were evaluated for proximity to identified critical habitat areas for threatened and endangered species and wildlife refuges. The Endangered Species Act of 1973, as amended, was enacted to provide a program for the preservation of endangered and threatened species. The Act provides protection for the ecosystems upon which these species depend for their survival. All federal agencies or projects utilizing federal funding are required to implement protection programs for designated species and to apply them in facilitating their survival.

Additionally, Section 4(f) of the Department of Transportation (DOT) Act of 1966 affords protection to wildlife or waterfowl refuges when USDOT funds are invested in a project.

An endangered species is a species in danger of extinction throughout all or a significant portion of its range. A threatened species is a species likely to become endangered within the foreseeable future throughout all or a significant portion of its range. Proposed species are those which have been formally submitted to Congress for official listing as threatened or endangered.

Species may be considered endangered or threatened when any of the five (5) following criteria occur:

- The current/imminent destruction, modification, or curtailment of their habitat or range
- Overuse of the species for commercial, recreational, scientific, or educational purposes
- Disease or predation
- The inadequacy of existing regulatory mechanisms
- Other natural or human-induced factors affect continued existence.

Table 6.3 lists species classified as endangered, threatened, or recovered within the MPA. Figure 6.3 displays the proposed MTP transportation projects along with the location of identified critical habitat areas. There are no wildlife or waterfowl refuges in the MPA.

Mitigation

Preliminary planning undertaken within the context of development of the MTP does not include resources sufficient to assess project specific impacts to species habitats. As projects are carried forward through the MDOT project delivery process, the NEPA process, design, and construction, projects will be developed in consultation with U.S. Fish and Wildlife Service and Mississippi Department of Wildlife, Fisheries, and Parks. Where practicable, actions which impact critical habitats will be avoided.

Table 6.3 Species Identified under Endangered Species Act in Hattiesburg, MS

Group	Common Name	Scientific Name	Status
Amphibians	Dusky Gopher Frog	<i>Rana sevosa</i>	Endangered
Birds	Red-cockaded woodpecker	<i>Picoides borealis</i>	Endangered
	Wood stork	<i>Mycteria americana</i>	Threatened
Clams	Tan riffleshell	<i>Epioblasma florentina walkeri</i> (=E. walkeri)	Endangered
Ferns and Allies	Louisiana quillwort	<i>Isoetes louisianensis</i>	Endangered
Fish	Atlantic sturgeon (Gulf subspecies)	<i>Acipenser oxyrinchus</i> (=oxyrhynchus) <i>desotoi</i>	Threatened
	Pearl darter	<i>Percina aurora</i>	Threatened
Mammals	Louisiana black bear	<i>Ursus americanus luteolus</i>	Recovery
Reptiles	Yellow-blotched map turtle	<i>Graptemys flavimaculata</i>	Threatened
	Black pine snake	<i>Pituophis melanoleucus lodingi</i>	Threatened
	Gopher tortoise	<i>Gopherus polyphemus</i>	Threatened

Source: U.S. Fish and Wildlife Service, Environmental Conservation Online System; National Marine Fisheries Service (NOAA Fisheries)

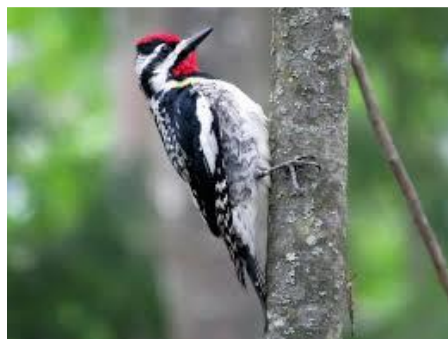


Table 6.4 displays the test projects that would impact wetlands and/or flood zones within the study area.

Table 6.4: Test Projects Impacting Wetlands or Floodplains

Project ID	Route	Description	Location	Wetlands	Floodplains
101	Ralston Rd	Add Center Turn Lane	US 98 Bypass to James St/Old US 49	No	Yes
102	Sims Rd	Widen to 4 Lanes	James St/Old US 49 to Old River Rd	Yes	Yes
103	Sims Rd Extension	New 4 Lane Roadway	Old River Rd to Indian Springs Rd	Yes	Yes
104	Sunrise Rd	Widen to 4 Lanes, Realign Intersections	Indian Springs Rd to MS 42	Yes	Yes
105	Batson Rd Extension	New 2 Lane Roadway	Sunrise Rd to MS 42	Yes	Yes
106	Evelyn Gandy Pkwy (MS 42)	Add New Service Roads	Old Richton Rd to Herrington Rd	Yes	Yes
107	US 11	Widen to 4 Lanes	W Central Ave to Evelyn Gandy Pkwy	No	Yes
108	US 11	Widen to 4 Lanes	Chapel Hill Rd to Leeville Rd	Yes	Yes
109	Hall Ave Extension	New 2 Lane Roadway	James St to E Hardy St	Yes	Yes
110	CBD Bypass Phase I	New 4 Lane Roadway	Bouie St/Gordon St to E Hardy St	Yes	Yes
111	CBD Bypass Phase II	New 4 Lane Roadway	E Hardy St to Edwards St	Yes	Yes
112	Bouie St	Widen to 4 Lanes	E 4th St to Old MS 42/US 11	No	Yes
113	Edwards St	Add Center Turn Lane	US 49 to Tuscan Ave	Yes	Yes
114	Edwards St	Widen to 5 Lanes	Tuscan Ave to James St	Yes	Yes
115	Glendale Ave	Widen to 4 Lanes	Old MS 42 to Evelyn Gandy Pkwy (MS 42)	Yes	Yes
116	Old MS 42	Widen to 4 Lanes	US 49 to Glendale Ave	Yes	Yes
117	W 4th St	Widen to 4 Lanes	US 49 to Bouie St	No	Yes
118	Pine St/Front St	Convert to Two Way	Hardy St to Market St	Yes	Yes
119	S 17th Ave	New 2 Lane Roadway	Adeline St to Mamie St	Yes	Yes
120	Broadway Dr Extension	New 2 Lane Roadway	W Pine St to Hall Ave	No	Yes

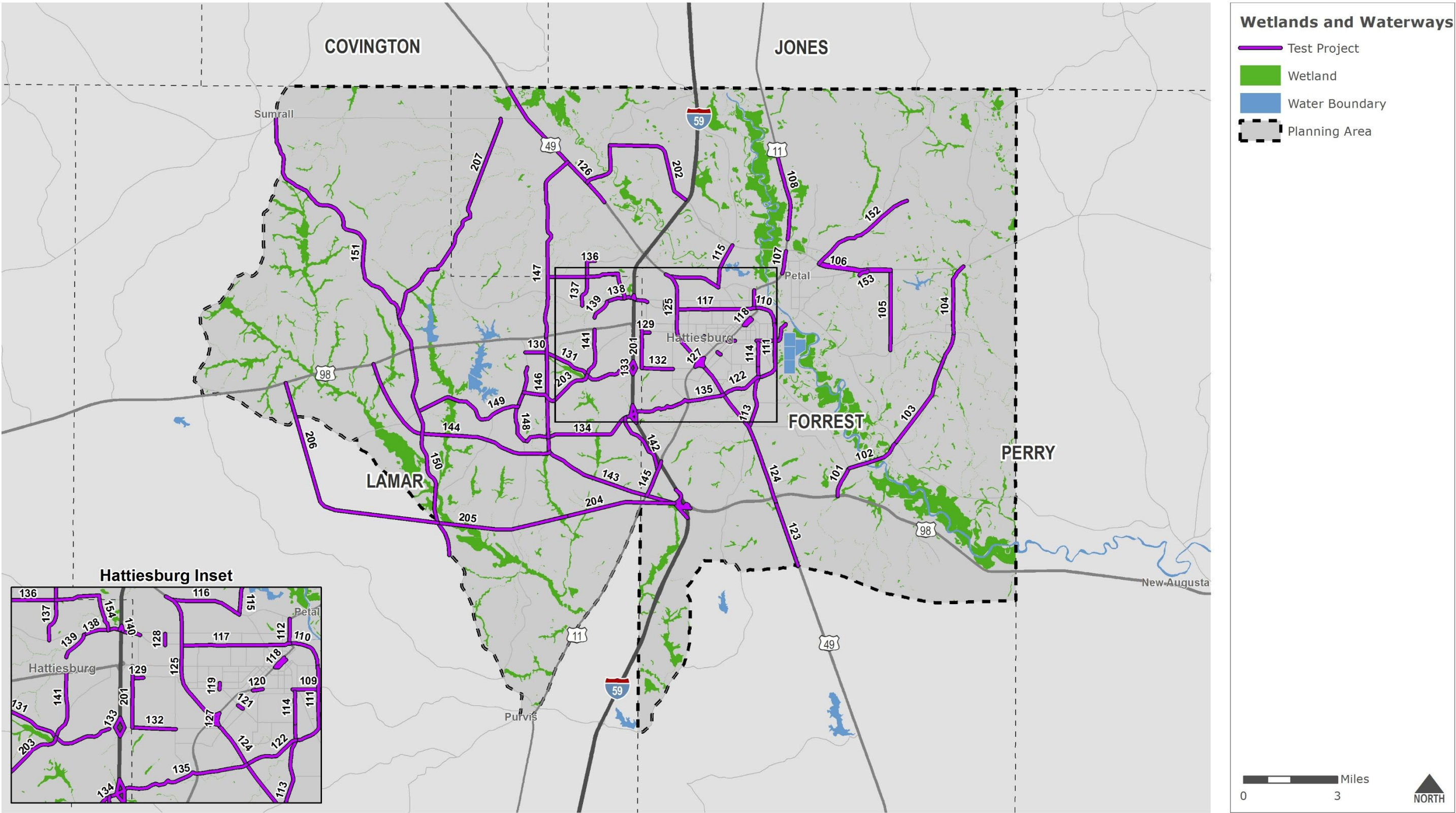
Project ID	Route	Description	Location	Wetlands	Floodplains
121	Timothy Ln Extension	New 2 Lane Roadway	W Pine St to Eastside Ave	No	Yes
122	WSF Tatum Blvd Extension	New 4 Lane Roadway	US 49 to Edwards St	Yes	Yes
123	US 49	Upgrade to Expressway	South Study Area Boundary to US 98 Bypass	Yes	Yes
124	US 49	Widen to 6 Lanes	US 98 Bypass to Broadway Dr	Yes	Yes
125	US 49	Widen to 6 Lanes	Broadway Dr to N 31st Ave	Yes	Yes
126	US 49	Widen to 6 Lanes	Rawls Springs Loop Rd to North Study Area Boundary	Yes	Yes
127	US 49	Reconstruct Interchange	@ Broadway Dr	Yes	Yes
128	N 31st Ave Extension	New 2 Lane Roadway	W 4th St to W 7th St	No	Yes
129	W Arlington Loop Extension	New 2 Lane Roadway	S 40th Ave to S 37th Ave	No	Yes
130	Lincoln Rd	Add Center Turn Lane	Old US 11 to Sandy Run Rd/Hegwood Rd	Yes	Yes
131	Lincoln Rd	Widen to 4 Lanes	Sandy Run Rd/Hegwood Rd to I-59	Yes	Yes
132	Lincoln Rd	Widen to 5 Lanes	S 40th Ave to S 28th Ave	Yes	Yes
133	I-59	New Interchange	@ Lincoln Rd	Yes	Yes
134	Richburg Rd	Widen to 4 Lanes, New 4 Lane Roadway, New Interchange	Old US 11 to I-59	Yes	Yes
135	Richburg Rd	Widen to 4 Lanes, New 4 Lane Roadway	I-59 to US 49	Yes	Yes
136	J Ed Turner Dr/Classic Dr	Widen to 4 Lanes	Jackson Rd to N Beverly Hills Rd	Yes	Yes
137	Classic Dr Extension	New 2 Lane Roadway	W 4th St to J Ed Turner Rd	Yes	Yes
138	W 4th St	Widen to 4 Lanes	Weathersby Rd to N 38th Ave	Yes	Yes

Project ID	Route	Description	Location	Wetlands	Floodplains
139	Weathersby Rd	Widen to 4 Lanes	Methodist Blvd to W 4th St	No	Yes
140	I-59	New Interchange	@ W 4th St	No	Yes
141	Oak Grove Rd/ Weathersby Rd	Widen to 4 Lanes	Lincoln Rd to US 98	Yes	Yes
142	Sullivan-Kilrain Rd/ Richburg Rd	Add Center Turn Lane	US 11 to Richburg Rd	No	Yes
143	US 98 Bypass Extension Phase I	New 4 Lane Roadway and Interchange Modification	Richburg Rd to I-59	Yes	Yes
144	US 98 Bypass Extension Phase II	New 4 Lane Roadway	US 98 to US 98 Bypass Extension Phase I	Yes	Yes
145	US 11	Widen to 4 Lanes	1.1 miles south of I-59 to I-59	Yes	Yes
146	Western Bypass Phase I	Widen to 4 Lanes, New 4 Lane Roadway	Richburg Rd to US 98	Yes	Yes
147	Western Bypass Phase II	Widen to 4 Lanes, New 4 Lane Roadway	US 98 to MS 42 Realignment	Yes	Yes
148	Old US 11	Add Center Turn Lane	Richburg Rd to 6th Section Rd	No	Yes
149	Old Hwy 24	Add Center Turn Lane	MS 589 to Old US 11	Yes	Yes
150	MS 589	Widen to 4 Lanes	Luther Lee Rd to US 98	Yes	Yes
151	MS 589	Widen to 4 Lanes	US 98 to MS 42	Yes	Yes
152	Old Richton Rd	Widen to 4 Lanes	Evelyn Gandy Pkwy to Herrington Rd	Yes	Yes
153	Springfield Rd Extension	New 2 Lane Roadway	Corinth Rd to Evelyn Gandy Pkwy	No	Yes
154	J Ed Turner Dr Extension	New 2 Lane Roadway	Classic Dr to W 4th St	Yes	Yes
201	S 40th Ave	Widen to 4 Lanes	Lincoln Rd to Hardy St	Yes	Yes
202	Western Bypass Phase III	New 4 Lane Roadway	Jc Bryant Rd to I-59	Yes	Yes
203	Oak Grove Rd	Widen to 4 Lanes	Old Hwy 11 to Lincoln Rd	Yes	Yes
204	Western Beltway Phase I	New 4 Lane Roadway and Interchange Modification	Slade Rd to I-59	Yes	Yes
205	Western Beltway Phase II	New 4 Lane Roadway	MS 589 to Slade Rd	Yes	Yes

Project ID	Route	Description	Location	Wetlands	Floodplains
206	Western Beltway Phase III	New 4 Lane Roadway	US 98 to MS 589	Yes	Yes
207	Outer Western Bypass	Widen to 4 Lanes, New 4 Lane Roadway	US 98 to MS 42	Yes	Yes

Source: MDOT, NSI

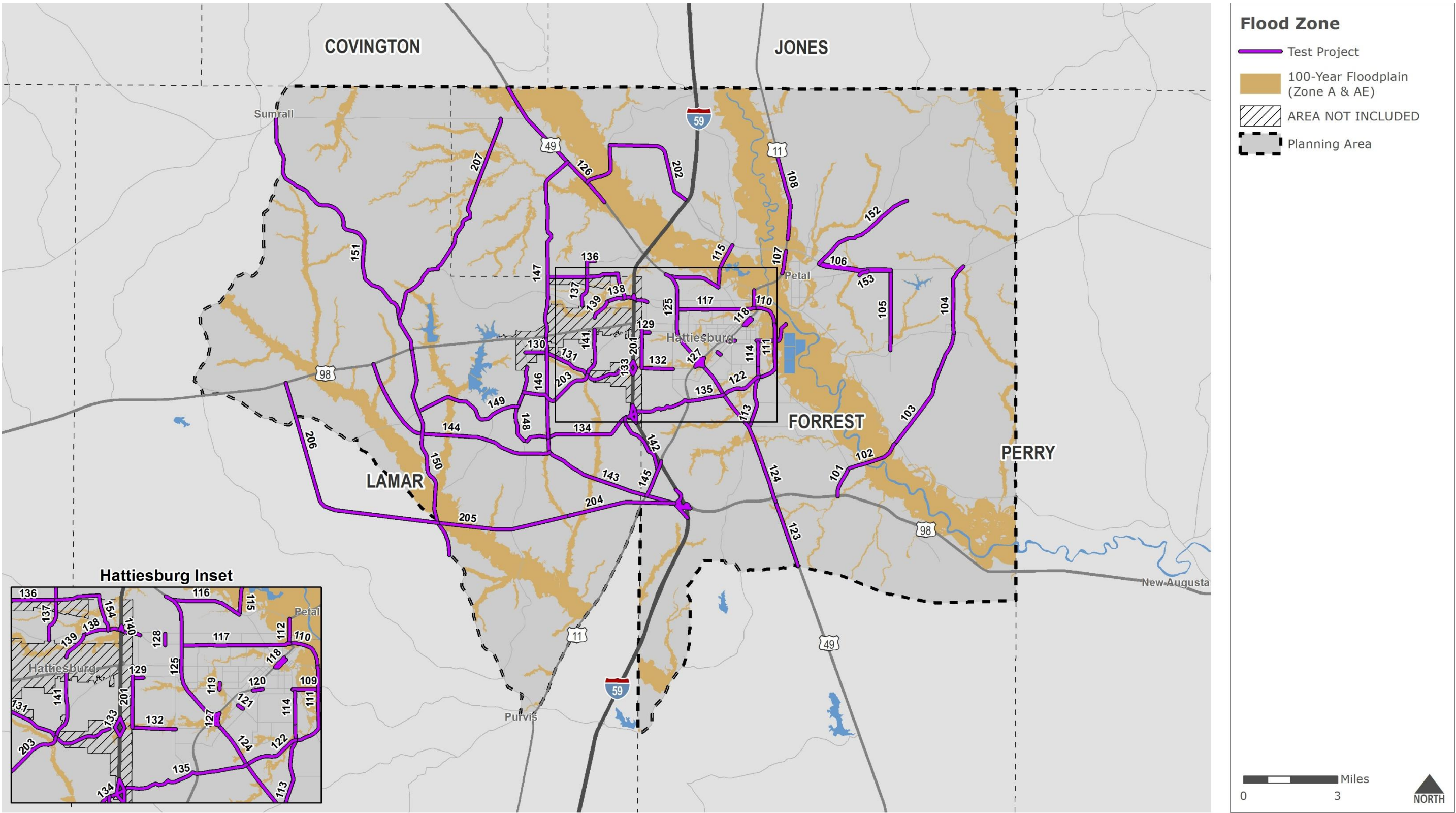
Figure 6.1: Wetlands and Waterways



Data Sources: NWI ; NSI

Disclaimer: This map is for planning purposes only.

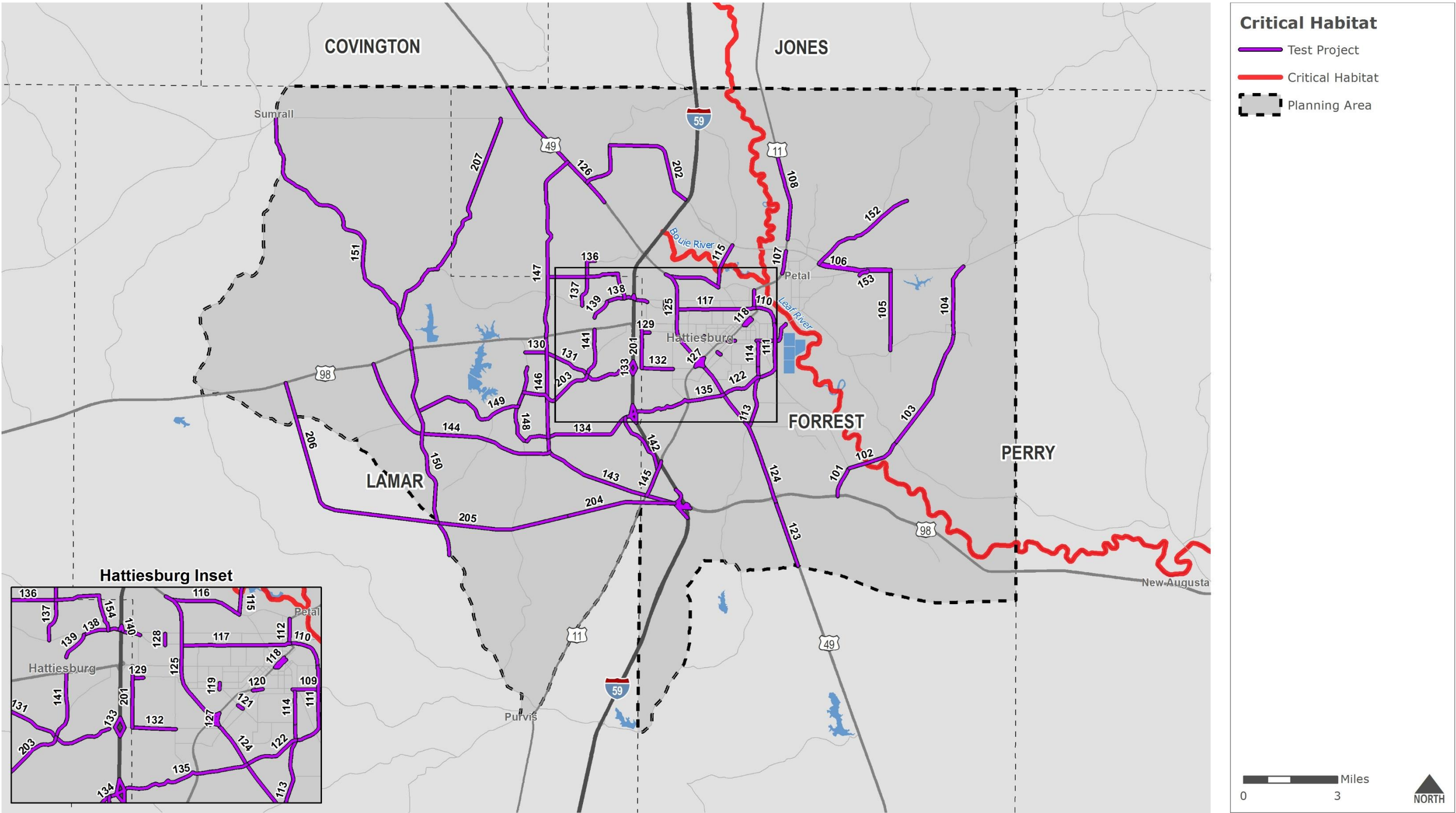
Figure 6.2: Flood Zones



Data Source: FEMA ; NSI

Disclaimer: This map is for planning purposes only.

Figure 6.3: Critical Habitats



Data Sources: FWS ; NSI

Disclaimer: This map is for planning purposes only.

6.5 The Human Environment

Historic and Recreational Resources

The test projects were evaluated for proximity to historic sites and publicly-owned recreational facilities. Section 4(f) of the Department of Transportation (DOT) Act of 1966 affords protection to publicly-owned parks and recreation areas and all historic sites listed or eligible for listing on the National Register of Historic Places (NRHP) when USDOT funds are invested in a project.

In order to be eligible for the NRHP, a district, site, building, structure, or object must possess:

- Integrity of location
- Design
- Setting
- Materials
- Workmanship
- Feeling
- Association
- Generally must be at least 50 years old.

It will also be evaluated by the following criteria:

- Association with events that have made a significant contribution to the broad patterns of our history; or
- Association with the lives of significant persons in our past; or
- Embodiment of the distinctive characteristics of a type, period, or method of construction, or representative of the work of a master, or possession of high artistic values, or representative of a significant and distinguishable entity whose components may lack individual distinction; or
- Provision or likelihood to provide information important in history or prehistory.

Figure 6.4 displays all historic sites listed on the National Register and State Register. It is important to note the State Register properties are not necessarily protected by Section 4(f) regulations unless they meet NRHP eligibility. Furthermore, there may be additional properties not listed on either register which are eligible for the NRHP. Note that Figure 6.4 excludes all historic features deemed 'restricted' or 'sensitive', such as sensitive archaeological sites.

Figure 6.4 also displays all publicly-owned parks and recreation areas deemed significant by a review of public agency websites.

Mitigation

Projects will be developed in consultation with the State Historic Preservation Office (SHPO) and to the extent practicable, actions which adversely impact NRHP properties and publicly-owned recreation

areas will be avoided. When historic properties are adversely affected, mitigation will include data recovery as appropriate to document the essential qualities of the historic resources. When publicly-owned recreation areas are adversely affected, appropriate compensation will be provided.

Potentially Hazardous Materials

Accidents, spills, leaks, and past improper disposal and handling of hazardous materials and wastes have resulted in contamination of many sites across the country.

The Comprehensive Environmental Response, Compensations, and Liability Act (CERCLA), commonly known as Superfund, was enacted in 1980 and:

- Established prohibitions and requirements concerning closed and abandoned hazardous waste sites
- Provided for liability of persons responsible for releases of hazardous waste at these sites
- Established a trust fund to provide for cleanup when no responsible party could be identified

CERCLA also enabled the revision of the National Contingency Plan, which established the National Priorities List (NPL). The NPL is the list of national priorities among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories. It is intended primarily to guide the EPA in determining which sites warrant further investigation.

There is only one (1) site in the MPA listed on the NPL, the Davis Timber Company in Lamar County. A Five Year Review was conducted in 2016 which found the remedy to be protective of human health and the environment. This site was identified using the EPA's Cleanups in My Community database, which includes cleanup sites, facilities and properties for which EPA collects information by law, or voluntarily via grants. This site, and other sites evaluated for inclusion in the NPL within the MPA, are illustrated in Figure 6.5.

Mitigation

At this stage in project development, not enough information is available to determine impacts and mitigation. However, transportation projects affected by or affecting potentially hazardous properties will be evaluated during the MDOT project delivery process, the NEPA process, design, and construction.

Environmental Justice Populations

Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations, was signed in 1994. It reaffirms the intent of Title VI of the Civil Rights Act of 1964, NEPA, and other federal laws, regulations, and policies by establishing the following Environmental Justice (EJ) principles for all federal agencies and agencies receiving federal funds, such as MPOs:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

Figure 6.6 shows areas in the MPA where low-income households make up a greater share of the overall population.

Similarly, Figure 6.7 shows areas in the MPA where minority populations make up a greater share of the overall population.

Mitigation

In an attempt to prevent disproportionately high and adverse effects on minority or low-income populations early in the planning process, the MPO should encourage high community and stakeholder engagement in the design phase of projects. This is especially important for projects that are located in areas with a disproportionately high minority and/or low-income population. Figures 6.6 and 6.7 illustrate transportation projects in relation to disproportionately high minority or low-income populations, but in-depth discussions need to be held to further explore the potential negative impacts in these communities.

Historical Urban Development

The historical urban development of the MPA breaks down the likely distribution of historic and other cultural resources. Figure 6.8 shows that the areas with the greatest concentrations of historical housing structures, or those at least 50 years old, are in the center of the City of Jackson and the City of Canton. There are likely smaller concentrations not revealed by historic centers of many of the smaller municipalities within the MPA. This information is merely intended to illustrate general patterns.

Land Cover

The land cover of the MPA is illustrated in Figure 6.9 and summarized in Figure 6.10. Forested, pasture, and herbaceous lands make up the majority of the land area in the MPA at over 57 percent. Developed areas still only account for around 16 percent of the land area.

Other Community Impacts

In addition to the community impacts already discussed, a transportation project may produce various impacts to public spaces, residences, and businesses. These impacts may relate to property, air quality, noise, or other issues and many will not be well understood until a project is substantially advanced.

Mitigation

Impacts associated with specific projects will be assessed in conformance with local, state, and federal regulations, NEPA guidance, and the MDOT project delivery process.

Certain impacts, such as those associated with an increase in traffic related noise, can potentially be mitigated. Also, to the extent practicable, projects should be developed using Context Sensitive Solutions.

Table 6.5 displays the test projects that would impact low income and/or minority populations within the study area.

Table 6.5: Test Projects Impacting Low Income or Minority Populations

Project ID	Route	Description	Location	Low Income	Minority Populations
101	Ralston Rd	Add Center Turn Lane	US 98 Bypass to James St/Old US 49	Yes	No
102	Sims Rd	Widen to 4 Lanes	James St/Old US 49 to Old River Rd	Yes	No
103	Sims Rd Extension	New 4 Lane Roadway	Old River Rd to Indian Springs Rd	No	No
104	Sunrise Rd	Widen to 4 Lanes, Realign Intersections	Indian Springs Rd to MS 42	No	No
105	Batson Rd Extension	New 2 Lane Roadway	Sunrise Rd to MS 42	No	No
106	Evelyn Gandy Pkwy (MS 42)	Add New Service Roads	Old Richton Rd to Herrington Rd	No	No
107	US 11	Widen to 4 Lanes	W Central Ave to Evelyn Gandy Pkwy	No	No
108	US 11	Widen to 4 Lanes	Chapel Hill Rd to Leeville Rd	No	No
109	Hall Ave Extension	New 2 Lane Roadway	James St to E Hardy St	Yes	Yes
110	CBD Bypass Phase I	New 4 Lane Roadway	Bouie St/Gordon St to E Hardy St	Yes	Yes

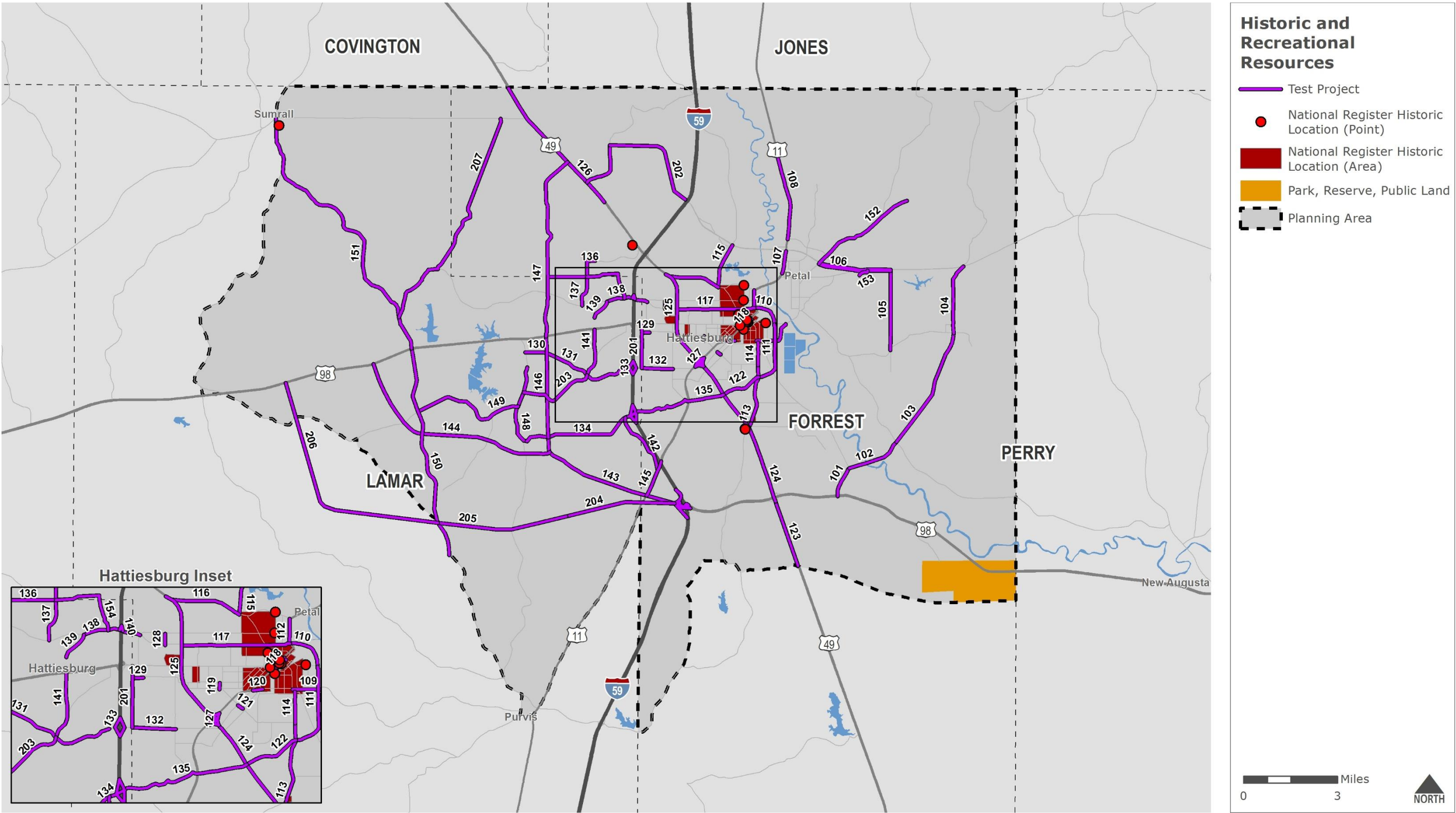
Project ID	Route	Description	Location	Low Income	Minority Populations
111	CBD Bypass Phase II	New 4 Lane Roadway	E Hardy St to Edwards St	Yes	Yes
112	Bouie St	Widen to 4 Lanes	E 4th St to Old MS 42/US 11	Yes	Yes
113	Edwards St	Add Center Turn Lane	US 49 to Tuscan Ave	Yes	Yes
114	Edwards St	Widen to 5 Lanes	Tuscan Ave to James St	Yes	Yes
115	Glendale Ave	Widen to 4 Lanes	Old MS 42 to Evelyn Gandy Pkwy (MS 42)	Yes	Yes
116	Old MS 42	Widen to 4 Lanes	US 49 to Glendale Ave	Yes	Yes
117	W 4th St	Widen to 4 Lanes	US 49 to Bouie St	Yes	Yes
118	Pine St/Front St	Convert to Two Way	Hardy St to Market St	Yes	Yes
119	S 17th Ave	New 2 Lane Roadway	Adeline St to Mamie St	No	No
120	Broadway Dr Extension	New 2 Lane Roadway	W Pine St to Hall Ave	Yes	Yes
121	Timothy Ln Extension	New 2 Lane Roadway	W Pine St to Eastside Ave	Yes	Yes
122	WSF Tatum Blvd Extension	New 4 Lane Roadway	US 49 to Edwards St	Yes	Yes
123	US 49	Upgrade to Expressway	South Study Area Boundary to US 98 Bypass	Yes	No
124	US 49	Widen to 6 Lanes	US 98 Bypass to Broadway Dr	Yes	Yes
125	US 49	Widen to 6 Lanes	Broadway Dr to N 31st Ave	Yes	Yes
126	US 49	Widen to 6 Lanes	Rawls Springs Loop Rd to North Study Area Boundary	No	No
127	US 49	Reconstruct Interchange	@ Broadway Dr	Yes	Yes
128	N 31st Ave Extension	New 2 Lane Roadway	W 4th St to W 7th St	Yes	Yes
129	W Arlington Loop Extension	New 2 Lane Roadway	S 40th Ave to S 37th Ave	No	No
130	Lincoln Rd	Add Center Turn Lane	Old US 11 to Sandy Run Rd/Hegwood Rd	No	Yes

Project ID	Route	Description	Location	Low Income	Minority Populations
131	Lincoln Rd	Widen to 4 Lanes	Sandy Run Rd/ Hegwood Rd to I-59	No	Yes
132	Lincoln Rd	Widen to 5 Lanes	S 40th Ave to S 28th Ave	No	No
133	I-59	New Interchange	@ Lincoln Rd	No	Yes
134	Richburg Rd	Widen to 4 Lanes, New 4 Lane Roadway, New Interchange	Old US 11 to I-59	No	Yes
135	Richburg Rd	Widen to 4 Lanes, New 4 Lane Roadway	I-59 to US 49	Yes	Yes
136	J Ed Turner Dr/ Classic Dr	Widen to 4 Lanes	Jackson Rd to N Beverly Hills Rd	No	Yes
137	Classic Dr Extension	New 2 Lane Roadway	W 4th St to J Ed Turner Rd	No	Yes
138	W 4th St	Widen to 4 Lanes	Weathersby Rd to N 38th Ave	Yes	Yes
139	Weathersby Rd	Widen to 4 Lanes	Methodist Blvd to W 4th St	No	Yes
140	I-59	New Interchange	@ W 4th St	Yes	Yes
141	Oak Grove Rd/ Weathersby Rd	Widen to 4 Lanes	Lincoln Rd to US 98	No	Yes
142	Sullivan-Kilrain Rd/ Richburg Rd	Add Center Turn Lane	US 11 to Richburg Rd	Yes	Yes
143	US 98 Bypass Extension Phase I	New 4 Lane Roadway and Interchange Modification	Richburg Rd to I-59	Yes	No
144	US 98 Bypass Extension Phase II	New 4 Lane Roadway	US 98 to US 98 Bypass Extension Phase I	No	No
145	US 11	Widen to 4 Lanes	1.1 miles south of I- 59 to I-59	Yes	No
146	Western Bypass Phase I	Widen to 4 Lanes, New 4 Lane Roadway	Richburg Rd to US 98	No	Yes
147	Western Bypass Phase II	Widen to 4 Lanes, New 4 Lane Roadway	US 98 to MS 42 Realignment	No	Yes
148	Old US 11	Add Center Turn Lane	Richburg Rd to 6th Section Rd	No	No
149	Old Hwy 24	Add Center Turn Lane	MS 589 to Old US 11	No	No

Project ID	Route	Description	Location	Low Income	Minority Populations
150	MS 589	Widen to 4 Lanes	Luther Lee Rd to US 98	No	No
151	MS 589	Widen to 4 Lanes	US 98 to MS 42	No	No
152	Old Richton Rd	Widen to 4 Lanes	Evelyn Gandy Pkwy to Herrington Rd	No	No
153	Springfield Rd Extension	New 2 Lane Roadway	Corinth Rd to Evelyn Gandy Pkwy	No	No
154	J Ed Turner Dr Extension	New 2 Lane Roadway	Classic Dr to W 4th St	No	Yes
201	S 40th Ave	Widen to 4 Lanes	Lincoln Rd to Hardy St	Yes	Yes
202	Western Bypass Phase III	New 4 Lane Roadway	Jc Bryant Rd to I-59	No	Yes
203	Oak Grove Rd	Widen to 4 Lanes	Old Hwy 11 to Lincoln Rd	No	Yes
204	Western Beltway Phase I	New 4 Lane Roadway and Interchange Modification	Slade Rd to I-59	Yes	No
205	Western Beltway Phase II	New 4 Lane Roadway	MS 589 to Slade Rd	No	No
206	Western Beltway Phase III	New 4 Lane Roadway	US 98 to MS 589	No	No
207	Outer Western Bypass	Widen to 4 Lanes, New 4 Lane Roadway	US 98 to MS 42	Yes	No

Source: MDOT, NSI, Minority Population Determination ACS 5-year Estimates (2014-2018)

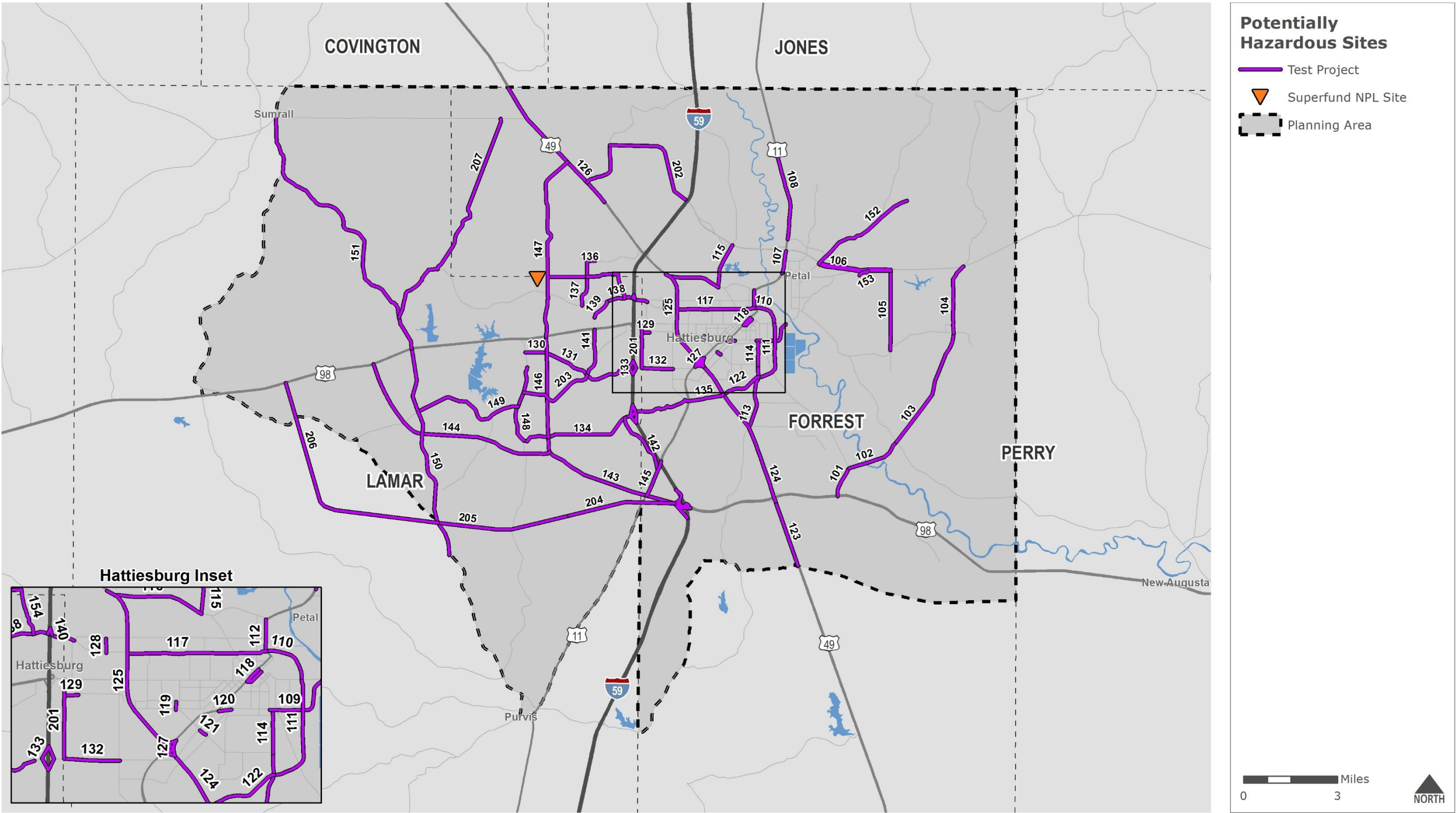
Figure 6.4: Historic and Recreational Resources



Data Sources: NPS (NRHP) ; MARIS ; MS Geospatial Clearinghouse ; NSI

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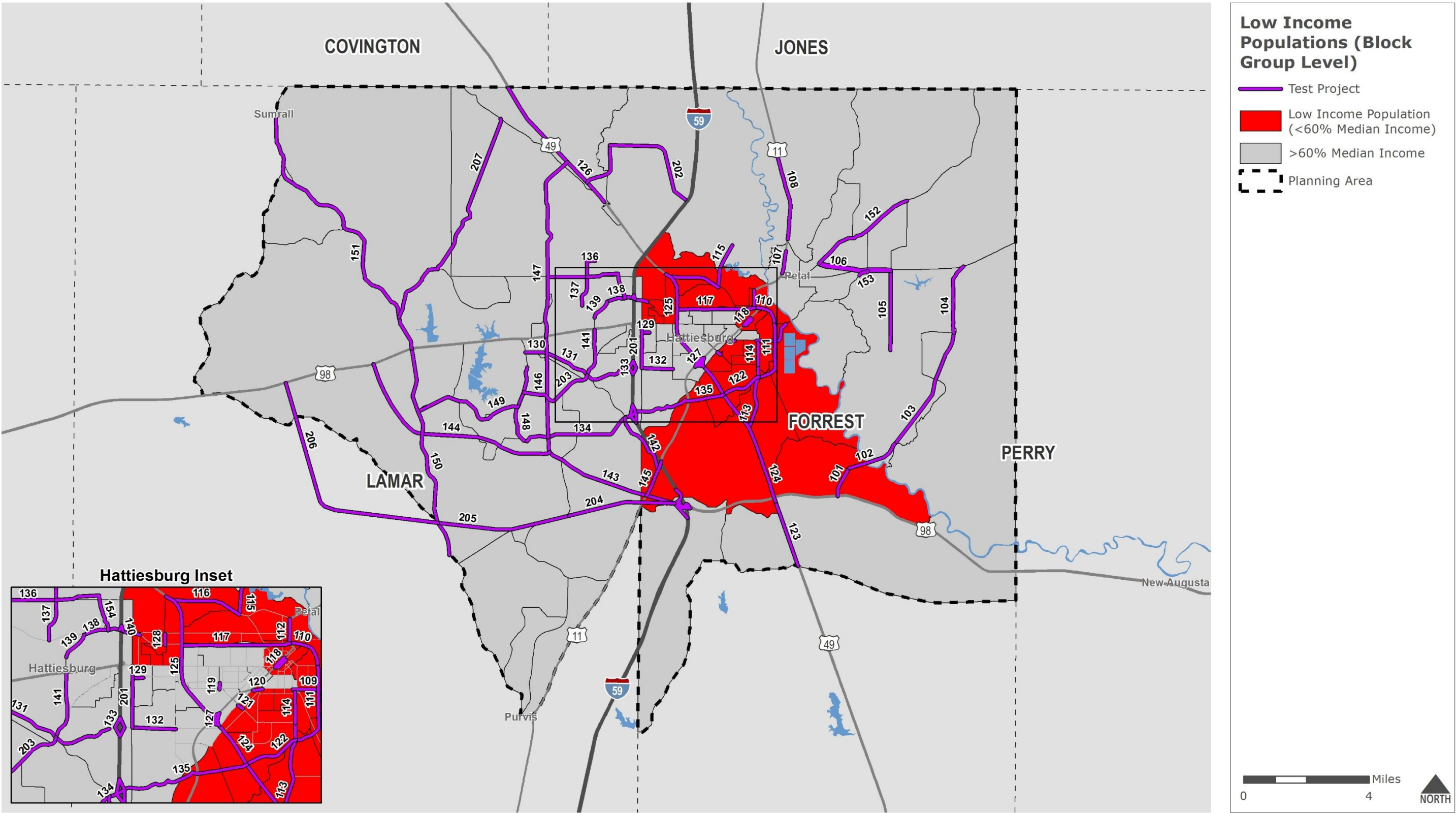
Figure 6.5: Potentially Hazardous Sites



Data Sources: EPA ; NSI

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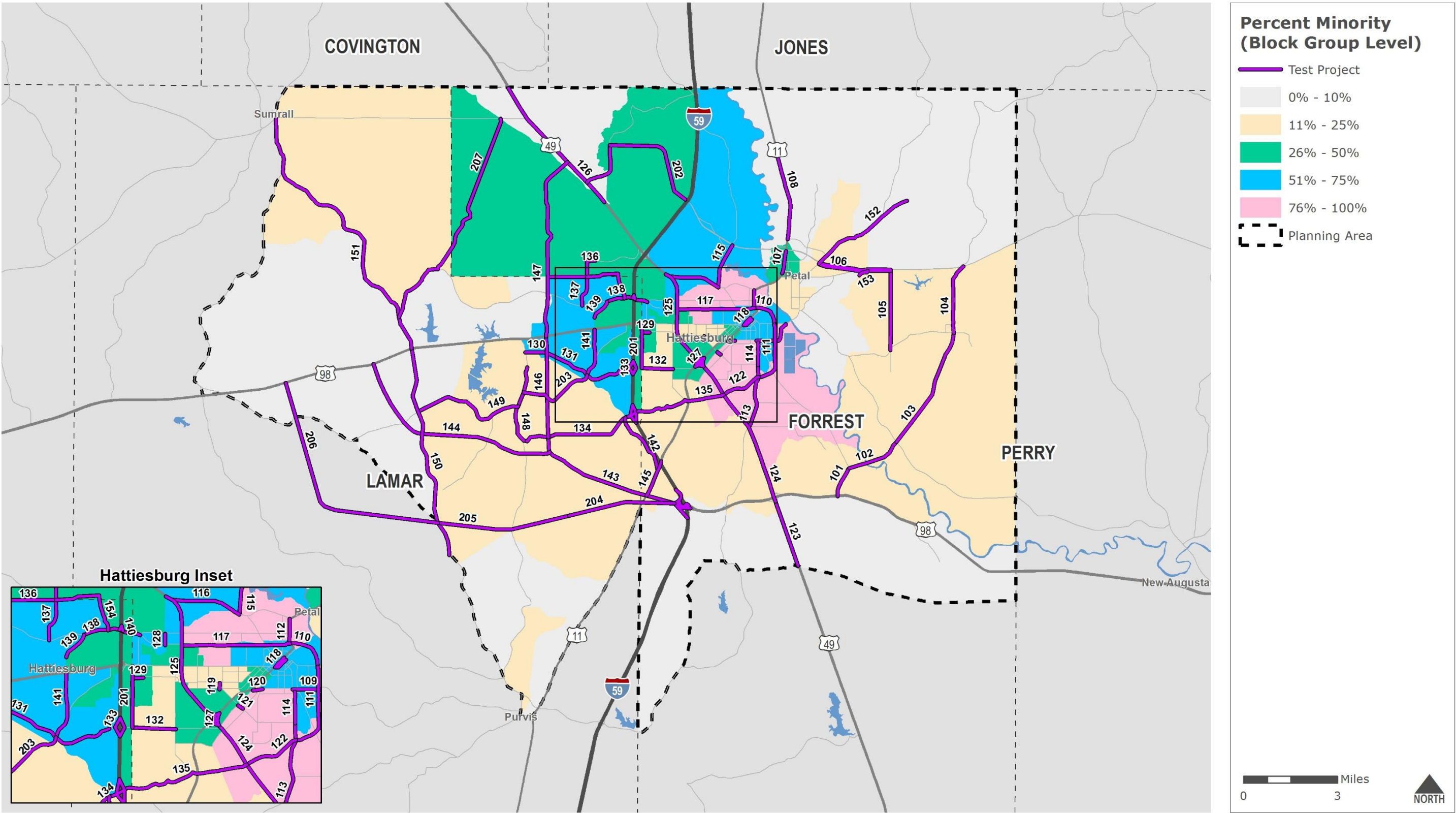
Figure 6.6: Block Group Demographics: People in Poverty



Data Source: Census Bureau; HUD ; NSI

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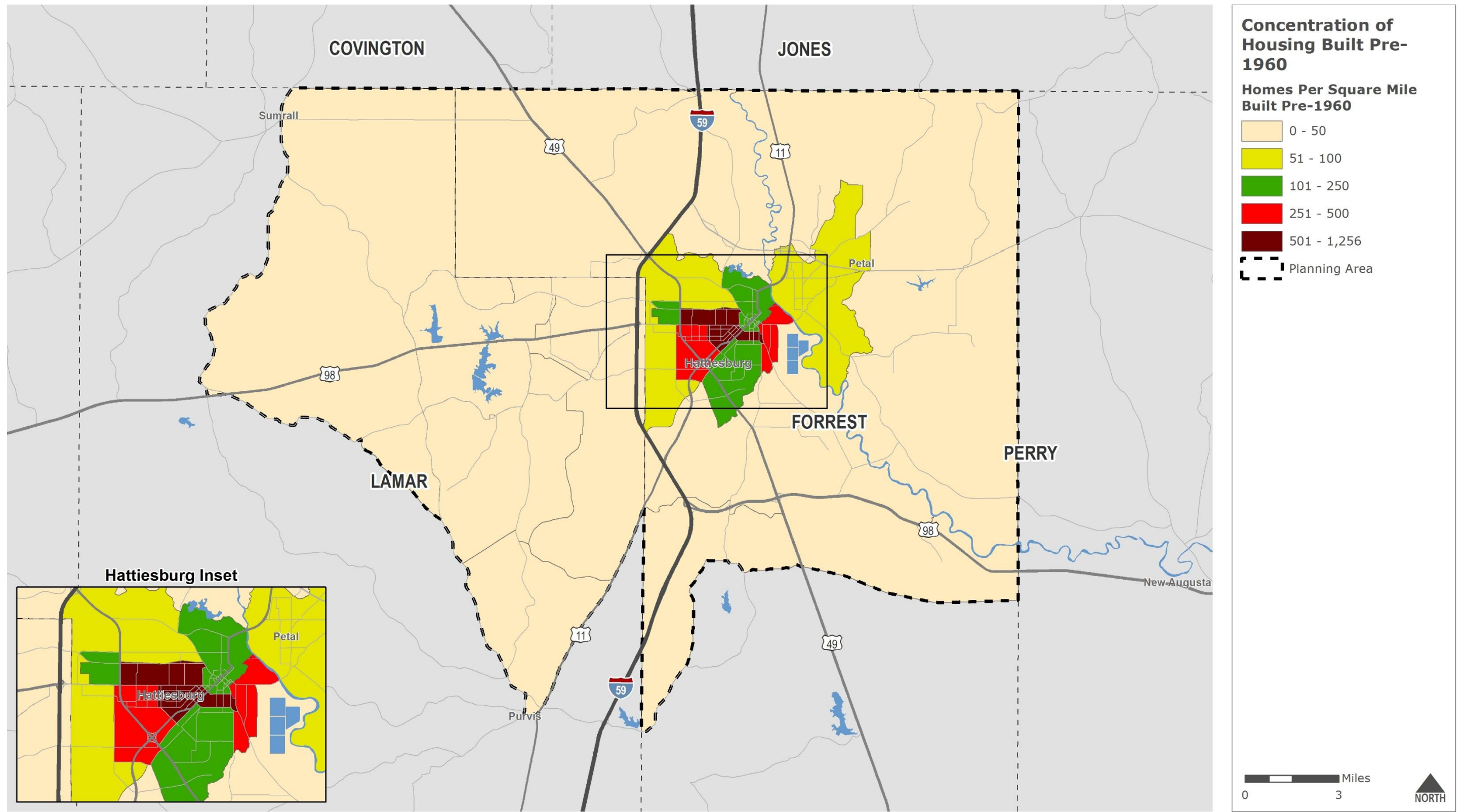
Figure 6.7: Block Group Demographics: Minority Populations



Data Source: ACS ; NSI

Disclaimer: This map is for planning purposes only.

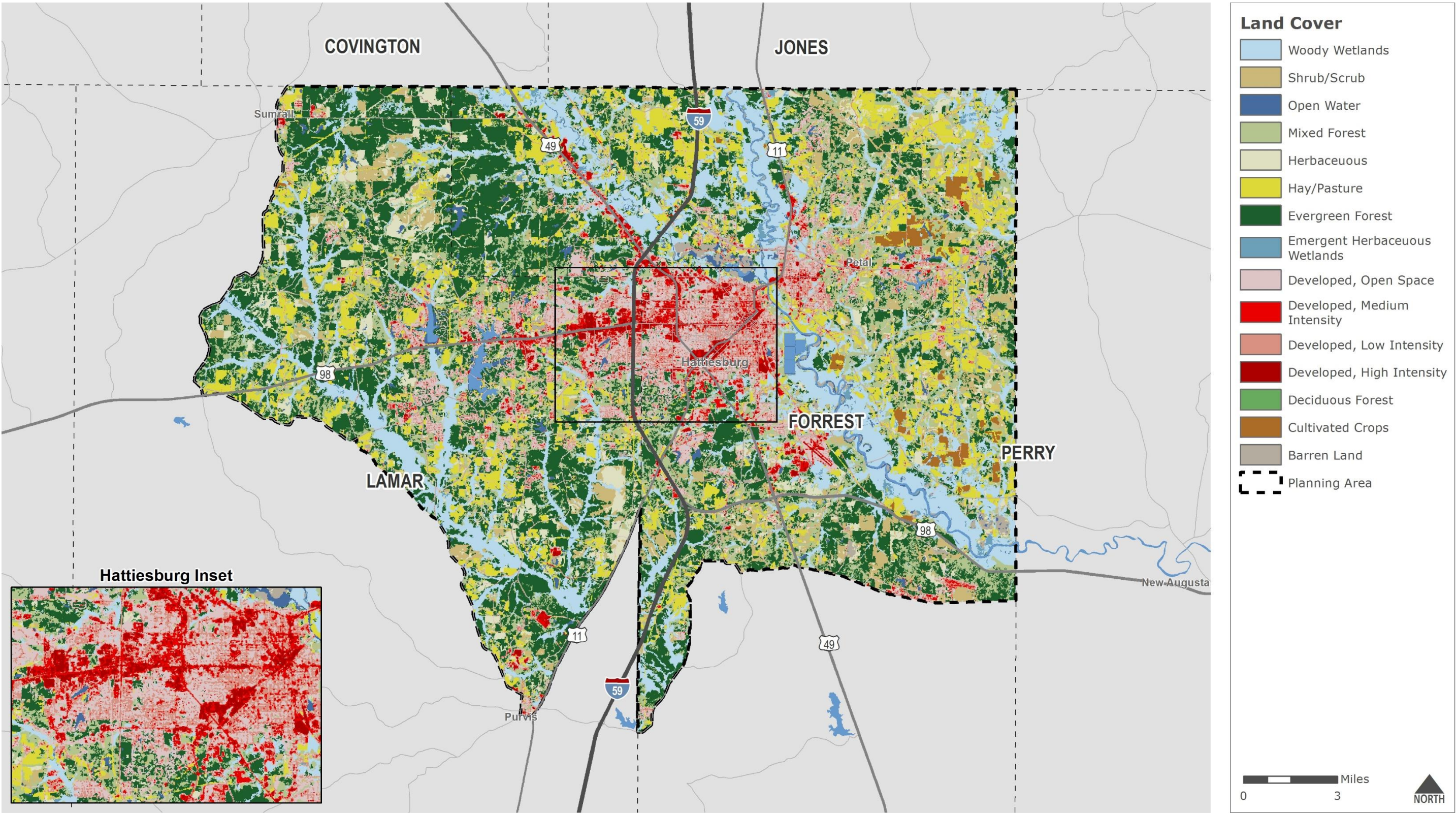
Figure 6.8: Concentration of Housing Built Pre-1960



Data Source: ACS

Disclaimer: This map is for planning purposes only.

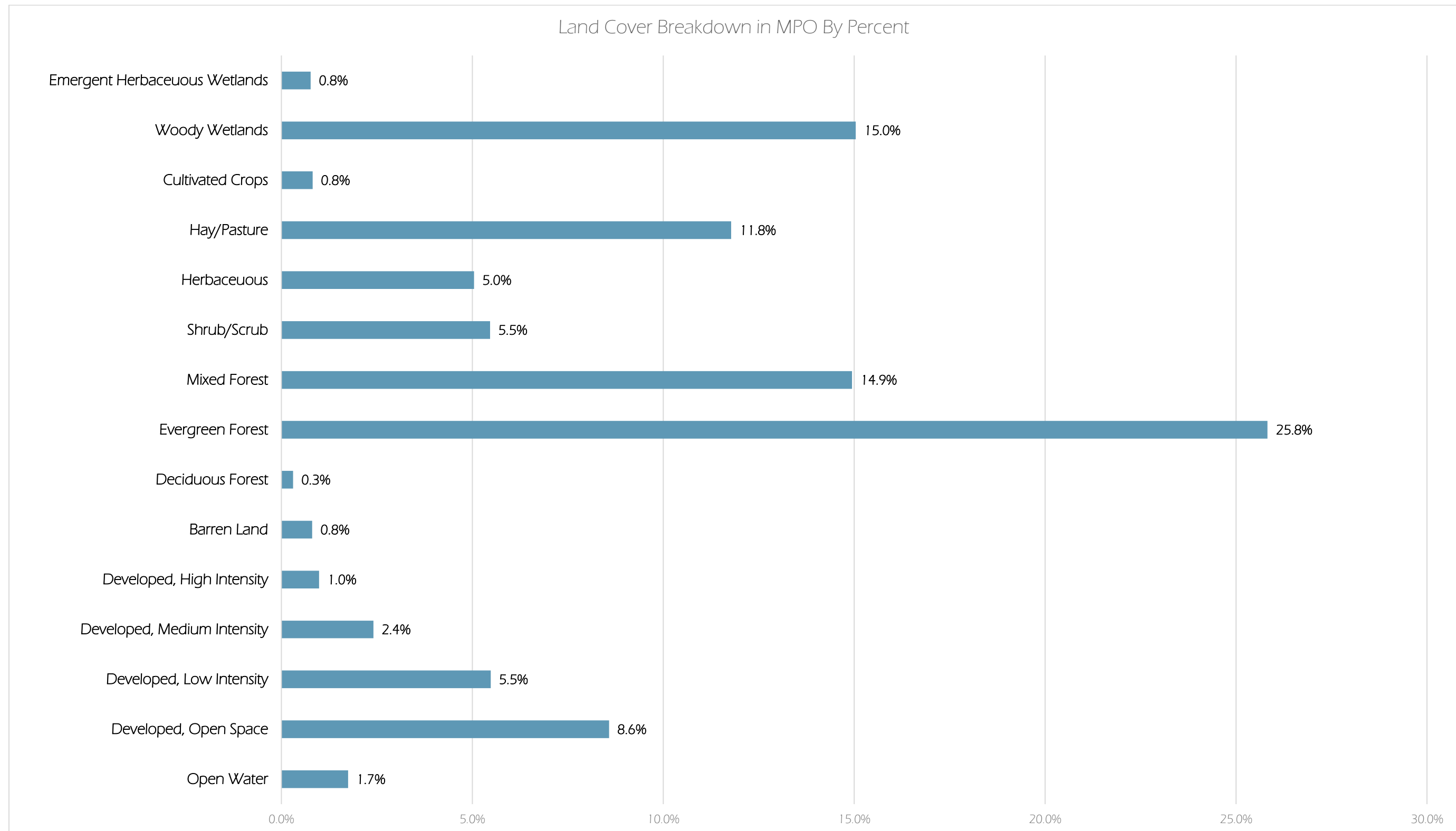
Figure 6.9: Land Cover Classification



Data Source: USGS

Disclaimer: This map is for planning purposes only.

Figure 6.10: Land Cover Classification Breakdown



7.0 Project Prioritization

Roadway capacity projects were prioritized based on the goals and objectives stated earlier in this MTP. Non-capacity roadway projects, such as safety and maintenance projects, were not prioritized. Instead, the MPO will continue to identify and prioritize non-capacity projects on a regular basis with local governments.

7.1 Roadway Capacity Project Prioritization

To maximize the amount of limited funding available within the MPA, roadway capacity projects were prioritized. Table 7.1 shows the criteria and weights that were utilized to prioritize the identified roadway capacity projects. This methodology is intended to support the previously stated goals and objectives. Additionally, projects could receive up to an additional 10 points in project scoring based on environmental mitigation and environmental justice analysis.

During the project scoring process, the MPO and the local jurisdictions were asked to provide local priority ratings for each project, ranging from A (highest priority) to D (lowest priority). These were used to further refine project selection for the Staged Improvement Program.

The results of this prioritization exercise are shown in Table 7.2 and illustrated in Figure 7.1.

Table 7.1: Project Prioritization Methodology for Roadway Capacity Projects

Criterion	Rationale	Measure	Scoring Scale (Points Possible)				
			0	5	10	15	20
Congestion Reduction	Prioritize projects that reduce congestion.	Reduction in Vehicle Hours of Delay from baseline conditions (Existing + Committed Network)	Points awarded in increments of 5 based upon to be determined breaks in the data				
Benefit Cost Ratio	Prioritize projects with congestion reduction benefits exceeding construction costs and maximize limited federal funds.	Benefit/Cost Ratio: annual dollars saved from delay reduction divided by project cost.	Points awarded in increments of 5 based upon to be determined breaks in the data				
Safety Benefits	Prioritize projects that will improve safety conditions.	Qualitative assessment based on crash data, bridge conditions, and engineering analysis.	Minimal safety benefits	Some safety benefits	Moderate safety benefits	Significant safety benefits	Very significant safety benefits
Bicycle and Pedestrian Benefits	Prioritize projects that will allow for incidental bike/ped improvements.	Latent Multimodal Demand: Demand for biking, walking, and transit within 0.25 mile of project based on GIS analysis in <i>Technical Report #2: Existing Conditions Analysis</i> .	Minimal demand (or along Interstate or Expressway)	Some demand	Moderate demand	Significant demand	Very significant demand
Freight Benefits	Prioritize projects that benefit the movement of goods.	Reduction in Truck Hours of Delay from baseline conditions (Existing + Committed Network). Designation as part of the statewide freight network.	Points awarded in increments of 5 based upon to be determined breaks in the data (projects that are part of statewide freight network automatically receive maximum points)				
Supports Existing Plans	Prioritize projects that reduce congestion.	Reduction in Vehicle Hours of Delay from baseline conditions (Existing + Committed Network)	Not in previous plan or study	In previous LRTP OR existing study/plan (not in comprehensive plan)	In previous LRTP AND existing study/plan (not in comprehensive plan) OR in local comprehensive plan		
Protect the Environment & Environmental Justice	Prioritize projects that reduce environmental damage or don't disproportionately affect communities.	Qualitative assessment based on GIS analysis of environmental assets and Census data.	More points will be awarded if the project is not impacting or close to environmentally sensitive issues or communities of concern.				

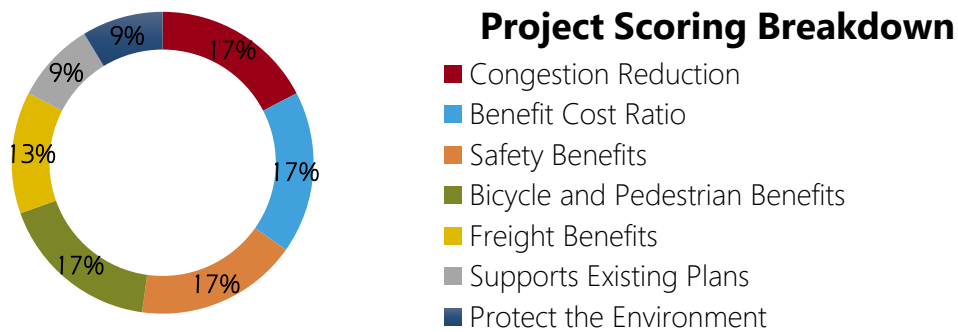


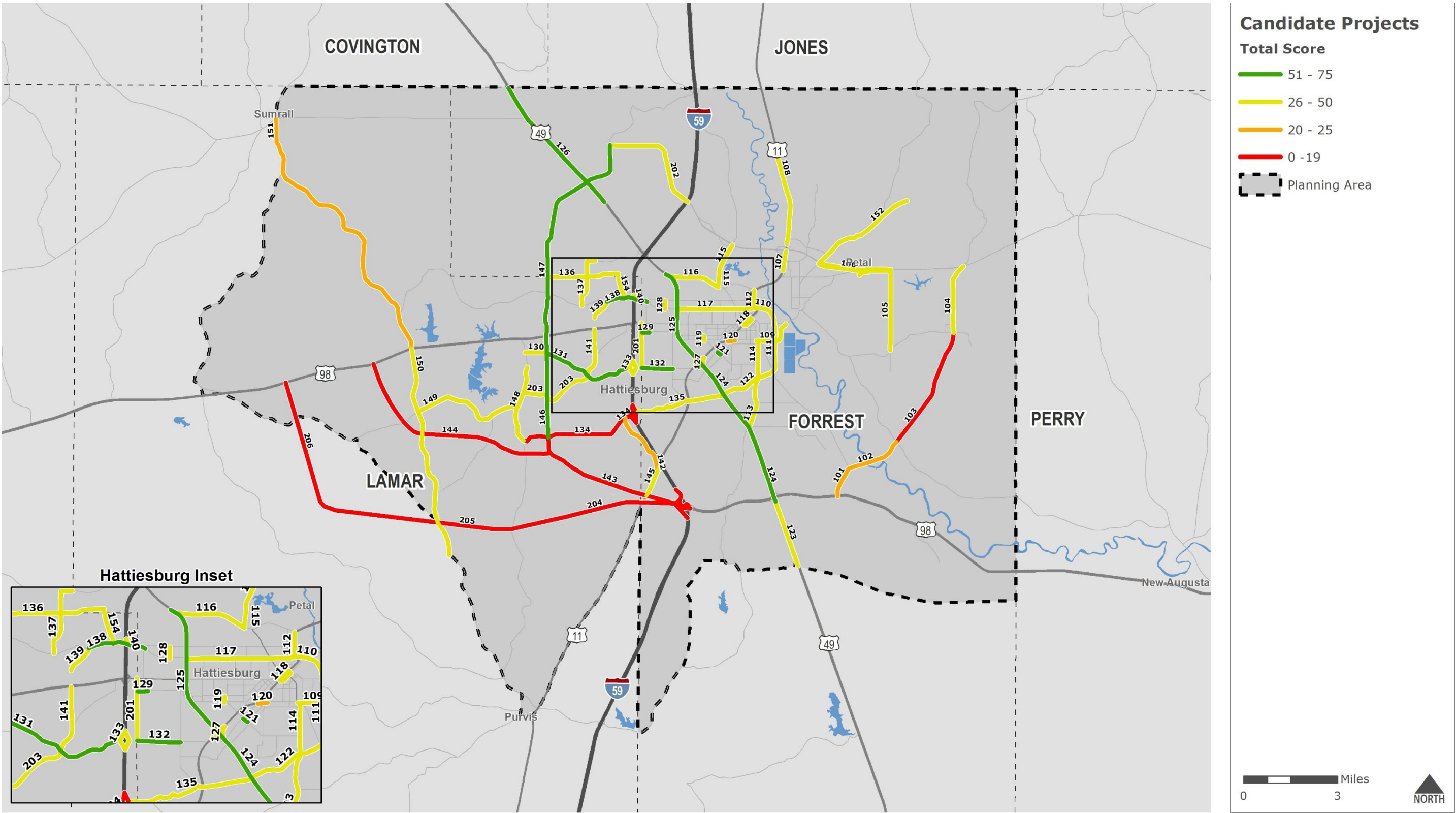
Table 7.2: Project Prioritization Results for Roadway Capacity Projects

Rank	Project ID	Location	Limits	Length (miles)	Improvement	Cost	Congestion Reduction Score	Benefit/Cost Score	Safety Benefit Score	Bike/Ped Benefit Score	Freight Benefit Score	Plan Consistency Score	Environmental Score	Total Score	Local Priority Ranking
1	147	Western Bypass Phase II	US 98 to MS 42 Realignment	4.89, 2.77	Widen to 4 Lanes, New 4 Lane Roadway	\$50,355,000	20	15	10	5	15	5	5	75	C
2	125	US 49	Broadway Dr to N 31st Ave	3.01	Widen to 6 Lanes	\$10,535,000	15	20	0	15	15	5	1	71	B
3	126	US 49	Rawls Springs Loop Rd to North Study Area Boundary	4.77	Widen to 6 Lanes	\$16,695,000	15	20	0	5	15	5	8	68	B
4	131	Lincoln Rd	Sandy Run Rd/Hegwood Rd to I-59	2.85	Widen to 4 Lanes	\$9,975,000	10	20	5	10	10	5	4	64	B
5	138	W 4th St	Weathersby Rd to N 38th Ave	1.34	Widen to 4 Lanes	\$4,690,000	10	20	5	10	10	5	1	61	B
6	124	US 49	US 98 Bypass to Broadway Dr	5.33	Widen to 6 Lanes	\$18,655,000	10	15	0	10	15	5	0	55	C
7	146	Western Bypass Phase I	Richburg Rd to US 98	1.94, 1.28	Widen to 4 Lanes, New 4 Lane Roadway	\$22,150,000	10	10	10	5	5	10	5	55	B
8	121	Timothy Ln Extension	W Pine St to Eastside Ave	0.13	New 2 Lane Roadway	\$767,000	0	20	5	15	5	5	3	53	D
9	129	W Arlington Loop Extension	S 40th Ave to S 37th Ave	0.25	New 2 Lane Roadway	\$1,475,000	0	15	5	15	5	5	7	52	C
10	132	Lincoln Rd	S 40th Ave to S 28th Ave	1.00	Widen to 5 Lanes	\$3,500,000	5	20	0	10	5	5	6	51	A
11	109	Hall Ave Extension	James St to E Hardy St	1.32	New 2 Lane Roadway	\$7,788,000	0	15	10	10	5	10	0	50	C
12	112	Bouie St	E 4th St to Old MS 42/US 11	0.57	Widen to 4 Lanes	\$1,995,000	0	20	0	15	5	5	2	47	D
13	137	Classic Dr Extension	W 4th St to J Ed Turner Rd	0.98	New 2 Lane Roadway	\$5,782,000	5	15	5	5	5	5	6	46	C
14	203	Oak Grove Rd	Old Hwy 11 to Lincoln Rd	2.45	Widen to 4 Lanes	\$8,575,000	10	20	0	5	5	0	5	45	B
15	105	Batson Rd Extension	Sunrise Rd to MS 42	2.55	New 2 Lane Roadway	\$15,045,000	0	10	10	5	5	5	8	43	B
16	135	Richburg Rd	I-59 to US 49	2.09, 0.81	Widen to 4 Lanes, New 4 Lane Roadway	\$17,035,000	5	10	10	5	5	5	3	43	B
17	107	US 11	W Central Ave to Evelyn Gandy Pkwy	0.72	Widen to 4 Lanes	\$2,520,000	0	15	0	10	5	5	7	42	C
18	110	CBD Bypass Phase I	Bouie St/Gordon St to E Hardy St	0.96	New 4 Lane Roadway	\$11,520,000	0	5	10	10	5	10	2	42	B
19	111	CBD Bypass Phase II	E Hardy St to Edwards St	2.02	New 4 Lane Roadway	\$24,240,000	0	5	10	10	5	10	2	42	C
20	128	N 31st Ave Extension	W 4th St to W 7th St	0.26	New 2 Lane Roadway	\$1,534,000	0	15	5	15	0	5	2	42	C
21	148	Old US 11	Richburg Rd to 6th Section Rd	2.50	Add Center Turn Lane	\$8,125,000	0	5	5	10	5	10	7	42	C
22	123	US 49	South Study Area Boundary to US 98 Bypass	2.18	Upgrade to Expressway	\$21,582,000	0	5	10	0	15	5	6	41	C
23	127	US 49	@ Broadway Dr	--	Reconstruct Interchange	\$20,000,000	0	0	20	0	15	5	1	41	B
24	130	Lincoln Rd	Old US 11 to Sandy Run Rd/Hegwood Rd	0.68	Add Center Turn Lane	\$2,210,000	0	5	5	10	5	10	6	41	C
25	136	J Ed Turner Dr/Classic Dr	Jackson Rd to N Beverly Hills Rd	2.02	Widen to 4 Lanes	\$7,070,000	5	15	0	5	5	5	6	41	C
26	154	J Ed Turner Dr Extension	Classic Dr to W 4th St	1.84	New 2 Lane Roadway	\$10,856,000	0	10	5	10	5	5	6	41	C
27	118	Pine St/Front St	Hardy St to Market St	0.63	Convert to Two Way	\$1,000,000	0	15	0	15	5	5	0	40	C

Rank	Project ID	Location	Limits	Length (miles)	Improvement	Cost	Congestion Reduction Score	Benefit/Cost Score	Safety Benefit Score	Bike/Ped Benefit Score	Freight Benefit Score	Plan Consistency Score	Environmental Score	Total Score	Local Priority Ranking
28	141	Oak Grove Rd/ Weathersby Rd	Lincoln Rd to US 98	1.54	Widen to 4 Lanes	\$5,390,000	0	10	0	10	5	10	5	40	B
29	133	I-59	@ Lincoln Rd	--	New Interchange	\$24,000,000	5	10	0	0	15	5	4	39	C
30	116	Old MS 42	US 49 to Glendale Ave	1.64	Widen to 4 Lanes	\$5,740,000	0	15	0	10	5	5	3	38	A
31	140	I-59	@ W 4th St	--	New Interchange	\$24,000,000	5	10	0	0	15	5	3	38	C
32	113	Edwards St	US 49 to Tuscan Ave	2.06	Add Center Turn Lane	\$6,695,000	0	0	15	10	5	5	2	37	C
33	117	W 4th St	US 49 to Bouie St	2.47	Widen to 4 Lanes	\$8,645,000	0	10	0	15	5	5	1	36	C
34	145	US 11	1.1 miles south of I-59 to I-59	1.19	Widen to 4 Lanes	\$4,165,000	0	15	0	5	5	5	6	36	A
35	139	Weathersby Rd	Methodist Blvd to W 4th St	0.68	Widen to 4 Lanes	\$2,380,000	0	10	0	10	5	5	5	35	C
36	122	WSF Tatum Blvd Extension	US 49 to Edwards St	1.30	New 4 Lane Roadway	\$15,600,000	0	5	10	10	0	5	3	33	B
37	108	US 11	Chapel Hill Rd to Leeville Rd	2.82	Widen to 4 Lanes	\$9,870,000	5	10	0	0	5	5	7	32	C
38	114	Edwards St	Tuscan Ave to James St	0.72	Widen to 5 Lanes	\$2,520,000	0	5	0	15	5	5	2	32	C
39	115	Glendale Ave	Old MS 42 to Evelyn Gandy Pkwy (MS 42)	1.44	Widen to 4 Lanes	\$5,040,000	0	10	0	10	5	5	2	32	B
40	150	MS 589	Luther Lee Rd to US 98	6.90	Widen to 4 Lanes	\$24,150,000	5	5	0	5	5	5	7	32	D
41	152	Old Richton Rd	Evelyn Gandy Pkwy to Herrington Rd	3.55	Widen to 4 Lanes	\$12,425,000	0	10	0	5	5	5	7	32	B
42	201	S 40th Ave	Lincoln Rd to Hardy St	1.41	Widen to 4 Lanes	\$4,935,000	0	15	0	10	5	0	2	32	A
43	106	Evelyn Gandy Pkwy (MS 42)	Old Richton Rd to Herrington Rd	2.29	Add New Service Roads	\$13,511,000	0	5	0	10	5	5	5	30	A
44	104	Sunrise Rd	Indian Springs Rd to MS 42	2.25	Widen to 4 Lanes, Realign Intersections	\$7,875,000	0	5	0	5	5	5	8	28	C
45	119	S 17th Ave	Adeline St to Mamie St	0.14	New 2 Lane Roadway	\$826,000	0	0	5	10	0	5	7	27	D
46	149	Old Hwy 24	MS 589 to Old US 11	3.72	Add Center Turn Lane	\$12,090,000	0	0	5	5	5	5	6	26	C
47	153	Springfield Rd Extension	Corinth Rd to Evelyn Gandy Pkwy	0.32	New 2 Lane Roadway	\$1,888,000	0	0	5	10	0	5	6	26	A
48	202	Western Bypass Phase III	Jc Bryant Rd to I-59	3.57	New 4 Lane Roadway	\$42,840,000	0	5	10	0	5	0	6	26	B
49	101	Ralston Rd	US 98 Bypass to James St/Old US 49	0.99	Add Center Turn Lane	\$3,217,500	0	5	5	0	5	5	5	25	C
50	151	MS 589	US 98 to MS 42	9.49	Widen to 4 Lanes	\$33,215,000	5	5	0	0	5	5	4	24	D
51	120	Broadway Dr Extension	W Pine St to Hall Ave	0.22	New 2 Lane Roadway	\$1,298,000	0	0	0	15	0	5	3	23	C
52	142	Sullivan-Kilrain Rd/ Richburg Rd	US 11 to Richburg Rd	2.12	Add Center Turn Lane	\$6,890,000	0	5	5	0	5	5	2	22	B
53	102	Sims Rd	James St/Old US 49 to Old River Rd	1.81	Widen to 4 Lanes	\$6,335,000	0	5	0	0	5	5	5	20	B
54	103	Sims Rd Extension	Old River Rd to Indian Springs Rd	3.99	New 4 Lane Roadway	\$47,880,000	This project has been moved to the Vision List and was not tested.							0	B

Rank	Project ID	Location	Limits	Length (miles)	Improvement	Cost	Congestion Reduction Score	Benefit/Cost Score	Safety Benefit Score	Bike/Ped Benefit Score	Freight Benefit Score	Plan Consistency Score	Environmental Score	Total Score	Local Priority Ranking
55	134	Richburg Rd	Old US 11 to I-59	3.20, 0.84	Widen to 4 Lanes, New 4 Lane Roadway, New Interchange	\$45,280,000	This project has been moved to the Vision List and was not tested.							0	D
56	143	US 98 Bypass Extension Phase I	Richburg Rd to I-59	5.08	New 4 Lane Roadway and Interchange Modification	\$67,210,000	This project has been moved to the Vision List and was not tested.							0	D
57	144	US 98 Bypass Extension Phase II	US 98 to US 98 Bypass Extension Phase I	7.03	New 4 Lane Roadway	\$84,360,000	This project has been moved to the Vision List and was not tested.							0	D
58	204	Western Beltway Phase I	Slade Rd to I-59	3.51	New 4 Lane Roadway and Interchange Modification	\$48,370,000	This project has been moved to the Vision List and was not tested.							0	C
59	205	Western Beltway Phase II	MS 589 to Slade Rd	4.17	New 4 Lane Roadway	\$50,040,000	This project has been moved to the Vision List and was not tested.							0	C
60	206	Western Beltway Phase III	US 98 to MS 589	7.82	New 4 Lane Roadway	\$93,840,000	This project has been moved to the Vision List and was not tested.							0	C
61	207	Outer Western Bypass	US 98 to MS 42	3.28, 5.39	Widen to 4 Lanes, New 4 Lane Roadway	\$76,160,000	This project has been moved to the Vision List and was not tested.							0	C

Figure 7.1: Project Prioritization Results for Roadway Capacity Projects



Data Sources: Neel-Schaffer, Inc.

Disclaimer: This map is for planning purposes only.

7.2 Bicycle and Pedestrian Corridor Prioritization

Bicycle and pedestrian projects were identified based on existing plans, especially the MPO Pathways Master Plan (2015), and the Needs Assessment. These projects were then prioritized based on the criteria and weights shown in Table 7.3. This methodology is intended to support the previously stated goals and objectives. These high-priority projects are shown in Table 7.4 and illustrated in Figure 7.2. The MTP does not recommend specific bicycle and pedestrian projects.

Individual sidewalk projects were not included in this prioritization. Instead, local municipalities should begin setting aside annual funding to bring existing sidewalks into ADA compliance and to build new infrastructure that prioritizes pedestrian access to medical services, retail centers, and public facilities.

Furthermore, bicycle and pedestrian improvements should be part of the overall design phase of all projects and included unless restrictions apply, consistent with FHWA guidance.

Table 7.3: Project Prioritization Methodology for Bicycle and Pedestrian Projects

Criterion	Measure	Scoring Scale (Points Possible)						
		0	5	10	18.5	37.5	56.25	75
Land Use and Demographics	Multimodal Demand Analysis Tier (Methodology found in <i>Technical Report 2: Existing Conditions</i> in Table 4.2). This considers the following: population, employment, and student density; popular destinations ¹ ; households without vehicles; and street connectivity.	Lowest Demand (Tier 1)			Low Demand (Tier 2)	Medium Demand (Tier 3)	High Demand (Tier 4)	Highest Demand (Tier 5)
System Connectivity	Number of existing bicycle connections per project mile	Less than 1 bike connection per mile	1 to 2 bike connection per mile	More than 2 bike connections per mile				
Safety	Ratio of unsafe roadway miles to project miles (unsafe roadway = posted speed above 25 MPH) ²	< 0.5	0.5-1.00	>1.00 OR Shared-Use Path				
Public Input	Number of times the location was mentioned in public surveys and meetings	0 Comments	1-5 Comments					

¹Popular desinations are parks, major recreation centers, schools, libraries, hospitals, grocery stores, pharmacies, convenience stores, eating and drinking places, and hotels/motels. Universities were weighted 10x, other schools and hospitals were weighed 5x and hotels/motels, grocery stores, pharmacies, and convenience stores and parks/rec centers were weighted 2x.

²Posted speeds came from the Travel Demand Model Network of major roads in the MPO. Roads not included in this model were considered to be local roads with a speed limit of 25 mph or less.

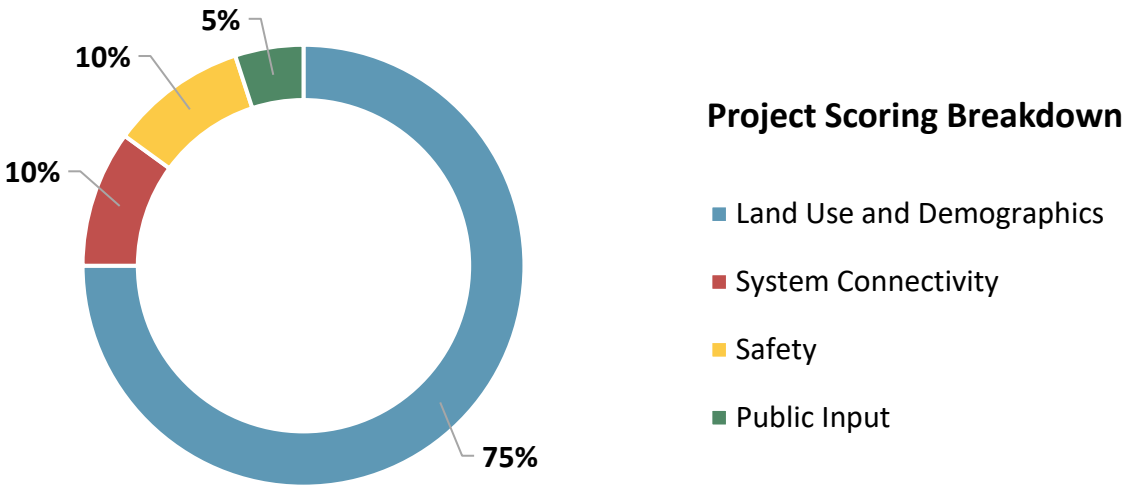
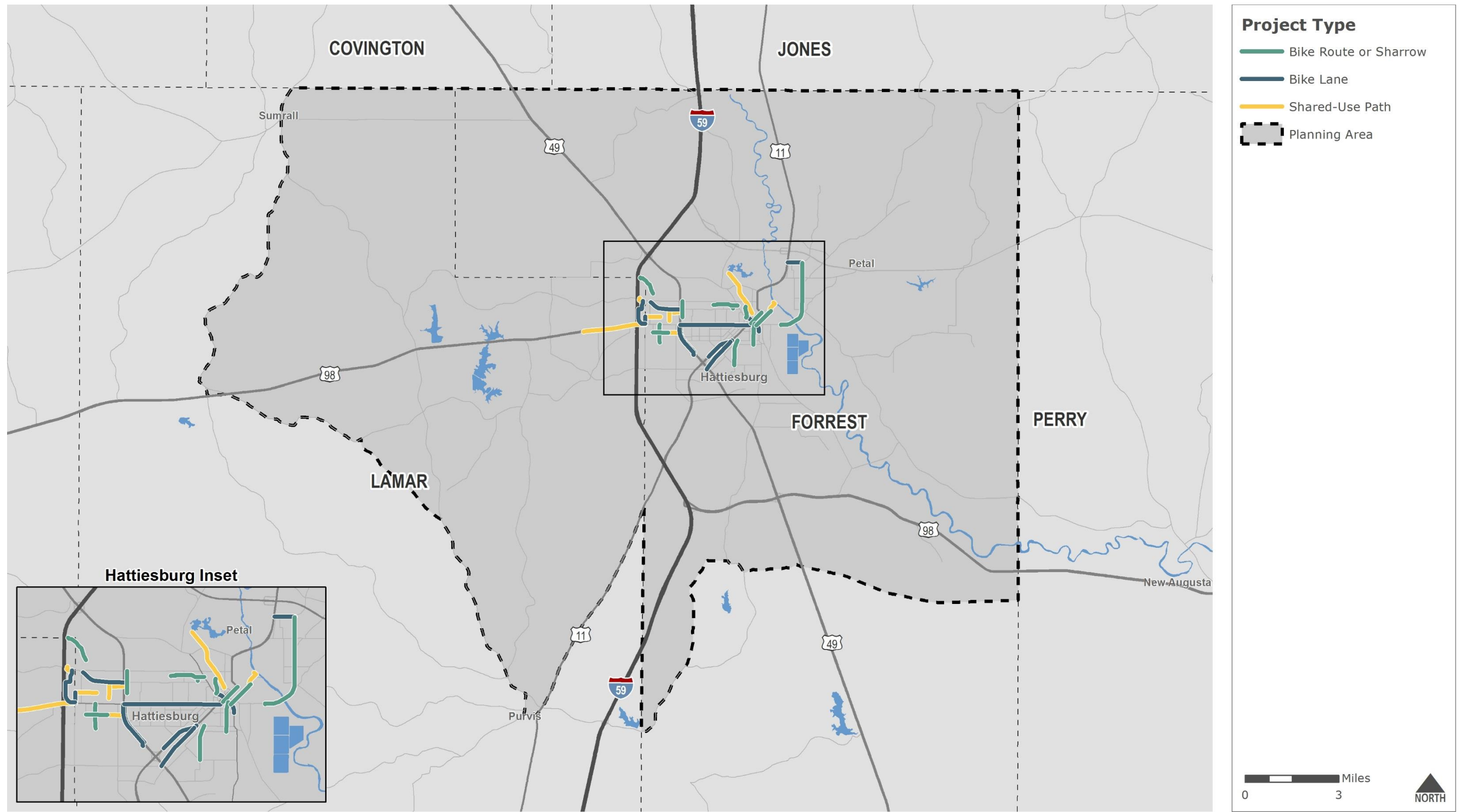


Table 7.4: High-Priority Bicycle and Pedestrian Project Corridors

Project ID	Location	Limits	Length (Miles)	Bicycle Facility Type	Responsible LPA
BP-3	Main St	Jackson St to Southern Ave	0.65	Bike Lane	City of Hattiesburg
BP-4	N 40th Ave and Montague Blvd	N 40th Ave: Hardy St to Montague Blvd Montague Blvd: N 40th Ave to Ross Blvd	0.74	N 40th Ave: Bike Lane; Montague Blvd: Shared-Use Path	City of Hattiesburg
BP-5	McLeod and Jackson St	McLeod St: Hardy St to Forrest St Jackson St: Forrest St to E 5th St	0.62	Advisory Bike Lane on McLeod St; Sharrow on Jackson St	City of Hattiesburg
BP-6	Buschman Blvd and Shared Use Path	Buschman Blvd: Main St to Rail ROW; Shared-Use Path: Buschman Blvd to 750 ft from E 5th Ave	1.02	Bike Boulevard on Buschman Blvd; Shared-Use Path from Buschman Blvd	City of Hattiesburg
BP-7	Black and Gold Blvd and Golden Ave Sidepaths	Black and Gold Ave: Golden Eagle Ave to Championship Ln Golden Eagle Ave: Pearl St to W 4th St	0.67	Shared-Use Path	City of Hattiesburg
BP-8	34th Ave Bike Route- Sharrows	Hardy St to Beverly Ln	0.57	Sharrows	City of Hattiesburg
BP-9	Arlington Loop	S 37th Ave to US 49	0.87	Sharrow from S 37th Ave to S 31st Ave; Shared-Use Path from S 31st Ave to US 49	City of Hattiesburg
BP-10	Walnut St	Katie Ave to Main St	0.68	Bike Blvd from Katie Ave to Southern Ave; Sharrow from Southern Ave to Main St	City of Hattiesburg
BP-11	Memorial Dr Bike Lanes	Hardy St to Arcadia St	1.04	Bike Lanes	City of Hattiesburg
BP-12	Thornhill Dr and Shared-Use Path	Thornhill Dr: N 40th Ave to W 4th St Shared-Use Path: Thornhill Dr to Longleaf Trace	1.17	Thornhill Dr: Bike Lane; Shared-Use Path	City of Hattiesburg
BP-13	Columbia St and West St	Columbia St: Rawls Ave to Main St West St: Columbia St to Longleaf Trace (Programmed)	0.79	Bike Route	City of Hattiesburg
BP-14	Hardy St West	S 40th Ave to Cross Creek Pkwy	2.00	Shared Use Path	City of Hattiesburg
BP-15	Hardy St Bike Lane	US 49 to W Front St	2.21	Bike Lane	City of Hattiesburg
BP-16	26th Ave Bike Lanes	Hardy St to Eddy St	1.11	Bike Lane	City of Hattiesburg
BP-17	25th Ave Bike Route	7th St to Quinn St	0.50	Sharrows	City of Hattiesburg
BP-18	Front Street Bike Route	Forrest St to Gordon St	0.48	Sharrows	City of Hattiesburg
BP-19	Old RR/ROW Shared-Use Path	Bouie River Shared Use Path to Mobile St	1.51	Class I Shared-Use Path	City of Hattiesburg
BP-20	Columbia St Bike Route	Rawls Ave to Main St	0.79	Route	City of Hattiesburg
BP-21	W. Pine St/Broadway Bike Lane	Service Rd to 83 ft from 7th Ave	0.94	Bike Lane	City of Hattiesburg
BP-22	MLK Ave Bike Route	Hall Ave to Tuscan Ave	0.80	Sharrows	City of Hattiesburg
BP-23	4th St Bike Lane	N 38th Ave to US 49	1.01	Bike Lane	City of Hattiesburg
BP-24	Beverly Hills Rd Bike Route	Campbell Dr to N 37th Ave	0.69	Route	City of Hattiesburg
BP-25	W. Pine St	Lincoln Rd to Broadway Dr	1.16	Bike Lane	Town of Petal
BP-26	Main St Petal	Main St: E Hardy St to W 1st Ave W 1st Ave: Main St to Rails with Trails Path	2.94	Bike Lane on Main St; Bike Route on W 1st Ave	Town of Petal

Figure 7.2: High-Priority Bicycle and Pedestrian Project Corridors



Data Sources: Neel-Schaffer, Inc.; MPO

Disclaimer: This map is for planning purposes only.

8.0 Financial Plan

Metropolitan Transportation Plans are required by federal legislation to be fiscally constrained. In order to demonstrate fiscal constraint, the costs of programmed projects must not exceed the amount of funding that is reasonably expected to be available.

This chapter reviews available funding sources and forecasts the amount of funding that can reasonably be anticipated to be available for transportation projects and programs in the MPA through 2045. Forecasts used in this chapter are for planning purposes only and do not commit any jurisdiction or agency to provide a specific level of funding.

8.1 Roadway Funding

Federal Funding Sources

Federal funding for transportation is authorized through the current transportation bill (The FAST Act) and includes several major “formula” programs and discretionary programs. While “formula” programs may change somewhat in future transportation bills, they have been relatively stable over time.

National Highway Performance Program (NHPP)

Overview: The NHPP provides support for the condition and performance of the National Highway System (NHS), for the construction of new facilities on the NHS, and to ensure that investments of Federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a State's asset management plan.

Eligible Activities: Projects or programs supporting progress toward the achievement of national performance goals for improving infrastructure condition, safety, congestion reduction, system reliability, or freight movement on the NHS.

Federal Share: 90 percent for most projects on the Interstate System and 80 percent elsewhere.

Surface Transportation Block Grant Program (STBG)

Overview: The STBG Program provides flexible funding that may be used for just about any type of transportation-related project. The FAST Act continues the regulation that 50 percent of a state's STBG apportionment is sub-allocated to areas based on their relative share of the total state population, with the other 50 percent available for use in any area of the state. These sub-allocations to the urban areas are called attributable funds.

Eligible Activities: Most transportation projects are eligible for STBG funding. See 23 U.S.C. 133(b)(15) for details.

Federal Share: 90 percent for most projects on the Interstate System and 80 percent elsewhere.

Highway Safety Improvement Program (HSIP)

Overview: The HSIP seeks to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned public roads and roads on tribal lands. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance.

Eligible Activities: Safety projects that are consistent with the State's Strategic Highway Safety Plan (SHSP) and that correct or improve a hazardous road location or feature or address a highway safety problem.

Federal Share: 90 percent except as provided in 23 U.S.C. 120 and 130.

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

Overview: The CMAQ program provides a flexible funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) and for former nonattainment areas that are now in compliance (maintenance areas).

Note: The HPFL MPO currently does not qualify for CMAQ funds because it is in attainment of air quality standards. However, should that change in the future, the MPO would become eligible for CMAQ funding.

Eligible Activities: Projects or programs that are likely to contribute to the attainment or maintenance of a national ambient air quality standard, with a high level of effectiveness in reducing air pollution.

Federal Share: 90 percent for most projects on the Interstate System and 80 percent elsewhere.

National Highway Freight Program (NHFP)

Overview: The NHFP seeks to improve the efficient movement of freight on the National Highway Freight Network (NHFN) and support national freight related goals.

Eligible Activities: Generally, NHFP funds must contribute to the efficient movement of freight on the NHFN and be identified in a freight investment plan included in the State's freight plan.

Federal Share: 90 percent for most projects on the Interstate System and 80 percent elsewhere.

State and Local Funding Sources

State Funding

State transportation revenues come from motor fuel taxes and fees and vehicles taxes and fees. The gasoline excise tax in particular is the state's largest funding source for roadway projects.

Property, Sales, and Income Taxes

Taxation contributes the most revenue to local governments in the United States. Property taxes, sales taxes, and income taxes are the most common and biggest sources of local government tax revenue. Taxes may be levied by states, counties, municipalities, or other authorities.

User Fees

User fees are fees collected from those who utilize a service or facility. The fees are collected to pay for the cost of a facility, finance the cost of operations, and/or generate revenue for other uses. User fees are commonly charged for public parks, water and sewer services, transit systems, and solid waste facilities. The theory behind the user fee is that those who directly benefit from these public services pay for the costs.

Special Assessments

Special assessment is a method of generating funds for public improvements, whereby the cost of a public improvement is collected from those who directly benefit from the improvement. In some instances, new streets are financed by special assessment. The owners of property located adjacent to the new streets are assessed a portion of the cost of the new streets, based on the amount of frontage they own along the new streets.

Special assessments have also been used to generate funds for general improvements within special districts, such as central business districts. These assessments may be paid over a period of time rather than as a lump sum payment.

Impact Fees

New developments create increased traffic volumes on the streets around them. Development impact fees are a way of attempting to place a portion of the burden of funding improvements on developers who are creating or adding to the need for improvements.

Bond Issues

Property tax and sales tax funds can be used on a pay-as-you-go basis, or the revenues from them can be used to pay off general obligation or revenue bonds. These bonds are issued by local governments upon approval of the voting public.

Forecasting Available Funds

Using analysis of historical funding within the MPA, the forecasted amount of federal funding that the MPO can reasonably expect to be available for roadway projects over the next 25 years was developed. These forecasts account for inflation and were provided for seven categories:

- Capacity projects
- Reconstruction
- Overlay
- Bridges
- Enhancement
- Safety
- Maintenance

Using the assumptions above, the amount of federal funding reasonably expected to be available for roadway projects in the MPO through 2045 is as follows:

- Capacity Projects
 - Stage 1 (2020-2025) - \$69,210,169
 - Stage 2 (2026-2035) - \$124,940,806
 - Stage 3 (2036-2045) - \$138,012,379
- Non-capacity Funding
 - Stage 1 (2020-2025) - \$84,590,207
 - Stage 2 (2026-2035) - \$152,705,430
 - Stage 3 (2036-2045) - \$168,681,796

The values above reflect the total funding expected within the MPA. Of this, the following are funds that can be used at the MPO's discretion and are expected to be available for capacity improvements:

- MPO Discretionary Funds - Stage 1 (2020-2025) - \$4,303,131
- MPO Discretionary Funds - Stage 2 (2026-2035) - \$8,411,794
- MPO Discretionary Funds - Stage 3 (2036-2045) - \$10,253,930

8.2 Bicycle and Pedestrian Funding

This section addresses funding for independent, or stand-alone bicycle and pedestrian projects. Funding for bicycle and pedestrian improvements that are part of other projects are addressed in other sections.

Federal Funding Sources

Transportation Alternatives (TA) Set-Aside

Overview: This set-aside program within the Surface Transportation Block Grant (STBG) program includes all projects and activities previously eligible under the Transportation Alternatives Program (TAP).

Eligible Activities: Pedestrian and bicycle facilities, recreational trails, safe routes to school projects, community improvements such as historic preservation and vegetation management, and environmental mitigation related to stormwater and habitat connectivity.

Federal Share: 90 percent for most projects on the Interstate System and 80 percent elsewhere.

“Flex” Funding

Other federal roadway and public transit funding sources are also flexible enough to fund construction of bicycle and pedestrian facilities. Still, most funding from these sources do not go to bicycle and pedestrian projects.

State and Local Funding Sources

State and local funding sources for bicycle and pedestrian projects are the same as those listed for roadways.

Forecasting Available Funds

Funding forecasts for independent bicycle and pedestrian projects are based on the Transportation Alternatives (TA) set-aside. TA funding for the MPO was forecast based on the following assumptions:

- Future State allocations will generally correlate with population. At a minimum, 50 percent of a state's TA apportionment (after deducting the set-aside for the Recreational Trails Program) must be sub-allocated to urban and rural areas based on their relative share of the total state population.
- The MPO will receive an amount of funding from the State that is proportionate to its Metropolitan Planning Area's share of the state population (4.6 percent). In 2020, that will amount to \$566,314.
- TA revenue will increase 1.0 percent annually.

Using the assumptions above, the amount of federal TA funding reasonably expected to be available for bicycle and pedestrian projects in the MPO through 2045 is as follows:

- Stage 1 (2021-2025) - \$3,483,974
- Stage 2 (2026-2035) - \$6,289,401
- Stage 3 (2036-2045) - \$6,947,412

8.3 Public Transit Funding

Federal Funding Sources

There are many federal funding sources for public transit. Most of these sources are programs funded by the Federal Transit Administration (FTA) and administered by the State.

Urbanized Area Formula Grants (Section 5307)

Overview: This formula-based funding program provides funds for capital and operating assistance for transit service in urbanized areas with populations greater than 50,000 and for transportation-related planning.

As part of the *Coronavirus Aid, Relief, and Economic Security (CARES) Act*, FTA allocated \$22.7 billion to recipients of urbanized area formula funds. Funding is provided at a 100-percent federal share, with no local match required, and will be available to support capital, operating, and other expenses generally eligible under those programs to prevent, prepare for, and respond to COVID-19.

Eligible Activities: Funds can be used for planning, engineering, design and evaluation of transit projects and other technical transportation-related studies; capital investments in bus and bus-related activities such as replacement of buses, overhaul of buses, rebuilding of buses, crime prevention and security equipment and construction of maintenance and passenger facilities; computer hardware/software; and operating assistance in urbanized areas under 200,000 in population or with 100 or fewer fixed-route buses operating in peak hours. Activities eligible under the former Job Access and Reverse Commute (JARC) program, which provided services to low-income individuals to access jobs, are now eligible under the Urbanized Area Formula program.

Federal Share: 80 percent for capital projects, 50 percent for operating assistance, and 80 percent for ADA non-fixed route paratransit service.

Enhanced Mobility of Seniors and Individuals with Disabilities (Section 5310)

Overview: Grants are made by the State to private non-profit organizations (and certain public bodies) to increase the mobility of seniors and persons with disabilities. The former New Freedom program (Section 5317) is folded into this program.

Eligible Activities: Projects must be included in a coordinated human service transportation plan. Funds can be used for buses and vans; wheelchair lifts, ramps, and securement devices; transit-related information technology systems; mobility management programs; acquisition of transportation services under a contract, lease, or other arrangement; travel training; volunteer driver programs; building an accessible path to a bus stop; and incremental cost of providing same day service or door-to-door service.

Federal Share: 80 percent for capital projects, 50 percent for operating assistance.

Rural Area Formula Grants (Section 5311)

Overview: This formula-based funding program provides administration, capital, planning, and operating assistance to support public transportation in rural areas, defined as areas with fewer than 50,000 residents.

Eligible Activities: Planning, capital, operating, job access and reverse commute projects, and the acquisition of public transportation services. Activities eligible under the former JARC program, which provided services to low-income individuals to access jobs, are now eligible under the Rural Area Formula program.

Federal Share: 80 percent for capital projects, 50 percent for operating assistance, and 80 percent for ADA non-fixed route paratransit service.

Bus and Bus Facilities Formula Grants (Section 5339a)

Overview: This program provides funds to replace, rehabilitate, and purchase buses and related equipment and to construct bus-related facilities.

Eligible Activities: Capital projects to replace, rehabilitate and purchase buses, vans, and related equipment, and to construct bus-related facilities, including technological changes or innovations to modify low or no emission vehicles or facilities.

Federal Share: 80 percent for capital projects.

Other FTA Grant Programs

The FTA has several other funding sources that each address specific issues. Most of these are more limited in funding and are competitive programs, meaning that applicants must compete for funding based on the merits of their project.

More details can be found at <https://www.transit.dot.gov/grants>

Flexible, Non-FTA Funds

Surface Transportation Block Grant Program (STBG): Provides funding that may be used by states and localities for a wide range of projects to preserve and improve the conditions and performance of surface transportation, including highway, transit, intercity bus, bicycle and pedestrian projects.

National Highway Performance Program (NHPP): Funds may only be used for the construction of a public transportation project that supports progress toward the achievement of national performance goals for improving infrastructure condition, safety, mobility, or freight movement on the NHS and which is eligible for assistance under chapter 53 of title 49, if: the project is in the same corridor as, and in proximity to, a fully access-controlled NHS route; the construction is more cost-effective (as determined by a benefit-cost analysis) than a NHS improvement; and the project will reduce delays or produce travel time savings on the NHS, as well as improve regional traffic flow. Local match requirement varies.

Congestion Mitigation and Air Quality Program (CMAQ): Provides funding to areas in nonattainment or maintenance for ozone, carbon monoxide, and/or particulate matter. States that have no nonattainment or maintenance areas still receive a minimum apportionment of CMAQ funding for either air quality projects or other elements of flexible spending. Funds may be used for any transit capital expenditures otherwise eligible for FTA funding as long as they have an air quality benefit.

State and Local Funding Sources

State and local funding sources include the same potential sources as those outlined for roadways. Fare revenue and advertising revenue are also important local funding sources but are relatively small.

Forecasting Available Funds

Forecasts were developed for federal transit programs Section 5307 and 5339 that are utilized by transit providers in the region, using the following assumptions:

- The region will receive 100 percent of annual Section 5307 funding allocated to the Hattiesburg, MS Urbanized Area.
- The region will receive 100 percent of the annual Section 5339 apportionment for Mississippi small urbanized areas.
- The region will receive 100 percent of the one-time 2020 CARES Act funding allocated to the Hattiesburg, MS Urbanized Area.
- Federal funding for these programs is inflated 1 percent annually. This is consistent with long-term annual increases in FTA program funding.

Based on these assumptions, the following levels of federal funding for public transit in the MPO can be expected through 2045:

- Stage 1 (2020-2025) - \$10,272,637 for operating and capital projects (This includes the one-time CARES Act funds but does not include any carry over funds.)
- Stage 2 (2026-2035) - \$12,757,095 for operating and capital projects
- Stage 3 (2036-2045) - \$14,091,770 for operating and capital projects

9.0 Implementation Plan

Based on the amount of funding anticipated in the financial plan, this section presents the recommended Implementation Plan. This plan advances the strategies previously outlined and incorporates the results of the project prioritization process.

9.1 Fiscally Constrained Plan

The fiscally constrained plan is the list of transportation projects that best address the needs of the region with the limited funding available. All other projects are “unfunded” and are listed later as visionary projects.

Roadways

Over the next 25 years, the MPO plans to implement a variety of roadway capacity projects (adding lanes or new roadways) and roadway non-capacity projects.

The MPO receives funding from many federal sources and provides local funding in addition to federal funding. Based on projections by MDOT, approximately \$332 million in federal funds will be available to the MPO for roadway projects from 2020 to 2045.

Table 9.2 lists all roadway capacity projects in the fiscally constrained plan and Table 9.3 lists all roadway non-capacity projects in the fiscally constrained plan. These projects are mapped in Figure 9.4 and Figure 9.5 respectively. Funds not used for capacity projects will instead be reserved for roadway maintenance.

As shown in Table 9.1, the fiscally constrained capacity projects will reduce vehicle hours of delay by approximately 31 percent when compared to only implementing projects that are currently funded.

Figure 9.1: Fiscally Constrained Roadway Projects (Federal Funding Only)

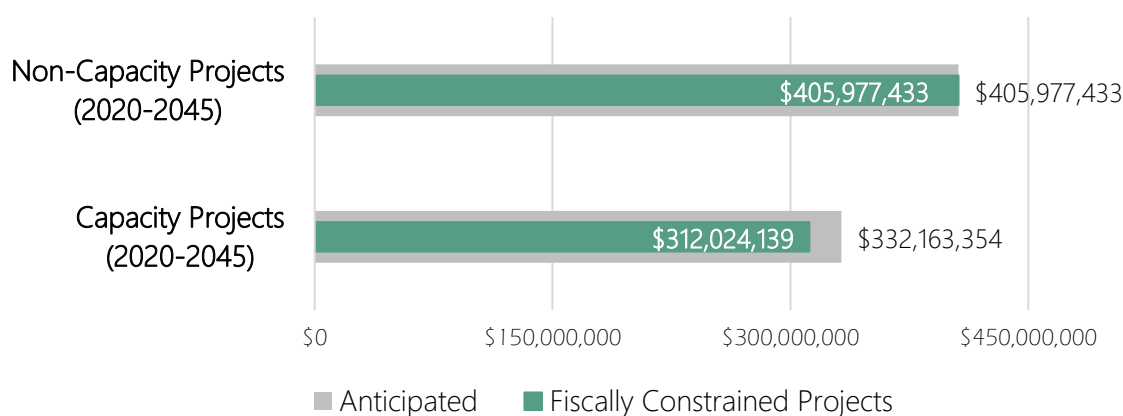


Table 9.1: Travel Impacts of Fiscally Constrained Roadway Capacity Projects

	2045 Existing and Committed	2045 Fiscally Constrained Roadway Capacity Projects	Difference	Percent Difference
Vehicle Miles Traveled	4,530,100	4,500,540	-29,560	-0.65%
Vehicle Hours Traveled	125,990	116,668	-9,322	-7.40%
Vehicle Hours of Delay	27,509	18,883	-8,626	-31.36%

Source: Jackson Regional Travel Demand Model; NSI

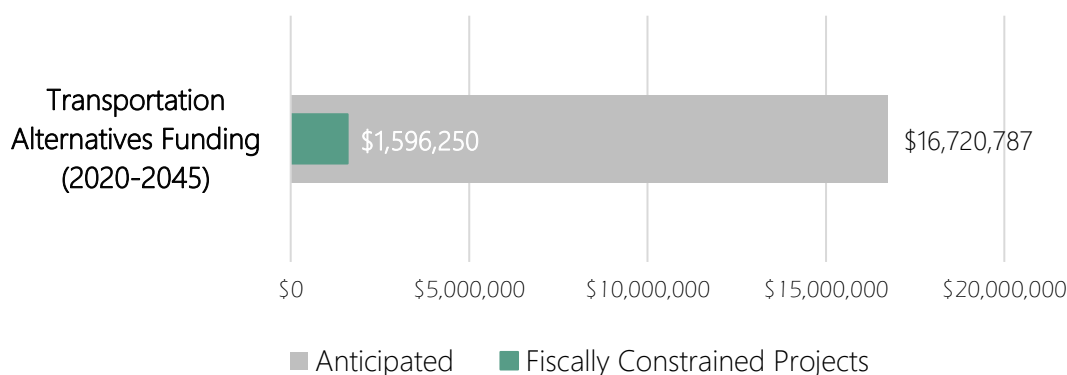
Bicycle and Pedestrian

In addition to bicycle and pedestrian improvements included with planned roadway projects, the region will continue to fund stand-alone bicycle and pedestrian projects.

The major federal source for bicycle and pedestrian projects is the Transportation Alternatives (TA) Set-Aside program, administered by MDOT. Based on historical funding levels and the region's share of the state population, this plan assumes that approximately \$16.72 million in federal TA funds will be available to the MPO from 2020 to 2045. The MPO currently only has two (2) TA-funded projects and local governments should continue to apply for these projects.

While the MTP does not identify specific bicycle and pedestrian projects outside of those already funded in the TIP, the MPO will encourage local agencies to make improvements along the high-priority bicycle and pedestrian corridors listed in Table 9.8 and Figure 9.9.

Figure 9.2: Fiscally Constrained Bicycle/Pedestrian Projects (Federal Funding Only)



Public Transit

Over the next 25 years, Hub City Transit will continue to provide its fixed and demand route services. At a minimum, the MTP assumes that existing transit services will continue to operate at current levels and that vehicles will be kept in a state of good repair.

Figure 9.3: Fiscally Constrained Transit Projects (Federal Funding Only)

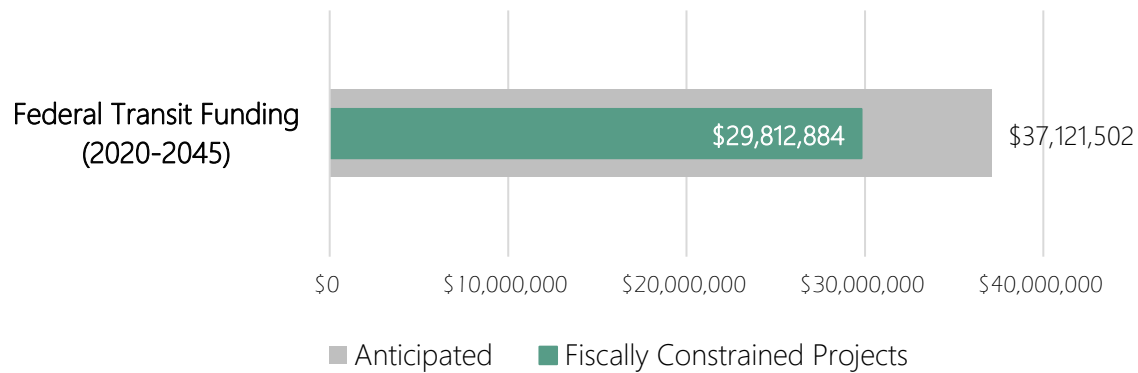


Table 9.2: Fiscally Constrained Roadway Capacity Projects

Project ID	Funding	Stage	Route	Location	Improvement	Length (mi)	Type	Cost (YOE)	Design Considerations
66	N/A	Stage I	Lincoln Rd	US 11 to 28th Ave	Widen to 4 Lanes	0.64	●	\$3,347,000	--
67	N/A	Stage I	Martin Luther King Extension	Bowling St to Helveston Rd	New 2 Lane Roadway	0.81	●	\$2,788,000	--
132	Local/MPO	Stage I	Lincoln Rd	S 40th Ave to S 28th Ave	Widen to 5 Lanes	1.00	●	\$3,588,202	EC
116	MDOT	Stage I	Old MS 42	US 49 to Glendale Ave	Widen to 4 Lanes	1.64	●	\$5,884,651	EC
145	MDOT	Stage I	US 11	1.1 miles south of I-59 to I-59	Widen to 4 Lanes	1.19	●	\$4,269,960	--
106	MDOT	Stage I	Evelyn Gandy Pkwy (MS 42)	Old Richton Rd to Herrington Rd	Add New Service Roads	2.29	●	\$13,851,484	EC
153	MDOT	Stage I	Springfield Rd Extension	Corinth Rd to Evelyn Gandy Pkwy	New 2 Lane Roadway	0.32	●	\$1,935,579	EC
125	MDOT	Stage I	US 49	Broadway Dr to N 31st Ave	Widen to 6 Lanes	3.01	●	\$10,800,487	EJ EC
135	MDOT	Stage I	Richburg Rd	I-59 to US 49	Widen to 4 Lanes, New 4 Lane Roadway	2.09, 0.81	●	\$17,464,291	EJ EC
107	MDOT	Stage I	US 11	W Central Ave to Evelyn Gandy Pkwy	Widen to 4 Lanes	0.72	●	\$2,583,505	EC
118	MDOT	Stage I	Pine St/Front St	Hardy St to Market St	Convert to Two Way	0.63	●	\$1,025,201	EJ EC
201	Local/MPO	Stage II	S 40th Ave	Lincoln Rd to Hardy St	Widen to 4 Lanes	1.41	●	\$5,478,567	EJ EC
126	MDOT	Stage II	US 49	Rawls Springs Loop Rd to North Study Area Boundary	Widen to 6 Lanes	4.77	●	\$18,533,875	--
146	MDOT	Stage II	Western Bypass Phase I	Richburg Rd to US 98	Widen to 4 Lanes, New 4 Lane Roadway	1.94, 1.28	●	\$24,589,717	--
110	MDOT	Stage II	CBD Bypass Phase I	Bouie St/Gordon St to E Hardy St	New 4 Lane Roadway	0.96	●	\$12,788,873	EJ EC
127	MDOT	Stage II	US 49	@ Broadway Dr	Reconstruct Interchange	--	●	\$22,202,905	EJ EC
124	MDOT	Stage II	US 49	US 98 Bypass to Broadway Dr	Widen to 6 Lanes	5.33	●	\$20,709,759	EJ EC
129	Local/MPO	Stage II	W Arlington Loop Extension	S 40th Ave to S 37th Ave	New 2 Lane Roadway	0.25	●	\$1,637,464	EC
108	MDOT	Stage II	US 11	Chapel Hill Rd to Leeville Rd	Widen to 4 Lanes	2.82	●	\$10,957,133	EC
121	Local/MPO	Stage II	Timothy Ln Extension	W Pine St to Eastside Ave	New 2 Lane Roadway	0.13	●	\$851,481	EJ EC
112	MDOT	Stage II	Bouie St	E 4th St to Old MS 42/US 11	Widen to 4 Lanes	0.57	●	\$2,214,740	EJ EC
138	Local/MPO	Stage III	W 4th St	Weathersby Rd to N 38th Ave	Widen to 4 Lanes	1.34	●	\$5,751,305	EJ EC
202	MDOT	Stage III	Western Bypass Phase III	Jc Bryant Rd to I-59	New 4 Lane Roadway	3.57	●	\$52,534,306	--
147	MDOT	Stage III	Western Bypass Phase II	US 98 to MS 42 Realignment	Widen to 4 Lanes, New 4 Lane Roadway	4.89, 2.77	●	\$61,749,883	--
128	Local/MPO	Stage III	N 31st Ave Extension	W 4th St to W 7th St	New 2 Lane Roadway	0.26	●	\$1,881,130	EJ EC
119	Local/MPO	Stage III	S 17th Ave	Adeline St to Mamie St	New 2 Lane Roadway	0.14	●	\$1,012,916	EC
120	Local/MPO	Stage III	Broadway Dr Extension	W Pine St to Hall Ave	New 2 Lane Roadway	0.22	●	\$1,591,726	EJ EC

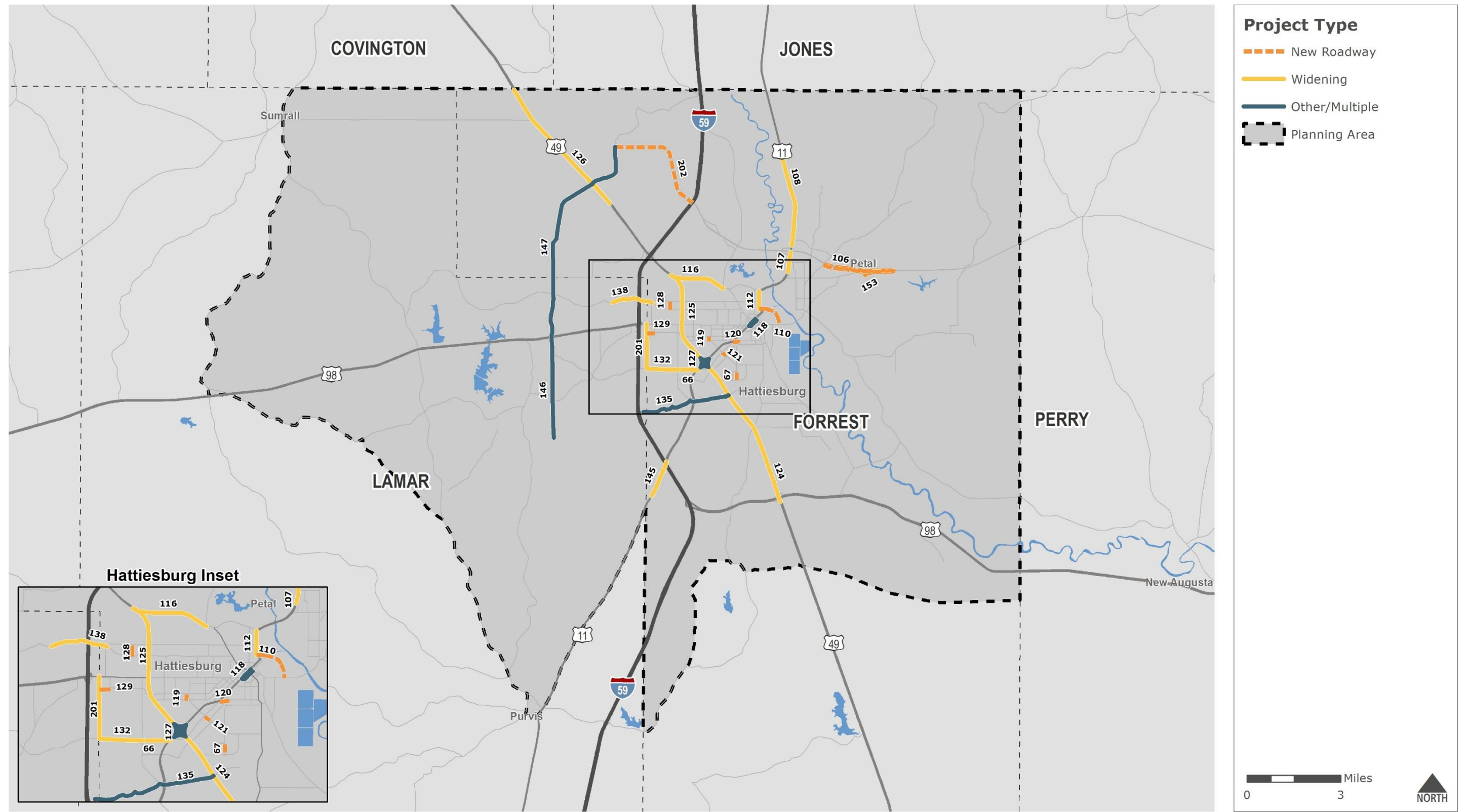
Note 1: YOE refers to the Year of Expenditure and reflects the expected cost at the time of implementation.

Note 2: Bicycle and pedestrian improvements should be part of the overall design phase of all projects and included unless restrictions apply consistent with FHWA guidance.

Improvement Type: ● New Roadway ● Widening ● Other/Multiple

Design Considerations: EJ – High Concern for Environmental Justice Impacts EC – High Concern for Environmental and Community Impacts

Figure 9.4: Fiscally Constrained Roadway Capacity Projects








Data Sources: Neel-Schaffer, Inc.; MPO

Disclaimer: This map is for planning purposes only.

Table 9.3: Fiscally Constrained Roadway Non-Capacity Projects

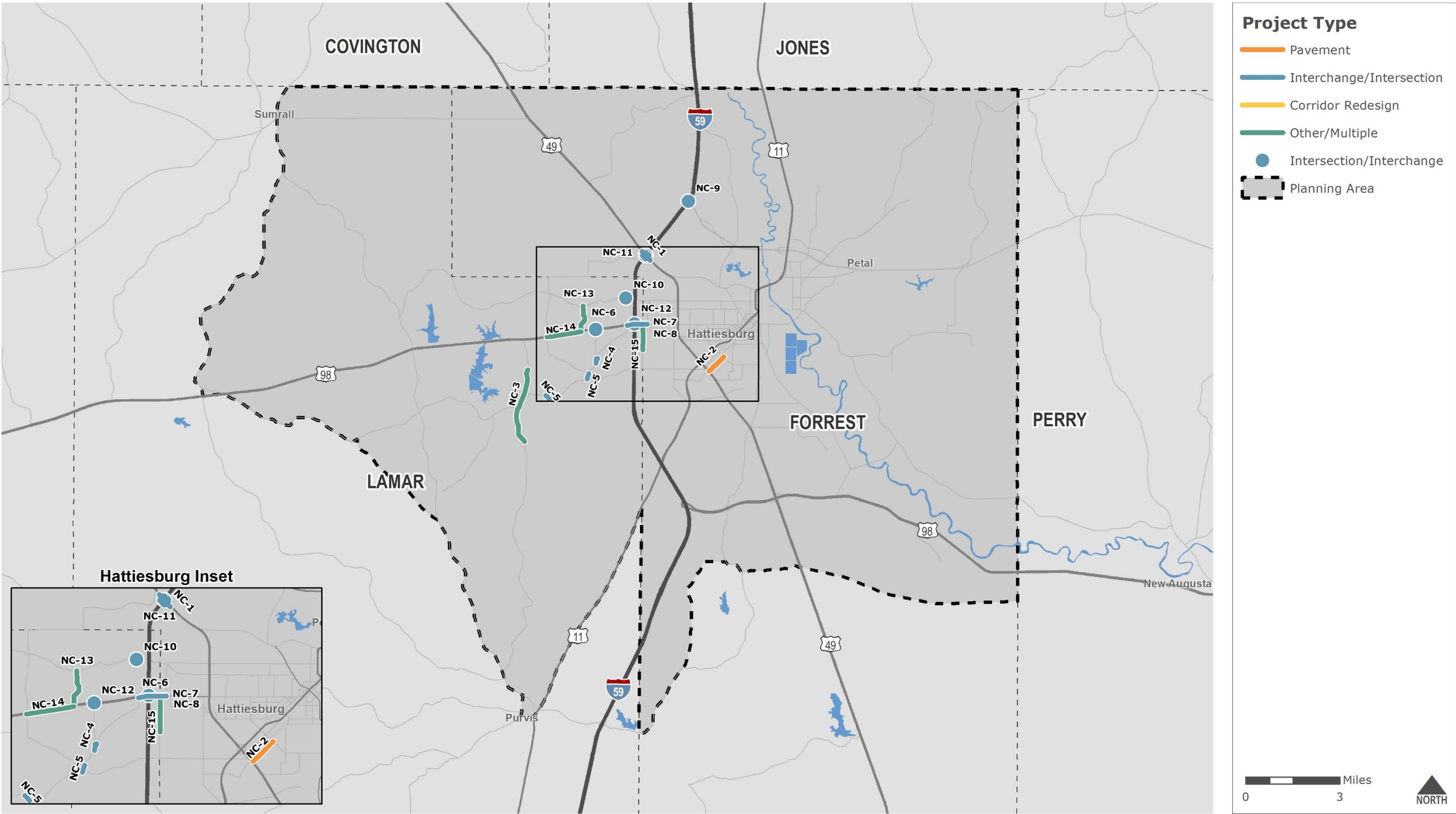
Project ID	Stage	Route	Location	Improvement Type	Length (mi)	Type	Cost
NC-1	Stage I	I-59	@ MS 42	Interchange Modification	1.07	●	\$2,111,631
NC-2	Stage I	Country Club Rd	Timothy Lane and Hwy 49	Reconstruction	3.13	●	\$778,750
NC-3	Stage I	Old Hwy 11	Hattiesburg Corp Limits South to Richburg Rd	Overlay and Maintenance	1.13	●	\$623,292
NC-4	Stage I	Oak Grove Rd/Weathersby Rd Intersection	Shears Rd to Oak Grove Rd	Intersection Improvement	0.92	●	\$1,010,164
NC-5	Stage I	Oak Grove Rd/Hegwood Rd/Lincoln Rd	plus/minus 600' either side of Hegwood Intersection & Lincoln Rd	Intersection Improvement	1.11	●	\$5,185,000
NC-6	TBD	I-59	@ US 98	Signal Retiming/Signal Improvement	N/A	●	TBD
NC-7	TBD	Hardy St	Westover Dr to 38th Ave	Signal Retiming/Signal Improvement	N/A	●	TBD
NC-8	TBD	Hardy St	Westover Dr to 38th Ave	Corridor Study	N/A	●	TBD
NC-9	TBD	MS 42 (Evelyn Gandy Pkwy)	@ I-59	Signal Retiming/Signal Improvement	N/A	●	TBD
NC-10	TBD	4st St	@ Westover Dr	Signal Retiming/Signal Improvement	N/A	●	TBD
NC-11	TBD	US 49 and I 59	@ I-59	Signal Retiming/Signal Improvement	N/A	●	TBD
NC-12	TBD	US 98	@ Weathersby Rd	Signal Retiming/Signal Improvement	N/A	●	TBD
NC-13	TBD	Cross Creek Pkwy	W 4th St to US 98 (Hardy St)	Safety Study	N/A	●	TBD
NC-14	TBD	US 98	Hegwood Rd/Jackson Rd to Cross Creek Pkwy	Safety Study	N/A	●	TBD
NC-15	TBD	S 40th Ave	MS 98 (Hardy St) to 0.83 miles south	Safety Study	N/A	●	TBD
LI-1	Stage I	Line Item Funding	Various	Reconstruction	Various	●	\$14,289,642
LI-2	Stage I	Line Item Funding	Various	Overlay	Various	●	\$23,070,056
LI-3	Stage I	Line Item Funding	Various	Bridge	Various	●	\$15,380,038
LI-4	Stage I	Line Item Funding	Various	Enhancement	Various	●	\$4,568,224
LI-5	Stage I	Line Item Funding	Various	Safety	Various	●	\$14,809,049
LI-6	Stage I	Line Item Funding	Various	Maintenance	Various	●	\$2,764,362
LI-7	Stage II	Line Item Funding	Various	Reconstruction	Various	●	\$27,764,624
LI-8	Stage II	Line Item Funding	Various	Overlay	Various	●	\$41,646,935
LI-9	Stage II	Line Item Funding	Various	Bridge	Various	●	\$27,764,624
LI-10	Stage II	Line Item Funding	Various	Enhancement	Various	●	\$13,882,312
LI-11	Stage II	Line Item Funding	Various	Safety	Various	●	\$36,094,011
LI-12	Stage II	Line Item Funding	Various	Maintenance	Various	●	\$5,552,925
LI-13	Stage III	Line Item Funding	Various	Reconstruction	Various	●	\$30,669,418

Project ID	Stage	Route	Location	Improvement Type	Length (mi)	Type	Cost
LI-14	Stage III	Line Item Funding	Various	Overlay	Various		\$46,004,126
LI-15	Stage III	Line Item Funding	Various	Bridge	Various		\$30,669,418
LI-16	Stage III	Line Item Funding	Various	Enhancement	Various		\$15,334,709
LI-17	Stage III	Line Item Funding	Various	Safety	Various		\$39,870,243
LI-18	Stage III	Line Item Funding	Various	Maintenance	Various		\$6,133,884

Note: YOE refers to the Year of Expenditure and reflects the expected cost at the time of implementation.

Improvement Type:  Bridge  Pavement  Intersection/Interchange  Corridor Redesign  Other/Multiple

Figure 9.5: Fiscally Constrained Roadway Non-Capacity Projects



Data Sources: Neel-Schaffer, Inc.; MPO

Disclaimer: This map is for planning purposes only.

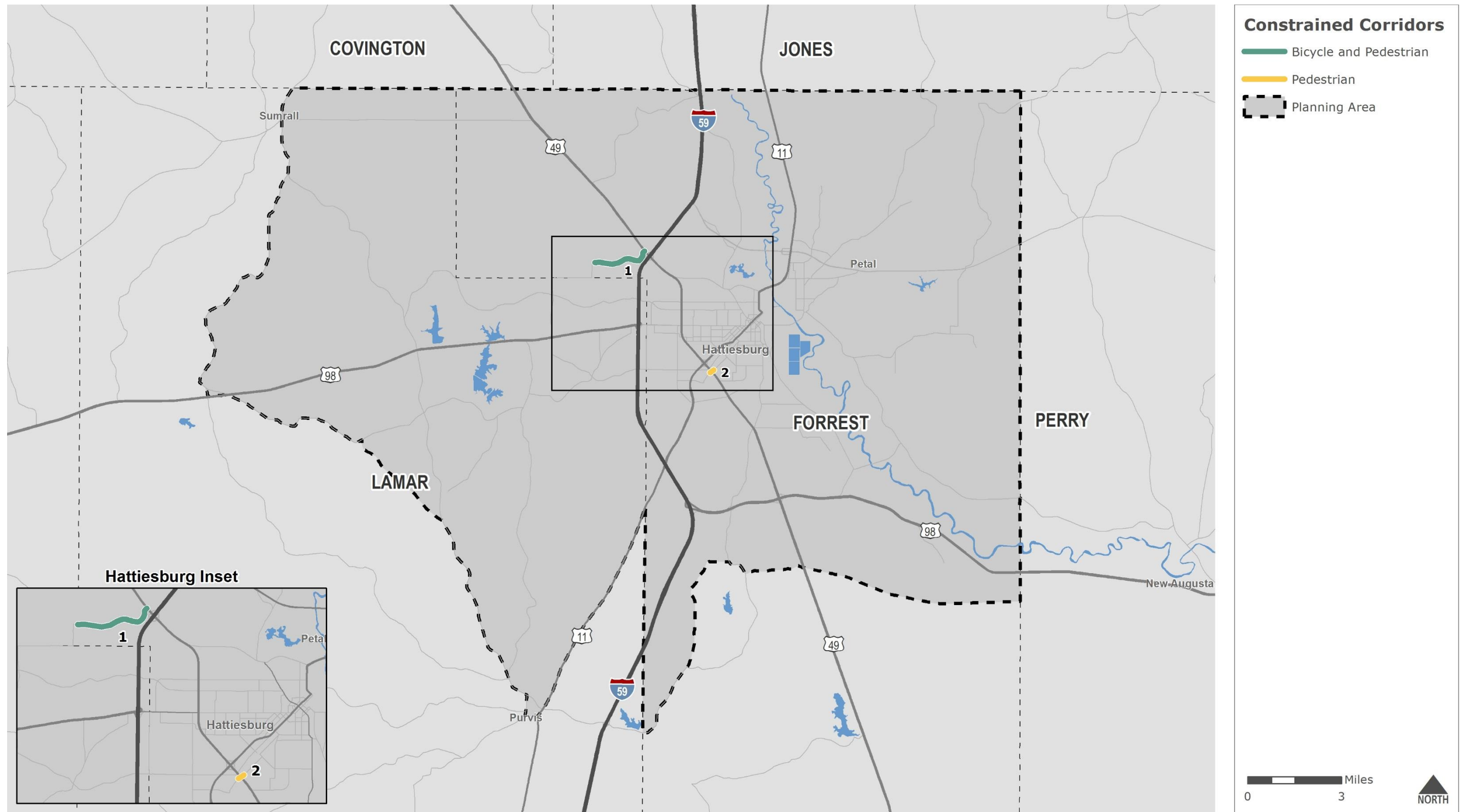
Table 9.4: Fiscally Constrained List of Bicycle and Pedestrian Projects

Project ID	TIP ID	Stage	Route	Location	Improvement Type	Length (mi)	Responsible LPA	Fiscal Year	Total Cost (YOE)	Federal Cost (YOE)
BP-1	502	Stage I	Classic Drive	Pine Tree Drive to US Hwy 49	●	1.8	Forrest County	2022	\$296,250	\$237,000
BP-2	505	Stage I	Country Club Rd	Country Club Rd across Us Hwy 49	●	0.1	Forrest County	2022	\$1,300,000	\$1,040,000

¹Funds for this project were committed through the Mississippi Department of Transportation (MDOT) and were not included in Figure 9.2.

Facility Type: ● Pedestrian ● Bicycle and Pedestrian

Figure 9.6 Fiscally Constrained Bicycle and Pedestrian Projects



Data Sources: Neel-Schaffer, Inc; MPO

Disclaimer: This map is for planning purposes only.

Table 9.5: Fiscally Constrained List of Transit Projects

Project ID	TIP ID	Description	Type	Sponsor	Fiscal Year	Total Cost (YOE)	Federal Cost (YOE)
HCT-1	N/A	SECTION 5307 OPERATIONS ASSISTANCE	●	HCT	2020	\$1,000,000	\$500,000
HCT-2	N/A	SECTION 5307 PREVENTATIVE MAINTENANCE	●	HCT	2020	\$428,750	\$343,000
HCT-3	N/A	SECTION 5307 ROLLING STOCK	●	HCT	2020	\$240,964	\$200,000
HCT-4	N/A	SECTION 5307 OPERATIONS ASSISTANCE	●	HCT	2021	\$1,436,628	\$718,314
HCT-5	N/A	SECTION 5307 PREVENTATIVE MAINTENANCE	●	HCT	2021	\$168,096	\$134,477
HCT-6	N/A	SECTION 5307 PASSENGER AMENITIES	●	HCT	2021	\$320,630	\$256,504
HCT-7	N/A	SECTION 5307 BUS SHELTERS	●	HCT	2021	\$366,878	\$293,502
HCT-8	N/A	SECTION 5307 ROLLING STOCK	●	HCT	2021	\$611,239	\$507,328
HCT-9	N/A	SECTION 5307 SUPPORT VEHICLES	●	HCT	2021	\$51,140	\$40,912
HCT-10	N/A	SECTION 5307 HCT OPERATIONS CENTER	●	HCT	2021	\$256,219	\$204,975
HCT-11	N/A	SECTION 5339 HCT OPERATIONS CENTER	●	HCT	2021	\$1,309,793	\$1,047,834
HCT-12	N/A	SECTION 5307 ADA VEHICLE EQUIPMENT	●	HCT	2021	\$256,219	\$204,975
HCT-13	N/A	SECTION 5307 OPERATIONS ASSISTANCE	●	HCT	2022	\$1,000,000	\$500,000
HCT-14	N/A	SECTION 5307 PREVENTATIVE MAINTENANCE	●	HCT	2022	\$428,750	\$343,000
HCT-15	N/A	SECTION 5307 ROLLING STOCK	●	HCT	2022	\$240,964	\$200,000
HCT-16	N/A	SECTION 5307 OPERATIONS ASSISTANCE	●	HCT	2023	\$960,000	\$480,000
HCT-17	N/A	SECTION 5307 PREVENTATIVE MAINTENANCE	●	HCT	2023	\$300,000	\$240,000
HCT-18	N/A	SECTION 5307 BUS SHELTERS	●	HCT	2023	\$79,876	\$63,901
HCT-19	N/A	SECTION 5307 ROLLING STOCK	●	HCT	2023	\$240,964	\$200,000
HCT-20	N/A	SECTION 5337 OPERATIONS ASSISTANCE	●	HCT	2024	\$960,000	\$480,000
HCT-21	N/A	SECTION 5307 PREVENTATIVE MAINTENANCE	●	HCT	2024	\$300,000	\$240,000
HCT-22	N/A	SECTION 5307 PASSENGER AMENITIES	●	HCT	2024	\$150,000	\$120,000
HCT-23	N/A	SECTION 5307 BUS SHELTERS	●	HCT	2024	\$79,876	\$63,901
HCT-24	N/A	SECTION 5307 ROLLING STOCK	●	HCT	2024	\$60,241	\$50,000
HCT-25	N/A	SECTION 5307 SUPPORT VEHICLES	●	HCT	2024	\$37,500	\$30,000

Project ID	TIP ID	Description	Type	Sponsor	Fiscal Year	Total Cost (YOE)	Federal Cost (YOE)
HCT-26	N/A	SECTIONS 5307 AND 5339 CAPITAL	●	HCT	2025	\$293,186	\$234,549
HCT-27	N/A	SECTION 5337 OPERATIONS ASSISTANCE	●	HCT	2025	\$10,245,602	\$5,122,801
HCT-28	N/A	SECTION 5307 PREVENTATIVE MAINTENANCE	●	HCT	2025	\$3,201,751	\$2,561,401
HCT-29	N/A	SECTIONS 5307 AND 5339 CAPITAL	●	HCT	2026-2035	\$3,098,045	\$2,478,436
HCT-30	N/A	SECTION 5337 OPERATIONS ASSISTANCE	●	HCT	2026-2035	\$10,245,602	\$5,122,801
HCT-31	N/A	SECTION 5307 PREVENTATIVE MAINTENANCE	●	HCT	2026-2035	\$3,201,751	\$2,561,401
HCT-32	N/A	SECTIONS 5307 AND 5339 CAPITAL	●	HCT	2036-2045	\$3,422,169	\$2,737,735
HCT-33	N/A	SECTION 5337 OPERATIONS ASSISTANCE	●	HCT	2036-2045	\$11,317,520	\$5,658,760
HCT-34	N/A	SECTION 5307 PREVENTATIVE MAINTENANCE	●	HCT	2036-2045	\$3,536,725	\$2,829,380

Note: YOE (Year of Expenditure) costs assume a 1% annual inflation rate for transit projects.

Improvement Type: ● Operating ● Capital ● Preventative Maintenance

9.2 Visionary (Unfunded) Projects

Visionary projects are identified projects that are unfunded or unprogrammed in the fiscally constrained list of projects.

Visionary Roadway Capacity Projects

Unfunded projects that could become funded with additional funding or if the fiscally constrained plan is changed.

Unfunded roadway capacity projects are not necessarily less important or effective; they just cannot be accommodated within the fiscally constrained budget. This may be due to project costs or overall feasibility.

Table 9.6 shows the list of visionary roadway capacity projects and Figure 9.7 maps these projects.

Visionary Bicycle and Pedestrian Corridors

Projects that can be programmed within the line-item budget for Transportation Alternatives projects.

The fiscally constrained plan has a line-item for TA projects. Local agencies should consider the visionary bicycle and pedestrian corridors when MDOT releases a call for TA project grant applications.

Table 9.8 shows the list of visionary bicycle and pedestrian corridors and Figure 9.9 maps these projects.

Visionary Transit Expansion

The Needs Assessment revealed regional demand for increased and improved transit service. To address these needs, the MTP recommends performing a Regional Transit Study. The Regional Transit Study should consider the following questions:

- How could existing routes and services be redesigned to provide more effective service?
- Which areas not currently served by fixed routes would most benefit from new or expanded routes?
- Are there any new modes or trends in the transit industry that could serve the area (i.e. microtransit)?

Answers to these questions should inform the study's strategies for Hub City Transit in the short, mid, and long-term horizons.

Table 9.6: Visionary Roadway Capacity Projects

Project ID	Funding	Route	Location	Improvement	Length (mi)	Type	Cost (2020\$)	Design Considerations
131	Local/MPO	Lincoln Rd	Sandy Run Rd/Hegwood Rd to I-59	Widen to 4 lanes	2.85	●	\$9,975,000	EJ EC
203	Local/MPO	Oak Grove Rd	Old Hwy 11 to Lincoln Rd	Widen to 4 Lanes	2.45	●	\$8,575,000	EC
105	Local/MPO	Batson Rd Extension	Sunrise Rd to MS 42	New 2 Lane Roadway	2.55	●	\$15,045,000	--
141	Local/MPO	Oak Grove Rd/Weathersby Rd	Lincoln Rd to US 98	Widen to 4 Lanes	1.54	●	\$5,390,000	EC
122	Local/MPO	WSF Tatum Blvd Extension	US 49 to Edwards St	New 4 Lane Roadway	1.30	●	\$15,600,000	EJ EC
115	Local/MPO	Glendale Ave	Old MS 42 to Evelyn Gandy Pkwy (MS 42)	Widen to 4 Lanes	1.44	●	\$5,040,000	EJ EC
152	Local/MPO	Old Richton Rd	Evelyn Gandy Pkwy to Herrington Rd	Widen to 4 Lanes	3.55	●	\$12,425,000	EC
142	Local/MPO	Sullivan-Kilrain Rd/Richburg Rd	US 11 to Richburg Rd	Add Center Turn Lane	2.12	●	\$6,890,000	EJ EC
102	Local/MPO	Sims Rd	James St/Old US 49 to Old River Rd	Widen to 4 Lanes	1.81	●	\$6,335,000	EC
103	Local/MPO	Sims Rd Extension	Old River Rd to Indian Springs Rd	New 4 Lane Roadway	3.99	●	\$47,880,000	--
109	Local/MPO	Hall Ave Extension	James St to E Hardy St	New 2 Lane Roadway	1.32	●	\$7,788,000	EJ EC
137	Local/MPO	Classic Dr Extension	W 4th St to J Ed Turner Rd	New 2 Lane Roadway	0.98	●	\$5,782,000	--
111	MDOT	CBD Bypass Phase II	E Hardy St to Edwards St	New 4 Lane Roadway	2.02	●	\$24,240,000	EJ EC
148	Local/MPO	Old US 11	Richburg Rd to 6th Section Rd	Add Center Turn Lane	2.50	●	\$8,125,000	EC
123	MDOT	US 49	South Study Area Boundary to US 98 Bypass	Upgrade to Expressway	2.18	●	\$21,582,000	--
130	Local/MPO	Lincoln Rd	Old US 11 to Sandy Run Rd/Hegwood Rd	Add Center Turn Lane	0.68	●	\$2,210,000	--
136	Local/MPO	J Ed Turner Dr/Classic Dr	Jackson Rd to N Beverly Hills Rd	Widen to 4 Lanes	2.02	●	\$7,070,000	--
154	Local/MPO	J Ed Turner Dr Extension	Classic Dr to W 4th St	New 2 Lane Roadway	1.84	●	\$10,856,000	--
133	MDOT	I-59	@ Lincoln Rd	New Interchange	--	●	\$24,000,000	EC
140	MDOT	I-59	@ W 4th St	New Interchange	--	●	\$24,000,000	EJ EC
113	Local/MPO	Edwards St	US 49 to Tuscan Ave	Add Center Turn Lane	2.06	●	\$6,695,000	EJ EC
117	Local/MPO	W 4th St	US 49 to Bouie St	Widen to 4 Lanes	2.47	●	\$8,645,000	EJ EC
139	Local/MPO	Weathersby Rd	Methodist Blvd to W 4th St	Widen to 4 Lanes	0.68	●	\$2,380,000	EJ
114	Local/MPO	Edwards St	Tuscan Ave to James St	Widen to 5 Lanes	0.72	●	\$2,520,000	EJ EC
104	Local/MPO	Sunrise Rd	Indian Springs Rd to MS 42	Widen to 4 Lanes, Realign Intersections	2.25	●	\$7,875,000	--
149	Local/MPO	Old Hwy 24	MS 589 to Old US 11	Add Center Turn Lane	3.72	●	\$12,090,000	EC
101	Local/MPO	Ralston Rd	US 98 Bypass to James St/Old US 49	Add Center Turn Lane	0.99	●	\$3,217,500	EC
204	MDOT	Western Beltway Phase I	Slade Rd to I-59	New 4 Lane Roadway and Interchange Modification	3.51	●	\$48,370,000	--
205	MDOT	Western Beltway Phase II	MS 589 to Slade Rd	New 4 Lane Roadway	4.17	●	\$50,040,000	--
206	MDOT	Western Beltway Phase III	US 98 to MS 589	New 4 Lane Roadway	7.82	●	\$93,840,000	EC
207	MDOT	Outer Western Bypass	US 98 to MS 42	Widen to 4 Lanes, New 4 Lane Roadway	3.28, 5.39	●	\$76,160,000	--
150	MDOT	MS 589	Luther Lee Rd to US 98	Widen to 4 Lanes	6.90	●	\$24,150,000	EC

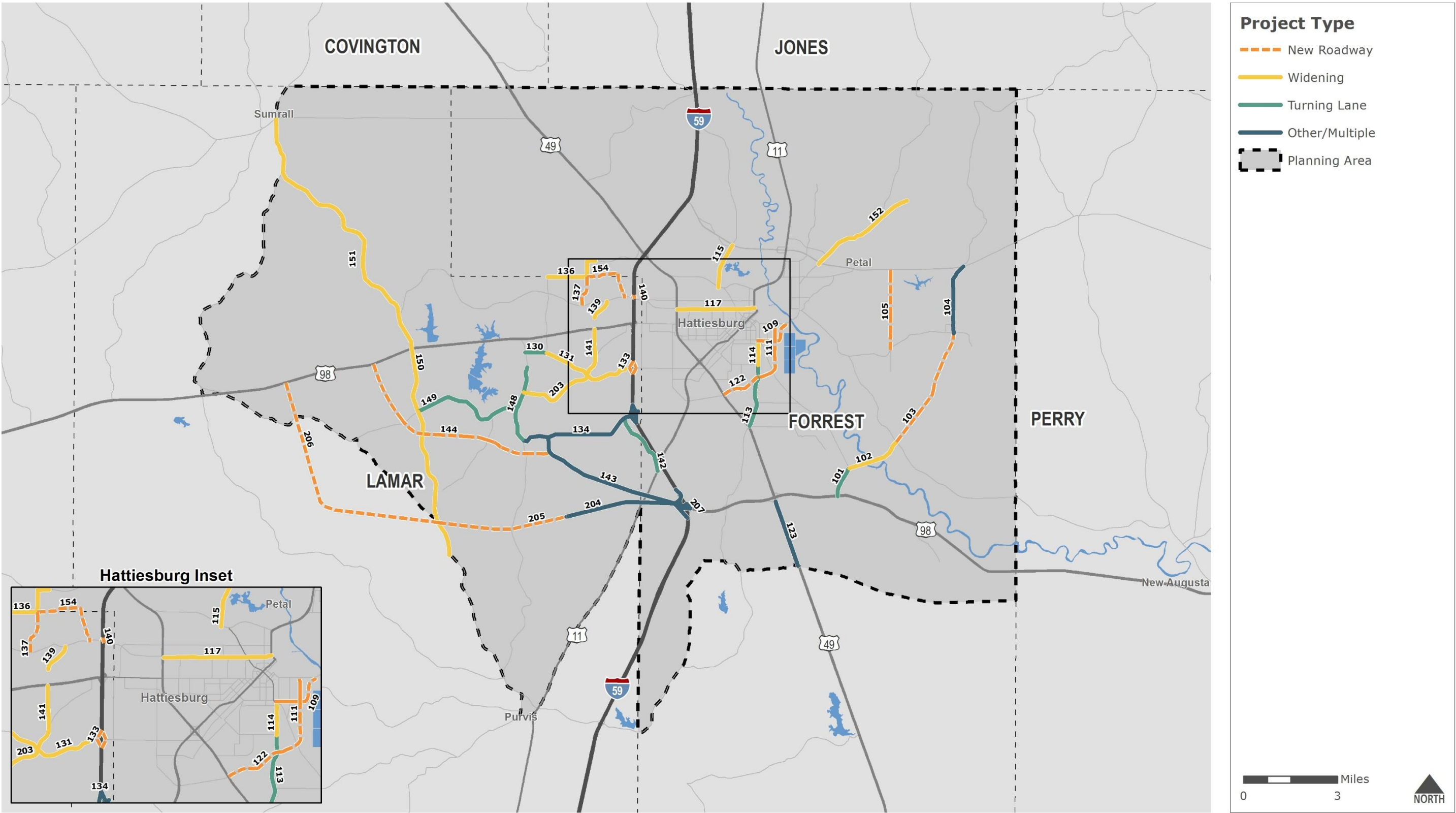
Project ID	Funding	Route	Location	Improvement	Length (mi)	Type	Cost (2020\$)	Design Considerations
151	MDOT	MS 589	US 98 to MS 42	Widen to 4 Lanes	9.49	●	\$33,215,000	EC
134	Local/MPO	Richburg Rd	Old US 11 to I-59	Widen to 4 Lanes, New 4 Lane Roadway, New Interchange	3.20, 0.84	●	\$45,280,000	EC
143	MDOT	US 98 Bypass Extension Phase I	Richburg Rd to I-59	New 4 Lane Roadway and Interchange Modification	5.08	●	\$67,210,000	--
144	MDOT	US 98 Bypass Extension Phase II	US 98 to US 98 Bypass Extension Phase I	New 4 Lane Roadway	7.03	●	\$84,360,000	--

Note: Bicycle and pedestrian improvements should be part of the overall design phase of all projects and included unless restrictions apply consistent with FHWA guidance.

Improvement Type: ● New Roadway ● Widening ● Turning Lane ● Other/Multiple

Design Considerations: EJ – High Concern for Environmental Justice Impacts EC – High Concern for Environmental and Community Impacts

Figure 9.7: Visionary Roadway Capacity Projects



Data Sources: Neel-Schaffer, Inc.; MPO

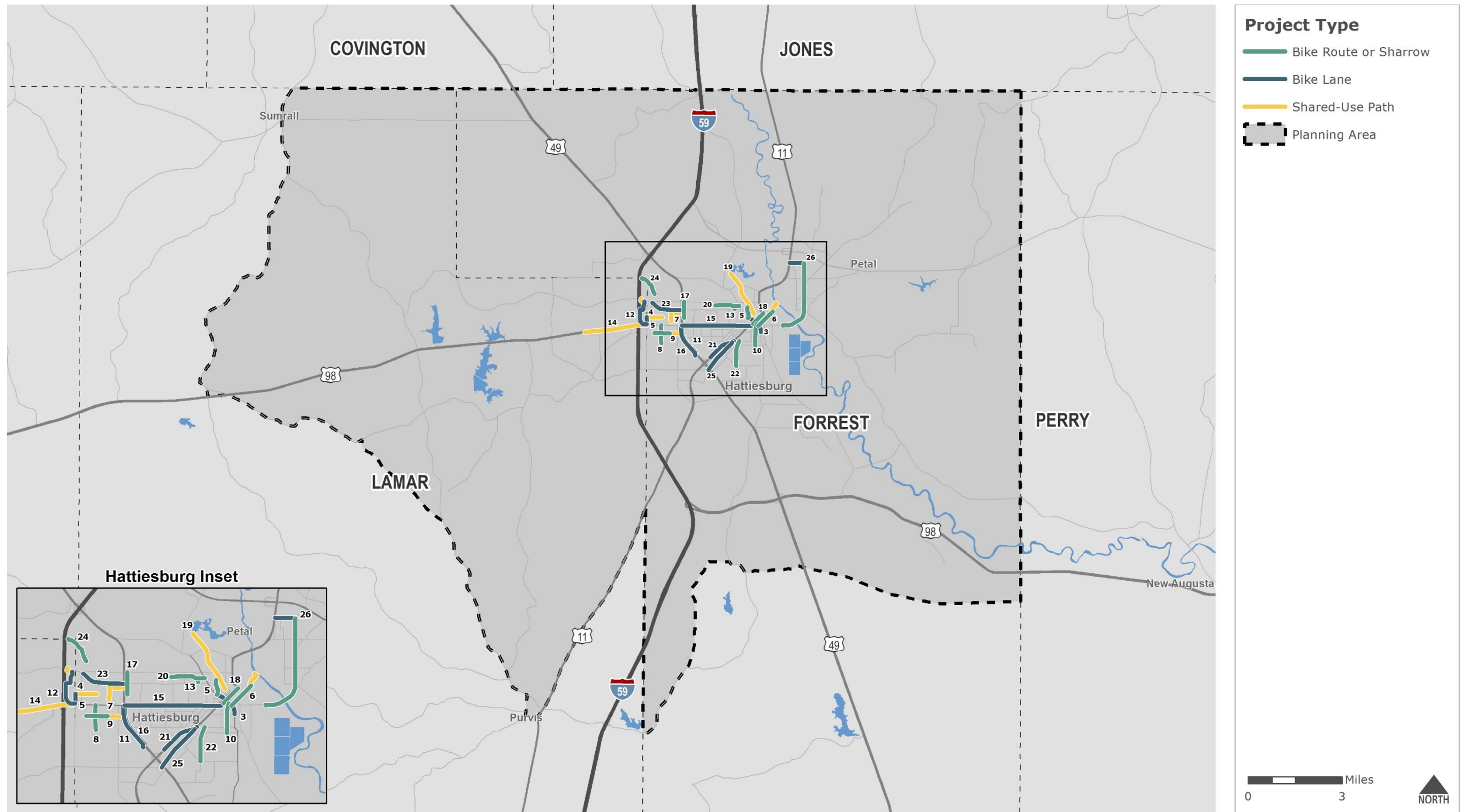
Disclaimer: This map is for planning purposes only.

Table 9.7: Visionary Bicycle and Pedestrian Project Corridors

Project ID	Responsible LPA	Stage	Route	Location	Length (mi)	Type	Cost (2020\$)
BP-3	City of Hattiesburg	Vision	Main St	Jackson St to Southern Ave	0.65	●	TBD
BP-4	City of Hattiesburg	Vision	N 40th Ave and Montague Blvd	N 40th Ave: Hardy St to Montague Blvd; Montague Blvd: N 40th Ave to Ross Blvd	0.74	●●	TBD
BP-5	City of Hattiesburg	Vision	McLeod and Jackson St	McLeod St: Hardy St to Forrest St; Jackson St: Forrest St to E 5th St	0.62	●●	TBD
BP-6	City of Hattiesburg	Vision	Buschman Blvd and Shared Use Path	Buschman Blvd: Main St to Rail ROW; Shared-Use Path: Buschman Blvd to 750 ft from E 5th Ave	1.02	●●	TBD
BP-7	City of Hattiesburg	Vision	Black and Gold Blvd and Golden Ave Sidepaths	Black and Gold Ave: Golden Eagle Ave to Championship Ln; Golden Eagle Ave: Pearl St to W 4th St	0.67	●	TBD
BP-8	City of Hattiesburg	Vision	34th Ave Bike Route- Sharrows	Hardy St to Beverly Ln	0.57	●	TBD
BP-9	City of Hattiesburg	Vision	Arlington Loop	S 37th Ave to US 49	0.87	●●	TBD
BP-10	City of Hattiesburg	Vision	Walnut St	Katie Ave to Main St	0.68	●	TBD
BP-11	City of Hattiesburg	Vision	Memorial Dr Bike Lanes	Hardy St to Arcadia St	1.04	●	TBD
BP-12	City of Hattiesburg	Vision	Thornhill Dr and Shared-Use Path	Thornhill Dr: N 40th Ave to W 4th St; Shared-Use Path: Thornhill Dr to Longleaf Trace	1.17	●●	TBD
BP-13	City of Hattiesburg	Vision	Columbia St and West St	Columbia St: Rawls Ave to Main St; West St: Columbia St to Longleaf Trace (Programmed)	0.79	●	TBD
BP-14	City of Hattiesburg	Vision	Hardy St West	S 40th Ave to Cross Creek Pkwy	2.00	●	TBD
BP-15	City of Hattiesburg	Vision	Hardy St Bike Lane	US 49 to W Front St	2.21	●	TBD
BP-16	City of Hattiesburg	Vision	26th Ave Bike Lanes	Hardy St to Eddy St	1.11	●	TBD
BP-17	City of Hattiesburg	Vision	25th Ave Bike Route	7th St to Quinn St	0.50	●	TBD
BP-18	City of Hattiesburg	Vision	Front Street Bike Route	Forrest St to Gordon St	0.48	●	TBD
BP-19	City of Hattiesburg	Vision	Old RR/ROW Shared-Use Path	Bouie River Shared Use Path to Mobile St	1.51	●	TBD
BP-20	City of Hattiesburg	Vision	Columbia St Bike Route	Rawls Ave to Main St	0.79	●	TBD
BP-21	City of Hattiesburg	Vision	W. Pine St/Broadway Bike Lane	Service Rd to 83 ft from 7th Ave	0.94	●	TBD
BP-22	City of Hattiesburg	Vision	MLK Ave Bike Route	Hall Ave to Tuscan Ave	0.80	●	TBD
BP-23	City of Hattiesburg	Vision	4th St Bike Lane	N 38th Ave to US 49	1.01	●	TBD
BP-24	City of Hattiesburg	Vision	Beverly Hills Rd Bike Route	Campbell Dr to N 37th Ave	0.69	●	TBD
BP-25	Town of Petal	Vision	W. Pine St	Lincoln Rd to Broadway Dr	1.16	●	TBD
BP-26	Town of Petal	Vision	Main St Petal	Main St: E Hardy St to W 1st Ave; W 1st Ave: Main St to Rails with Trails Path	2.94	●●	TBD

Improvement Type: ● Bike Lane ● Bike Route ● Shared-Use Path

Figure 9.8: High-Priority Bicycle and Pedestrian Project Corridors



Data Sources: Neel-Schaffer, Inc.; MPO

Disclaimer: This map is for planning purposes only.

Appendix: Public/Stakeholder Outreach Documentation

Round 1 Documentation

Summary of outreach efforts will be provided at end of engagement process.

Multiplan Website

Summary of outreach efforts will be provided at end of engagement process.

Quarterly Newsbytes

Summary of outreach efforts will be provided at end of engagement process.

Social Media

Photos from City of Hattiesburg-Government's post in Timeline Photos

JOIN US FOR TRANSPORTATION TALK.

Tuesday, March 26
Lamar Park Comm. Center
226 Pinewood Drive

Thursday, March 28
Historic Train Depot
308 Newman Street

MSTRANSPORTATIONPLAN2045.COM

Like Comment Share Tag Photo Options Send in Messenger

City of Hattiesburg-Government
March 14, 2019

Hey, Hattiesburg.

If you are passionate about the future of our state's transportation features, we've got two opportunities for you!

MULTIPLAN 2045, a concerted effort between Hattiesburg MPO, Mississippi Department of Transportation and other partnering agencies, will host two open house sessions where you can provide your feedback about Hattiesburg's traffic, public transit, accessible multi-use paths, sidewalks, airports, rail transportation and more.

Join us at either session:
Tuesday, March 26
Lamar Park Community Center (226 Pinewood Drive)

Thursday, March 28
Historic Train Depot (308 Newman Street).

Each public meeting will be from 4 - 6 pm. We look forward to seeing you there! For more about MULTIPLAN 2045 and how the feedback gathered from these meetings will be used, visit: <http://mstransportationplan2045.com/about/>

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City of Hattiesburg-Government
 March 26, 2019 ·

Tonight is the night!

At 6 p.m., the [Mississippi Department of Transportation](#) and Hattiesburg MPO will host its first of two public meetings to hear feedback from residents regarding the long-range plan for transportation.

Join us at Lamar Park Community Center tonight (Tuesday, March 26) or on Thursday, March 28 at the Train Depot.

TIPLAN 2045, visit [mstransportationplan2045.com](#).

JOIN US FOR TRANSPORTATION TALK.

Tuesday, March 26
 Lamar Park Comm. Center
 226 Pinewood Drive

2045
MULTIPLAN
 THE FUTURE IN MOTION

MDOT
 MISSISSIPPI DEPARTMENT OF TRANSPORTATION

MPO
 HATTIESBURG PETAL-FORREST-LAMAR METROPOLITAN PLANNING ORGANIZATION

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Hub City Spokes Publication

Hattiesburg Publishing, Inc.

103 N. 40th Ave. • Hattiesburg, MS 39401
(601) 268-2331 tel • (601) 268-2965 fax

Proof of Publication

THE STATE OF MISSISSIPPI, LAMAR COUNTY, FORREST COUNTY
Personally appeared before me, the undersigned person, representing The PineBelt NEWS, a weekly newspaper published in Lamar County and Forrest County, Mississippi, who, being duly sworn, says that the notice, a true copy of which is hereto annexed, appeared in the issues of said newspapers as follows:

Total # of Words: 209 Published 1 times

Date 1st Published: Mar 7 Amt: 25.08

Date 2nd Published: _____ Amt: _____

Date 3rd Published: _____ Amt: _____

Date 4th Published: _____ Amt: _____

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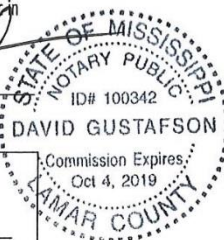
Proof of Publication Fee: 3.00

TOTAL: 28.08

(signed) *Yvette Banks*
The PineBelt NEWS

Sworn to and subscribed before me in my Presence, this 7th
day of March, 2019, a Notary Public in
and for the County of Lamar, State of Mississippi:

(signed) *David Gustafson*

**FOR OFFICE USE ONLY:**

- ☐ Em P: 02/27
- ☐ App: 02/27
- ☐ File Name: CoH - MULTIPLAN
- ☐ Invoice #: 93342
- ☐ Inv. Crt/Mtd: Feb 27
- ☐ Pymt Rec.d: _____
- ☐ POP sent: _____

NOTICE OF PUBLIC HEARING

HATTIESBURG-PETAL-FORREST-LAMAR METROPOLITAN PLANNING ORGANIZATION
MISSISSIPPI'S LONG-RANGE TRANSPORTATION PLAN (MULTIPLAN)

The Hattiesburg-Petal-Forrest-Lamar Metropolitan Planning Organization (HPFL/MPO) and the Mississippi Department of Transportation (MDOT) invite citizens to participate in the development of the state's long-range transportation plan. Come-and-go style public meetings are scheduled as follows:

Tuesday, March 26, 2019, 4 – 6 p.m.
Lamar Park Community Center
226 Pinewood Drive, Hattiesburg, MS 39402.

Thursday, March 28, 2019, 4 – 6 p.m.
Hattiesburg Historic Train Depot
308 Newman Street, Hattiesburg, MS 39401

Mississippi's Unified Long-Range Transportation Plan (MULTIPLAN) is comprehensive in nature. It guides statewide planning efforts by helping answer the questions, "What do we want from our transportation system over the next 25 years, and how can we achieve it?"

The HPFL/MPO is responsible for transportation planning in the urbanized areas of Forrest and Lamar counties. The HPFL/MPO coordinates the transportation planning processes and programs that become a part of the MULTIPLAN.

For additional information about the HPFL/MPO, visit hattiesburgms.com/mpo. For additional information about

MULTIPLAN 2045, visit mstransportation-plan2045.com.

Individuals requiring auxiliary aids or alternative languages and wishing to participate in the meetings should call 601.359.7685 no later than five days prior to a meeting.

CITY OF HATTIESBURG,
MISSISSIPPI

BY:
CITY CLERK

Toby Barker, Mayor

Published Mar 7, 2019

Outreach to Underserved Communities

Summary of outreach efforts will be provided at end of engagement process.

Online Survey

Summary of outreach efforts will be provided at end of engagement process.

Public Meetings

Complete summary of outreach efforts will be provided at end of engagement process.

Stakeholder Meetings

Complete summary of outreach efforts will be provided at end of engagement process.

Public Meeting Sign-in Sheet – Round 1

2045 MULTIPLAN Open-House Public Meeting Sign-In Sheet

Hattiesburg-Petal-Forrest-Lamar Metropolitan Planning Organization | Thursday, March 28, 4-6 p.m.
Hattiesburg Historic Train Station | 308 Newman Street | Hattiesburg, MS 39401 (Forrest County)



Name	Affiliation	Email	Telephone
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Michael Moss	resident + Lamar County	mossb@moss1.com	702-325-8966
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Erica Robinson	Robinson Studio		
Rhoda Pickett	Resident	rhodapickett@gmail.com	851-767-8952
Hadiljah Muhammad	Resident	Kaminah@yahoo.com	317-223-6935

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Public Meeting Sign-in Sheet – Round 1 continued

2045 MULTIPLAN Open-House Public Meeting Sign-In Sheet

Hattiesburg-Petal-Forrest-Lamar Metropolitan Planning Organization | Thursday, March 28, 4-6 p.m.
Hattiesburg Historic Train Station | 308 Newman Street | Hattiesburg, MS 39401 (Forrest County)



Name	Affiliation	Email	Telephone
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Dillon Morris	citizen	dillon-morris@comcast.net	601-466-7649
Robert Walker	neel-schaffer	robert-walker@neel-schaffer.com	601-624-7713

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Public/Stakeholder Outreach Record

Public Meeting Sign-in Sheet – Round 1 continued

2045 MULTIPLAN Open-House Public Meeting Sign-In Sheet

Hattiesburg-Petal-Forrest-Lamar Metropolitan Planning Organization | Tuesday, March 26, 4-6 p.m.
Lamar Park Community Center | 226 Pinewood Drive | Hattiesburg, MS 39402 (Lamar County)



Name	Affiliation	Email	Telephone
Robert Walker	Neel-Schaffer	robert.walker@neel-schaffer.com	
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Shanta Russell	Public	shantarussell71@gmail.com	601-527-7115
Erica Robinson	Pos. Studio		

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Public/Stakeholder Outreach Record

Stakeholder Meeting Sign-in Sheet – Round 1

2045 MULTIPLAN Stakeholder Meeting Sign-In Sheet

Hattiesburg-Petal-Forrest-Lamar Metropolitan Planning Organization | Thursday, March 28, 1-3 p.m.
Hattiesburg Historic Train Station | 308 Newman Street | Hattiesburg, MS 39401 (Forrest County)



Name	Affiliation	Email	Telephone
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Tom Barker	COH	tbarker@hattiesburgms.com	545-4501
Jeffrey George	COH	jrg@hattiesburgms.com	601-620-3388
Corey Procter	Forrest Co.	cprocter@co.forrest.ms.us	601-524-6162
Petra Winga	TFR CDC	pwings@outlook.com	601-466-7421

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[illegible]

MDOT
Michigan Department of Transportation



Public/Stakeholder Outreach Record

Stakeholder Meeting Sign-in Sheet – Round 1 Continued

2045 MULTIPLAN Stakeholder Meeting Sign-In Sheet

Hattiesburg-Petal-Forrest-Lamar Metropolitan Planning Organization | Tuesday, March 26, 1-3 p.m.
Lamar Park Community Center | 226 Pinewood Drive | Hattiesburg, MS 39402 (Lamar County)



Name	Affiliation	Email	Telephone
Robert Walker	Neel-Schaffer	robert.walker@neel-schaffer.com	601-624-7713
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Stephanie Hall	City of Hattiesburg	shall@hattiesburgms.com	601-545-4675
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Taylor Marcantel	Neel-Schaffer	taylor.marcantel@neel-schaffer.com	
Vijay Kumada	Neel-Schaffer	vijay.kumada@neel-schaffer.com	337-232-6111

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Round 2 Documentation

Summary of outreach efforts will be provided at end of engagement process.

Multiplan Website

Summary of outreach efforts will be provided at end of engagement process.

Quarterly Newsbytes

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