

WHAT IS SAFE MOBILITY 2050?



The Johnson City Metropolitan Transportation Planning Organization (MTPO) is updating its Metropolitan Transportation Plan (MTP) to guide transportation investments across the region. The latest update, called Safe Mobility 2050, looks 25 years ahead to shape the future of transportation in the Johnson City MTPO planning area. As part of this effort, the plan includes a regionwide safety analysis to identify high-risk locations for all modes of travel and recommend improvements to reduce crashes and improve safety for everyone.

WHAT IS SAFE MOBILITY 2050?

- ✓ **Guides** local transportation investments over the **next 25 years** while **meeting federal and state planning requirements**.
- ✓ **Considers all modes** – driving, walking, biking, transit, and freight – **to support** how residents, workers, and visitors live, work, and travel.
- ✓ **Documents** existing conditions, **identifies** future needs, and **recommends** improvements using data and community input.
- ✓ **Prioritizes projects and strategies** to create a more connected, efficient, and reliable transportation system.
- ✓ **Emphasizes safety** by identifying high-risk locations and **prioritizing improvements** to reduce serious crashes for all users.

SAFE MOBILITY 2050 DRAFT GOALS



Improve Safety and Security Throughout the MTPO Area Transportation System



Mitigate Traffic Congestion Along Major Routes in the MTPO Area



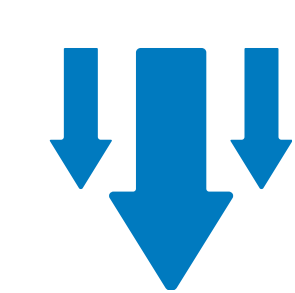
Promote Sustainable Economic Growth and Livability by Enhancing the MTPO Area Transportation System



Enhance Regional Access To and From the MTPO Area

GOALS AND OBJECTIVES

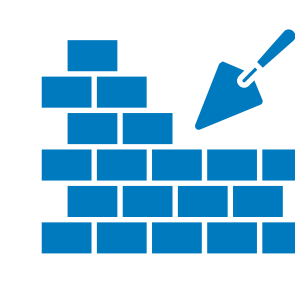
1 Improve Safety and Security Throughout the MTPO Area Transportation System



Reduce **crash rates** with serious injuries and fatalities



Reduce **secondary traffic crashes**



Establish initiatives (projects and programs) to improve the safety and security of vulnerable roadway users (e.g., pedestrians, cyclists, transit riders, and the young and old)

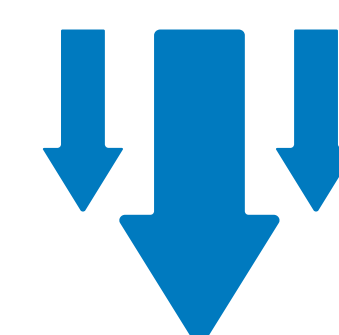


Encourage partnerships with other transportation and non-transportation agencies to enhance transportation safety and security

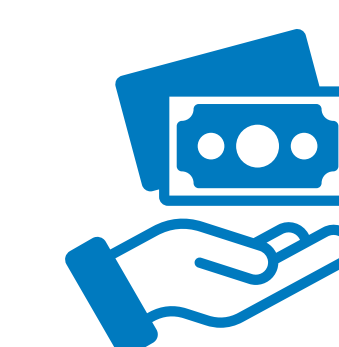


Increase the **transportation system's resilience** to climate change and extreme weather

2 Mitigate Traffic Congestion Along Major Routes in the MTPO Area



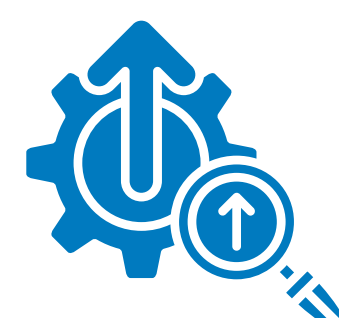
Reduce **travel delays** between major areas of attractions in the MTPO study area



Seek **cost-effective management solutions** and new technologies as a means of addressing congestion, reducing transportation delay, improving travel time reliability, and improving system operations



Increase **transit and other transportation demand management strategies**



Enhance the flow of raw materials and manufactured products

GOALS AND OBJECTIVES

3 Promote Sustainable Economic Growth and Livability by Enhancing the MTPO Area Transportation System



Maintain what we have – take a “state of good repair” approach to our community’s transportation assets



Invest in the integration and connectivity of the transportation system, across and between modes, for people and freight, to support sustainable economic development and improve quality of life



Promote alternative forms of transportation (such as walking, biking, and transit)



Support transportation investments which minimize adverse impacts of surface transportation to historical, social, cultural, and natural environments, including stormwater impacts, and reduce transportation impacts on air-quality

4 Enhance Regional Access to and From the MTPO Area



Maintain and improve access to regional areas outside of the MTPO study area



Support transportation investments and policies that work to create jobs and improve access to people, tourism, places, and goods while embracing access management and corridor management strategies that preserve the long-term functionality of a roadway’s capacity and safety



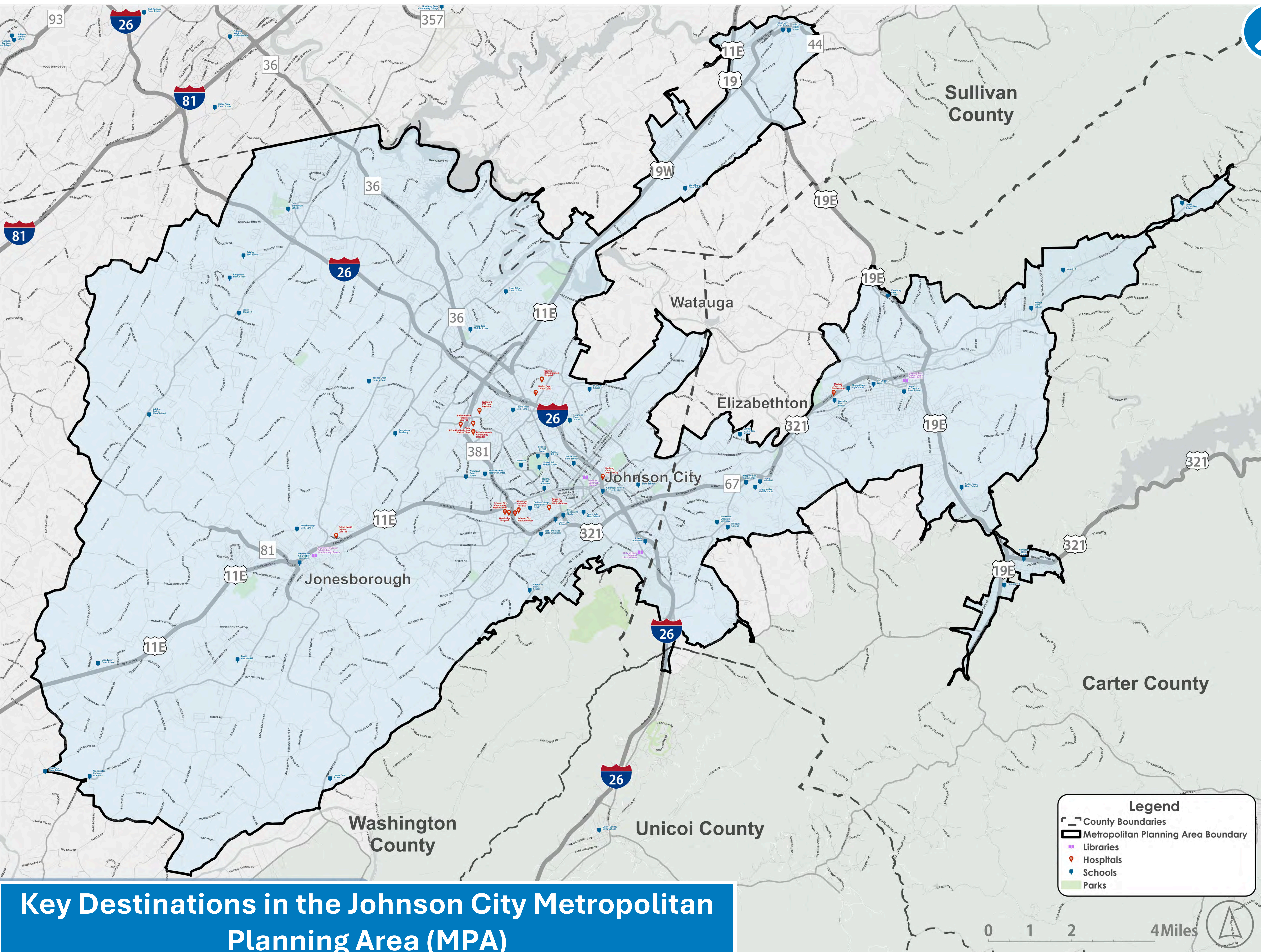
Strategically target transportation investments to areas supportive of and conducive to growth and redevelopment initiatives

PRIORITIZE OUR GOALS

Help Shape Our Priorities: Your input will help guide how these goals are prioritized.
Please rate each goal as **High**, **Medium**, or **Low** priority based on what is most important to you

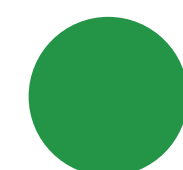
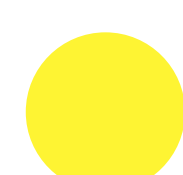
GOAL	High	Medium	Low
 Improve Safety and Security Throughout the MTPO Area Transportation System			
 Mitigate Traffic Congestion Along Major Routes in the MTPO Area			
 Promote Sustainable Economic Growth and Livability by Enhancing the MTPO Area Transportation System			
 Enhance Regional Access To and From the MTPO Area			

DAILY DESTINATIONS



Why this matters: Your daily trips — to work, school, shopping, or recreation — shape how the transportation system is used and where improvements are needed most.

Show us where you go!
Place a dot on the map where you regularly travel. This could be for work, shopping, school, health care, or other daily activities.
(You can place multiple dots if you have more than one regular destination.)

-  Work or job site
-  Parks, gyms, or recreation
-  Grocery stores or shopping
-  Doctor's office or hospital
-  Schools
-  Restaurants or entertainment

Key Destinations in the Johnson City Metropolitan Planning Area (MPA)

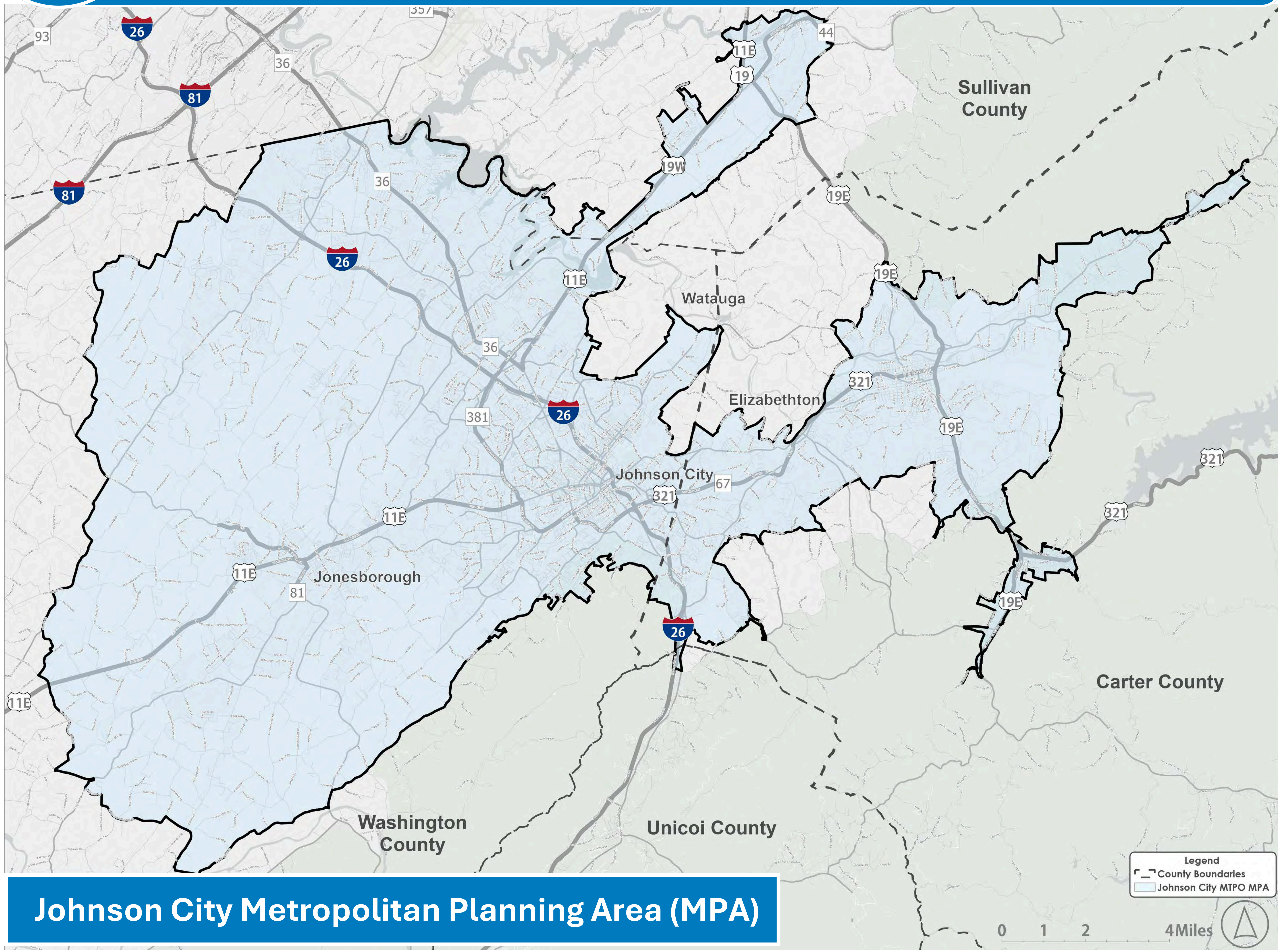
HOW OUR REGION IS GROWING



SAFE MOBILITY 2050
METROPOLITAN TRANSPORTATION
& SAFETY PLAN



Why this matters: The region is growing, which increases travel demand and puts pressure on roads, intersections, and infrastructure. Your input will help us understand where growth is having the biggest impact.



Johnson City Metropolitan Planning Area (MPA)

Tell us where growth is impacting you.
Place a sticky note on the map where you've seen recent growth or development.
(Label the location with what type of development has been added and how it has impacted your travel.)



The population of the Johnson City MPA was 177,878 in 2024.



Population in the Johnson City MPA has grown by 6% between 2021 and 2024.



Employment in the Johnson City MPA has grown by 7% since 2019.



Growth often occurs in concentrated areas, creating localized transportation challenges.

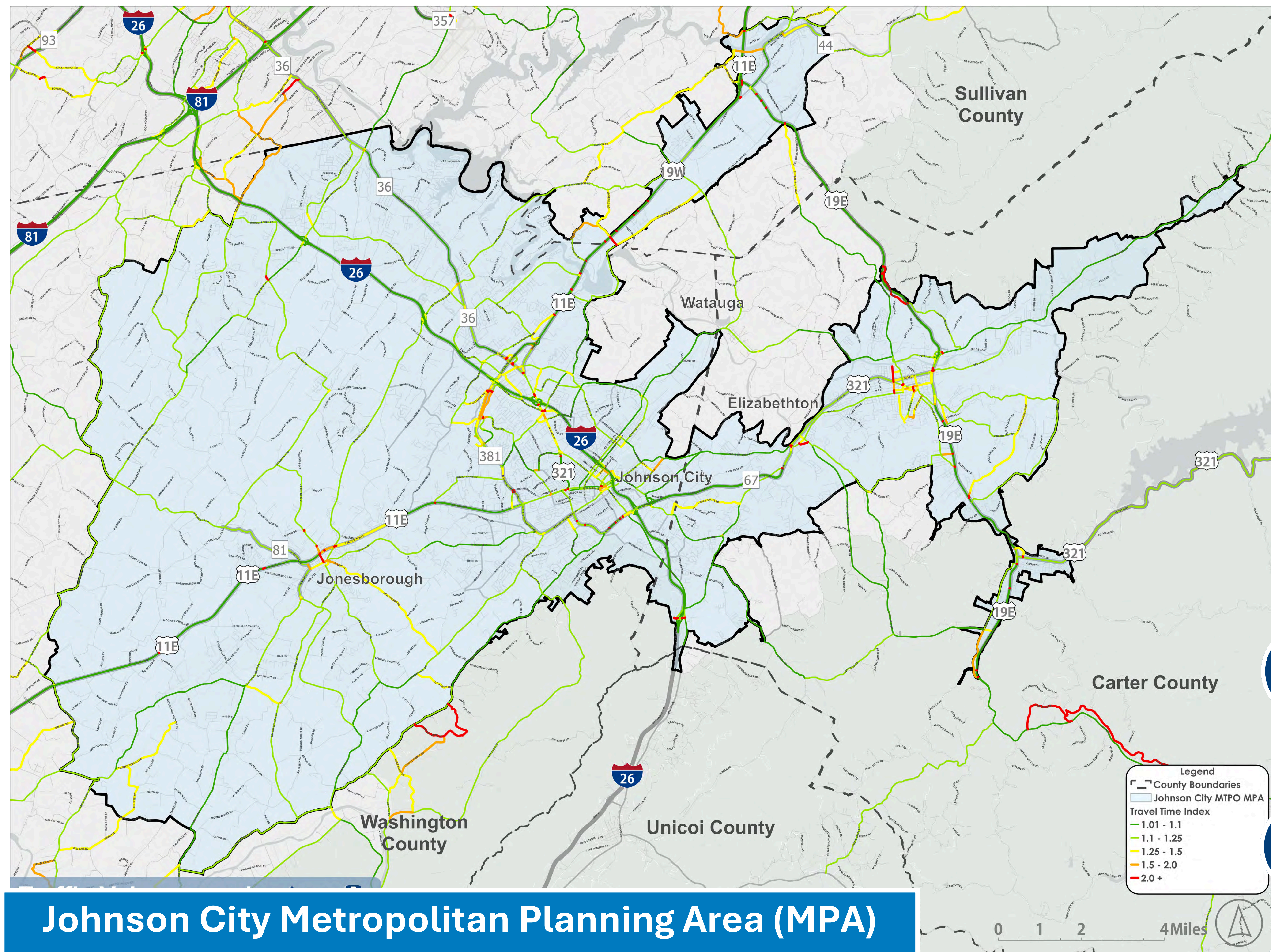
TRAFFIC PERFORMANCE DURING PEAK HOURS



SAFE MOBILITY 2050
METROPOLITAN TRANSPORTATION
& SAFETY PLAN



Why this matters: Understanding where travel takes longer during busy periods helps identify where improvements can reduce delays and make trips more reliable.



Johnson City Metropolitan Planning Area (MPA)
2025 Weekday PM Peak Hour (4–8 PM) TTI

What is the Travel Time Index (TTI)?

Travel Time Index (TTI) compares how long a trip takes during typical peak-period traffic conditions to how long the same trip would take when traffic is light.
For example: A TTI of 1.5 means the trip takes 50% longer than normal during the PM peak period. A 10-minute trip would take 15 minutes.

Ratio	Description	Roadway Density
1.1 - 1.25	Free-flow or light traffic	
1.25 - 1.5	Light to moderate congestion	
1.5 - 2.0	Moderate to heavy congestion	
>2.0	Severe congestion	

 Interstates may show lower values because this map reflects average conditions over several hours (4 PM–8 PM). Congestion may occur regularly, but it is usually limited to shorter periods.

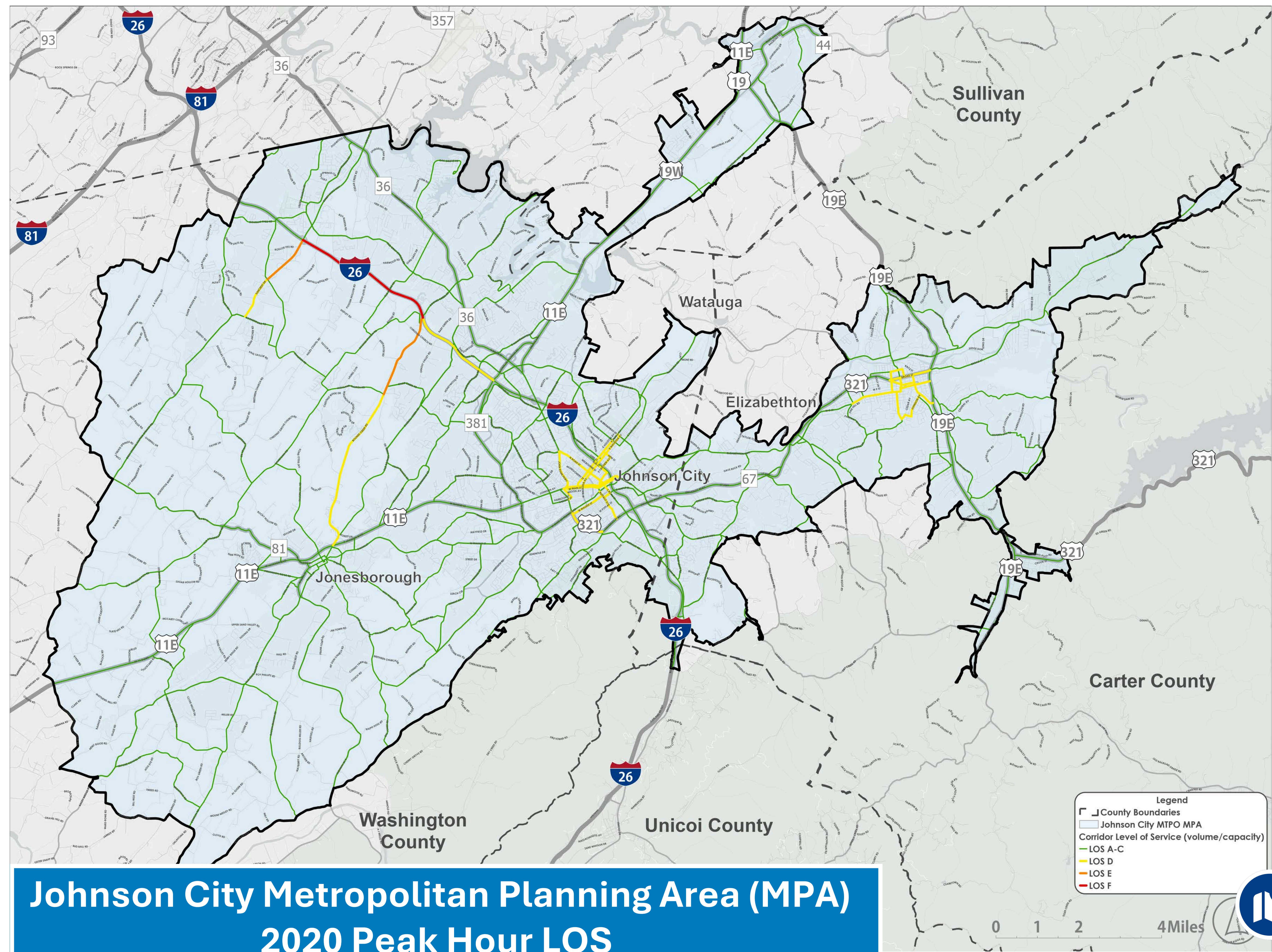
 Congestion is concentrated along key high-demand corridors

 Regional PM peak TTI average: ~1.46
(Trips can take almost 50% longer during the PM peak)

LEVEL OF SERVICE



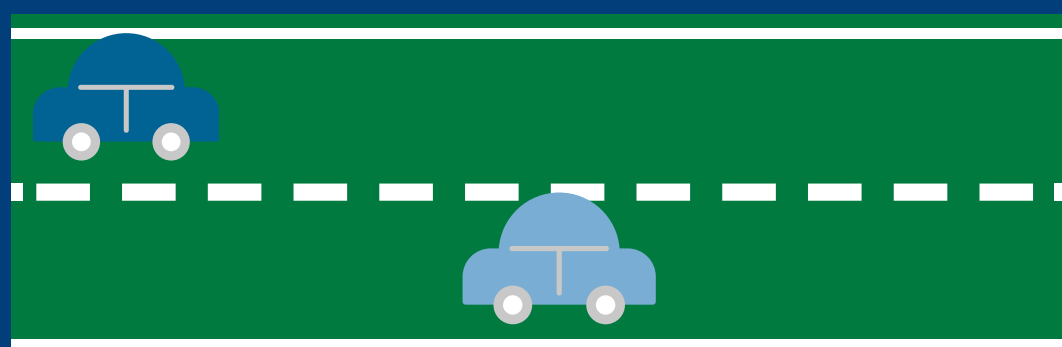
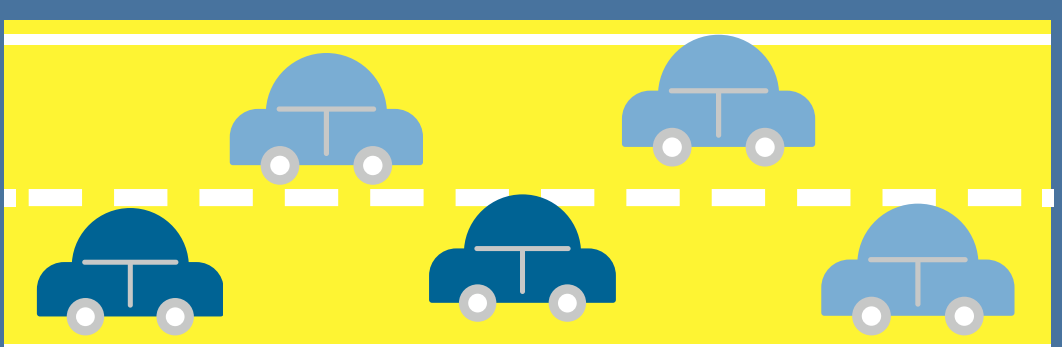
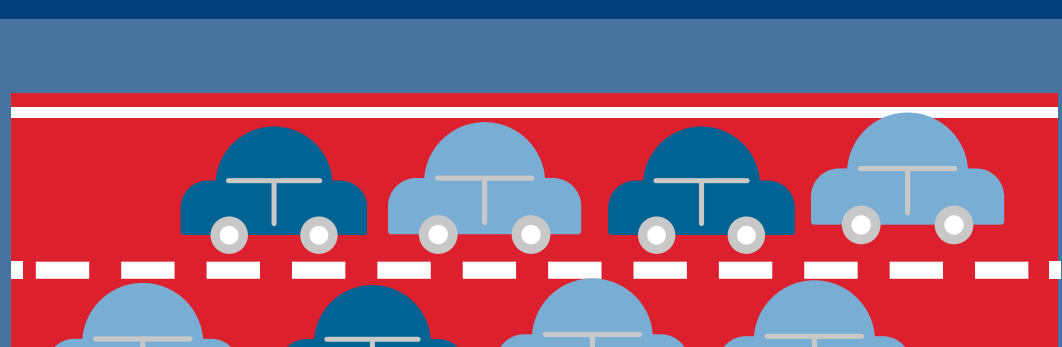
Why this matters: Understanding roadway Level of Service (LOS) helps identify where traffic conditions become congested or unstable, highlighting where improvements can improve traffic flow and reduce delays.



Johnson City Metropolitan Planning Area (MPA)
2020 Peak Hour LOS

What Does Level of Service (LOS) (Volume/Capacity) Mean?

Level of Service (LOS) describes how well a roadway is operating by comparing traffic demand to its capacity. It is based on the volume-to-capacity ratio, which compares how many vehicles are using the road (volume) to how many it can handle (capacity). The result reflects how congested the roadway feels, with LOS A indicating free-flow conditions and LOS F representing severe congestion.

LOS	Description	Roadway Density
A - C	No delays	
D	Minimal delays	
E	Busy but acceptable	
F	Frequent slowing, stopping, and longer delays	

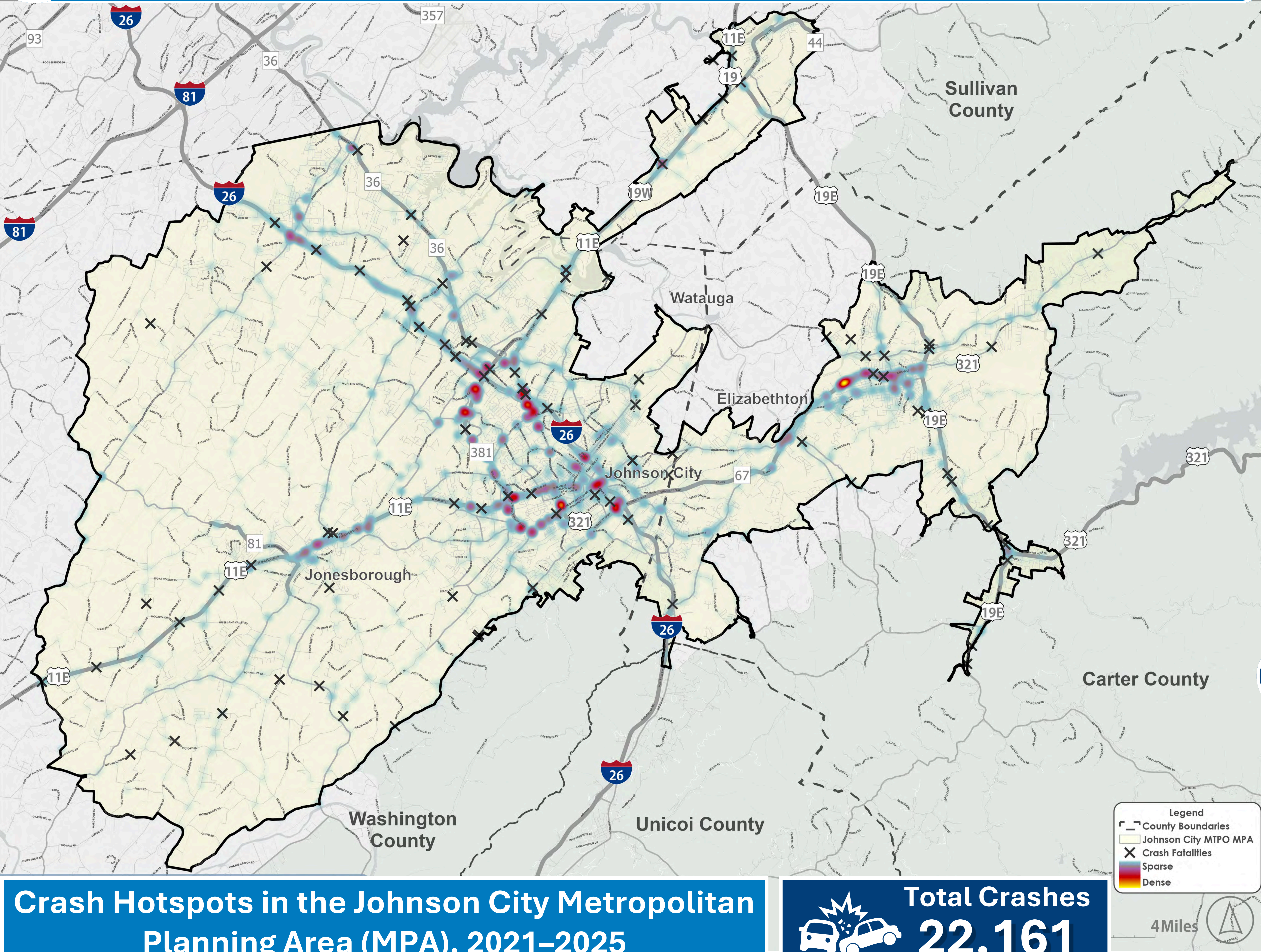
 Congestion is characterized by traffic moving slower, trips taking longer, and vehicles starting to back up.

 This map shows overall roadway performance based on model data. It highlights general congestion patterns but may not capture localized congestion at intersections or bottlenecks. The travel time index map provides a more detailed view of where delays are regularly experienced.

WHERE CRASHES ARE OCCURRING

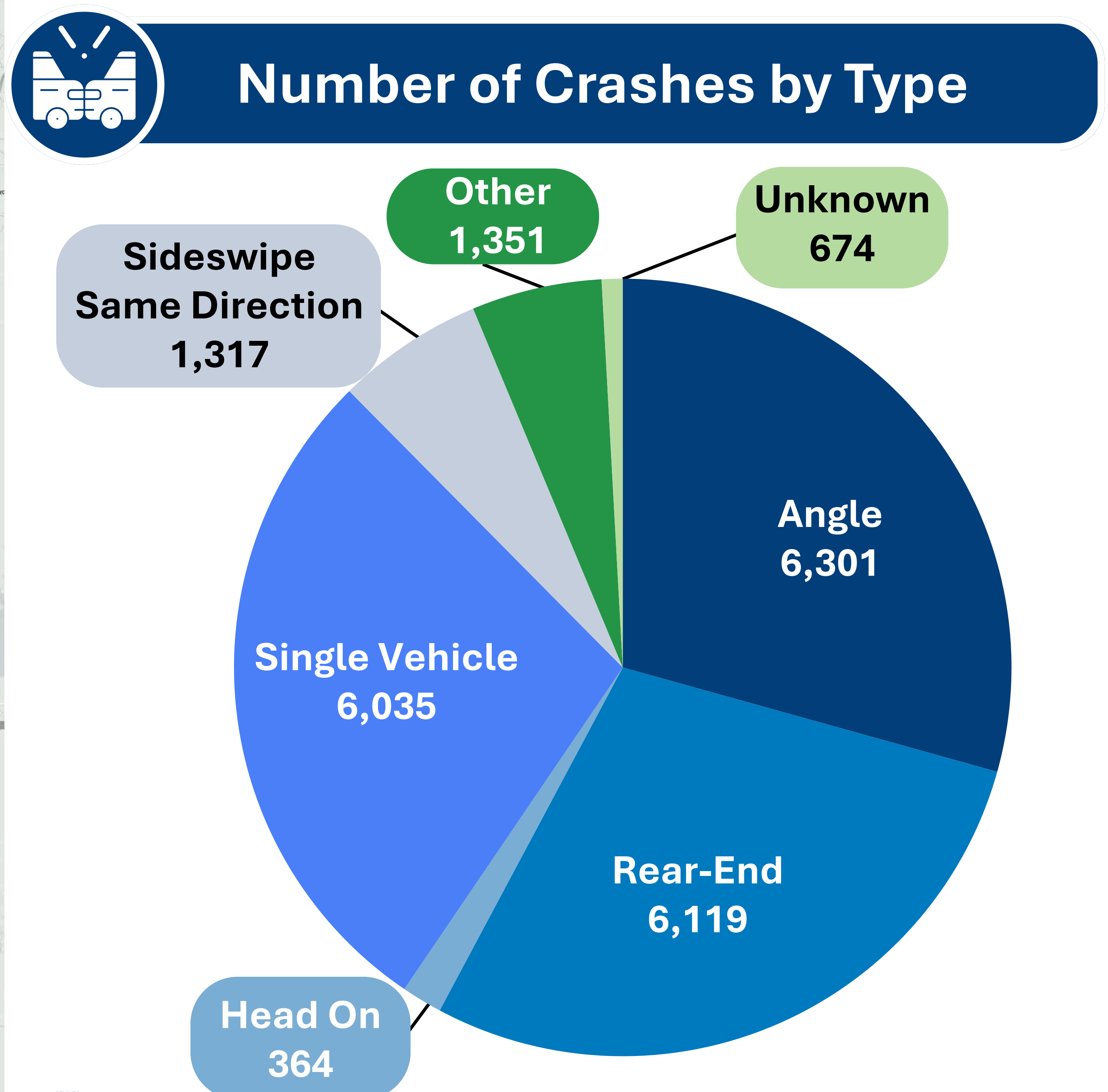


Why this matters: Understanding where and how crashes occur helps target improvements that can reduce injuries and save lives.





50% of all crashes occurred on State Routes, which tend to carry higher traffic volumes and serve as key travel corridors.





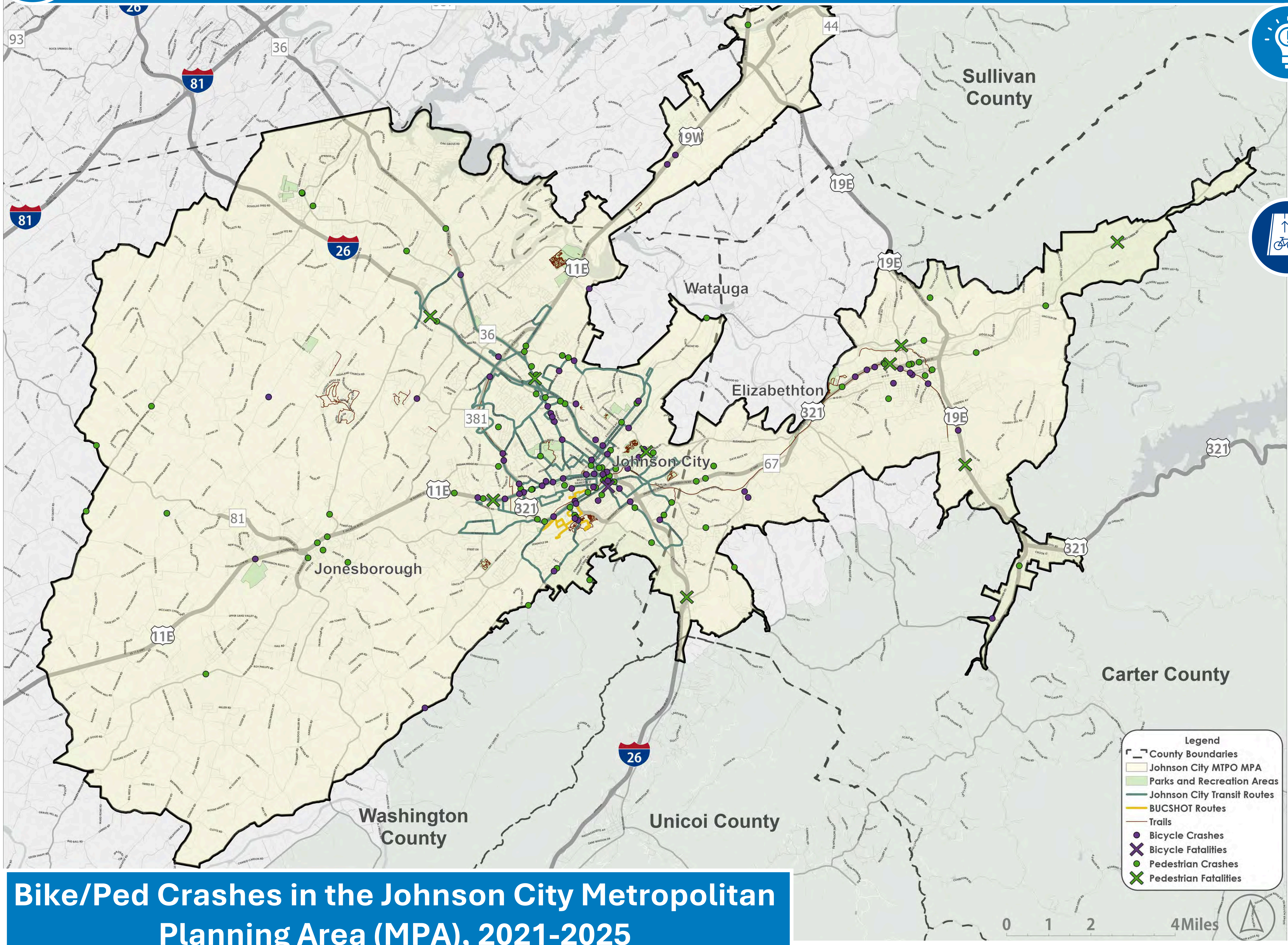
Number of Crashes by Severity

Property Damage	18,417
Possible Injury	2,297
Suspected Minor Injury	1,018
Suspected Serious Injury	366
Fatal	89

BICYCLE AND PEDESTRAIN SAFETY



Why this matters: People walking and biking are more vulnerable in crashes. Identifying where these crashes occur helps prioritize improvements that can reduce injuries and save lives.



"Multimodal" refers to bicycle, pedestrian, and transit trips



Not all areas with bicycle and pedestrian activity have dedicated infrastructure, highlighting opportunities to improve multimodal connections.

Total Pedestrian Crashes - **110**



Fatal - **9**
Serious Injury - **23**

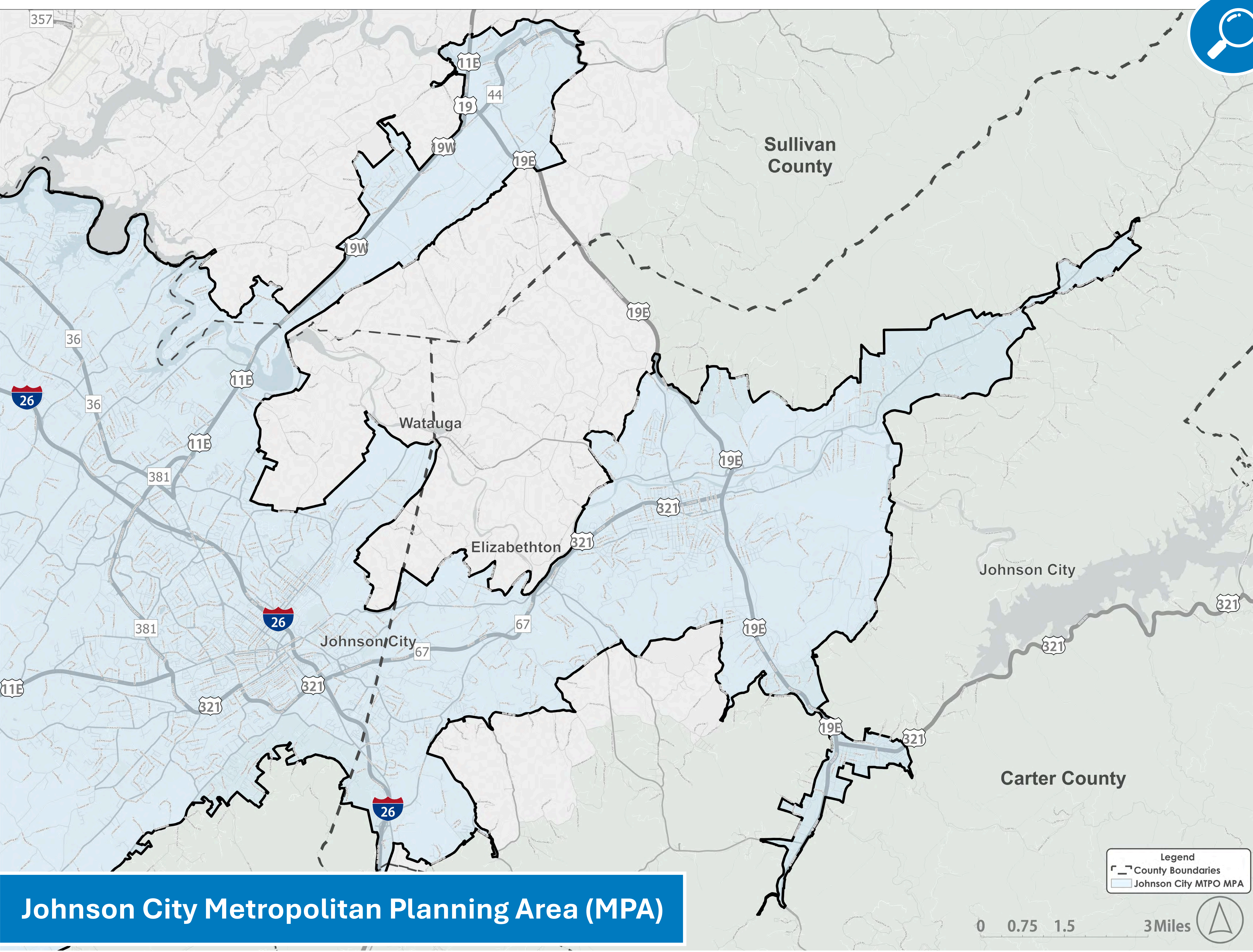
Total Bicycle Crashes - **76**



Fatal - **1**
Serious Injury - **9**

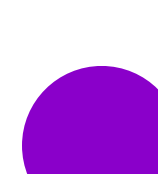
Bike/Ped Crashes in the Johnson City Metropolitan Planning Area (MPA), 2021-2025

IDENTIFY TRANSPORTATION NEEDS



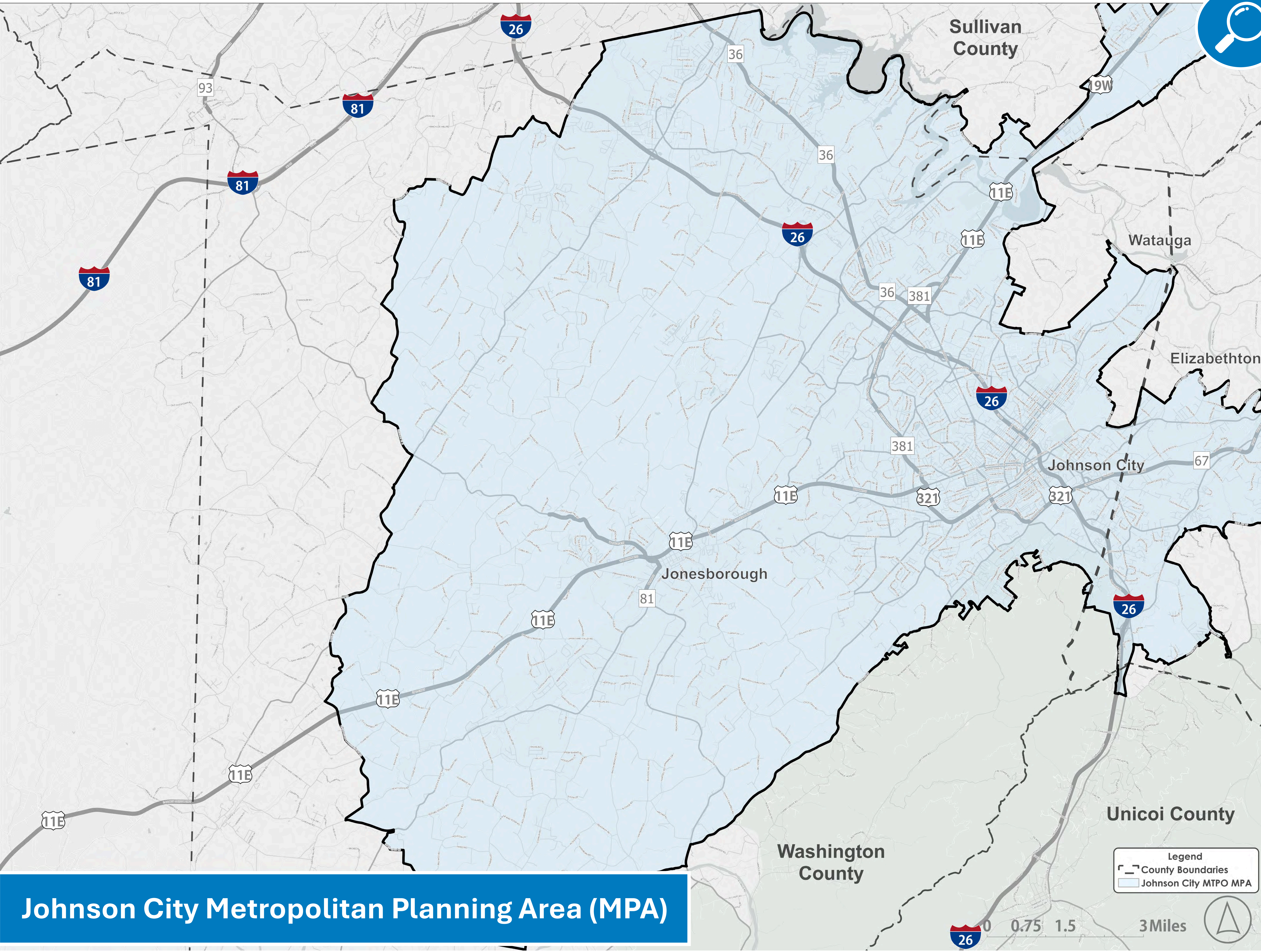
Why this matters: Local knowledge helps pinpoint where improvements are needed most and will help guide future investments to improve safety, mobility, and access.

Tell us where you experience transportation challenges or where improvements are needed. Place a colored dot on the map to show the location of where you've noticed issues or would like to see improvements. Use the color that best matches your concern.

-  **Safety**
-  **Traffic**
-  **Transit**
-  **Pedestrian**
-  **Biking**
-  **Railroad**
-  **Truck/Freight**
-  **General Comment**

Johnson City Metropolitan Planning Area (MPA)

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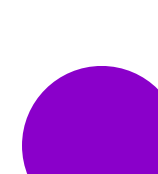


Johnson City Metropolitan Planning Area (MPA)



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