



Western Piedmont Council of Governments

Greater Hickory Metropolitan Planning Organization

Technical Coordinating Committee

(TCC) Wednesday, August 28, 2024, 1:00 PM

WPCOG Offices—1880 2nd Ave NW

wpcog.org/metropolitan-planning-org

Agenda Item	Presenter	Attachment	Action
Call to Order /Introductions	Randy Williams		
Consent Agenda Items:			
A. Minutes of July 24, 2024 Meeting			
B. Transportation Improvement Program Revisions for Release	Randy Williams	Attachment I	Approve Consent Agenda Items
C. Congestion Management Process Report			
D. Greenway Public Transportation Safety Performance Targets for 2024			
Transportation Improvement Program Revisions for Approval	Averi Ritchie	Attachment II	Adopt by Resolution
Transportation Integrity Explorer	Andrew Webb & Kelly Christensen	Attachment III	Adopt by Resolution
Regional Tier Local Input Point Scores—Check-in	Averi Ritchie	Attachment VI	Approve List
NCDOT Updates			
Division 11	Sean Sizemore		
Division 12	Anil Panicker		
Division 13	Hannah Cook		
Transportation Planning Division	Reuben Crummy		
Integrated Mobility Division	Bryan Lopez		
Reminders	Averi Ritchie		
Public Comment / Announcements	Randy Williams		
Adjournment			
Next Meeting: September 25, 2024	Randy Williams		

Call to Order and Introductions: Chair Williams called the meeting to order at 1:04 PM and welcomed all present. Introductions were conducted, followed by the Introduction of online viewers.

Approval of Remote Participation: Online attendees were Mario Schlarandis, Bonnie Caudle, Hannah Williams, Grayson Molinari, Hannah Smith and Steve Cannon. Chair Williams canvassed the committee for any objections to online participants. Hearing none, online participation was approved by consensus.

Action Items:

- I. **Approval of Minutes:** Chair Williams called for a motion to approve the TCC Minutes from June 26th, 2024. Upon a motion from Mr. Glines and a second from Mr. Marshall, the Committee unanimously voted to approve the minutes from June 26th, 2024.
- II. **Transportation Improvement Program Revisions for Approval:** Ms. Ritchie presented Transportation Improvement Program (TIP) revisions for approval. The revisions included several delays regarding ROW acquisition and construction dates. Upon a motion by Mr. Greer and a second by Mr. Glines, the revisions were approved.
- III. **Transportation Improvement Program Revisions for Release:** Ms. Ritchie presented TIP revisions for release. These revisions included project delays and construction schedule adjustments within the region.
- IV. **Prioritization – Regional Tier Scores/ Local Input Point Assignment:** Ms. Ritchie presented an overview of the STIP Prioritization process for Regional Tier projects. She detailed the methodology used for scoring projects at this tier and subsequently shared the scores assigned to these projects. Ms. Ritchie explained the scoring process, including how projects were ranked according to the DOT’s scoring methodology. She also provided the final list of project rankings and their respective scores. Notably, Ms. Ritchie highlighted that the NC 126 project in Burke County would receive a partial allocation rather than the full 100 points, with the remaining points being allocated to support a rail project within the region. Following a motion by Mr. Glines and a second by Mr. Schlichting, the Committee unanimously approved the Regional Tier Scores and Local Input Point Assignments.
- V. **Prioritization – Priorities of Existing Committed Projects:** Ms. Ritchie presented an update on the re-prioritization of projects throughout the region. She provided a comprehensive briefing, including detailed descriptions and maps of each affected project. Ms. Ritchie outlined the process of engaging with officials from all regions impacted by these projects. She also summarized the revised project rankings for each area, incorporating feedback from local representatives. Additionally, Mr. Cannon from DOT Division 13 offered insights into the project rankings and discussed the funding mechanisms currently under review to align with the new project timelines.
- VI. **Congestion Management Process Report:** Mr. Odem presented the Congestion Management Report (CMP) for the Greater Hickory Metropolitan Planning Organization, which establishes a baseline for future congestion assessments. The report highlights a significant decrease in regional delay during the COVID-19 pandemic, with current delay levels remaining below pre-pandemic figures despite a return to pre-pandemic Vehicle Miles Traveled (VMT). Changes in commuting patterns, including a rise in remote work, have influenced peak hour delays and led to increased cross-county and extra-regional commuting. Segment level analyses identified key congested areas, with several already addressed in STIP projects or competing for funding. The CMP underscores the importance of integrating data-driven solutions and maintaining continuity in performance

measures for future reports. Key goals include implementing interim improvements and exploring cost-effective strategies to manage congestion effectively.

- VII. Congestion Management Overview:** Mr. Reece from NC DOT Congestion Management discussed the statewide application of cost-effective traffic engineering strategies aimed at mitigating traffic congestion, improving system efficiency, enhancing traveler safety, and boosting economic vitality. He outlined NCDOT's capacity analysis processes and policies, including the use of various tools such as TransModeler, Synchro, and CAP-X for different levels of analysis. Key topics covered included reduced conflict intersections, such as RCUTs, and their impact on safety and congestion, with references to recent studies on their economic effects. The discussion also highlighted NCDOT's guidelines on capacity analysis, including the upcoming update to best practices expected later in 2024. Mr. Reece emphasized the importance of safety in intersection design, including pedestrian and bicycle considerations. He concluded with an overview of the SPOT prioritization process and how it integrates capacity analysis into project planning.
- VIII. Safety Performance Targets for 2024:** Ms. Ritchie presented the 2024 Transit Safety Performance Targets, detailing the Federal Transit Administration's mandate for public transportation systems to develop Safety Performance Targets as part of their Public Transportation Agency Safety Plan (PTASP). She explained that the Western Piedmont Regional Transit Authority (WPRTA) has established these targets to ensure compliance, focusing on metrics such as fatalities, injuries, safety events, and system reliability. The targets, which are required to be aligned with federal regulations, provide a framework for assessing and improving transit safety performance. The Board was informed of these developments and the need to release the targets for public comment.

NCDOT Update –

- **Division 11:** Mr. Sizemore provided project updates within the packet for Division 11.
- **Division 12:** Mr. Panicker provided project updates in the agenda packet for Division 12.
- **Division 13:** Ms. Smith provided project updates in the agenda packet for Division 13.
- **NCDOT-TPD:** Mr. Crummy provided a brief reminder that new Traffic Forecast are due out September 14th.
- **NCDOT-IMD:** No updates.
- **FHWA:** No updates.

Reminders: Ms. Ritchie stated that the transportation team will be meeting with adjacent MPO's & RPO's for further discussions regarding the rail project from Salisbury to Asheville.

Public Comment/Announcements: None

Adjournment: Chairman Williams adjourned the meeting at 2:27 p.m. The next meeting will be Wednesday, July 24th, 2024

Respectfully Submitted,

Randy Williams, MPO/TCC Chair

Averi Ritchie, TCC Secretary

**REQUEST FOR BOARD ACTION
GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION
TCC/TAC**

MEETING DATE: August 28, 2024

SUBJECT: Transportation Improvement Program Revisions for Release

PRESENTER: Averi Ritchie, Transportation Planning Manager

ATTACHMENTS: Transportation Improvement Program Revisions for Release

SUMMARY OF REQUEST:

State Transportation Improvement Program (STIP) revisions include modifications and amendments to regional and statewide transportation projects. STIP revisions are released for public comment and approved following a 30 day public comment period by TAC. All approved revisions are submitted for Board of Transportation approval. Modifications and revisions often include funding and fiscal year changes. Revisions are released monthly by NCDOT.

BOARD ACTION REQUESTED: Release for public comment.

Suggested Motion: *Approval to release for public comment*

REVISIONS TO THE 2024-2033 STIP
HIGHWAY PROGRAM

GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION

STIP ADDITIONS

* HL-0002 CATAWBA PROJ.CATEGORY EXEMPT	- GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION	US 70, SR 1358 (4TH STREET DRIVE SW) INTERSECTION IN HICKORY. CONSTRUCT INTERSECTION IMPROVEMENTS. <u>TO REFLECT THE LATEST DELIVERY SCHEDULE, DELAY CONSTRUCTION FROM FY 23 TO FY 24. THIS ACTION ADDS CONSTRUCTION TO THE FEDERALLY APPROVED 2024-2033 STIP.</u>	CONSTRUCTION	FY 2024 - \$320,000 (BGANY) FY 2024 - \$400,000 (BGDA) FY 2024 - <u>\$180,000</u> (L(M)) \$900,000
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STIP MODIFICATIONS

B-6041 CATAWBA PROJ.CATEGORY STATEWIDE	- GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION	I-40, REPLACE BRIDGE 170177 AND 170178 OVER LYLE CREEK. <u>TO ALLOW ADDITIONAL TIME FOR PLANNING AND DESIGN, DELAY RIGHT-OF-WAY FROM FY 25 TO FY 26.</u>	RIGHT-OF-WAY CONSTRUCTION	FY 2026 - \$290,000 (BFP) FY 2030 - \$8,877,000 (BFP) FY 2031 - \$11,029,000 (BFP) FY 2032 - <u>\$6,994,000</u> (BFP) \$27,190,000
BL-0067 CATAWBA PROJ.CATEGORY DIVISION	- GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION	AVIATION WALK CONNECTOR, CLEMENT BOULEVARD TO 17TH STREET NW. EXTEND MULTI-USE PATH. <u>TO ALLOW ADDITIONAL TIME FOR PLANNING AND DESIGN, DELAY RIGHT-OF-WAY FROM FY 24 TO FY 25.</u>	RIGHT-OF-WAY CONSTRUCTION	FY 2025 - \$40,000 (BGDA) FY 2025 - \$10,000 (L) FY 2025 - \$2,120,000 (BGDA) FY 2025 - <u>\$530,000</u> (L) \$2,700,000
C-5196 CATAWBA PROJ.CATEGORY DIVISION	- GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION	16TH STREET (SANDY RIDGE ROAD) AT 21ST AVENUE NE IN HICKORY. CONSTRUCT ROUNDABOUT. <u>TO ALLOW ADDITIONAL TIME FOR PLANNING AND DESIGN, DELAY RIGHT-OF-WAY FROM FY 24 TO FY 25.</u>	RIGHT-OF-WAY CONSTRUCTION	FY 2025 - \$2,364,000 (CMAQ) FY 2025 - \$492,000 (L) FY 2026 - \$2,000,000 (CMAQ) FY 2026 - \$1,990,000 (BGANY) FY 2026 - <u>\$998,000</u> (L) \$7,844,000

* INDICATES FEDERAL AMENDMENT

REVISIONS TO THE 2024-2033 STIP
HIGHWAY PROGRAM

GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION

STIP MODIFICATIONS

* R-2307B CATAWBA IREDELL PROJ.CATEGORY REGIONAL	- GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION - CHARLOTTE REGIONAL TRANSPORTATION PLANNING ORGANIZATION	NC 150, SR 1840 (GREENWOOD ROAD) IN CATAWBA COUNTY TO WEST OF SR 1303/SR 1180 (PERTH ROAD/DOOLIE ROAD) IN IREDELL COUNTY. WIDEN TO 4-LANES. SR 1383/SR 1180 TO US 21 IN IREDELL COUNTY. WIDEN TO 6-LANES. <u>COST INCREASE EXCEEDING \$2 MILLION AND 25% THRESHOLDS.</u>	CONSTRUCTION	FY 2025 - \$49,469,000 (NHP)
				FY 2025 - \$213,000 (T(M))
				FY 2026 - \$58,888,000 (NHP)
				FY 2026 - \$253,000 (T(M))
				FY 2027 - \$51,806,000 (NHP)
				FY 2027 - \$219,000 (T(M))
				FY 2028 - \$40,033,000 (NHP)
				FY 2028 - \$169,000 (T(M))
				FY 2029 - \$35,305,000 (NHP)
				FY 2029 - \$145,000 (T(M))
				\$236,500,000
* R-3603A ALEXANDER CATAWBA PROJ.CATEGORY DIVISION	- GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION	NC 127, SR 1400 (CLONINGER MILL ROAD) TO SR 1156 (RICHEY ROAD). UPGRADE TWO LANES AND PROVIDE SOME MULTI-LANE CURB AND GUTTER. <u>TO ALLOW ADDITIONAL TIME FOR RIGHT-OF-WAY ACQUISITION, DELAY CONSTRUCTION FROM FY 26 TO FY 28.</u>	RIGHT-OF-WAY	FY 2025 - \$5,891,000 (BGANY)
				FY 2026 - \$7,069,000 (BGANY)
				FY 2027 - \$1,620,000 (BGANY)
				FY 2028 - \$1,620,000 (BGANY)
			UTILITIES	FY 2025 - \$2,250,000 (BGANY)
				FY 2026 - \$2,250,000 (BGANY)
			CONSTRUCTION	FY 2028 - \$14,808,000 (BGANY)
				FY 2029 - \$23,285,000 (BGANY)
				FY 2030 - \$19,668,000 (BGANY)
				FY 2031 - \$14,123,000 (BGANY)
	FY 2032 - \$6,116,000 (BGANY)			
				\$98,700,000

* INDICATES FEDERAL AMENDMENT

Wednesday, August 7, 2024

REVISIONS TO THE 2024-2033 STIP
HIGHWAY PROGRAM

GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION

STIP MODIFICATIONS

U-2307B CATAWBA PROJ.CATEGORY DIVISION	- GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION	MCDONALD PARKWAY, SR 1453 (SPRINGS ROAD) TO NC 127. WIDEN TO MULTI-LANES. <u>TO ALLOW ADDITIONAL TIME FOR PLANNING AND DESIGN, DELAY RIGHT-OF-WAY FROM FY 25 TO FY 26 AND CONSTRUCTION FROM FY 28 TO FY 29.</u>	RIGHT-OF-WAY	FY 2026 - \$8,608,000 (BGANY)
				FY 2027 - \$12,374,000 (BGANY)
				FY 2028 - \$12,374,000 (BGANY)
				FY 2029 - \$9,684,000 (BGANY)
				FY 2030 - \$10,760,000 (BGANY)
			UTILITIES	FY 2026 - \$7,850,000 (BGANY)
				FY 2027 - \$7,850,000 (BGANY)
			CONSTRUCTION	FY 2029 - \$5,754,000 (BGANY)
				FY 2030 - \$18,944,000 (BGANY)
				FY 2031 - \$16,548,000 (BGANY)
	FY 2032 - \$12,619,000 (BGANY)			
	FY 2033 - \$10,836,000 (BGANY)			
	<u>\$134,201,000</u>			
* U-5777 CATAWBA PROJ.CATEGORY REGIONAL	- GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION	NC 127, 1ST AVENUE SE TO 2ND AVENUE SE. ADD TURN LANES. <u>COST INCREASE EXCEEDING \$2 MILLION AND 25% THRESHOLDS.</u>	CONSTRUCTION	FY 2025 - \$65,000 (BGANY)
				FY 2026 - \$3,497,000 (BGANY)
				FY 2027 - \$2,433,000 (BGANY)
				FY 2028 - \$505,000 (BGANY)
	<u>\$6,500,000</u>			
U-6157 CALDWELL PROJ.CATEGORY DIVISION	- GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION	SR 1130 (CAJAH MOUNTAIN ROAD), SR 1001 (CONNELLY SPRINGS ROAD) TO US 321A. MODERNIZE ROADWAY. <u>COST INCREASE EXCEEDING \$2 MILLION AND 25% THRESHOLDS.</u>	RIGHT-OF-WAY	FY 2025 - \$3,467,000 (BGANY)
				FY 2026 - \$3,782,000 (BGANY)
				FY 2027 - \$3,151,000 (BGANY)
				FY 2028 - \$1,300,000 (BGANY)
				FY 2029 - \$1,300,000 (BGANY)
			UTILITIES	FY 2024 - \$5,100,000 (BGANY)
				FY 2025 - \$5,100,000 (BGANY)
			CONSTRUCTION	FY 2027 - \$239,000 (BGANY)
				FY 2028 - \$9,616,000 (BGANY)
				FY 2029 - \$7,505,000 (BGANY)
	FY 2030 - \$5,054,000 (BGANY)			
	FY 2031 - \$1,486,000 (BGANY)			
	<u>\$47,100,000</u>			

* INDICATES FEDERAL AMENDMENT

Wednesday, August 7, 2024

**REQUEST FOR BOARD ACTION
GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION
TCC/TAC**

MEETING DATE: August 28, 2024

SUBJECT: 2024 Congestion Management Process Report

PRESENTER: Daniel Odom, Transportation Projects Coordinator

ATTACHMENTS: 2024 Congestion Management Report

SUMMARY OF REQUEST:

The Congestion Management Process (CMP) is a systematic approach to congestion management, *required in metropolitan transportation planning by federal code*. Through a federally prescribed process, the region's Congestion Management Process manages new and existing transportation systems for relieving congestion and maximizing the safety and mobility of people and goods. The tool used to evaluate the implementation of the Congestion Management Process is the Congestion Management Report. The Congestion Management Report is conducted biannually and assesses the quantitative performance of the transportation system in two manners: 1) A regional system level analysis of existing congestion data and predictive trends 2) A segment level analysis of roadway performance and potential solutions to operational deficiencies.

This Congestion Management Report will be the first completed by the Greater Hickory Metropolitan Planning Organization and will thus set the standard against which future Congestion Management Reports will be assessed. The Greater Hickory Metropolitan Area has experienced high degrees of variability in commuting patterns and congestion outcomes in the last several years. The COVID-19 pandemic rapidly and significantly changed the commuting patterns expected in the Greater Hickory Metropolitan Area. As a result, this report will address the following primary objectives: **1) Assess and compare regional pre and post pandemic congestion. 2) Discuss changes in regional commuting patterns and their influence on system performance. 3 Assess System Performance at the roadway segment level.**

BOARD ACTION REQUESTED: Approved Congestion Management Report.

Suggested Motion: *I move that the committee approve the Congestion Management Report, as presented.*

Greater Hickory Metropolitan Planning Organization

2024 Congestion Management Report



Western Piedmont
Council of Governments

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August 2024

Introduction

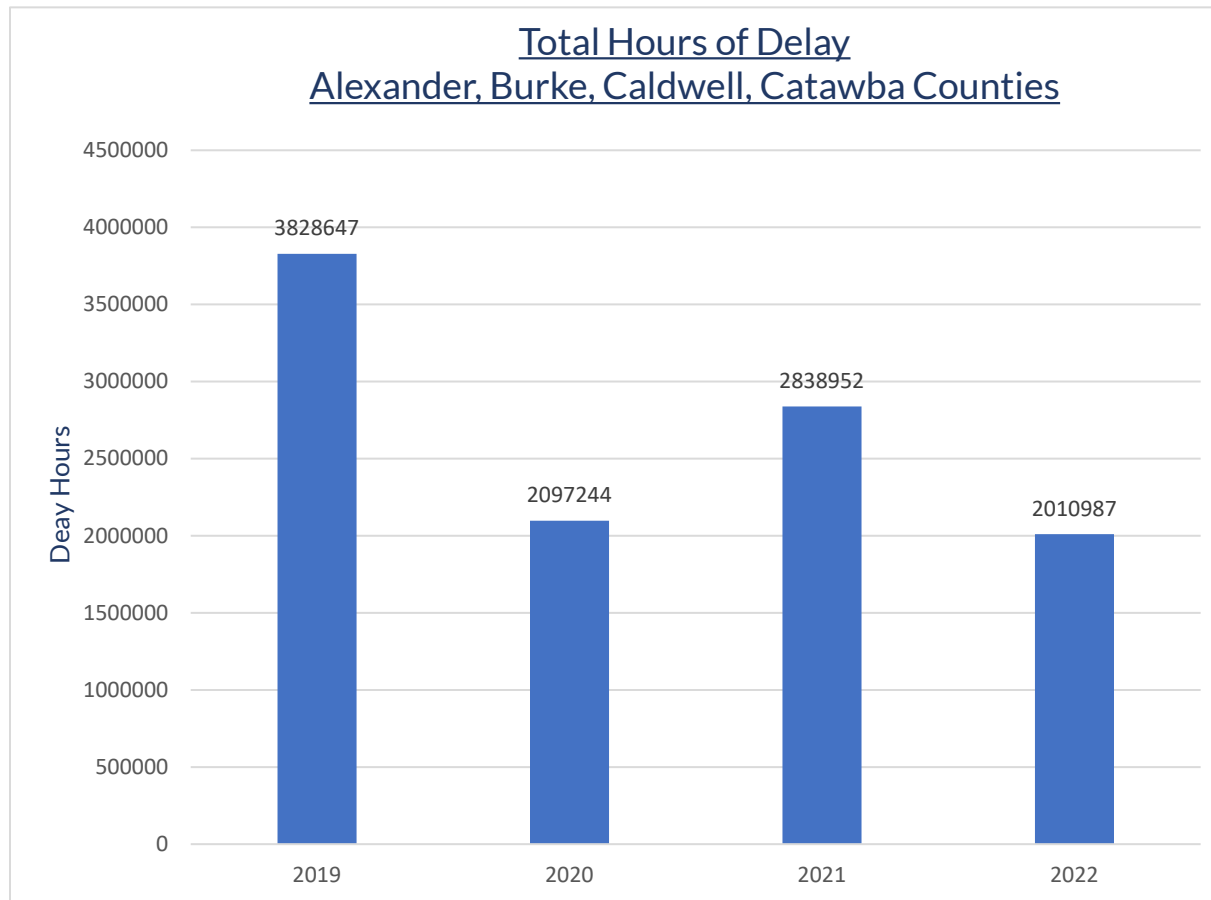
The Congestion Management Process (CMP) is a systematic approach to congestion management, required in metropolitan transportation planning by federal code. Through a federally prescribed process, the Congestion Management Process in the region manages new and existing transportation systems for relieving congestion and maximizing the safety and mobility of people and goods. The tool used to evaluate the implementation of the Congestion Management Process is the Congestion Management Report. The Congestion Management Report is conducted biannually and assesses the quantitative performance of the transportation system in two manners: 1) A regional system level analysis of existing congestion data and predictive trends 2) A segment level analysis of roadway performance and potential solutions to operational deficiencies.

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- 1. Assess and compare regional pre and post pandemic delay.** Total Regional delay significantly decreased during the COVID-19 pandemic. While Vehicle Miles Traveled (VMT) have returned to pre-pandemic levels, delay continues to remain below pre-pandemic level.
- 2. Discuss changes in regional commuting patterns and their influence on system performance.** Commuting patterns play a significant role in the determination and prediction of peak hour delay. COVID-19 significantly changed the workplace, and as a result commuting patterns. Cross-County and Extra-Regional commuting patterns continue to trend upwards.
- 3. Assess System Performance at Segment Level.** A primary objective of the Congestion Management Process is the identification and implementation of segment level solutions. This report will analyze roadway segment performance and identify potential solutions.

The Pandemic and Delay

COVID-19 significantly altered the way people work – and ultimately, the way people commute. 2019 total regional delay data, the primary congestion performance measure at the regional system level, represents the final reporting period prior to the pandemic; the most accurate depiction of the delay prior to COVID. In 2019, the Greater Hickory Region experience roughly 3.82 million hours of total delay. 2020 total regional delay data represents the immediate impact of COVID-19 on system demand and delay – a 45% decrease in total delay. While commuting patterns may



have shifted in 2020, this significant decrease in delay is likely attributed to reduced travel during the peak of COVID-19. 2021 resulted in an increase in total delay when compared to 2020. However, 2022 data reflects that total regional delay has not recovered to pre-pandemic levels despite VMT (Vehicle Miles Traveled) recovery and the lifting of the majority of restrictions. Since the COVID-19 pandemic, the Greater Hickory Region has experienced 2.32M hours of delay per year on average – a 39.5% decrease in delay when compared to 2019. **Reduced delay despite recovering VMT and a normalizing post-COVID-19 environment suggest that COVID-19 produced significant changes to travel patterns.**

Figure 1 Source: RITIS Probe Data Analytics Suite

How the Pandemic Impacted Commuting Patterns

The COVID-19 pandemic had a profound effect on commuting patterns and congestion, through the effect it has had on how, where, and when American's work. COVID-19 forced the workforce out of the office and into their homes. Companies responded to the pandemic with work-from-home policies, forcing the workforce to adapt and produce from their homes. These changes resulted in acute decreases in commuting and as a result, congestion (2020). As the spread of COVID-19 became more and more controlled, many companies began to return to normal office operations. This return to work as normal was met with considerable resistance, and played a role in the "Great Resignation" of 2021, with many looking to retain their work from home availability. To remain competitive, many workplaces have maintained telework and flexible work schedule policies in place post COVID-19. There are two distinct commuting pattern impacts caused by post COVID-19 continued work-from-home and flexible work schedules: **1) Telework and flex schedules reduce peak hour travel, as fewer workers commute daily to the office. 2) Telework and flexible work redistributes trips to non-peak hours.** Employees working from home or on a flex schedule exhibit higher levels of trip diversity and leisure trips. Regionally, working from home continues to grow. In 2019, an estimated 3.3% of employed Hickory MSA residents worked predominantly from home. In 2022, an estimated 5.4% of employed Hickory MSA residents worked from home.

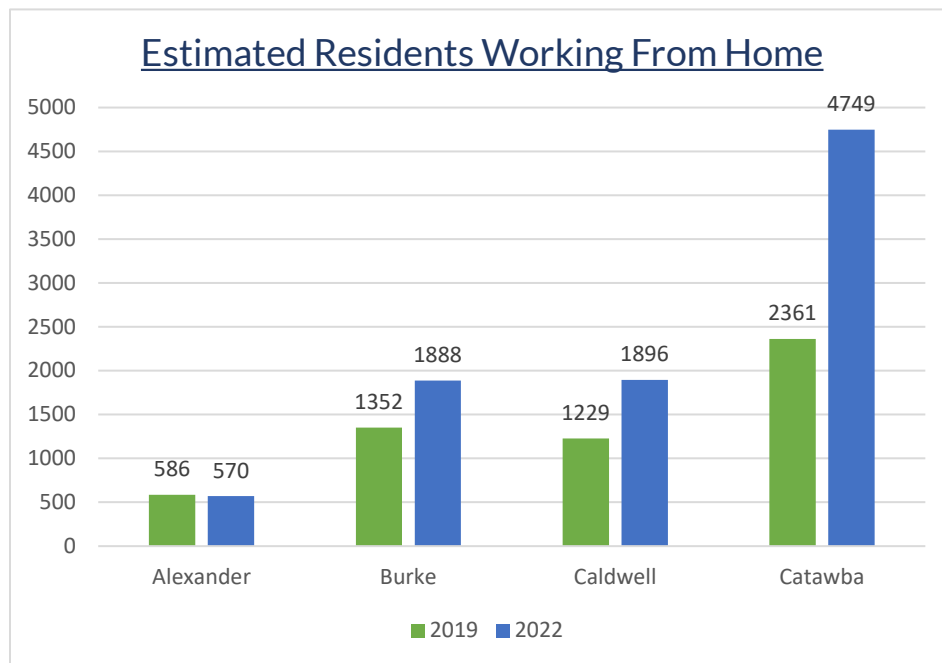


Figure 2 Source: US Census Bureau American Community Survey

Regionally, working from home continues to grow. In 2019, an estimated 3.3% of employed Hickory MSA residents worked predominantly from home. In 2022, an estimated 5.4% of employed Hickory MSA residents worked from home.

Regionally, working from home continues to grow. In 2019, an estimated 3.3% of employed Hickory MSA residents worked predominantly from home. In 2022, an estimated 5.4% of employed Hickory MSA residents worked from home. COVID-19 also had impacts on alternative modes of transportation. **From 2019 to 2022, the number of Hickory MSA residents commuting via Public Transportation decreased 21.5% (353-277).**

The Future of Working from Home and Commuting Patterns

Remote work in the Greater Hickory Metropolitan Area surged by 167% from 2010-2022. This increase aligns not only with the impact of COVID-19 but also with the entrance of Generation Y and Generation Z into the workforce. These generations, attracted technology in the workplace and the work-life balance stemming from flexible hours and remote work, have played an influential role in remote work trends. While projecting work-from-home trends may suggest a potential slowing in the next decade as Generation and Generation X continue to lead the workforce, a shift could be anticipated in the 2040 and 2050 horizons. Planners must recognize the potential for virtual workplace expansion as Millennials and Generation Z assume leadership roles. The workplace changes resulting from generational shift may be exacerbated by technologic advancement. It is likely that future telework technologies will far outperform current virtual workplace technology, further supporting the virtual workplace. GHMPO planners should consider this commuting pattern potential in the transportation planning process.

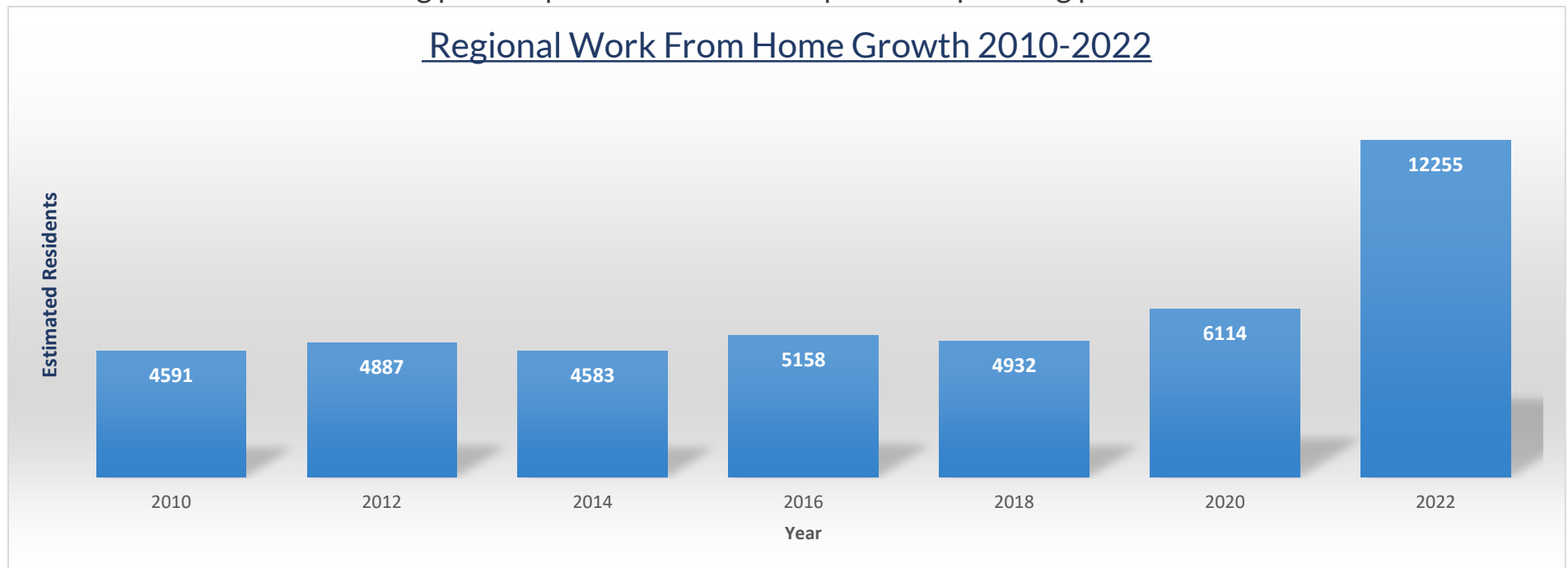


Figure 3 Source: US Census Bureau, American Community Survey

Cross-County Commuting Patterns

The Hickory MSA and Greater Hickory Region, as a whole, continue to see increase in cross-county and extra-regional commuting. Data for this section on commuting is sourced through the Longitudinal Employer Household Dynamics data set provided by the US Census Bureau. It is important to note, especially in reference to extra-regional commuting, that these data reflect general employee and employer locations, but do not necessarily imply daily commuting to that location. In this aspect, the virtual workplace continues to contribute to changes in commuting trends.

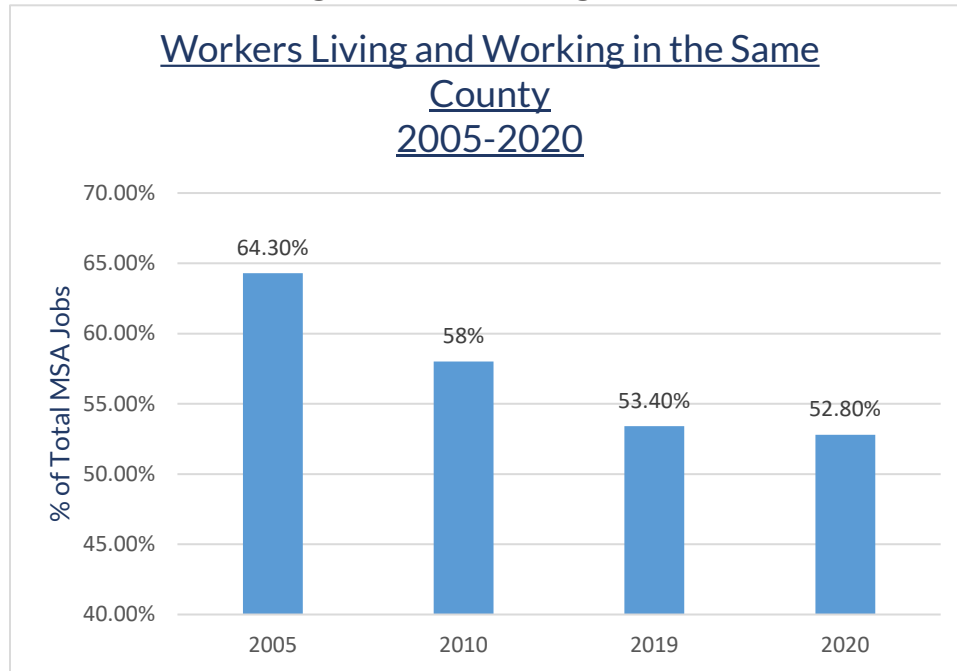


Figure 4 Source: US Census Bureau, LEHD Data

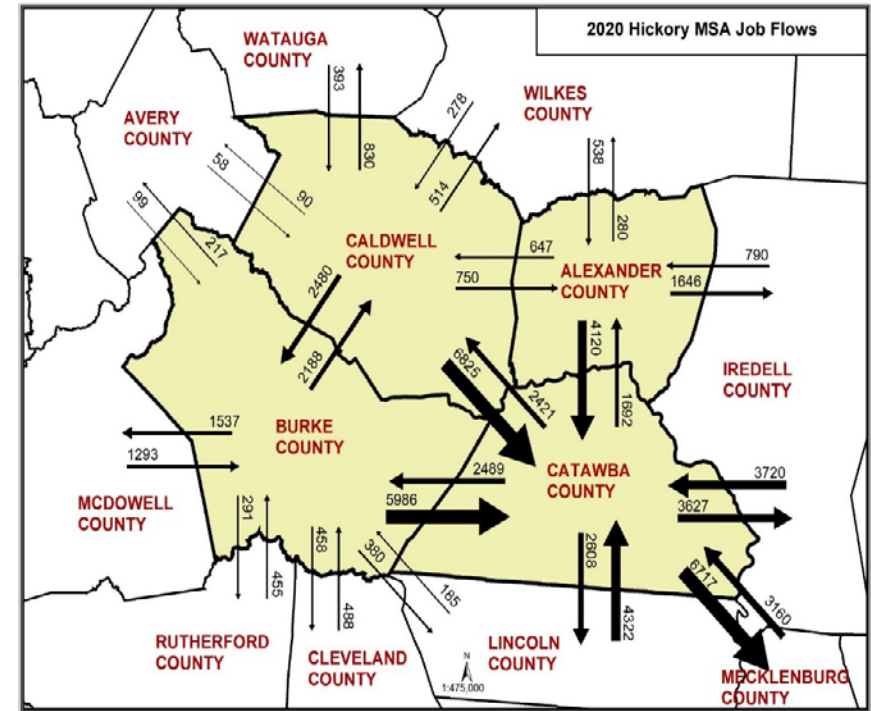


Figure 5 Source: US Census Bureau, LEHD Data

In reference to congestion and demand forecasting, increasing cross-county and extra-regional commuting patterns suggest increased demand potential for interstate and arterial commutes. **If current trends continue, the region will become increasingly reliant on the level of service that can be provided by I-40, US-321, NC-16, and US-64.**

Assessing Causes of Delay

Causes of delay have decreased proportionately to the reduction in overall delay observed during and post-pandemic. In the Greater Hickory Metropolitan Area, Congestion caused by traffic signals still contributes more delay time than any other singular cause. Many of the segment level analyses in Appendix B include the optimization of signal timing as a recommended interim improvement. Notably, recurrent congestion (congestion caused by predictable high demand) decreased significantly from 2019-2022. The size in reduction compared the reduction in signal delay supports that additional behavioral change, as well as reduced demand, contribute to the reduction.

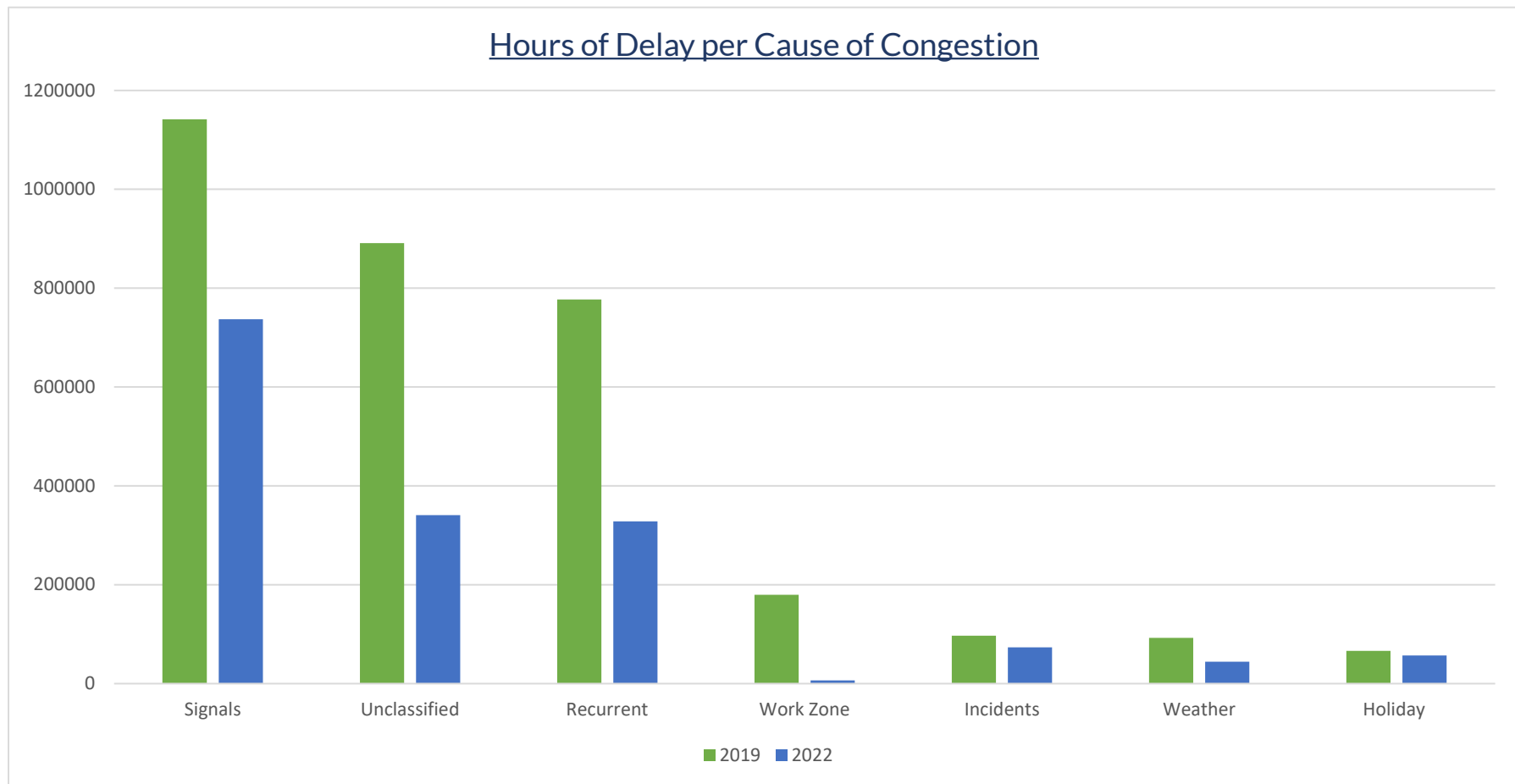


Figure 6 Source: RITIS Probe Data Analytics Suite

Assessing Congestion at the Segment Level

The ultimate goal of Congestion Management is the reduction of system wide congestion. The transportation systems overall performance is a composition of the performance of over 950 individual road segments across Alexander, Burke, Caldwell, and Catawba counties. **Delay is not distributed proportionately across all road segments, and the purpose of the Congestion Management Process and report is to implement a data-driven method to identify, monitor, and improve the performance of segments that create regionally significant amounts of delay.** To identify and monitor poor performing segments of roadway, the Congestion Management Report uses measures that assess both recurring and non-recurring congestion. **Recurring congestion** is the result of system demand exceeding system capacity. Simply, too many vehicles for the roadway. **Non-recurring congestion** on the other hand, is congestion directly caused by a singular event. Common causes of non-recurring congestion include vehicle accidents, vehicle breakdowns, inclement weather, and other special events. To assess recurring congestion, Planning Time Index and Travel Time Index are used. To measure non-recurring congestion, Severity Index and Number of Accidents are used, as vehicle accidents represent a large portion of non-recurring congestion events.

Planning Time Index is a measure of system reliability. Planning time represents the total time a traveler should plan to ensure on-time arrival. The 95th percentile travel time is used for the calculation, meaning that if a traveler allows the appropriate buffer time, they will arrive on-time in 95% of the trips. For example, a PTI of 1.60 means that for a trip that takes 15 minutes in light traffic, 24 total minutes should be allowed for the trip.

Travel Time Index represents actual travel time as a percentage of the ideal (free flow) travel time. The index is the ratio of the travel time during the peak period to the time required to make the same trip at free flow speeds. A TTI of 1.3, for example, indicates a 20-minute free-flow trip requires 26 minutes during the peak period.

Severity Index represents the severity of accidents at a specific intersection. Severity index is equal to equivalent property damage only (EPDO) divided by the number of crashes. EPDO uses assigned values to quantify the severity of injuries sustained in car crashes.

Number of Accidents simply represents the number of accidents over a prescribed reporting period at an individual intersection or segment area. Using this data, MPO staff can rank intersections across the region based upon the number of accidents across a set reporting period.

Bottleneck Ranking is used to account for delay volume within each segment. Bottlenecks in the region are measured by Total delay, or the total amount of vehicle delay caused by a segment throughout the year.

Regional Segment Ranking

Based on the weighting for Planning Time Index, Travel Time Index, Accident Severity Index, Number of Accidents, and Bottleneck Ranking, established by the Congestion Management Process (CMP), the Greater Hickory Metropolitan Planning Organization has analyzed and scored each road segment identified in the CMP network of study. The 10 highest scoring segments and their respective methodology scores are below. For the complete list, see the scoring Appendix A.

Road Segment	Score / 50
1. MCDONALD PARKWAY S @ I-40	33
2. NC 18 N @ Bush Drive / I-40	29
3. US 64 W @ I-40	29
4. US 70 W @ US-70 / E Union Street	27
5. US 321 N/S @ Mission Road / Lower Cedar Valley Road	26
6. US 70W @ US 70-BR/E Union Street	25
7. US 321 S @ US 64/NC 90/NC 18	25
8. US 321 @ Mount Herman Road	25
9. NC 16 @ US 64 (Taylorsville)	22
10. NC 18S @ Bush Drive / I-40	22

Identifying Segment Level Solutions

The identification of poor performing road segments through recurring and non-recurring congestion data allows planners and engineers to analyze and target the shortcomings of identified road segments with actionable solutions. During the development of this Congestion Management Report, GHMPO and NCDOT Congestion Management Unit staff worked together to produce solutions and strategies that could produce submittals to the Strategic Prioritization Process, LAPP, and other competitive infrastructure improvement funding opportunities. Full descriptions for each road segment can be found in Appendix B.

Road Segment	STIP Project Funded	STIP Project Carryover or New Submittal	MTP/CTP Project	Improvements under study or recommended by NCDOT
MCDONALD PKWY S @ I-40				X
I-40W @ US-321 (Exit 123)		X	X	X
I-40 @ Oxford School (Exit 138)			X	X
I-40 W@ 125 (LR BLVD)	X		X	
I-40 @ 126 (McDonald)		X	X	
NC 16 @ NC-16 BUS		X	X	X
NC 16 @ US-64		X	X	
US 321 @ 2nd Ave	X		X	
I-40W @ Jamestown Road/Exit 100		X	X	X
I-40E @ Carolina Street / Exit 111		X	X	
US-70W @ US-70-BR/E Union Street				X
US-70E @ Drexel Rd/S Main Street				X
I-40E @ Old NC 10/Exit 118	X		X	
US-70W @ US-70/E Union Street				X
US-321S @ US-64/NC-90/NC-18			X	
NC-18N @ Bush Drive/I-40				X
I-40W @ Center St/Exit 119	X		X	
US-64W @ I-40 (Morganton)	X		X	X
US-70BR-W @ Huffman St/Center St				X

Road Segment	STIP Project Funded	STIP Project Carryover or New Submittal	MTP/CTP Project	Improvements under study or recommended by NCDOT
US-321N @ US-64/NC-90/NC-18			X	
NC-18S @ Bush Drive / I-40				X
I-40W @ N Oxford Street/Exit 135			X	
I-40E @ US-70A/Exit 130		X	X	
I-40W @ Mineral Springs Mountain Road/Exit 112		X	X	
I-40W @ Malcolm BLVD/Exit 113		X	X	
US-321 @ Maizel Rd/New Farm Road		X		
South Center Street @ US-70			X	X
NC-127 @ 2nd Ave	X		X	
US-321 @ Mount Herman Road	X		X	
US 321 @ Mission Road / Lower Cedar Valley Road	X		X	

This report the 30 most significantly congested road segments within the Greater Hickory Planning Area. Of the 30 identified segments, 8 (26%) are addressed in currently funded STIP projects. 10 (33%) of identified segments are addressed in a project currently competing for funding in prioritization. 18 (54.5%) of the identified segments are in the STIP Process. 22 (73%) of the identified segments are addressed within an adopted MTP or CTP Project Proposal. Additionally, of the 30 identified road segments, 10 (33%) are either under current review by the Congestion Management Unit, or have interim improvement recommendations, identified jointly by NCDOT and GHMPO, documented within this report. **All 30 identified segments have identified potential solutions documented within this report.**

Addressing Congestion in a 3C Manner: Key Takeaways and Goals

The 2024 CMP Report provides a performance benchmark for both regional system and roadway segment level performance. Subsequent CMP Reports should maintain regional performance measure continuity, which will allow the region to continuously assess the transportation systems performance. GHMPO staff should also ensure that segment level performance data is maintained, and roadway improvements at identified segments are documented. This data will allow the region to assess both the success of the individual improvement, and the avenues in which improvements can be implemented.

The CMP Reports segment level analysis suggests a clear link between the congestion management process and the MTP/CTP and Prioritization process, as evidenced by nearly 80% of congested roadway segments being identified in the STIP or MTP/CTP. GHMPO Staff should continue to Implement CMP recommendations in the Transportation Planning Process, including the incorporation of project proposals for the 7 roadway segments not addressed by documented project proposals in the next MTP/CTP update.

While many roadway segments are addressed in documented project recommendations, many of these projects are capital intensive. GHMPO Staff should continue to work with NCDOT to identify opportunities to implement cost effective interim improvements, and explore funding sources to implement the segment specific interim improvement strategies identified within this report, which include signage improvements, signal timing optimization, interim signalization, and interim access management.

Regional Commuting Pattern Trends will continue to reflect increase interstate and arterial demand. GHMPO Staff should frequently monitor congestion data along commuting corridors: I-40, US-321, NC-150, NC-16, and US-64. GHMPO staff should continue to monitor the competitiveness of documented MTP/CTP/Prioritization projects designed to increase capacity and prioritize throughput within these corridors As these corridors develop, the GHMPO should continue to explore and incorporate proposals that prioritize travel-time savings and travel-time reliability.

While less likely to influence regional delay totals, residential development in regional Growth Areas present opportunities for increased demand in new locations. As trip-generators like housing developments emerge, GHMPO should work with regional planning partners to identify potential collector road and intersection deficiencies.

Appendix A: Complete Segment Scoring

Table 1 Source: NCDOT TEAAS, Jan-Dec 2022. PDA Suite Jan-Dec 2022.

Road Segment	Score / 50
1. MCDONALD PARKWAY S @ I-40	33
2. NC 18 N @ Bush Drive / I-40	29
3. US 64 @ I-40	29
4. US 70 W @ US-70 / E Union Street	27
5. US 321 N/S @ Mission Road / Lower Cedar Valley Road	26
6. US 70 @ US 70-BR/E Union Street	25
7. US 321 S @ US 64/NC 90/NC 18	25
8. US 321 N/S @ Mount Herman Road	25
9. NC 16 @ US 64 (Taylorsville)	22
10. NC 18S @ Bush Drive / I-40	22
11. NC 16 @ NC 16 Business (Conover)	21
12. US-70 BR-W @ Huffman Street Center Street	21
13. I-40 @ US 321	20
14. US-70E @ Drexel Road / S Main Street	20
15. US 321 N @ US 64 / NC 90 / NC 18	19
16. I-40 @ Exit 124 (LR BLVD)	18
17. NC 127 @ 2nd Avenue NW	15
18. US 321 @ 2nd Avenue NW	13
19. I-40 @ Jamestown Road / Exit 100	13
20. I-40 @ Carolina Street / Exit 111	13
21. I-40 @ Old NC 10 / Exit 118	9
22. I-40 @ Center Street / Exit 119	9
23. US 321 @ Maizel Road / New Farm Road	9

24.I-40 @ Oxford	7
25.I-40 @ Exit 126	6
26.I-40 @ N Oxford Street/ Exit 135	6
27.I-40 @ US-70A / Exit 130	6
28.I-40 @ Mineral Springs Mountain Road / Exit 112	6
29.I-40 @ Malcolm BLVD Exit 113	6
30.South Center Street @ US 70	6

Table 2 Source: NCDOT TEAAS, Jan-Dec 2022. PDA Suite Jan-Dec 2022.

Appendix B: Segment Level Discussion and Recommendations

Alexander County Segment Level Analysis

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
NC 16 @ US 64	Not Ranked	2.3	1.5	18	2.23

- **Delay Analysis:** This interchange in Taylorsville presents delay data which suggests possible congestion along NC-16 throughout the interchange. It is likely that this delay is a result of premature slowing of vehicles as they enter the “downtown” area of Taylorsville. The interchange design is sound.
- **Recommendations:** Minor improvements could include speed-limit modifications through the segment area, primarily through the extension of the 35 MPH zone. Signal timing is likely to be sound, but could be addressed if delay continues.
- **Documented Project Proposals:** Former STIP project and current submittal U-6151 proposes the modernization of NC-16 from US-64 to the Catawba River. While this project may have minimal improvements to performance of the interchange, it does present an opportunity for more thorough analysis of the interchange.

Burke County Segment Level Analysis

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
I-40W @ Jamestown Road (Exit 100)	8	1	1	N/A	N/A

- **Delay Analysis:** Congestion presented at I-40 Exit 100 is due in large part to antiquated interchange design and ramp length, including local road access to the I-40 West on-ramp, creating ramp congestion during peak hour traffic.
- **Recommendations:** Interchange redesign is necessary to completely address causes of delay. NCDOT’s Congestion Management unit will continue to monitor this area for potential interim improvements.
- **Documented Project Proposals:** STIP Project I-5874 was identified to redesign the interchange and construct a new interchange to NCDOT Standards. Design alternates include a possible roundabout interchange, with roundabouts servicing traffic at each leg of the interchange, and a partial cloverleaf alternate. I-5874 is currently funded for Preliminary Engineering only, and is currently competing in Prioritization 7.0. 2050 CTP Project BURK-HS-09-CTP also proposes the widening of I-40 from 4 to 6 lanes, which would require interchange improvements and reduce delay.

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
I-40E @ Carolina Street (Exit 111)	6	1.1	1	N/A	N/A

- **Delay Analysis:** Congestion presented at I-40 Exit 111 can be attributed to the level of conflict created by an outdated interchange design. The east-bound on ramp, in combination with Carolina Street and Abees Grove Church Road, creates an awkward interchange experience. The westbound off-ramp is shortened due to its intersection with Abees Grove Church Road, creating an increased potential for on-ramp queuing and delay on I-40. The east bound on/off ramp system is also awkward, with very short ramp lengths.
- **Recommendations:** This area continue to be analyzed for a potential modernization project to implement interim improvements, as a modernization submittal may be more cost-effective, and more competitive, than I-5008.
- **Documented Project Proposals:** This segment is a candidate for redesign, with STIP project I-5008. However, this project is funded for Preliminary Engineering only, and is currently competing in Prioritization 7.0. 2050 CTP Project BURK-HS-09-CTP also proposes the widening of I-40 from 4 to 6 lanes, which would require interchange improvements and reduce delay.

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
I-40W @ Mineral Springs Mountain Road (Exit 112)	Not Ranked	1.1	1	6	1

- **Delay Analysis:** Congestion presented at I-40 Exit 112 is marginally supported by congestion data, with a cumulative congestion score of 6 out of a possible 50 points. This congestion may be caused in part by the local access road on the I-40 ramp, and overall interchange design.
- **Recommendations:** This interchange is a candidate for redesign. MPO and NCDOT staff should continue to monitor the competitiveness of this project as a STIP submittal.
- **Documented Project Proposals:** STIP Project I-5975 is identified as a potential solution, but is currently competing in Prioritization. 2050 CTP Project BURK-HS-09-CTP also proposes the widening of I-40 from 4 to 6 lanes, which would require interchange improvements and reduce delay.

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
I-40W @ Malcolm Boulevard (Exit 113)	Not Ranked	1	1	N/A	N/A

- **Delay Analysis:** Congestion presented at exit 113 is marginally supported by congestion data. Overall, this interchange appears to be in good condition, with the exception of the two-way ramp condition.
- **Recommendations:** Removal of the two-way ramp access, and potential redesign should address potential for excessive delay.
- **Documented Project Proposals:** NCDOT Division 13 has submitted a project to compete in Prioritization which addresses the two-way ramp. The GHMPO should consider including this project in the next Metropolitan Transportation Plan Update. 2050 CTP Project BURK-HS-09-CTP also proposes the widening of I-40 from 4 to 6 lanes, which would require interchange improvements and reduce delay.

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
US-70W @ US-70 BR/East Union	4	2	1.4	13	N/A

- **Delay Analysis:** Multiple segments within this intersection area are well supported by Congestion Data, with two segments scoring 27 and 25 out 50 points. This congestion is largely due to high volumes of traffic accessing Morganton through the intersection, and possibly high-levels of non-recurring congestion due to minor accidents.
- **Recommendations:** It is recommended that signal timing be analyzed for possible improvements. Long-term solutions will require a large redesign of the intersection, possibly including a bypass of the intersection.
- **Documented Project Proposals:** This intersection is not currently addressed in a STIP project submittal, or MTP/CTP Proposal. GHMPO Staff should consider the inclusion of long-term proposals, including a possible intersection redesign in the MTP, or a potential bypass system in the CTP.

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
US-70E @ Drexel Road/South Main Street	11	2	1	7	3.11

- **Delay Analysis:** Congestion throughout this intersection area is due in large part to poor access management. Several businesses have unrestricted access to the intersecting roadways, creating multiple conflict points and decreasing operation efficiency, as well as increasing the conflict experienced by drivers utilizing this area of roadway. The unrestricted access is likely to result in traffic slowing and queueing, and increased accident volumes.
- **Recommendations:** There is an access management/control project currently on hold through NCDOT Congestion Management, which would limit access and decrease potential conflict. Other interim improvements include curb bollards, and cautionary signaling. Longer-term improvements include a possible mini-roundabout. This project also highlights the necessity for intentional land use planning and design, and the consideration of transportation impacts incurred through development.
- **Documented Project Proposals:** This intersection is not currently addressed in a STIP Project Submittal or MTP/CTP Proposal. While NCDOT Congestion Management has initiated a project to address the intersection, GHMPO staff should identify the potential for other interim improvements and opportunities to fund said improvements. GHMPO Staff should also consider the inclusion of an MTP/CTP proposal to address the project area in accordance with NCDOT design recommendations.

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
I-40 @ Old NC 10 (Exit 116)	19	1.1	1	13	3.85

- **Delay Analysis:** Congestion at this interchange is marginally supported by congestion data. Operationally, the congestion could be caused by the short ramp lengths and potential queuing at peak hours, and the two-way ramp conditions.
- **Recommendations:** This interchange is a candidate for redesign. However, a complete redesign is capital intensive. GHMPO Staff should explore submittal alternatives.
- **Documented Project Proposals:** STIP project I-5971 (also identified in the 2050 MTP) was identified as a long term solution to the antiquated interchange design, but is currently only funded for Preliminary Engineering and is currently competing in Prioritization 7.0. 2050 CTP Project BURK-HS-09-CTP also proposes the widening of I-40 from 4 to 6 lanes, which would require interchange improvements and reduce delay.

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
NC 18 N/S @ Bush Drive/I-40	10/12	2.1/2.1	1.5/1/4	23	1.23

- **Delay Analysis:** Congestion at this interchange is strongly supported by congestion data. This segment area was recently improved. However, congestion data supports the need for continued monitoring and improvement.
- **Recommendations:** Recommended improvements include possible improvements at the fourth leg of the interchange, including a complete redirect of traffic at the fourth leg. Long term, this segment area may need a redesign to better accommodate increasing volume. GHMPO Staff should continue to monitor this segment area and work with NCDOT Congestion Management to formulate potential interim solutions.
- **Documented Project Proposals:** This segment area is not currently addressed in a STIP Project Submittal or MTP/CTP Proposal. GHMPO staff should work with NCDOT to formulate an agreed upon interim improvement to be submitted for Prioritization, and included in the MTP.

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
US-64 @ I-40 (Exit 103)	7	2.1	1.7	18	1.41

- **Delay Analysis:** Congestion data at this segment area support the occurrence of very high levels of congestion. Businesses have largely unrestricted access to the US-64 corridor in this area, creating multiple conflict points and decreasing operation efficiency, as well as increasing the conflict experienced by drivers utilizing this area of roadway. The unrestricted access is likely to result in traffic slowing and queueing, and increased accident volumes.

- **Recommendations:** The interchange improvements currently submitted in Prioritization may resolve delay issues in proximity to the interchange. However, it is likely that this area of the US-64 corridor may continue to present congestion data due to a lack of access management and conflict experienced by drivers. GHMPO and Land-Use planning staff should consider potential land-use policy to improve connectivity among businesses within the corridor, and prevent further access management issues.
- **Documented Project Proposals:** STIP Project I-5009 (identified in the MTP/CTP) is currently competing in prioritization. 2050 CTP Project BURK-HS-09-CTP also proposes the widening of I-40 from 4 to 6 lanes, which would require interchange improvements and reduce delay.

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
US-70 BR @ Huffman St/Center Street	18	3	1.4	N/A	N/A

- **Delay Analysis:** Congestion at this segment area is due in large part to the awkward intersection of the roadways, which create a false-5 point intersection with the WB Couplet of US-70 BR.
- **Recommendations:** Short-term improvement may be made at this intersection through increased signage. Long-term, this intersection could be a candidate for a roundabout or other total redesign project.
- **Documented Project Proposals:** This segment area is not currently addressed in a STIP Project Submittal or MTP/CTP Proposal. GHMPO Staff should continue to work with NCDOT staff to identify an agreed upon solution for inclusion in the MTP/CTP and submittal for prioritization.

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
I-40W @ Center Street (Exit 119)	20	1	1	7	3.11

- **Delay Analysis:** Congestion at this segment is marginally supported by data. Congestion could be influenced by freight mobility shortcomings. Overall, this interchange meets NCDOT standards and is in good condition.
- **Recommendations:** This segment area is addressed by a bridge replacement project. GHMPO Staff should continue to monitor this interchanges congestion data following the completion of the bridge replacement project.
- **Documented Project Proposals:** This segment area is addressed by a bridge replacement project. GHMPO staff should continue to monitor this interchange, and if necessary, consider potential proposals for inclusion in the MTP/CTP. 2050 CTP Project BURK-HS-09-CTP also proposes the widening of I-40 from 4 to 6 lanes, which would require interchange improvements and reduce delay.

Caldwell County Segment Level Analysis

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
US 321 N/S @ US-64/NC-90/NC18	16/13	1.9/2	1.5	6	2.23

- **Delay Analysis:** The US 321 corridor carries considerable volumes of traffic throughout the Greater Hickory Region. US-64/NC 90/NC 18 carries considerable traffic through Caldwell County and the Lenoir area. Congestion at this segment area is due to the volume of traffic negotiating a signalized intersection. While actual experienced delay for individual trips may not be excessive, the volume of traffic contributes to this segments bottleneck ranking and total delay.
- **Recommendations:** Long term solutions are complicated due to the land use implications of potential solutions. Any long term solutions, which would most likely include interchange construction or bypass, must consider the prioritization of US 321 traffic, the economic impact of alternating traffic flows on the City of Lenoir, and the land use implications of potential interchange designs. Regional partners will be essential to the design process, and the decision making process regarding the classification/characterization of US 321. As the US-321 corridor develops with Reduced Conflict Intersections and increased throughput, the severity of the bottleneck at this intersection will increase.
- **Documented Project Proposals:** This segment area is addressed by CALD-HD-24-CTP, Southeast Boulevard, in the 2050 Comprehensive Transportation Plan. This proposal suggests the construction of a loop bypass of US-321 from the existing Southwest Boulevard to NC-18 via Alfred Hartley Road and new location. GHMPO staff should collaborate with NCDOT and regional planning partners to assess the feasibility of this proposal, and consider the inclusion of alternates in the MTP/CTP. Ultimately, the need for an agreed upon project submittal for Prioritization will continue to increase if commuting trends and current project plans continue.

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
US-321 @ Maizel Farm Road/New Farm Road	17	1.4	1.1	10	2.48

- **Delay Analysis:** Congestion in this segment area is strongly supported by data and is reflective of the volumes of traffic negotiating a signalized intersection. While actual experienced delay for individual trips may not be excessive, the volume of traffic contributes to this segments bottleneck ranking and total delay.
- **Recommendations:** Long term solutions for this project will require this intersection to be upgraded to an interchange or grade separated intersection.
- **Documented Project Proposals:** This segment area is addressed by a STIP Project Submittal currently competing in Prioritization 7.0, which proposes an upgrade to an interchange.

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
US-321 @ Mount Herman Road	2	1.3	1.1	5.79	47

- **Delay Analysis:** Congestion at this segment area is strongly supported by congestion data. This segments recurring congestion is comparable in both severity and cause to other intersections along the US-321 corridor in Caldwell County. Notably, this segment area may experience high levels of non-recurring congestion – due to high accident volume and severity.
- **Recommendations:** Given the need for both safety and free-flow improvements, this segment area will benefit from the construction of a reduced conflict intersection.
- **Documented Project Proposals:** This segment area is addressed by a funded STIP Project, U-4700CA will construct a reduced conflict intersection with construction programmed for 2024. This proposal was also identified in the 2050 MTP.

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
US-321 @ Mission Road	5	1.3	1.1	29	13.75

- **Delay Analysis:** Congestion in this segment area is similar to congestion presented at US-321 @ Mount Herman Road. This segments recurring congestion is comparable in both severity and cause to other intersections along the US-321 corridor in Caldwell County. To a lesser extent than US-321 @ Mount Herman Road, this segment area may experience high levels of non-recurring congestion – due to high accident volume and severity.
- **Recommendations:** Given the need for both safety and free-flow improvements, this segment area will benefit from the construction of a reduced conflict intersection.
- **Documented Project Proposals:** This segment area is addressed by a funded STIP Project, U-4700CC will construct a reduced conflict intersection with construction programmed for 2024. This proposal was also identified in the 2050 MTP.

Catawba County Segment Level Analysis

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
McDonald PKWYS @ I-40	1	4.3	2.6	9	3.47

- **Delay Analysis:** Congestion at this segment area is strongly supported by congestion data. Delay on McDonald Parkway is likely the result of suboptimal signal timing. However, addition queuing could be caused by a lack of signal capacity.
- **Recommendations:** This segment area would likely benefit from signal timing optimization and ramp improvement. NCDOT Congestion Management is currently reviewing ramp capacity on the interchange.
- **Documented Project Proposals:** This segment area is currently addressed in an MTP/CTP project and STIP Project Submittal currently competing in Prioritization. I-5991A proposes the widening of I-40 from 4 to 6 lanes. This project, if funded, would present an opportunity for interchange improvements like ramp improvement. However, I-5991A is capital intensive. GHMPO staff should collaborate with NCDOT to produce an interchange specific interim solution for inclusion in the MTP/CTP and Prioritization.

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
I-40W @ US-321 (Exit 123)	3	2	1.1	10	3.96

- **Delay Analysis:** Congestion at this segment area is strongly supported by data during peak hours. Accident severity index suggests that non-recurring congestion may also be an issue at this interchange.
- **Recommendations:** NCDOT Congestion Management currently has a safety project to reduce accident frequency on interchange ramps in queue.
- **Documented Project Proposals:** This segment area is currently addressed by two MTP/CTP Projects and STIP Submittals. Exit 123 serves as a terminus for both projects (STIP Project I-5991A, MTP Project MULT-HS-03). Both submittals propose widening I-40 from 4 to 6 lanes. This project presents an opportunity for interchange improvements and improved free-flow on I-40.

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
I-40 @ Oxford School Road (Exit 138)	25	1.1	1	8	1.92

- **Delay Analysis:** Congestion at this segment area is likely caused by the number of conflict points within the interchange. However, congestion data suggests that existing congestion may not be excessive enough to necessitate a total interchange redesign at this time.

- **Recommendations:** In the interim, this interchange could benefit from additional signage to improve flow. This interchange may be a candidate for improvement through a bridge replacement. GHMPO Staff and NCDOT Congestion Management should collaborate to establish proposed improvements which could be synergized within a Bridge replacement project. Long term solutions may dual roundabouts at interchange terminals.
- **Documented Project Proposals:** This segment area is currently addressed by an MTP project (MULT-HS-04) which proposes the widening of I-40 from 4 to 6 lanes from Exit 132 to the Iredell County line. GHMPO staff should consider the inclusion of an interchange specific project in the next update on the MTP/CTP.

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
I-40 @ LR Boulevard (Exit 125)	23	2.5	1.2	24	3.16

- **Delay Analysis:** Congestion at this segment area is largely due to interchange deficiencies created by conflict at on and off ramps and suboptimal lane continuity on Lenoir-Rhyne Boulevard.
- **Recommendations:** Queuing and congestion can be reduced at this interchange through the construction of a loop on ramp, turning-movement restrictions, and increased lane continuity.
- **Documented Project Proposals:** This segment area is addressed by a funded STIP project identified in the MTP/CTP, I-5716. Construction is currently programmed for 2026.

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
I-40 @ McDonald Parkway (Exit 126)	NR	1.5	1	9	3.47

- **Delay Analysis:** Congestion at this segment area is strongly supported by congestion data. Delay on McDonald Parkway is likely the result of suboptimal signal timing. However, addition queuing could be caused by a lack of signal capacity.
- **Recommendations:** This segment area would likely benefit from signal timing optimization and ramp improvement. NCDOT Congestion Management is currently reviewing ramp capacity on the interchange.
- **Documented Project Proposals:** This segment area is currently addressed in an MTP/CTP project and STIP Project Submittal currently competing in Prioritization. I-5991A proposes the widening of I-40 from 4 to 6 lanes. This project, if funded, would present an opportunity for interchange improvements like ramp improvement. However, I-5991A is capital intensive. GHMPO staff should collaborate with NCDOT to produce an interchange specific interim solution for inclusion in the MTP/CTP and Prioritization.

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
NC-16 @ NC-16 Business/ Thornburg	22	2.2	1.6	8	>1

- **Delay Analysis:** Congestion in this segment area is largely contributed to the awkward proximity of the Exit 132 interchange and the intersection of Thornburg and NC 16. AM peak hour queuing is common in the Thornburg LHTL accessing the I-40W on ramp. PM peak hour queuing is common on the I-40E off-ramp. While accident volumes are relatively low, there is a Highway Safety Improvement Program Study currently under review, which suggests that non-recurring congestion may also be a frequent cause of delay.
- **Recommendations:** Interim improvements at this segment area could include additional signage to direct traffic flow at conflict points, and signal timing review to limit queuing in the Thornburg LHTL accessing the I-40W ramp. To address PM peak hour queuing on the I-40E off-ramp, NCDOT Congestion Management is currently reviewing the demand for dual left-turn lanes. Span-wire signs could direct LHT movement into the left lane, and RHT movements into the right lane, decreasing queue in the RHTL, which currently allows both LHT and RHT movements. Long term, GHMPO should work with NCDOT to identify specific interchange improvements that can be submitted as standalone projects, or incorporated into the designs of the projects listed below.
- **Documented Project Proposals:** This segment area is currently addressed by three MTP/CTP Projects and two STIP submittals. CATA-HR-08, currently competing in Prioritization, modernizes NC-16 from Thornburg to the Catawba River. This project presents an opportunity for improvement at the intersection of NC-16 and Thornburg. I-5991B, also competing currently, proposes the widening of I-40 from Exit 128 to Exit 132. Finally, CTP Project MULT-HS-04 proposes the widening of I-40 from Exit 132 to the Iredell County Line. Each of these projects present an opportunity for further analysis of potential improvements at this segment area.

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
US-321 @ 2 nd Avenue NW	9	1.3	1.1	13	2.14

- **Delay Analysis:** Congestion at this segment area is consistent with congestion observed along the US-321 corridor from Hickory to Lenoir – a simple function of traffic volume and facility/signal capacity.
- **Recommendations:** Delay at this intersection will be remedied through the construction of a Reduced Conflict Intersection.
- **Documented Project Proposals:** This segment area is addressed by funded STIP Project U-4700A, which widens US-321 to 6 lanes and redesigns intersections from North of US 70 in Hickory to US-321A. Construction is currently programmed for 2026.

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
I-40 @ N Oxford Street (Exit 135)	NR	1	1	8	1.92

- **Delay Analysis:** Congestion at this segment appears to predominantly occur on the interchange ramps at peak hour. North Oxford Street and I-40 do not present significant delay data. These data characteristics suggest that traffic flow on and off of ramps may be delayed by peak hour traffic on North Oxford Street, as all terminals currently are not signalized.
- **Recommendations:** This segment area could be addressed through a bridge replacement project. Signalization at this intersection may be unnecessary due to overall low volumes and delay being limited to peak hours. However, roundabouts at each terminal could reduce ramp delay. GHMPO Staff should collaborate with NCDOT Congestion Management to document a proposal to potentially be included within a bridge replacement project, and consider including the proposal in the MTP/CTP.
- **Documented Project Proposals:** This segment area is addressed by two CTP projects. CATA-HD-16 proposes the widening of North Oxford Street, the primary North-South corridor for Claremont and the only access to I-40, from I-40 to US-70. MULT-HS-04 proposes the widening of I-40 from 4 to 6 lanes from Exit 132 to the Iredell County Line. GHMPO staff should consider expanding CATA-HD-16 to include specific interchange improvements.

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
I-40 @ US-70A (Exit 130)	NR	1.1	1	5	2.48

- **Delay Analysis:** Congestion at this segment area is largely contributed to false capacity on 1st ST SW. Both off ramps access 1st ST W as a four-lane roadway. However, the additional lanes terminate in close proximity to the interchange, causing unexpected merging movements and potential for queuing and conflict.
- **Recommendations:** Improvements in this segment area should predominantly take place in the form of improved lane continuity on 1st ST W.
- **Documented Project Proposals:** This segment area is currently addressed by 1 MTP/CTP Project and STIP Project Submittal. I-5991B, currently competing in prioritization, proposes the widening of I-40 from 4 to 6 lanes from Exit 128 to Exit 132. This interchange would likely require upgrade to accommodate additional through capacity on I-40. GHMPO staff should develop a standalone proposal to address 1st ST W continuity.

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
South Center Street @ US-70	NR	1	1	10	2.48

- **Delay Analysis:** Congestion at this segment area is likely attributed to signal delay at US-70. However, this is a proposed HSIP location, which suggests there may be safety concerns and incidents causing non-recurring delay.

- **Recommendations:** GHMPO Staff should monitor potential HSIP outcomes and consider incorporating HSIP findings and project potential into the MTP/CTP.
- **Documented Project Proposals:** This segment area is currently addressed by CATA-HD-35, identified in the 2050 CTP, which proposes upgrading Center Street from US-70 to 8th Avenue Drive SE. GHMPO Staff should incorporate potential intersection improvements into this proposal.

Segment Title	Bottleneck Ranking	Peak Planning Time Index	Peak Travel Time Index	Number of Accidents	Accident Severity Index
NC 127 @ 2 nd Ave SE	NR	1.9	1.4	41	2.26

- **Delay Analysis:** Congestion at this segment area is likely attributed to the need for dedicated turning lanes to allow for optimal throughput and mobility. Accident volume is notable, and suggests that total delay may be considerably compounded by non-recurring congestion.
- **Recommendations:** The construction of turn lanes should address congestion at this segment area.
- **Documented Project Proposals:** This segment area is addressed by funded STIP Project U-5777, which constructs turn lanes from 1st Avenue SE to 2nd Ave SE. Construction is programmed for 2025.

Appendix C: Regional System Performance Data

Regional Measure	2019	2022
Total Delay (Hours)	3,828,647	2,010,987
Percentage of Employed MSA Residents Teleworking	3.3%	5.4%
Number of Employed MSA Residents Utilizing Public Transit for Commute to Work	353	277
Percentage of Identified Segments Addressed in Funded STIP Projects		26%
Percentage of Identified Segments Addressed in Prioritization Submittal		33%
Percentage of Identified Segments Addressed in MTP/CTP Proposal		73%
Average Peak PTI of Top 30 Segments		1.73
Average Peak TTI of Top 30 Segments		1.25



**GREATER HICKORY
METROPOLITAN PLANNING ORGANIZATION (MPO)**
1880 2nd Avenue NW, PO Box 9026
Hickory, NC 28603



RESOLUTION ADOPTING THE 2024 CONGESTION MANAGEMENT REPORT

A motion was made by _____ and seconded by _____ for the adoption of the following resolution and upon being put to a vote was duly adopted.

WHEREAS, the Greater Hickory Metropolitan Planning Organization is the duly designated and constituted body responsible for carrying out the transportation planning process for Alexander, Burke, Caldwell and Catawba Counties; AND

WHEREAS, 23 U.S.C. 134; and 49 U.S.C. 5303 require that the urbanized area, as a condition to the receipt of federal capital or operating assistance, have a continuing, cooperative, and comprehensive transportation planning process that results in plans and programs consistent with the comprehensively planned development of the urbanized area; AND

WHEREAS, the Greater Hickory Metropolitan Planning Organization has developed the 2024 Congestion Management Report that has been provided for review and recommended for adoption by the Greater Hickory MPO Technical Coordinating Committee and Transportation Advisory Committee.

NOW THEREFORE be it resolved that the GHMPO TAC has reviewed, endorsed, and adopted the 2024 Congestion Management Report on August 28, 2024.

Bruce Eckard, Greater Hickory MPO TAC Chair

Averi Ritchie, Greater Hickory MPO TAC
Secretary

**REQUEST FOR BOARD ACTION
GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION
TCC/TAC**

MEETING DATE: August 28, 2024

SUBJECT: 2024 Transit Safety Performance Targets

PRESENTER: Averi Ritchie, Transportation Planning Manager

ATTACHMENTS: 2024 Transit Safety Performance Targets & Resolution (for next month)

SUMMARY OF REQUEST:

The Federal Transit Administration (FTA) published the Public Transportation Agency Safety Plan (PTASP) Final Rule on July 19, 2018, requiring certain providers of public transportation systems that receive federal funds under FTA's Urbanized Area Formula Grants to develop and adopt a PTSAP that includes Safety Performance Targets for transit-related facilities, injuries, safety events, and system reliability (state of good repair). The Federal Highway Administration (FHWA) and the FTA issued a joint final rule on planning (Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning), under which MPOs must establish Safety Performance Targets 180 days after the transit agency established their Safety Performance Targets. The Western Piedmont Regional Transit Authority (WPRTA) operating in the MPO's planning area has developed information and transit safety targets toward compliance with the PTASP regulation and provided their targets to the MPO on July 24, 2024.

BOARD ACTION REQUESTED: Recommend to approve 2024 Transit Safety Performance Targets.

Suggested Motion: *I move that the committee approve the 2024 Transit Safety Performance Targets, as presented.*

Greater Hickory MPO Transit Safety Performance Targets

Safety Performance Targets – Calendar Year 2023							
<i>Specify performance targets based on the safety performance measures established under the National Public Transportation Safety Plan – National Transit Database</i>							
Mode of Transit Service	Fatalities	Fatalities (per 100k VRM)	Injuries	Injuries (per 100k VRM)	Safety Events	Safety Events (per 100k VRM)	System Reliability (number of miles between major failures)
Motor Bus Fixed Route Bus	0	0	2	0.72	1	0.36	12,615
Demand Response	0	0	0	0	1	0.19	31,609

Safety Performance Targets – Calendar Year 2024							
<i>Specify performance targets based on the safety performance measures established under the National Public Transportation Safety Plan – National Transit Database</i>							
Mode of Transit Service	Fatalities	Fatalities (per 100k VRM)	Injuries	Injuries (per 100k VRM)	Safety Events	Safety Events (per 100k VRM)	System Reliability (number of miles between major failures)
Motor Bus Fixed Route Bus	0	0	1	0.39	1	0.39	14,090
Demand Response	0	0	3	0.53	3	0.53	33,036



Transportation Planning

**RESOLUTION ESTABLISHING TRANSIT SAFETY PERFORMANCE TARGETS FOR THE
PUBLIC TRANSPORTATION AGENCY SAFETY PLAN**

A motion was made by _____ and seconded by _____ for the adoption of the following resolution, and upon being put to a vote was duly adopted.

WHEREAS, the Greater Hickory Metropolitan Planning Organization has been designated by the Governor as the Metropolitan Planning Organization (MPO) responsible, together with the State, for the comprehensive, continuing, and cooperative transportation planning process for the MPO's planning area;

WHEREAS, the Moving Ahead for Progress Act (MAP-21) and the Fixing America's Surface Transportation Action (FAST Act) requires States, public transportation providers, and MPOs to transition to a performance-based planning and programming process for the MPO's planning area;

WHEREAS, the Federal Transit Administration (FTA) published the Public Transportation Agency Safety Plan (PTASP) Final Rule on July 19, 2018, requiring certain providers of public transportation systems that receive federal funds under FTA's Urbanized Area Formula Grants to develop and adopt a PTASP that includes Safety Performance Targets for transit-related facilities, injuries, safety events, and system reliability (state of good repair);

WHEREAS, the Federal Highway Administration (FHWA) and the FTA issued a joint final rule on planning (Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning), under which MPOs must establish Safety Performance Targets 180 days after the transit agency established their Safety Performance Targets;

WHEREAS, the Western Piedmont Regional Transit Authority (WPRTA) operating in the MPO's planning area has developed information and transit safety targets toward compliance with the PTASP regulation and provided their targets to the MPO on August 28, 2024;

NOW THEREFORE be it resolved on this 28th of August, that the Greater Hickory Metropolitan Transportation Advisory Committee supports the Western Piedmont Regional Transit Authority safety targets and agrees to plan and program projects that contribute toward the accomplishment of the transit provider targets as follows on the next page:

**REQUEST FOR BOARD ACTION
GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION
TCC/TAC**

MEETING DATE: August 28, 2024

SUBJECT: Transportation Improvement Program Revisions for Approval

PRESENTER: Averi Ritchie, Transportation Planning Manager

ATTACHMENTS: Transportation Improvement Program Revisions for Approval

SUMMARY OF REQUEST:

State Transportation Improvement Program (STIP) revisions include modifications and amendments to regional and statewide transportation projects. STIP revisions are released for public comment and approved following a 30 day public comment period by TAC. All approved revisions are submitted for Board of Transportation approval. Modifications and revisions often include funding and fiscal year changes. Revisions are released monthly by NCDOT.

BOARD ACTION REQUESTED: Recommend for approval.

Suggested Motion: *Motion to approve*

REVISIONS TO THE 2024-2033 STIP
HIGHWAY PROGRAM

STATEWIDE PROJECT

STIP ADDITIONS

* M-0426DIV	- STATEWIDE PROJECT	VARIOUS, STATEWIDE TRAINING, EDUCATION, AND	ENGINEERING	FY 2024 -	\$90,000	(NHP)
STATEWIDE		WORKFORCE DEVELOPMENT.		FY 2025 -	\$90,000	(NHP)
PROJ.CATEGORY		<u>ADD PROJECT AT THE REQUEST OF THE DIVISION OF</u>		FY 2026 -	\$90,000	(NHP)
DIVISION		<u>PLANNING AND PROGRAMMING.</u>		FY 2027 -	\$90,000	(NHP)
				FY 2028 -	\$90,000	(NHP)
				FY 2029 -	\$90,000	(NHP)
				FY 2030 -	\$90,000	(NHP)
				FY 2031 -	\$90,000	(NHP)
				FY 2032 -	\$90,000	(NHP)
				FY 2033 -	\$90,000	(NHP)
				AFTER FY 2033 -	<u>\$180,000</u>	(NHP)
					\$1,080,000	
* M-0426REG	- STATEWIDE PROJECT	VARIOUS, STATEWIDE TRAINING, EDUCATION, AND	ENGINEERING	FY 2024 -	\$90,000	(NHP)
STATEWIDE		WORKFORCE DEVELOPMENT.		FY 2025 -	\$90,000	(NHP)
PROJ.CATEGORY		<u>ADD PROJECT AT THE REQUEST OF THE DIVISION OF</u>		FY 2026 -	\$90,000	(NHP)
REGIONAL		<u>PLANNING AND PROGRAMMING.</u>		FY 2027 -	\$90,000	(NHP)
				FY 2028 -	\$90,000	(NHP)
				FY 2029 -	\$90,000	(NHP)
				FY 2030 -	\$90,000	(NHP)
				FY 2031 -	\$90,000	(NHP)
				FY 2032 -	\$90,000	(NHP)
				FY 2033 -	\$90,000	(NHP)
				AFTER FY 2033 -	<u>\$180,000</u>	(NHP)
					\$1,080,000	

* INDICATES FEDERAL AMENDMENT

Wednesday, July 10, 2024

REVISIONS TO THE 2024-2033 STIP
HIGHWAY PROGRAM

STATEWIDE PROJECT

STIP ADDITIONS

* M-0426SW	- STATEWIDE PROJECT	VARIOUS, STATEWIDE TRAINING, EDUCATION, AND	ENGINEERING	FY 2024 -	\$120,000	(NHP)
STATEWIDE		WORKFORCE DEVELOPMENT.		FY 2025 -	\$120,000	(NHP)
PROJ.CATEGORY		<u>ADD PROJECT AT THE REQUEST OF THE DIVISION OF</u>		FY 2026 -	\$120,000	(NHP)
STATEWIDE		<u>PLANNING AND PROGRAMMING.</u>		FY 2027 -	\$120,000	(NHP)
				FY 2028 -	\$120,000	(NHP)
				FY 2029 -	\$120,000	(NHP)
				FY 2030 -	\$120,000	(NHP)
				FY 2031 -	\$120,000	(NHP)
				FY 2032 -	\$120,000	(NHP)
				FY 2033 -	\$120,000	(NHP)
				AFTER FY 2033 -	<u>\$240,000</u>	(NHP)
					\$1,440,000	
* M-0460	- STATEWIDE PROJECT	VARIOUS, NATIONAL SUMMER TRANSPORTATION	ENGINEERING	FY 2024 -	\$200,000	(O)
STATEWIDE		INSTITUTE (NSTI).		FY 2025 -	\$200,000	(O)
PROJ.CATEGORY		<u>ADD PROJECT AT THE REQUEST OF THE DIVISION OF</u>		FY 2026 -	\$200,000	(O)
EXEMPT		<u>PLANNING AND PROGRAMMING.</u>		FY 2027 -	\$200,000	(O)
				FY 2028 -	\$200,000	(O)
				FY 2029 -	\$200,000	(O)
				FY 2030 -	\$200,000	(O)
				FY 2031 -	\$200,000	(O)
				FY 2032 -	\$200,000	(O)
				FY 2033 -	\$200,000	(O)
				AFTER FY 2033 -	<u>\$400,000</u>	(O)
					\$2,400,000	

* INDICATES FEDERAL AMENDMENT

Wednesday, July 10, 2024

REVISIONS TO THE 2024-2033 STIP
HIGHWAY PROGRAM

STATEWIDE PROJECT

STIP ADDITIONS

* M-0478	- STATEWIDE PROJECT	VARIOUS, ON-THE-JOB TRAINING PROGRAM.	ENGINEERING	FY 2024 -	\$500,000	(O)
STATEWIDE		<u>ADD PROJECT AT THE REQUEST OF THE DIVISION OF</u>		FY 2025 -	\$500,000	(O)
PROJ.CATEGORY		<u>PLANNING AND PROGRAMMING.</u>		FY 2026 -	\$500,000	(O)
EXEMPT				FY 2027 -	\$500,000	(O)
				FY 2028 -	\$500,000	(O)
				FY 2029 -	\$500,000	(O)
				FY 2030 -	\$500,000	(O)
				FY 2031 -	\$500,000	(O)
				FY 2032 -	\$500,000	(O)
				FY 2033 -	\$500,000	(O)
				AFTER FY 2033 -	<u>\$1,000,000</u>	(O)
					\$6,000,000	
* M-0480	- STATEWIDE PROJECT	VARIOUS, DISADVANTAGED BUSINESS ENTERPRISE	ENGINEERING	FY 2024 -	\$300,000	(O)
STATEWIDE		(DBE) TRAINING AND SUPPORTIVE SERVICES.		FY 2025 -	\$300,000	(O)
PROJ.CATEGORY		<u>ADD PROJECT AT THE REQUEST OF THE DIVISION OF</u>		FY 2026 -	\$300,000	(O)
EXEMPT		<u>PLANNING AND PROGRAMMING.</u>		FY 2027 -	\$300,000	(O)
				FY 2028 -	\$300,000	(O)
				FY 2029 -	\$300,000	(O)
				FY 2030 -	\$300,000	(O)
				FY 2031 -	\$300,000	(O)
				FY 2032 -	\$300,000	(O)
				FY 2033 -	\$300,000	(O)
				AFTER FY 2033 -	<u>\$600,000</u>	(O)
					\$3,600,000	

* INDICATES FEDERAL AMENDMENT

Wednesday, July 10, 2024

REVISIONS TO THE 2024-2033 STIP
HIGHWAY PROGRAM

GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION

STIP ADDITIONS

* BL-0141 BURKE PROJ.CATEGORY DIVISION	- GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION	NC 126, BENFIELD'S LANDING BURKE ROAD TO EASTSIDE BURKE AVENUE IN NEBO. CONSTRUCT SIDEWALK. <u>ADD PROJECT AT THE REQUEST OF THE MPO.</u>	ENGINEERING RIGHT-OF-WAY CONSTRUCTION	FY 2025 - \$80,000 (STBG) FY 2025 - \$20,000 (L(M)) FY 2026 - \$160,000 (STBG) FY 2026 - \$40,000 (L(M)) FY 2027 - \$1,000,000 (STBG) FY 2027 - <u>\$250,000</u> (L(M)) \$1,550,000
TG-0023 ALEXANDER BURKE CALDWELL CATAWBA PROJ.CATEGORY PUBLIC TRANS	- GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION	WESTERN PIEDMONT REGIONAL TRANSIT AUTHORITY, PURCHASE REPLACEMENT BUSES. <u>ADD PROJECT AT THE REQUEST OF THE MPO.</u>	CAPITAL	FY 2025 - \$155,000 (L) FY 2025 - <u>\$650,000</u> (5309) \$805,000

STIP MODIFICATIONS

* BL-0140A BURKE PROJ.CATEGORY DIVISION	- GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION	LOVELADY ROAD, LAUREL STREET TO CRESCENT STREET IN VALDESE. CONSTRUCT SIDEWALK. <u>ADD PROJECT AT THE REQUEST OF THE MPO.</u>	ENGINEERING CONSTRUCTION	FY 2025 - \$120,000 (STBG) FY 2025 - \$30,000 (L(M)) FY 2027 - \$1,025,000 (STBG) FY 2027 - <u>\$256,000</u> (L(M)) \$1,431,000
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* INDICATES FEDERAL AMENDMENT

REVISIONS TO THE 2024-2033 STIP
HIGHWAY PROGRAM

GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION

STIP MODIFICATIONS

* HB-0057 CALDWELL PROJ.CATEGORY EXEMPT	- GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION	SR 1356, REPLACE BRIDGE 130185 OVER JOHNS RIVER. <u>TO ALLOW ADDITIONAL TIME FOR PLANNING AND DESIGN, DELAY RIGHT-OF-WAY AND UTILITIES FROM FY 23 TO FY 24 AND CONSTRUCTION FROM FY 24 TO FY 25. THIS ACTION ADDS RIGHT-OF-WAY TO THE FEDERALLY APPROVED 2024-2033 STIP. DP REPRESENTS RAISE GRANT FUNDS.</u>	RIGHT-OF-WAY	FY 2024 -	\$13,000	(DP)
				FY 2024 -	\$53,000	(HFB)
			UTILITIES	FY 2024 -	\$12,000	(DP)
				FY 2024 -	\$47,000	(HFB)
			CONSTRUCTION	FY 2025 -	\$162,000	(DP)
				FY 2025 -	\$6,000	(HFB)
				FY 2026 -	\$641,000	(HFB)
		\$934,000				
* HB-0058 CALDWELL PROJ.CATEGORY EXEMPT	- GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION	SR 1356, REPLACE BRIDGE 130186 OVER JOHNS RIVER. <u>TO ALLOW ADDITIONAL TIME FOR PLANNING AND DESIGN, DELAY RIGHT-OF-WAY AND UTILITIES FROM FY 23 TO FY 24 AND CONSTRUCTION FROM FY 24 TO FY 25. THIS ACTION ADDS RIGHT-OF-WAY TO THE FEDERALLY APPROVED 2024-2033 STIP. DP REPRESENTS RAISE GRANT FUNDS.</u>	RIGHT-OF-WAY	FY 2024 -	\$13,000	(DP)
				FY 2024 -	\$53,000	(HFB)
			UTILITIES	FY 2024 -	\$12,000	(DP)
				FY 2024 -	\$47,000	(HFB)
			CONSTRUCTION	FY 2025 -	\$162,000	(DP)
				FY 2025 -	\$6,000	(HFB)
				FY 2026 -	\$641,000	(HFB)
		\$934,000				
* HB-0059 CALDWELL PROJ.CATEGORY EXEMPT	- GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION	SR 1356, REPLACE BRIDGE 130275 OVER JOHNS RIVER. <u>TO ALLOW ADDITIONAL TIME FOR PLANNING AND DESIGN, DELAY RIGHT-OF-WAY AND UTILITIES FROM FY 23 TO FY 24 AND CONSTRUCTION FROM FY 24 TO FY 25. THIS ACTION ADDS RIGHT-OF-WAY TO THE FEDERALLY APPROVED 2024-2033 STIP. DP REPRESENTS RAISE GRANT FUNDS.</u>	RIGHT-OF-WAY	FY 2024 -	\$13,000	(DP)
				FY 2024 -	\$53,000	(HFB)
			UTILITIES	FY 2024 -	\$12,000	(DP)
				FY 2024 -	\$47,000	(HFB)
			CONSTRUCTION	FY 2025 -	\$162,000	(DP)
				FY 2025 -	\$6,000	(HFB)
				FY 2026 -	\$641,000	(HFB)
		\$934,000				
* HB-0060 CALDWELL PROJ.CATEGORY EXEMPT	- GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION	SR 1356, REPLACE BRIDGE 130317 OVER JOHNS RIVER. <u>TO ALLOW ADDITIONAL TIME FOR PLANNING AND DESIGN, DELAY RIGHT-OF-WAY AND UTILITIES FROM FY 23 TO FY 24 AND CONSTRUCTION FROM FY 24 TO FY 25. THIS ACTION ADDS RIGHT-OF-WAY TO THE FEDERALLY APPROVED 2024-2033 STIP. DP REPRESENTS RAISE GRANT FUNDS.</u>	RIGHT-OF-WAY	FY 2024 -	\$17,000	(DP)
				FY 2024 -	\$69,000	(HFB)
			UTILITIES	FY 2024 -	\$15,000	(DP)
				FY 2024 -	\$61,000	(HFB)
			CONSTRUCTION	FY 2025 -	\$210,000	(DP)
				FY 2025 -	\$8,000	(HFB)
				FY 2026 -	\$834,000	(HFB)
		\$1,214,000				

* INDICATES FEDERAL AMENDMENT

REVISIONS TO THE 2024-2033 STIP
HIGHWAY PROGRAM

GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION

STIP MODIFICATIONS

* HS-2413E BURKE PROJ.CATEGORY REGIONAL	- GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION	US 70, INSTALL RUMBLESTRIPES AND 6" LONG LIFE PAVEMENT MARKINGS. <u>ADD PROJECT BREAK AT THE REQUEST OF THE TRANSPORTATION MOBILITY AND SAFETY DIVISION</u>	CONSTRUCTION	FY 2025 - <u>\$270,000</u> (HSIP) \$270,000
* HS-2413H BURKE PROJ.CATEGORY REGIONAL	- GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION	VARIOUS, PRIMARY AND SECONDARY ROUTES IN DIVISION 13. INSTALL HORIZONTAL ALIGNMENT WARNING SIGNS. <u>ADD PROJECT BREAK AT THE REQUEST OF THE TRANSPORTATION MOBILITY AND SAFETY DIVISION</u>	CONSTRUCTION	FY 2025 - <u>\$438,000</u> (HSIP) \$438,000
TA-6707 ALEXANDER BURKE CALDWELL CATAWBA PROJ.CATEGORY PUBLIC TRANS	- GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION	WESTERN PIEDMONT REGIONAL TRANSPORTATION, WESTERN PIEDMONT REGIONAL TRANSIT AUTHORITY. <u>MODIFY FUNDING IN FY 26 AT THE REQUEST OF THE MPO.</u>	PLANNING	FY 2024 - \$84,000 (L) FY 2024 - \$336,000 (5307) FY 2025 - \$84,000 (L) FY 2025 - \$336,000 (5307) FY 2026 - \$84,000 (L) FY 2026 - \$336,000 (5307)
			CAPITAL	FY 2024 - \$84,000 (L) FY 2024 - \$336,000 (5307) FY 2025 - \$84,000 (L) FY 2025 - <u>\$336,000</u> (5307) \$2,100,000

* INDICATES FEDERAL AMENDMENT

REVISIONS TO THE 2024-2033 STIP
HIGHWAY PROGRAM

GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION

STIP MODIFICATIONS

TG-6800	- GREATER HICKORY METROPOLITAN	WESTERN PIEDMONT REGIONAL TRANSIT AUTHORITY, CAPITAL	FY 2024 -	\$96,000	(L)
ALEXANDER	PLANNING ORGANIZATION	ROUTINE CAPITAL - BUS STOP SHELTERS, BENCHES,	FY 2024 -	\$384,000	(5307)
BURKE		SHOP EQUIPMENT, SPARE PARTS, ENGINES,	FY 2025 -	\$96,000	(L)
CALDWELL		FAREBOX, SERVICE VEHICLES, COMPUTER	FY 2025 -	\$384,000	(5307)
CATAWBA		HARDWARE AND SOFTWARE, AVL SOFTWARE, ETC.	FY 2026 -	\$96,000	(L)
PROJ.CATEGORY		<u>MODIFY FUNDING IN FY 26 AT THE REQUEST OF THE</u>	FY 2026 -	\$384,000	(5307)
PUBLIC TRANS		<u>MPO.</u>		\$1,440,000	
TG-6801	- GREATER HICKORY METROPOLITAN	WESTERN PIEDMONT REGIONAL TRANSIT AUTHORITY, PLANNING	FY 2024 -	\$50,000	(L)
ALEXANDER	PLANNING ORGANIZATION	OPERATING ASSISTANCE - ADA PARATRANSIT.	FY 2024 -	\$200,000	(5307)
BURKE		<u>MODIFY FUNDING IN FY 24, FY 25, AND FY 26 AT THE</u>	FY 2025 -	\$50,000	(L)
CALDWELL		<u>REQUEST OF THE MPO.</u>	FY 2025 -	\$200,000	(5307)
CATAWBA			FY 2026 -	\$50,000	(L)
PROJ.CATEGORY			FY 2026 -	\$200,000	(5307)
PUBLIC TRANS			OPERATIONS	FY 2024 -	\$50,000 (L)
				FY 2024 -	\$200,000 (5307)
				FY 2025 -	\$50,000 (L)
				FY 2025 -	\$200,000 (5307)
					\$1,250,000
TQ-9039	- GREATER HICKORY METROPOLITAN	WESTERN PIEDMONT REGIONAL TRANSIT AUTHORITY, CAPITAL	FY 2025 -	\$75,000	(L)
ALEXANDER	PLANNING ORGANIZATION	CAPITAL PURCHASE OF SERVICE.	FY 2025 -	\$300,000	(5310)
BURKE		<u>MODIFY FUNDING IN FY 25, AT THE REQUEST OF THE</u>		\$375,000	
CALDWELL		<u>MPO.</u>			
CATAWBA					
PROJ.CATEGORY					
PUBLIC TRANS					

* INDICATES FEDERAL AMENDMENT

REVISIONS TO THE 2024-2033 STIP
HIGHWAY PROGRAM

GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION

STIP MODIFICATIONS

U-4700CA CALDWELL PROJ.CATEGORY REGIONAL	- GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION	US 321, SR 1160 (MOUNT HERMAN ROAD). UPGRADE INTERSECTION TO REDUCED CONFLICT INTERSECTION - WITHIN THE LIMITS OF U-4700 C. <u>TO ALLOW ADDITIONAL TIME FOR UTILITY RELOCATION, DELAY CONSTRUCTION FROM FY 24 TO FY 25.</u>	CONSTRUCTION	FY 2025 - \$72,000 (NHP) FY 2026 - \$3,657,000 (NHP) FY 2027 - \$2,781,000 (NHP) FY 2028 - \$690,000 (NHP) \$7,200,000
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U-4700CB CALDWELL PROJ.CATEGORY STATEWIDE	- GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION	US 321, SR 1809/1952 (PINE MOUNTAIN ROAD). UPGRADE INTERSECTION TO REDUCED CONFLICT INTERSECTION - WITHIN THE LIMITS OF U-4700 C. <u>TO ALLOW ADDITIONAL TIME FOR UTILITY RELOCATION, DELAY CONSTRUCTION FROM FY 24 TO FY 25.</u>	CONSTRUCTION	FY 2025 - \$120,000 (NHP) FY 2026 - \$5,467,000 (NHP) FY 2027 - \$4,602,000 (NHP) FY 2028 - \$1,809,000 (NHP) \$11,998,000
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U-4700CC CALDWELL PROJ.CATEGORY STATEWIDE	- GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION	US 321, SR 1108 (MISSION ROAD). UPGRADE INTERSECTION TO REDUCED CONFLICT INTERSECTION - WITHIN THE LIMITS OF U-4700 C. <u>TO ALLOW ADDITIONAL TIME FOR UTILITY RELOCATION, DELAY CONSTRUCTION FROM FY 24 TO FY 25.</u>	CONSTRUCTION	FY 2025 - \$83,000 (NHP) FY 2026 - \$4,050,000 (NHP) FY 2027 - \$3,217,000 (NHP) FY 2028 - \$950,000 (NHP) \$8,300,000
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STIP DELETIONS

* B-5542 CATAWBA PROJ.CATEGORY DIVISION	- GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION	CLAREMOUNT, PRESERVATION OF BUNKER HILL COVERED BRIDGE. <u>REMOVE PROJECT. FEDERAL FUNDS NO LONGER AVAILABLE.</u>	CONSTRUCTION	FY 2024 - \$296,000 (O) \$296,000
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* INDICATES FEDERAL AMENDMENT



**GREATER HICKORY
METROPOLITAN PLANNING ORGANIZATION (MPO)**
1880 2nd Avenue NW, PO Box 9026
Hickory, NC 28603



**RESOLUTION ADOPTING MODIFICATIONS TO THE
TRANSPORTATION IMPROVEMENT PROGRAM (TIP) FY 2024-2033**

A motion was made by _____ and seconded by _____ for the adoption of the following resolution, and upon being put to a vote was duly adopted.

WHEREAS, the following modifications have been proposed for FY 2024-2033 Transportation Improvement Program (TIP):

See page 1 of this Attachment

WHEREAS, the MPO certifies that these TIP modifications are consistent with the intent of the adopted 2050 Metropolitan Transportation Plan (MTP);

NOW THEREFORE be it resolved, by the Greater Hickory MPO Transportation Advisory Committee (TAC) that the TIP FYs 2024-2033 be modified as listed above on this, the 28th day of August, 2024.

Bruce Eckard
Greater Hickory MPO TAC Chair

Averi Ritchie
Greater Hickory MPO TAC Secretary

**REQUEST FOR BOARD ACTION
GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION
TCC/TAC**

MEETING DATE: August 28, 2024

SUBJECT: Transportation Integrity Explorer

PRESENTER: Andrew Webb, Outreach Coordinator & Kelly Christensen, GIS Technician

ATTACHMENTS: Transportation Integrity Explorer Demonstration

SUMMARY OF REQUEST:

To expand on GHMPO's 2050 Metropolitan Transportation Plan (MTP), staff have collected data for new mapping tools to identify and support vulnerable road users, resiliency needs, bike/pedestrian/transit projects, and highway initiatives. GHMPO staff just completed a health equity mapping assessment and are now working on a cumulative analysis of past, present, and future transportation projects within the region. This analysis covers all modes of transportation.

BOARD ACTION REQUESTED: Approve the Transportation Integrity Explorer as an appendix to the 2050 Metropolitan Transportation Plan.

Suggested Motion: *I move that the committee approve the Transportation Integrity Explorer, as presented*



**GREATER HICKORY
METROPOLITAN PLANNING ORGANIZATION (MPO)**
1880 2nd Avenue NW, PO Box 9026
Hickory, NC 28603



**RESOLUTION ADOPTING THE TRANSPORTATION INTEGRITY EXPLORER AS
APPENDIX TO THE 2050 METROPOLITAN TRANSPORTATION PLAN**

A motion was made by _____ and seconded by _____ for the adoption of the following resolution and upon being put to a vote was duly adopted.

WHEREAS, the Fixing America’s Surface Transportation (FAST) Act requires all Metropolitan Planning Organizations (MPOs) to develop and maintain a Metropolitan Transportation Plan;
AND

WHEREAS, the Metropolitan Transportation Plan (MTP) must address all modes of transportation in an urban area, have a horizon year of at least 20 years, and be financially constrained; AND

WHEREAS, 23 CFR 450.336 requires that the Greater Hickory Metropolitan Planning Organization certify the compliance of the planning process with all applicable requirements listed therein; AND

WHEREAS, the Greater Hickory Metropolitan Planning Organization has developed the Transportation Integrity Explorer that has been provided for review and recommended for adoption as an appendix to the 2050 Metropolitan Transportation Plan by the Greater Hickory MPO Technical Coordinating Committee and Transportation Advisory Committee.

NOW THEREFORE be it resolved that the GHMPO TAC has reviewed, endorsed, and adopted the Transportation Integrity Explorer on August 28, 2024.

Bruce Eckard, Greater Hickory MPO TAC Chair

Averi Ritchie, Greater Hickory MPO TAC
Secretary

**REQUEST FOR BOARD ACTION
GREATER HICKORY METROPOLITAN PLANNING ORGANIZATION
TCC/TAC**

MEETING DATE: August 28, 2024

SUBJECT: Prioritization Statewide Tier Scores & Regional Tier Local Input Point Assignment

PRESENTER: Averi Ritchie, Transportation Planning Manager

ATTACHMENTS: Prioritization Statewide Tier Scores & Regional Tier Local Input Point Assignment

SUMMARY OF REQUEST:

Every two years MPOs across the state submit transportation projects to compete for funding and inclusion in the State Transportation Improvement Program. All modes of transportation are eligible for funding. 2024-2025 is a work-intensive year for collecting data for Prioritization 7.0, assigning local input points, and confirming transportation project submittals with NCDOT for the region. Staff are currently meeting with NCDOT to ensure that all submitted projects meet the goals and needs of the region. NCDOT and staff are reviewing project data. Data scores for interstate projects and segments of US 321 were released in May. Data input points cannot be assigned for statewide tier projects. TCC and TAC are encouraged to review scores for each statewide tier project within the WPCOG and Greater Hickory MPO planning region. Scores were released for public input at the May TAC meeting.

Regional tier scores received from NCDOT were scored in GHMPO's local methodology for local input point assignment. In addition to NCDOT's data, mobility and economic development are also scored. Preliminary scores are included in the following attachment.

BOARD ACTION REQUESTED: Approve local input point assignment for regional tier scores.

Suggested Motion: *Motion to approve local input point assignment for regional tier scores.*

Top Scoring Regional Projects (Local Methodology)

SPOT ID	Local Score	DOT Score	County	Project Description	Local Input Points Assigned
H190207	Local: 70	DOT: 48.76	Caldwell	(State Wide Mobility) US 321 Alternate (South Main Street)/Riverbend Drive	100
H191141	Local:70	DOT: 45.02	Catawba	Regional Hickory Citywide Signal System Upgrade Signal Equipment	100
H170566	Local: 70	DOT: 41.477	Burke	Regional US 64 (Burkemon Avenue) @ US 70 (W Fleming Drive) Improve Intersection	100
H150309	Local: 60	DOT: 44.84	Catawba	Statewide mobility US 321(Exit 123) to SR 1476 - Fiargrove Church Road (Exit 128)	100
H190692	Local: 60	DOT: 41.77	Catawba	Regional US 70 (Main Street) @ SR 1715 (Oxford Street) Improve Intersection	100
H170910	Local: 60	DOT: 41.51	Catawba	Statewide Mobility SR 1476 (Fairgrove Church Road) - Exit 128 to NC 16 (Thornburg Drive) Exit 132 Widen Roadway to six lanes	100
H231614	Local: 60	DOT: 38.86	Burke	Regional US 70 (West Fleming Drive) Coal Chute Road Improve Intersection	100
H172232	Local: 60	DOT: 38.67	Burke/Catawba	Statewide Mobility SR 1761 - Exit 116 to US 321 Exit 123 Widen Exisiting Roadway	100
H090090	Local: 60	DOT: 27.49	Alexander	H090090 Regional NC 16 (Catawba River) to (US 64) Modernize Roadway	100
H190804	Local: 55	DOT: 40.71	Caldwell	Regional US 64, NC 18 (Wilkesboro Boulevard) Linkside Court to US 64, NC 90 (Taylorsivlle Road) Access Managment	100
H191849	Local:55	DOT: 35.99	Catawba	Regional NC 16 Upgrade Roadway	100
H090042	Local: 50	DOT: 35.09	Burke	Statewide Mobility US 64 (Burkemont Road- Exit 103) Improve Interchange	63
H090474-C	Local: 50	DOT: 39.71	Caldwell	Statewide Mobility US 321 SR 1108(Mission Road) to SR 1933 (Southwest Blvd)	100
R230042	N/A	DOT: 41.81	McDowell, Burke, Catawba, Buncombe, Iredell, Rowan	Upgrade rail infrastructure to support new intercity passenger service from Salisbury to Asheville on the AS Line. Project includes necessary infrastructure, stations, and passenger equipment to begin service with three roundtrips per day. This project would also include a maintenance facility at one endpoint. This project is contingent upon the awarding of an 80/20 federal grant and if the grant is not awarded, then the project is void.	37

Top Scoring Regional Projects (DOT Methodology)

SPOT ID	Local Score	DOT Score	County	Project Description	Cost to NCDOT
H190207	70	48.757	Caldwell	(State Wide Mobility) US 321 Alternate (South Main Street)/Riverbend Drive	\$30,500,000.00
H191141	70	45.017	Catawba	Regional Hickory Citywide Signal System Upgrade Signal Equipment	\$16,200,000.00
H150309	60	44.838	Catawba	Statewide mobility US 321(Exit 123) to SR 1476 - Fiargrove Church Road (Exit 128)	\$83,600,000.00
H190692	60	41.774	Catawba	Regional US 70 (Main Street) @ SR 1715 (Oxford Street) Improve Intersection	\$5,900,000.00
H170910	60	41.51	Catawba	Statewide Mobility SR 1476 (Fairgrove Church Road) - Exit 128 to NC 16 (Thornburg Drive) Exit 132 Widen Roadway to six lanes	\$46,400,000.00
H170566	70	41.477	Burke	Regional US 64 (Burkemon Avenue) @ US 70 (W Fleming Drive) Improve Intersection	\$3,100,000.00
H190804	55	40.708	Caldwell	Regional US 64, NC 18 (Wilkesboro Boulevard) Linkside Court to US 64, NC 90 (Taylorsivlle Road) Access Managment	\$25,000,000.00
H111253	45	40.025	Burke	Widen NC 181 from Spainhour Rd to Bost Rd	\$28,800,000.00
H090474-C	50	39.711	Caldwell	Statewide Mobility US 321 SR 1108(Mission Road) to SR 1933 (Southwest Blvd)	\$163,100,000.00
H150286	30	39.254	Burke	H150286 Statewide Mobility I 40 SR 1744 (Mineral Springs Mountain Rd.),SR 1744 (Eldred St. SE) - Exit 112	\$11,400,000.00
H141130	40	38.909	Burke	H141130 Statewide Mobility I 40 SR 1142 (Jamestown Road) - Exit 100 Upgrade Interchange	\$23,600,000.00
H231614	60	38.858	Burke	Regional US 70 (West Fleming Drive) Coal Chute Road Improve Intersection	\$2,400,000.00
H172232	60	38.632	Burke/Catawba	Statewide Mobility SR 1761 - Exit 116 to US 321 Exit 123 Widen Exisiting Roadway	\$139,000,000.00
H141920	40	38.442	Burke	H141920 Statewide Mobility SR 1712 (Drexel Road) - Exit 107 Improve Intersection	\$27,600,000.00
H190895	50	38.188	Catawba	H190895 Statewide Mobility SR 1476(Fairgrove Church Road) Construct roundabouts at both ramp terminals	\$80,900,000.00
H191465	30	36.216	Caldwell	H191465 Regional NC 90 & US 64 Widen Roadwy to two 12 -foot lanes and paved shoulders	\$25,800,000.00
H191849	55	35.987	Catawba	Regional NC 16 Upgrade Roadway	\$87,400,000.00
H090042	50	35.09	Burke	Statewide Mobility US 64 (Burkemont Road- Exit 103) Improve Interchange	\$58,800,000.00
H191600	30	33.887	Caldwell	H191600 Regional US 64, NC 18 (Morganton Blvd) SR 1956(Pinehurst Acres) to SR 1143 (Rocky Road) Widen Existing Roadway	\$31,000,000.00
H090041	30	33.657	Burke	H090041 Statewide Mobility SR 1734 (Carolina Street SE/SR 1826 - Exit 111) Improve Interchange	\$44,400,000.00
H090474-B	50	33.617	Caldwell	Statewide Mobility US 321 Alternate (South Main Street) SR 1108 (Mission Road)	\$245,500,000.00
H191773	40	33.293	Burke	H191773 Regional US 70 (Carbon City Rd) SR1150 (Reep Drive) to SR 1142 (Jamestown Road) Upgrade Roadway	\$9,400,000.00
H230986		32.999	Burke	H230986 I40 Exit 96 Kathy Rd Construct interchange improvements - remove substandard 2-way ramp condition.	\$34,300,000.00
H231622		31.924	Burke	H231622 Regional US 70 B (E Meeting St), US 70 B (E Union St) Improve Multiple Intersections along Corridor	\$4,004,000.00

H170895	40	31.599	Catawba	H170895 Regional NC 127 (2nd Street NE) 8th Avenue NE to ST 1327 (30th Avenue NW) Access Managment	\$70,800,000.00
H150287	25	31.24	Burke	H150287 Statewide Mobility SR1761 (Old Highway NC 10) - Exit 116 Upgrade interchange and remove two way traffic	\$36,500,000.00
H230985		29.606	Burke	H230985 I40 Exit 113 Construct interchange improvements - remove substandard 2-way ramp condition.	\$34,300,000.00
H150285	30	27.866	Burke	H150285 Statewide Moblity SR 114 (Causby Rd) - Exit 98	\$10,900,000.00
H111251	45	27.77	Burke	H111251 Regional NC 126 (Watermill Rd) to (Fish Hatchery Road) Modernize Roadway	\$55,400,00.00
H090090	60	27.49	Alexander	H090090 Regional NC 16 (Catawba River) to (US 64) Modernize Roadway	\$109,200,000.00
H230983		26.599	Burke	983 US 70 N Center St Construct intersection improvements to include southbound turn lanes on the bridge. Provide appropriate turning radius for t	\$4,100,000.00
H231772		26	Caldwell	H231772 US 321, SR 1107 (Falls Avenue) Upgrade interchange to tight diamond configuration.	\$112,000,000.00
H190458	40	24.717	Catawba	H190458 Regional NC 10 US 321 to NC 16 (Sigmon Dairy Rd) Widen Existing Roadway and Construct Part on New Location	\$169,500,000.00
H184299	25	24.542	Catawba	299 Regional US 70 SR 1188, SR 1361 (13th St SW) to SR 1007 (Lenoir Rhyne Blvd), SR 1164 (8th St Drive SE) Upgrade Arterial to Signalized RCI Cor	\$93,800,000.00
H171000	55	24.04	Burke	H171000 Regional NC 126 (Independence Blvd) to (Watermill Road) Modernize Roadway	\$26,400,44.00

Greater Hickory MPO
Transportation Update
August 2024

Division 11 Projects Under Development – Caldwell Co.								
<u>TIP</u>	<u>ROUTE</u>	<u>DESCRIPTION</u>	<u>ROW YEAR</u>	<u>CONST YEAR</u>	<u>TOTAL PROJECT COST</u>	<u>Status</u>	<u>Final Assigned Manager</u>	<u>Funding: S/F</u>
BL-0002	US 321A (MAIN STREET)	US 321A (MAIN STREET), CONSTRUCT PEDESTRIAN CROSSING IMPROVEMENTS FROM SR 1952 (CEDAR VALLEY ROAD) TO SR 1156 (LEGION ROAD).	2025	2025	\$464,000	Planning	Division	F
BL-0065	NS	Lenoir Greenway, Harper Avenue to Morganton Boulevard. Extend multi-use path.	2025	2026	\$2,449,000	Planning	LAP	F
BP11-R008	SR 1545 (COTTRELL HILL ROAD)	Replace Bridge 130011 on SR 1545 over Zachs Fork Creek in Caldwell County	2025	2026	\$900,000	Planning	Division	S
BP11-R025	SR 1927 (OLD MORGANTON ROAD)	Replace Bridge 130332 on SR 1927 over Abington Creek in Caldwell County	2025	2026	\$1,450,000	Planning	Division	S
BP11-R035	SR 1519 (HOLLYWOOD RIDGE ROAD)	Replace Bridge 130169 on SR 1519 over Warrior Creek in Caldwell County	2026	2027	\$950,000	Planning	Division	S
BP11-R040	SR 1719 (CEDAR VALLEY CHURCH ROAD)	Replace Bridge 130048 on SR 1719 over Upper Little River in Caldwell County	2025	2026	\$850,000	Planning	Division	S
BP11-R041	SR 1703 (LAXTON ROAD)	Replace Bridge 130271 on SR 1703 over UT Kings Creek in Caldwell County	2026	2027	\$950,000	Planning	Division	S
BP11-R042	SR 1328 (BROWN MOUNTAIN BEACH ROAD)	Replace Bridge 130322 on SR 1328 over Este Mill Creek in Caldwell County	2026	2027	\$950,000	Planning	Division	S
BP11-R048	SR 1571	Replace Bridge 130342 on SR 1571 over Kings Creek in Caldwell County	2026	2027	\$1,300,000	Planning	Division	S
HB-0056	SR 1514	SR 1514, REPLACE BRIDGE 130 OVER YADKIN RIVER.	2026	2027	\$934,000	Planning	Division	F
HB-0057	SR 1356	SR 1356, REPLACE BRIDGE 185 OVER JOHNS RIVER.	2024	2025	\$934,000	Planning	Division	F
HB-0058	SR 1356	SR 1356, REPLACE BRIDGE 186 OVER JOHNS RIVER.	2025	2025	\$875,000	Planning	Division	F
HB-0059	SR 1356	SR 1356, REPLACE BRIDGE 275 OVER JOHNS RIVER.	2025	2025	\$934,000	Planning	Division	F

Greater Hickory MPO
 Transportation Update
 August 2024

Division 11 Projects Under Construction

<u>Contract Number</u>	<u>County</u>	<u>TIP#</u>	<u>Route</u>	<u>Location Description</u>	<u>Contract Amount</u>	<u>Contractor</u>	<u>Construction Progress %</u>	<u>Completion Date</u>
DK00259	CALDWELL	R-5775	US 321	IMPROVE INTERSECTION AT US 321 (HICKORY BLVD) AND SR 1109 (PINEWOOD ROAD EXT)	\$1,682,361.75	TRI-COUNTY PAVING INC	93 %	8/24
DK00367	CALDWELL	U-6033	US 64	US 64 (NC 18) AND SR 1142 (CALLICO ROAD) INTERSECTION IMPROVEMENTS	\$3,574,459.72	TRI-COUNTY PAVING INC	87 %	4/25
DK00390	CALDWELL	U-6035	SR 1002 (DUDLEY SHOALS ROAD)	CONSTRUCT ROUNDABOUT AT GRACE CHAPEL/CAMPGROUND/PEACH ORCHARD ROAD)	\$2,132,554.69	Smith-Rowe	42 %	5/25
C204844	CCALDWELL	U-6036	SR 1109 (PINEWOOD ROAD)	FROM US 321 TO SR-1252 (BERT HUFFMAN ROAD)	\$11,480,140.98	JAMES R VANNOY & SONS CONSTRUCTION COMPANY INC	0 %	3/27

August 2024 Progress Report for Division 12 Projects in GHMPO

Active Construction Projects

Contract/ TIP #	County	Route	Project Description	Status	% Complete
C204804	Catawba, Iredell	I-40 from East of SR 1007 (1st St. West) to East of NC 115	Resurfacing for 0.861 miles.	Underway.	78%
C204848	Catawba	1 Section of US 70, 1 Section of NC 10 and 16 Sections of Secondary Roads.	Resurfacing for 31.17 miles.	Underway.	84%
DL00319	Alexander, Catawba	Various Secondary Roads	Resurfacing for 8.29 miles.	Underway.	41%
DL00322	Catawba, Cleveland, Gaston, Iredell	NC 10, NC 18, NC 150, NC 275	Install Rumble Strips for 31 miles	Project Complete.	100%
DL00311	Catawba, Lincoln	Various Secondary Roads	Resurfacing for 28.05 miles.	Project Complete.	100%

Active Projects Under Development

Contract/ TIP #	County	Route	Project Description	Status	% Complete
U-4700 A	Catawba	US 321	Widen to six lanes from north of US 70 in Hickory to US 321A. Length 3.2 miles.	Right-of-Way acquisition underway. Work on multiple disciplines also underway. The projected schedule for Construction let is August of 2026.	NA
U-5777	Catawba	NC 127	Add turn lanes from 1st Ave SE to 2nd Ave SE.	Right of Way acquisition in progress. Redesigned to shorten turn lane to reduce impacts to adjacent properties and reduced vertical profile to facilitate constructability. Let date scheduled for December of 2024.	NA

Contract/ TIP #	County	Route	Project Description	Status	% Complete
U-6041	Alexander	US 64 at SR 1124 (Church Rd)	Add left turn lanes on westbound US 64/ NC 90.	The projected schedule for Right of Way and Construction is in FY 2024 and FY 2025 respectively. Engineering work is ongoing.	NA
R-3603A	Alexander	NC 127	Widen to multi-lanes from SR 1400 (Cloninger Mill Rd) in Catawba County to SR 1156 (Richey Rd) in Alexander County.	The projected schedule for Right of Way and Construction is in FY 2024 and FY 2028 respectively. Design work in progress.	NA
U-2530A	Catawba	NC 127	Widen to multi-lanes from SR 1132 (Huffman Road) to SR 1008 (Zion Church Road).	The projected schedule for Right of Way and Construction is in FY 2025 and FY 2027 respectively. Engineering work is ongoing. Public meeting held on March 21, 2024.	NA
R-2307A	Catawba, Lincoln	NC 150	Relocated NC 16 to East of SR 1840 (Greenwood Rd). Widen to 4 lanes.	The projected schedule for Right of Way and Construction is in FY 2027 and FY 2030 respectively. Preliminary survey underway.	NA
B-5847	Catawba	SR 1709 (Rock Barn Road)	Replace Bridge 170173 over I-40.	The projected schedule for Right of Way, Utility relocation and Construction is in FY 2023 FY 2024 and FY 2030 respectively. Right of Way acquisition is ongoing. Public Meeting held on July 12, 2022 in Conover. The project proposes roundabout at the ramp terminals and also considering a multiuse path and sidewalks over I-40.	NA

NCDOT Division 13 - Construction Progress Report - August 2024

Contract Number	County	TIP#	Route	Location Description	Completion Date	Completion Percent
C204406	Buncombe, Burke, McDowell, Mitchell	B-6011, B-6013, B-6014, B-6016	SR-1106, SR-1430, SR-1781, SR-2027	1 BRIDGE IN BUNCOMBE COUNTY, 1 BRIDGE IN BURKE COUNTY, 1 BRIDGE IN MCDOWELL COUNTY, AND 1 BRIDGE IN MITCHELL COUNTY.	10/22/2024	72.04%
C204716	Burke	B-5869	US-64	BRIDGE #99 OVER NORFOLK SOUTHERN RAILROAD ON US-64/US-70 IN MORGANTON.	1/26/2028	30.48%
DM00414	Burke		SR-1001	OVER I-40 ON SR-1001 (RUTHERFORD COLLEGE RD/MALCOMB BLVD)	9/5/2025	31.70%
DM00440	Burke		-	VARIOUS PRIMARY AND SECONDARY ROUTES	10/15/2025	0.00%
DM00441	Burke		-	VARIOUS SECONDARY ROUTES	9/12/2025	8.50%
DM00442	Burke, Rutherford		SR-Multi	VARIOUS SECONDARY ROUTES	11/21/2025	0.00%
DM00449	Burke	R-5967	SR-1625	SR-1625 (9TH AVE DR NW)	10/30/2026	7.43%

NCDOT Contact: Travis J. Henley (828) 803-6120

Division 13, GHMPO Project Development Update, August 2024

Project ID	Project Manager Name	County	Description	R/W Acq. Begins	Let Date	Funding Program Description
I-5008	BRENDAN MERITHEW	BURKE	I-40 AT SR 1734/SR 1826 (EXIT 111) (COMB W/I-5875)	Non-Committed / Reprioritized	Non-Committed / Reprioritized	HIGHWAY - STI (PRIORITIZATION)
I-5009	MICHAEL G. CLARK	BURKE	I-40 AND US 64 (BURKEMONT ROAD)	Non-Committed / Reprioritized	Non-Committed / Reprioritized	HIGHWAY - STI (PRIORITIZATION)
I-5874	BRENDAN MERITHEW	BURKE	I-40 AT SR 1142 (JAMESTOWN ROAD) - EXIT 100 UPGRADE INTERCHANGE	Non-Committed / Reprioritized	Non-Committed / Reprioritized	HIGHWAY - STI (PRIORITIZATION)
I-5875	MICHAEL G. CLARK	BURKE	I-40 AT SR 1712 (DREXEL ROAD). UPGRADE INTERCHANGE. (COMB W/I-5008)	Non-Committed / Reprioritized	Non-Committed / Reprioritized	HIGHWAY - STI (PRIORITIZATION)
I-5975	CLAUDIA W. LEE	BURKE	I-40 AT EXIT 112 AND SR 1744(MINERAL SPRINGS MOUNTAIN ROAD)/ SR 1744 (ELDRED STREET SE)	Not Funded / Reprioritized	Not Funded / Reprioritized	HIGHWAY - STI (PRIORITIZATION)
I-6058	BRENDAN MERITHEW	BURKE	I-40 AT SR 1744 (CAUSBY ROAD)	Not Funded / Reprioritized	Not Funded / Reprioritized	HIGHWAY - STI (PRIORITIZATION)
R-3430A	ELISE F. BIELEN	BURKE	SR 1001 (MALCOLM BOULEVARD) FROM US 70 TO CATAWBA RIVER. MODERNIZE ROADWAY TO INCLUDE BICYCLE AND PEDESTRIAN ACCOMMODATIONS.	Not Funded / Reprioritized	Not Funded / Reprioritized	HIGHWAY - STI (PRIORITIZATION)
U-5978	BRENDAN MERITHEW	BURKE	NC 181 FROM SR 1440 TO SR 1419. WIDEN TO 3 LANES.	Not Funded / Reprioritized	Not Funded / Reprioritized	HIGHWAY - STI (PRIORITIZATION)
U-6123	BRENDAN MERITHEW	BURKE	US 64 (BURKEMONT AVENUE) BURKE COUNTY AT US 70 (W. FLEMING DRIVE) INTERSECTION. IMPROVE INTERSECTION.	Not Funded / Reprioritized	Not Funded / Reprioritized	HIGHWAY - STI (PRIORITIZATION)
U-6164	BRENDAN MERITHEW	BURKE	NC 126 FROM SR 1250 (WATERMILL ROAD) TO SR 1254 (FISH HATCHERY ROAD). MODERNIZE ROADWAY.	Not Funded / Reprioritized	Not Funded / Reprioritized	HIGHWAY - STI (PRIORITIZATION)
I-5971	BRENDAN MERITHEW	BURKE	I-40 FROM SR 1761 (OLD HIGHWAY NC10)-EXIT 116 UPGRADE INTERCHANGE AND REMOVE TWO-WAY TAFFIC	Non-Committed / Reprioritized	Non-Committed / Reprioritized	HIGHWAY - STI (PRIORITIZATION)
BR-0130	VERROL J. MCLEARY	BURKE	Replace Bridges 110114 and 110120 on I40 over Silver Creek.	4/17/2026	1/15/2030	HIGHWAY FUND BRIDGE / BRIDGE PROGRAM
U-5836	BRENDAN MERITHEW	BURKE	NC 181 FROM SR 1414 (ST. MARY'S CHURCH ROAD) TO MORGANTON ETJ WIDEN EXISTING ROADWAY	10/12/2026	6/19/2029	HIGHWAY - STI (PRIORITIZATION)
I-5891B	BRENDAN MERITHEW	BURKE	I-40 FROM MILE MARKER 105 TO MILE MARKER 112 PAVEMENT REHABILITATION AND BRIDGE REHABILITATION		3/20/2029	HIGHWAY - INTERSTATE MAINTENANCE
BL-0140A	GABRIEL L. JOHNSON	BURKE	LOVELADY ROAD, LAUREL STREET TO CRESCENT STREET IN VALDESE.CONSTRUCT SIDEWALK.		3/25/2027	BIKE & PED - STI (PRIORITIZATION)
BL-0141	GABRIEL L. JOHNSON	BURKE	NC 126. BENFIELD'S LANDING BURKE ROAD TO EASTSIDE BURKE AVENUE IN NEBO. CONSTRUCT SIDEWALK.	12/8/2025	12/2/2026	
EB-5978	BRENDAN MERITHEW	BURKE	COLLEGE STREET MULTIMODAL CONNECTOR TRAIL FROM NORTH GREEN STREET TO US 70 IN MORGANTON	10/24/2025	9/23/2026	BIKE & PED - STI (PRIORITIZATION)
RX-2013C	NANCY HORNE	BURKE	HIGHWAY-RAILWAY GRADE CROSSING SIGNALS AND GATES ON HOGAN STREET AT NORFOLK SOUTHERN RAILWAY CROSSING 729506G IN MORGANTON,BURKE COUNTY,NC		6/2/2026	
I-5990	MICHAEL G. CLARK	BURKE	I-40 AT EXIT 118 - SR 1761 (OLD NC 10). CONSTRUCT INTERCHANGE IMPROVEMENTS.	12/11/2024	12/16/2025	HIGHWAY - STI (PRIORITIZATION)
BL-0001	BRENDAN MERITHEW	BURKE	MAIN AVENUE EAST CONSTRUCT PEDESTRIAN IMPROVEMENTS FROM 2NDSTREET SE TO US 70.	7/31/2025	12/3/2025	BIKE & PED - LOCALLY SELECTED
HS-2413E	GABRIEL L. JOHNSON	BURKE	US 70 WEST OF GLEN ALPINE. INSTALL RUMBLESTRIPES AND 6" LONG LIFE PAVEMENT MARKINGS.		11/19/2025	HIGHWAY - SAFETY
R-3430B	ELISE F. BIELEN	BURKE	SR 1001 (CONNELLY SPRINGS ROAD). CONSTRUCT NEW PARALLEL BRIDGE OVER CATAWBA RIVER.	3/22/2022	7/15/2025	HIGHWAY FUND BRIDGE / BRIDGE PROGRAM
HS-2413H	GABRIEL L. JOHNSON	BURKE	MULTIPLE US, NC, AND SR ROUTES. INSTALL HORIZONTAL ALIGNMENTWARNING SIGNS.		3/19/2025	HIGHWAY - SAFETY
HA-0001	BRENDAN MERITHEW	BURKE	NEW ROUTE, CONSTRUCT ACCESS ROAD INTO BURKE COUNTY INDUSTRIAL PARK.		9/4/2024	HIGHWAY - APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM