



GREATER NASHVILLE  
**REGIONAL COUNCIL**

# Transportation Planning Work Program

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ADOPTED ON AUGUST 18, 2021

Fiscal Years 2022-2023

**Greater Nashville Regional Council**

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[GNRC.org](http://GNRC.org)

**RESOLUTION TPB-2021-009**

**A RESOLUTION ADOPTING THE FISCAL YEARS 2022 AND 2023 UNIFIED PLANNING  
WORK PROGRAM FOR THE NASHVILLE METROPOLITAN PLANNING AREA**

**WHEREAS**, the Nashville Area Metropolitan Planning Organization (MPO) is responsible for carrying out a comprehensive, cooperative, and continuing transportation planning process across Davidson, Maury, Robertson, Rutherford, Sumner, Williamson, and Wilson counties, and

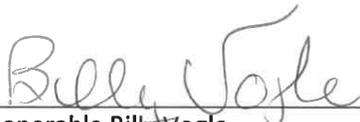
**WHEREAS**, federal regulations require that the MPO develop and adopt a Unified Planning Work Program (UPWP), also referred to as the Transportation Planning Work Program, to include a description of metropolitan area planning activities to be undertaken in the Nashville area using federal transportation grant funds; and

**WHEREAS**, various state, local, and regional agencies concerned with transportation planning for this area have cooperatively developed a two-year UPWP to direct the planning efforts for the federal fiscal years beginning October 1, 2021 and ending September 30, 2023; and

**WHEREAS**, the adoption of the UPWP satisfies federal planning requirements, it also establishes annual membership dues in order to provide local matching funds for the federal grants used to fund regional and subregional studies being carried out by the Greater Nashville Regional Council on behalf of its MPO member jurisdictions;

**NOW, THEREFORE, BE IT RESOLVED** by the Transportation Policy Board of the Nashville Area Metropolitan Planning Organization that the Unified Planning Work Program is adopted for federal fiscal years 2022 and 2023.

Adopted this 18th day of August, 2021 by the Transportation Policy Board of the Nashville Area Metropolitan Planning Organization.



The Honorable Billy Vogle,  
Transportation Policy Board Chair

Attest:



Sean Pfalzer,  
MPO Coordinator

## Acknowledgments

Funding for this document was provided by the U.S. Department of Transportation Federal Highway Administration and Federal Transit Administration, the Tennessee Department of Transportation, and local government members of the Greater Nashville Regional Council.



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# 1.0 Introduction

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## 1.1 About the Greater Nashville Regional Council

The Greater Nashville Regional Council (GNRC or Regional Council) was established in 1965 by the TN General Assembly as a not-for-profit government agency. GNRC is a council of governments empowered by State law to convene local and state leaders for the purposes of planning and programming state and federal investments into a range of social services and public infrastructure across a thirteen-county region. The 93-member governing body of the Regional Council includes 13 county mayors, 52 municipal mayors, 2 state legislators, a private citizen from each county representing issues of business and commerce, and a private citizen from each county representing issues of social equity and inclusion.

GNRC carries several designations as it works on behalf of State and local governmental partners. GNRC is designated by the U.S. Department of Health and Human Services Administration for Community Living and the TN Commission on Aging and Disability as the region's Area Agency on Aging and Disability (AAAD). The U.S. Dept of Commerce has designated GNRC as a regional Economic Development District (EDD) for the purposes of convening officials to develop the region's Comprehensive Economic Development Strategy. The U.S. Small Business Administration has designated the Mid-Cumberland Area Development Corporation, GNRC's non-profit lending arm, as a Certified Development Company authorized to administer federal small business loans.

Since October 2017, GNRC has administered the federal Metropolitan Planning Organization (MPO) programming for the seven-county Nashville metropolitan area on behalf of the region's Transportation Policy Board and has coordinated with TDOT and adjacent planning organizations to ensure a seamless planning process across the State of Tennessee.

## 1.2 About the Transportation Policy Board

The Transportation Policy Board, or TPB, is responsible for guiding the development of a regional transportation vision and the adoption of federally-required transportation plans and funding programs. The TPB represents all levels of government and key transportation officials across a seven-county metropolitan planning area that is designated in cooperation with the Tennessee Governor. The TPB governs the policymaking and transportation improvement programming decisions of the metropolitan area, and serves as the primary forum for collaboration among local communities, state officials, and interested parties related to regional transportation policies, plans, programs, and funding. The TPB is empowered to act independently of GNRC's governing body (known as the Regional Council) in the adoption of transportation policies, plans, and programs as permitted by state and federal laws and regulations.

Membership consists of the Tennessee Governor, city and county elected officials, a representative from the Greater Nashville Regional Council, a representative of area public transit operators, a representative of area county highway departments, and administrators from the Federal Highway Administration and Federal Transit Administration.

## 1.3 About this Document

This document was prepared in accordance with 23 CFR 450.308 which requires each MPO prepare an annual Unified Planning Work Program (UPWP), also called a Transportation Planning Work Program, to identify all federally-funded regional transportation planning activities or studies that will be carried out by GNRC staff, vendors/consultants, or partner organizations. The document also provides an overview of federal transportation planning requirements, the organizational structure of the MPO as it is administered by the GNRC, and a review of regional issues and initiatives that shape the transportation planning activities identified in the work program.

# 2.0 Transportation Planning Overview

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## 2.1 Federal Transportation Planning Requirements

Since the 1960s, federal law has required local and state officials to work together to make collaborative decisions for the use of federal transportation funds within America's metropolitan areas through a continuing, cooperative, and comprehensive planning process. This process requires coordination among the Tennessee Governor, local elected officials of municipal and county governments, and transportation agencies that are responsible for maintaining and improving area roadways and public transit systems.

This federal requirement for urban or metropolitan transportation planning emerged, in part, as a response to the controversies stemming from the construction of the U.S. Interstate Highway System and the broader issue of race and urban renewal across the nation's larger cities. The Federal-Aid Highway Act of 1962, passed by Congress during the John F. Kennedy administration, created the first federal requirement for urban transportation planning.

The Intermodal Surface Transportation Equity Act (ISTEA) of 1991, and subsequent acts, strengthened the metropolitan planning process, further empowered local decision-making, increased requirements for public and stakeholder involvement, and encouraged movement away from a highway construction-emphasis toward a more integrated multi-modal transportation system to improve efficiency, mobility, and access.

Federal legislation, such as the current law created through the Fixing America's Surface Transportation Act of 2015 (FAST Act), is codified in the U.S. Code of Federal Regulations (CFR) and published in the Federal Register by executive departments and agencies of the federal government. Title 23 of the United States Code (U.S.C.) contains rules and regulations for the regional transportation planning carried out by GNRC on behalf of the Nashville Area MPO (23 CFR Part 450, subpart C) with additional provisions provided in Title 49.

## 2.2 Transportation Planning Organizations

Federal law requires states to consult and coordinate with local officials in the development of transportation plans and programs. In Tennessee, TDOT works with two types of federally-recognized regional planning organizations which serve as forums for cooperative planning and decision-making.

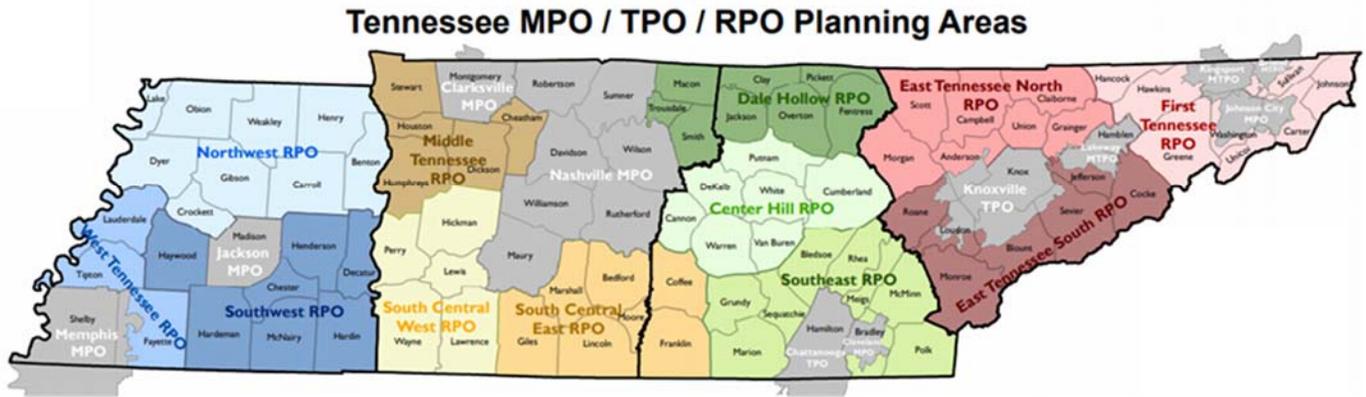
Metropolitan Planning Organizations (MPOs), also sometimes referred to as Transportation Planning Organizations, serve as the lead planning agency in cooperation with the State and public transportation operators for urban areas of the state with 50,000 or more people and are empowered to make decisions about how federal transportation funds will be programmed on transportation improvements within their respective "metropolitan planning areas." In support of that decision-making process, MPOs are required to produce a long-range Regional Transportation Plan, a short-range Transportation Improvement Program, and a Unified Planning Work Program, each of these described further in section 2.4.

There are eleven MPOs across the state which work in partnership with TDOT to carry out the following activities in their respective planning areas:

- Monitor the conditions of the existing transportation network;
- Identify existing capacity or safety problems through detailed planning studies to develop candidate transportation improvements;
- Forecast future population and employment growth for the region;
- Evaluate the effects that future land use plans will have on transportation infrastructure within major growth corridors throughout the region;
- Develop alternative growth scenarios to evaluate the affects that land use and transportation choices made today will have on the region's future;
- Estimate the impact that an expanding transportation system will have on air quality;

- Develop a financial plan that identifies the costs and revenues associated with the continued operation and maintenance, and future expansion of the region’s transportation system;
- Work with the public and stakeholders to determine the region’s priorities for improving the transportation system with the anticipated revenue; and
- Track progress through performance-based planning.

**Figure 1-1 Map of Tennessee Regional Transportation Planning Organizations**

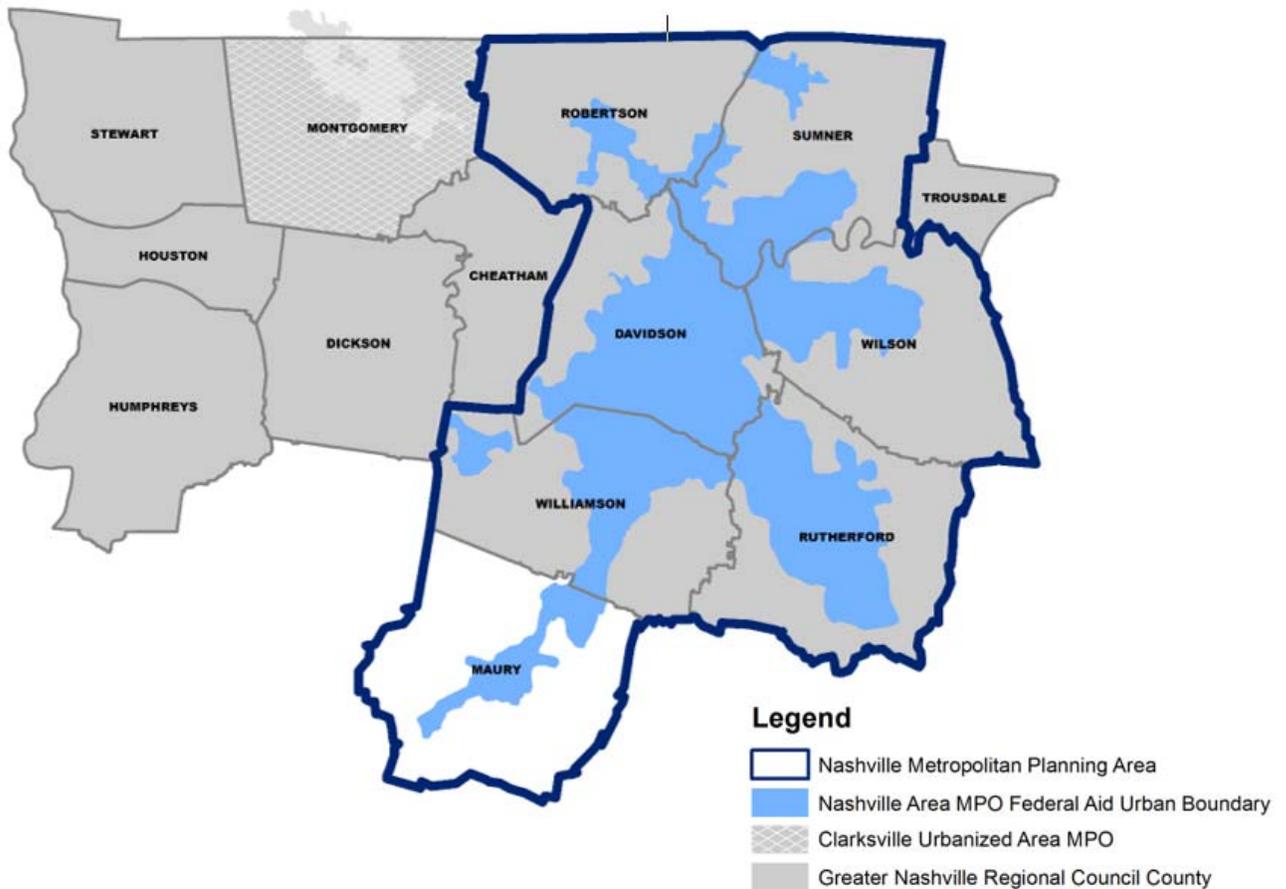


The GNRC region is served by three additional regional planning organizations. GNRC participates on the technical committees and policy boards of these organizations in order to represent a land use and economic development perspective and to assist TDOT with coordination of transportation-related initiatives across Middle Tennessee.

- **Clarksville Urbanized Area MPO** - the federally designated regional planning organization for Montgomery County, Tennessee and the portion of Christian County, Kentucky including and adjacent to the U.S. Census Clarksville Urbanized Area. Staffing and administrative support is provided by the Clarksville/Montgomery County Regional Planning Commission.
- **Middle Tennessee Rural Planning Organization** – the regional transportation planning organization for Stewart, Houston, Humphreys, Dickson, and Cheatham counties. Staffing and administrative support is provided by the Mid-Cumberland Human Resource Agency.
- **Dale Hollow Rural Planning Organization** – the regional transportation planning organization for GNRC-member Trousdale County along with Macon, Smith, Clay, Jackson, Overton, Pickett, and Fentress counties in the Upper Cumberland Development District.

Rural Planning Organizations (RPOs) serve a similar function as MPOs for the rural areas of the state. The purpose of an RPO is to involve local officials in multimodal transportation planning, through a structured process, to ensure quality, competence, and fairness in the transportation decision-making process. RPOs consider multimodal transportation needs on a local and regional basis, review long-term needs as well as short-term funding priorities, and make recommendations to TDOT. RPOs are advisory in nature and lack the programming authority of MPOs.

**Figure 1-2 Map of GNRC Planning Areas**



### 2.3 Organization of the Nashville Area MPO

The Nashville Area MPO acts as the federally-recognized transportation planning and programming body for Davidson, Maury, Robertson, Rutherford, Sumner, Williamson, and Wilson counties (see map in Appendix A). The MPO program is funded in large part by grants made available through TDOT from the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) of the U.S. Department of Transportation (U.S. DOT). Local governments across the area contribute funding through regional annual dues which assess every county and each community of 5,000 or more in population a per capita rate of 26 cents.

The MPO program is organized around a Transportation Policy Board, advisory committees, and professional planning staff described in the following sections. More information about GNRC boards and committees can be found online at <https://www.gnrc.org/governance>.

#### Transportation Policy Board

The Transportation Policy Board governs the policy-making and programming decisions for the MPO program, and serves as the primary forum for collaboration among local communities, state officials, and interested parties related to regional transportation policies, plans, programs, and funding. The Policy Board consists of the principal elected official (e.g., mayor or county executive) from each of the counties within the approved metropolitan planning area, as well as cities in those counties with a population of 5,000 or more people. Additional board members include the Tennessee Governor, a representative from the Greater Nashville Regional Council, a representative of area public transit operators, a representative of area county highway departments, and staff from the Federal Highway Administration and Federal Transit Administration.

## **Planning Oversight Committee**

The Planning Oversight Committee (POC) monitors the progress of activities identified in the Unified Planning Work Program, and reviews requests for reimbursement of expenses incurred by consultants contracted by the GNRC on behalf of the MPO. The committee also serves to develop any terms of agreement with GNRC for the administration of the MPO planning grants and the provision of staffing support. The committee's recommendations must be adopted by the Transportation Policy Board in order to be enacted. The committee consists of the chairperson and vice-chairperson of the Transportation Policy Board, the chairperson of the Transportation Coordinating Committee, Policy Board members that represent the largest city within each Census-defined Urbanized Area located within the metropolitan planning area, and a member of the Policy Board representing a municipality located outside of an Urbanized Area, a member of the Policy Board representing a county government, and a representative of TDOT.

## **Transportation Coordinating Committee**

The Transportation Coordinating Committee (TCC) is the lead advisory committee to the Policy Board. The TCC is responsible for assisting transportation planning staff with preparing and reviewing data, analyzing trends, and developing recommendations for the Transportation Policy Board. In addition, the TCC takes a lead role in coordinating local implementation of MPO-endorsed projects and policies. The committee consists of the administrative and technical leadership of member jurisdictions and agencies including local planning and public works departments, public transit agencies, public health departments, the Tennessee Department of Transportation, the Tennessee Department of Environment and Conservation, the Federal Highway Administration, and the Federal Transit Administration.

## **Bicycle and Pedestrian Advisory Committee**

This advisory group, also known as the BPAC, guides the region's bicycle and pedestrian planning efforts and helps to evaluate proposed transportation projects to ensure that they are scoped to accommodate all modes of transportation. In addition, the committee plays a key role in the project selection process associated with GNRC's Active Transportation Program which provides dedicated federal funding for the improvement of walking and bicycling conditions across the area. The BPAC consists of representatives from local governments, state agencies, non-profit organizations, local bicycle clubs, and local law enforcement. A complete roster and contact information is available online at <https://www.gnrc.org/357/Regional-BPAC>

## **Environmental Roundtable**

The Environmental Roundtable convenes local experts, practitioners, and advocates from non-profit organizations and State and federal public agencies to collaborate on issues and challenges related to the environmental quality of Middle Tennessee. The group was established by GNRC in 2020 to assist in a major update to the regional transportation plan and to help establish the Council's first regional strategy for the preservation and conservation of natural and socio-cultural resources. A complete roster and contact information is available online at <https://www.gnrc.org/341/Environmental-RoundTable>.

## **Administration and Staffing Support**

The MPO program is staffed by the GNRC which provides professional planners, engineers, research analysts, policy advisors, and communications specialists in support of the Transportation Policy Board. An MPO Coordinator oversees the day-to-day management of activities identified in the adopted UPWP. The GNRC also is responsible for the execution of legal agreements and contracts on behalf of the Transportation Policy Board, and provides administration and management of its fiscal needs.

## **2.4 Transportation Planning Products and Documents**

As part of its responsibility to staff the MPO program, GNRC staff produces three major work products: a Regional Transportation Plan (also known as the RTP or long-range transportation plan), a Transportation Improvement Program (TIP), and a Unified Planning Work Program (UPWP). The MPO's Transportation Planning

Prospectus provides further detail on the program’s organizational structure and planning process, and a Public Participation Plan (PPP) helps communicate to partners and the general public opportunities for involvement in the development of MPO products. The PPP also specifies the process and timelines for adopting and amending MPO plans and programs. All plans and programs are available on the MPO’s website at [GNRC.org](https://www.gnrc.org) and at the GRNC’s Downtown Office, 138 2<sup>nd</sup> Ave N, Nashville, TN 37201.

## **Regional Transportation Plan**

The Regional Transportation Plan (RTP) is a long-range, twenty-five year multimodal strategy and capital improvement program developed to guide the effective investment of public funds in transportation facilities. The plan identifies specific roadway and transit projects that will help manage congestion, increase regional mobility options, and address other community-driven quality of life outcomes. The RTP is updated every four or five years and may be amended as a result of changes in federal planning requirements, anticipated federal, state, and local funding; major investment studies; congestion management systems plans; interstate interchange justification studies; and environmental impact studies. The 2045 Regional Transportation Plan was adopted in February 2021, and is available at <https://www.gnrc.org/transportation>.

## **Transportation Improvement Program**

The Transportation Improvement Program (TIP) is a short-range work program that lists all regionally-significant and federally funded transportation projects and services in the MPO planning area. This includes highway and street projects, public transit projects, as well as bicycle and pedestrian projects that are implemented by TDOT or local governments, or transit agencies. The TIP is required to cover at least a four-year span and is updated at least every three years. All projects included in the TIP must be consistent with, or selected from the adopted regional transportation plan. Additionally, the TIP must be fiscally constrained by federal appropriations or estimated revenues.

The TIP identifies the location and scope of work for transportation improvements and authorizes federal grant amounts and phases of work (e.g., engineering, construction, etc.) by program year. Federal transportation funds may not be used by TDOT or local agencies in the region until they are programmed in the TIP. The current TIP accounts for approximately \$1.5 billion dollars through the year 2020.

More information about the TIP is available online at <https://www.gnrc.org/transportation>. An interactive map of projects in the TIP is available at <http://TIP.NashvilleMPO.org>.

## **Transportation Planning Prospectus and Organizational Bylaws**

The Transportation Planning Prospectus provides an overview of federal metropolitan planning requirements, the MPO’s organizational structure and decision-making process, and other regional partners who share a role in carrying out those requirements. The organizational bylaws specify the governance structure and responsibilities of the MPO Transportation Policy Board and the GNRC professional team.

## **Public Participation Plan**

The Public Participation Plan (PPP) provides the general public and interested parties with an overview of the public involvement process for the transportation planning program. This includes information about the strategies deployed to engage the public and stakeholders and the specific timelines and requirements for public comment during the development and adoption of transportation plans and programs.

Because of the extreme importance of an all-inclusive outreach program that ensures compliance with Title VI, Environmental Justice, LEP, and the Americans with Disabilities Act of 1990, GNRC will place emphasis on efforts to reach out to traditionally underserved or underrepresented segments of the region’s population including: low income, minorities, including majority minorities, homeless or institutionally housed, limited English proficiency, limited literacy, transit dependent, transportation disadvantaged, single-parent families, the elderly, and school-aged children. The goal is to ensure public involvement of vulnerable communities in decision

making to prevent disproportionately high and adverse impacts, and to ensure equal benefits from transportation improvements. The current PPP is available at <http://www.gnrc.org/publications>.

### **Nashville Region's Vital Signs**

Each year, the Nashville Area Chamber of Commerce and GNRC publish a major report to the region that tracks data points related to key issues affecting Middle Tennessee's economic well-being and quality of life in order to facilitate conversation about community-driven solutions to reinforce our strengths and address our weaknesses. The Vital Signs reports are available at <http://www.gnrc.org/publications>.

### **Annual Listing of Federally-Obligated Projects**

Each December, the GNRC publishes a complete list of all transportation projects that have had federal funds obligated during the preceding federal fiscal year for the Nashville metropolitan planning area. The obligation of funds is the federal government's promise to pay for all eligible expenses incurred by TDOT or the local implementing agency. Grant funds must be approved by the Transportation Policy Board and included in the RTP and TIP prior to their obligation by the federal government. Annual listings of federally-obligated projects are available online at <https://www.gnrc.org/transportation>.

### **Other Reports, Publications, Digital Media**

The GNRC publishes several reports, presentations, videos, and other multi-media content to its website at <http://www.gnrc.org>.

## 3.0 Planning Topics and Issues

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### 3.1 Community and Regional Issues

The planning priorities for the next two years are shaped largely by input from the Transportation Policy Board and transportation planning partners during the regular planning cycles for the regional Transportation Improvement Program and Regional Transportation Plan. The work program addresses several of the regional planning issues described below by allocating funding to projects that focus on the expansion of public transit options, the development of walkable communities, and the integration of transportation, land use, urban design, and economic development decision-making.

#### **Uncertain Impacts of the COVID-19 Pandemic**

The global pandemic has led to dramatic changes in transportation patterns and behavior through the sudden and widespread adoption of telecommuting, increased demand for home delivery services, and surge in active transportation activity. In addition, the pandemic has had a disproportionate impact on the region's vulnerable residents such as seniors or those with respiratory diseases. The pandemic continues to impact the economy, causing layoffs and decreased pay, which has led to financial strain on households across the region. Given the ongoing uncertainty associated with the pandemic, it is not yet clear which emerging trends are likely to remain into the future.

The work program seeks to address impacts caused by the pandemic through ongoing data monitoring and analysis and programming of COVID relief funding to transportation investments in the region.

#### **Worsening Traffic Congestion**

Traffic congestion is often the first visible sign of economic prosperity as more people commute to work and school and make more trips to spend their increased discretionary income. The region's rapid growth has led to additional traffic volumes and increased demand on the existing transportation system. As a result, the duration of congestion has increased and the reliability of congestion has worsened in recent years. Based on NPMRDS (INRIX) data, the duration of congestion, measured by person-hours of excessive delay, has increased two percent annually for the Nashville area.

In the future, the region will need to move people more efficiently than driving alone. According to Transportation for America's The Congestion Con report, the region has added freeways faster than the population has grown, but it has not prevented congestion. Over the last 25 years, the Nashville urbanized area has increased freeway lane miles by 107%, population by 101%, yet increased annual hours of delay by 329%. Transit solutions and safe access to active transportation are necessary in order to maintain mobility across the region and access to economic opportunities.

To address increased congestion on the region's roadways, the work program will continue to monitor and report on traffic congestion trends and convene stakeholders responsible for implementing strategies to mitigate congestion. In addition, GNRC will also engage in strategies to mitigate congestion through the Downtown Interstate Loop Study and nMotion Update of WeGo's strategic plan for transit in the region.

#### **Rise in Serious Injuries and Fatalities**

The Nashville area's Pedestrian Danger Index (PDI) is nearly double the national average, according to Transportation for America's 2019 Dangerous by Design report. Pedestrians represent less than one percent of crashes in the region, yet they are disproportionately impacted by crashes when involved. Pedestrians account for nearly 18% of traffic fatalities in the region, and pedestrian fatalities have nearly doubled from 25 in 2015 to 44 in 2019. In addition, overall traffic fatalities have risen from 156 fatalities in 2015 to 233 fatalities in 2019. One in every 400 crashes is likely to result in the loss of a life and traffic fatalities consistently remain around

200 annually for the region. To address this issue, strategies are necessary to modernize major corridors to allow safe access for all users, reduce crash severity at intersections, and connect active transportation networks.

To improve safety for all users, the work program focuses on activities to analyze and share crash data, and use crash data to evaluate and prioritize areas for improvement. In addition, GNRC will support safety planning efforts in the region and lead the first Regional Pedestrian Safety Action Plan.

### **Diversity and Demographic Shifts**

The Middle Tennessee area continues to grow and diversify. The region's total population added nearly 200,000 residents between 2010 and 2018, an increase of more than 12% in just 8 years. Over the same time period, the percentage of ethnic and racial minorities increased by 24% and the elderly population rose by 40% regionwide, both outpacing the total population growth.

The region's recent growth outpaces many of our peer regions such as Indianapolis, Kansas City, and Louisville, and growth is projected to continue. By 2045, the MPO region is expected to reach more than 2.7 million residents - an additional million people in the next 25 years. Over that time horizon, the region's racial minority population is expected to increase at a faster rate than the total population and represent 22% of the region's population by 2045. In addition, the senior population is projected to more than double to nearly half a million seniors by 2045.

As the region's population continues to age and diversify, it is essential to account for the transportation needs of these populations and ensure their participation in the transportation planning process.

A recent report regarding public transit for seniors shows Nashville as the fourth-worst city for senior transit access in the nation among metropolitan areas with a population of one million or more. Commissioned by Transportation for America, "Aging in Place, Stuck without Options" showed that 85 percent of Nashville's citizens aged 65 to 79 had poor transit access in 2015. Only Atlanta, Kansas City and Oklahoma City were worse off. As seniors become a larger share of the population, the MPO region will need to address the unique transportation needs of older adults, particularly when it comes to accessing healthcare, local organizations and support programs, public transportation, including paratransit, and opportunities for activity, such as walkable neighborhoods and multi-use paths.

To address these inequities as the region continues to grow and change, the work program includes further data analysis and targeted outreach to vulnerable populations to ensure access to basic needs and employment opportunities.

### **Affordability and Housing Choice**

Although cost of living has traditionally been a strength of the Nashville region, recent increases in cost of living, particularly in housing costs have been a burden on residents. According to the Center for Neighborhood Technology and the U.S. Department of Housing and Urban Development, households are cost burdened cost-burdened more than 45% of household income on housing and transportation. Across the MPO region, the average resident spends 53% of their income on housing and transportation, exceeding the cost-burdened threshold.

Rising housing costs have pushed many families to seek housing farther from places of employment. As a result, they may be hindered by longer commutes and/or higher transportation costs, or worse yet, pass on employment prospects due to limited transportation mobility – not only affecting individual households but the region's economic vitality.

Thus, transportation investments that expand transit service in the region and improve access to employment will be critical to increasing access to economic opportunity and sustaining the region's economy over the long term.

To address affordability issues and displacement, GNRC staff will coordinate transportation planning with economic and community development and land use decisions through its update of the Comprehensive Economic Development Strategy and support of local land use plans to implement shared strategies to maintain housing and transportation affordability.

### **Rising Costs of Obesity Epidemic**

According to the Centers for Disease Control and Prevention (CDC), Tennessee is among the top 10 most obese states in the nation, with approximately two thirds of adults and one-third of adolescents considered overweight or obese. Additionally, one-third of Americans do not drive and/or own cars, relying on walking, bicycling, and transit for transportation. Yet of the 30 percent of trips in urban areas that are one mile or less, 65 percent depend on an automobile due to inadequate facilities.

Moreover, 2012 CDC data show that 29 percent of the residents in the Nashville-Davidson-Franklin-Murfreesboro Metropolitan Statistical Area (MSA) were rated as obese. Conditions such as obesity, which is directly related to physical inactivity, combined with injuries from vehicular crashes and diseases related to air pollution, cost the United States hundreds of billions each year in health care costs. Declining public health is due in part to the built environment of cities and neighborhoods; and has led planners and community leaders to reevaluate investments in transportation infrastructure to address public health issues.

To address issues related to the obesity epidemic, GNRC will continue to fund and implement investments that promote active modes of transportation and continue its partnership with the Tennessee Department of Health to identify opportunities to incorporate public health considerations and data into planning processes and projects.

### **Climate Shifts and Extreme Weather**

Climate change and its implications have been the focus of ongoing conversation across the globe for more than two decades. Locally, the Nashville region has seen the impact of extreme weather on its communities with unprecedented flooding in 2010, the March 2020 Tornado, increasing periods of drought and rain, as well as extreme temperature fluctuations. From rolling hills, to lush farms, to meandering streams, Middle Tennessee offers unmatched beauty. But the environment's importance goes well beyond beauty. Its health and vitality are directly tied to the physical and emotional health of its residents, as well as their economic well-being.

Through the Federal Climate Assessment, the Federal government has called for action to plan for and enhance the adaptability of the nation's infrastructure to future climate scenarios. Because of the substantial capital investment and long-life cycles inherent in most transportation infrastructure, it is critical that stakeholders engage in long-term evaluation of how a transportation asset will perform under a range of future climate scenarios. Currently, policy recommendations are being developed and considered at the Federal level to incentivize planning and investment in climate resilient infrastructure. Future transportation bills could include new funding earmarked for this purpose and the region should be ready to compete for this funding and to lead the way in Tennessee.

For most of the region's transportation assets this will implicate the design, engineering and maintenance of bridges and roadways that cross or are near surface water bodies that may experience more frequent and severe flood events. At the same time, potential drought events could cause near-surface aquifer drawdowns that could result in sinkhole formations or other structural impacts. Together, these future impacts could significantly affect the level of service, reliability, and safety of the transportation system.

Future climate scenarios indicate a range of potential conditions across Tennessee that could include alterations to the frequency and intensity of storm events and changes in average and extreme temperatures. These future changes may result in more extreme weather events, such as tornadoes, flooding, and droughts, and present a significant amount of risk to the communities across Middle Tennessee. Planning for and managing these risks within the context of long-range transportation planning will allow communities across the region to avoid significant economic and environmental disruption. It will be important for the Nashville region's transportation

system of the future to be resilient in the face of climate uncertainty to make them less susceptible to significant loss of service or worse, outright failure.

To address climate related challenges as the region continues to face extreme weather events, the work program will apply the environmental data analysis to further analyze projects through the development process and coordinate with environmental stakeholders. In addition, GNRC will develop strategies and recommendations to mitigate environmental impacts, conserve environmental quality, and prepare for future environmental challenges through a Regional Conservation Strategy.

### Limited Funding and Financing Options

Over recent years the call for Congress to address the nation’s transportation funding crisis has continued to grow. As Congress continues to draw from the general fund to fill holes in the Federal Highway Trust Fund (HTF), cities and states are increasingly willing to find funding solutions for their growing transportation needs. To date, approximately \$140 Billion has been transferred from the General Fund to the HTF, including \$70 Billion alone for the FAST Act. The current funding issues are due in part to the declining purchasing power of the federal gas tax, which has not been increased since 1993. The value of revenue from this source has fallen by more than 40 percent due to inflation and is compounded by drivers buying less gas as fuel efficiency standards for cars and trucks has significantly improved.

Declining gas tax revenues and buying power means fewer projects, slower progress, and less benefit to communities and economies—thus forcing local governments to find other means to meet funding needs. As a result, nearly three-quarters of states have increased their gas tax rate at the state level since 2010. Tennessee was one those states with the passage of the IMPROVE Act in 2017 that increased the state’s tax on gasoline by 6 cents over 3 years, state’s tax on diesel fuel by 10 cents over 3 years, increased vehicle registration fees, and authorized a local option transit surtax.

Shifts in demographics and geographic characteristics have led to increasing interest in regional mass transit in Middle Tennessee to improve mobility. Today, the region as a whole has underfunded its existing transit network and led to the existence of a product that does not meet the needs of potential riders. In 2019, as the Nashville MTA rebranded as WeGo Public Transit, the agency also experienced a \$8.7 million budget shortfall, causing the elimination of numerous bus routes and increased fares. In order to avoid service cuts and fare increases in the near-term and to develop a regional system that supports the growth that is expected over the next 25 years in the long-term, dedicated funding for transit is essential.

To address the lack of funding for transportation investments in the region, GNRC will conduct a regional traffic shed/impact fee analysis to help local communities identify transportation revenue options to manage rapid growth and development.

### 3.2 Regional Goals & Objectives

GNRC uses the Unified (Transportation) Planning Work Program to advance the regional goals and objectives identified through public and stakeholder involvement in the development of the regional transportation plan. The 2045 Regional Transportation Plan, adopted in February 2021, established the following six goals and 24 measurable objectives to help ensure that the desired outcomes of the plan are being achieved through the implementation of its recommendations. The planning activities outlined in the work program provides data, research, and analysis that is used to develop and evaluate policies, projects, or programs for their consistency with these goals and objectives.

| Regional Goal                                  | Corresponding Objectives  |
|--|---|
| <i>Goal 1. Maintain a State of Good Repair</i> | Objective 1 – Maintain roadway pavement conditions<br>Objective 2 – Maintain bridge deck conditions<br>Objective 3 – Repair or replace deficient bridges<br>Objective 4 – Maintain transit assets |

|   |  |
|---|--|
| <i>Goal 2. Improve Safety for all Users</i>                           | Objective 5 – Reduce crashes and traffic incidents<br>Objective 6 – Reduce traffic fatalities<br>Objective 7 – Reduce serious injuries from crashes<br>Objective 8 – Improve safety for pedestrians and cyclists   |
| <i>Goal 3. Mitigate Congestion to Keep Region Moving</i>              | Objective 9 – Minimize travel delays<br>Objective 10 – Improve corridor-level travel time reliability<br>Objective 11 – Increase access to non-single occupant vehicle options<br>Objective 12 – Reduce travel distances   |
| <i>Goal 4. Increase Access to Economic Opportunity</i>                | Objective 13 – Increase system capacity to support economic growth<br>Objective 14 – Improve connectivity between jobs and workforce<br>Objective 15 – Ensure availability of affordable transportation options<br>Objective 16 – Increase efficiency of freight movements |
| <i>Goal 5. Minimize Disruptive Impacts of Transportation Projects</i> | Objective 17 – Build resiliency into the transportation network<br>Objective 18 – Minimize pollution from vehicle emissions<br>Objective 19 – Minimize impacts on vulnerable communities<br>Objective 20 – Minimize conflict with environmental assets                     |
| <i>Goal 6. Align with Local, Statewide, and National Policies</i>     | Objective 21 – Help implement national transportation policy<br>Objective 22 – Support statewide transportation plans<br>Objective 23 – Provide investment to build livable communities<br>Objective 24 – Invest incrementally to implement long-range vision              |

### 3.3 Federal Planning Factors and Initiatives

Activities presented in the Transportation Planning Work Program also are shaped by a set of national goals defined by the federal transportation program. The Code of Regulations (23 CFR 450.306) specifies ten planning factors to consider when developing transportation plans and programs in a metropolitan area including:

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

In addition to the planning factors required by the FAST Act, the GNRC considers areas of emphasis promoted as best practices at the national level either by the U.S. DOT or planning associations that are relevant to the metropolitan planning process. A description of how the GNRC is incorporating those recent and current priorities follows.

## **Virtual Public Involvement**

As a result of the stay-at-home orders during the COVID-19 pandemic, GNRC and its planning partners have transitioned to conducting planning activities and public engagement virtually using Microsoft Teams, Zoom, and other virtual platforms. Based on experiences over the course of the last year, there is a need for more interactive and engaging virtual activities to support two-way communication and input from all participants.

FHWA has promoted Virtual Public Involvement (VPI) through the Every Day Counts (EDC) program, and TDOT has selected VPI as a Statewide Planning Emphasis Area. Through the work program, GNRC plans to continue and enhance its use of VPI through greater availability and access to data and analysis and incorporation of VPI into studies underway or planned over the next two years.

## **Alternative Fuels**

The electrification of America's vehicles has recently increased its presence in the transportation realm. EV charging infrastructure and the use of alternative fuels is gaining national attention and funding. FHWA has promoted alternative fuels through the Alternative Fuels Corridor Program and TDOT demonstrates support of alternative fuels as a Statewide Planning Emphasis Area through current Interstate 40 Deployment Planning Efforts and through a commitment to contribute \$7 million in Highway Infrastructure Program (HIP) funds as part of a statewide partnership with TDEC and TVA. GNRC recognizes the importance of alternative fuels and plans to increase engagement with existing alternative fuel stakeholders, better incorporate it into ongoing planning activities, and link proponents with potential funding opportunities.

## **Project Delivery**

MPOs across the state of Tennessee have a high unobligated balance of suballocated federal funds that run the risk of expiring if not spent within required timeframes. TDOT identifies project delivery as an important part of the MPO planning activity in an effort to increase the obligation and expenditure of Federal and State funds programmed in MPO TIPs throughout the state of Tennessee. Through the work program, GNRC will continue its existing efforts to monitor project tracking through quarterly updates and periodic call-for-projects for cost overruns. In addition, to further elevate this issue, GNRC will establish a Project Delivery Task Force that serves as a forum for sharing common issues and challenges in the project development process and implementing strategies to expedite the delivery of projects.

## **Models of Regional Planning Cooperation**

The FHWA and FTA encourage ongoing collaboration among TDOT and MPOs and between MPOs in order to ensure the proper coordination of transportation plans and programs. The Nashville Area MPO is an active participant in TDOT's statewide long-range transportation plan update and as a member of the MPO; TDOT is actively engaged in the regional transportation plan developed for the Nashville metropolitan area. In addition, the Nashville Area MPO works closely with the Clarksville Urbanized Area MPO to carry out transit studies on behalf of or in partnership with the Regional Transportation Authority of Middle Tennessee.

On October 1, 2017, the GNRC became the sponsoring agency for the MPO program to enhance coordination among local communities and between regional organizations in Middle Tennessee, improving the efficiency and effectiveness of regional decision-making and to better align transportation planning programs with other regional activities related to economic development, infrastructure investment, and quality of life.

## **Access to Essential Services**

GNRC is committed to ensuring that the region's transportation system can be relied upon to connect vulnerable populations to life-sustaining services including housing, employment, health care, schools, and recreation. The 2045 Regional Transportation Plan included an equity analysis that identified the location of nine traditionally underserved and disadvantaged populations that have historically had difficulty in accessing those essential services. This analysis also identified Highly Vulnerable Areas, or HVAs, where six or more of the nine populations are above the regional average. GNRC will continue to utilize these findings in planning

activities and will identify additional opportunities to prioritize funding to vulnerable communities throughout FYs 2022 and 2023.

### **Performance Based Planning**

Since the passage of MAP-21 in 2012 and the FAST Act in 2015, GNRC has been working to expand its approach to performance-based planning. Specifically, the policy framework for the 2045 Regional Transportation Plan tracked performance of the transportation system with key metrics across state of good repair, safety, traffic congestion, and other regional goals and objectives. The Transportation Policy Board also adopted regional targets for roadway safety based on a one percent annual reduction in safety performance measures out to 2045. Staff will continue to work with area stakeholders to meet these performance targets and help monitor progress towards federal, state, and regional transportation goals.

### **Safety and Public Health**

The Nashville Area MPO program has a reputation as a national leader in the integration of public health considerations into the transportation planning process. GNRC will continue its efforts to evaluate health impacts of proposed transportation policies, plans, and programs through traditional roadway safety/ crash data analyses, emerging Health Impact Assessment practices and further incorporate its Integrated Transport Health Impact Model (ITHIM) with its Activity-Based Model to forecast health savings due to changes in travel behaviors.

### **Planning for Operations**

GNRC will continue to work with TDOT and other stakeholders to ensure that improvements to traffic operations and incident management are a top strategy for achieving congestion management and roadway safety goals of the MPO. In FY 2021, GNRC completed its update to the regional Intelligent Transportation Systems (ITS) infrastructure to include potential upgrades to area traffic signal technology and to prepare for emerging technologies in transportation and communications.

### **Linking Planning and Environment**

In recent years, federal and state agencies have sought to streamline the transportation project delivery process by linking the planning process with the environmental review required by the National Environmental Policy Act (NEPA). To assist in this effort, GNRC has placed an emphasis on integrating analyses of environmental, community, and economic goals into long-range planning and coordinated with TDOT, FHWA, and other partners to incorporate a formal Planning and Environmental Linkages (PEL) approach into the development of the 2045 Regional Transportation Plan. In addition, GNRC is developing a Tier 2 Analysis to expedite the NEPA process for select projects in the RTP.

### **Freight & Goods Movement**

GNRC continues to build its capacity for regional freight planning through the work program. GNRC has budgeted funds in FY 2022 and FY 2023 to facilitate the implementation of recommendations from the most recent phase of the Regional Freight and Goods Movement Study. Strategies will be developed through coordination with the regional Freight Advisory Committee and Transportation Coordinating Committee.

# 4.0 Work Program Highlights

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## 4.1 Call for Projects and Adoption

Each March GNRC announces a call-for-studies or planning activities to be considered for the upcoming UPWP. While the call is primarily targeted at those serving on the Transportation Coordinating Committee and Transportation Policy Board, the public is encouraged to offer suggestions for topics or issues to be studied. GNRC routinely collects information about planning activities conducted by local governments, transit agencies, and TDOT to be incorporated into the document for coordination purposes.

As part of the work program development process, GNRC captured input on priority planning issues to address through upcoming planning activities through an online survey and had follow-up discussions with local governments and transit agencies to document priorities, clarify requests, and identify opportunities. The results indicate that worsening traffic congestion, rise in serious injuries and fatalities, and limited funding and financing options remain higher priorities to address.

In addition to the survey, GNRC held two scoping sessions in late April and early May to guide upcoming work on the regional freight study and regional traffic impact study. These scoping sessions provided background on previous planning efforts and initial goals, objectives, and potential tasks for both efforts. GNRC used the regular Transportation Coordinating Committee and Transportation Policy Board meetings to update members on the development of the UPWP. A summary of activities in the UPWP development timeline is listed below.

- March 3 – Call for Studies and Planning Activities
- April 1 – Submission of draft UPWP to TDOT for state review
- April - May – State Review of Draft Work Program
- June – Presentation of Draft Work Program to TCC and TPB
- June 4 – Submission of draft UPWP to FHWA and FTA for federal review
- June - July – Federal Review of Draft Work Program
- August – Public Review and Comment Period for Draft Work Program
- August 18 – Adoption of Work Program

The Public Participation Plan (PPP) requires that members of the public are given at least 14 days to review and comment on the draft work program prior to adoption. During the formal review and comment period, interested stakeholders and members of the general public are asked to submit comments and ideas through the website at [GNRC.org](https://www.gnrc.org), via email at [comments@gnrc.org](mailto:comments@gnrc.org), or in person at the adoption hearing held by the Transportation Policy Board in conjunction with the formal adoption. Special assistance is provided for those who need it, by contacting GNRC staff at (615) 862-8828 or by emailing [contact@gnrc.org](mailto:contact@gnrc.org). Following that review period, a public hearing is held by the Transportation Policy Board prior to the adoption of the work program.

## 4.2 Planning Priorities for Fiscal Years 2022 and 2023

As presented in Section 3.0, the work program is designed around regional planning issues of importance to Middle Tennesseans and scheduled according to regular cycles for the update to major plans and programs. The FYs 2022-2023 program highlights include:

- **Completion of the South Corridor Study** – GNRC will complete its evaluation of major transportation investments along the I-65/ US 31/ SR-6 corridor connecting Nashville, Brentwood, Franklin, Thompsons Station, Spring Hill, and Columbia. The study is largely focused on evaluating rapid transit alternatives but will also identify ancillary roadway and active transportation improvements and provides guidance for aligning land use and development policies and regulations with desired transportation and mobility patterns.

- **Completion of Downtown Interstate Loop Study** – GNRC, TDOT, Metro Nashville, Downtown Nashville Partnership, and the Nashville Civic Design Center are cooperating on an effort to evaluate options to improve traffic through and around the downtown area. The purpose of the study is to develop a shared vision for continued improvements to the U.S Interstate 24/40/65 loop (“Inner Loop”) around downtown Nashville. The goal is to help guide short-, mid-, and long-range investments into the Loop and key facilities that support access, egress, and parallel movements.
- **Completion of Traffic Shed/Impact Fee Study** – GNRC will conduct a regional traffic shed/impact fee analysis to implement recommendations from the RTP by identifying transportation revenue options and growth management tools to help local communities manage future growth and development.
- **Reconvene the Regional Freight Experts and Advisors** – GNRC will be assembling a regional freight roundtable to develop specific strategies for advancing key recommendations identified in previous regional freight planning studies.
- **Establish Project Delivery Task Force** – GNRC will establish a task force made up of member jurisdictions and project sponsor agencies to track the progress of transportation improvements through the project delivery process. The group will be responsible for identifying projects which have fallen behind schedule and formulating recommendations for ensuring the timely obligation of federal transportation funds across the region.
- **Hold Call for Projects for the Active Transportation Program Grant** –GNRC will administer a call-for-projects and award grants through its Active Transportation Program (ATP) Grant. The ATP was first established by the Transportation Policy Board in 2010 to provide additional funding to local governments and transit agencies seeking to improve walking and bicycling conditions across the region and is coordinated with the GNRC’s Bicycle and Pedestrian Advisory Committee.
- **Develop a Regional Conservation Strategy:** GNRC is in the process of developing a framework for a Regional Conservation Strategy with the help of our Environmental Roundtable, a group of local experts, advocates, organizations, and public agencies that convenes monthly to collaborate on environmental issues. The Strategy will identify key regional issues and trends, threats and risks, priorities, and provide strategies and recommendations to mitigate impacts, conserve environmental quality, and prepare for future environmental challenges. Preliminary discussions have identified six key topic areas: (1) air quality and climate change, (2) water resources, (3) habitat, wildlife, and invasive species, (4) forest and agricultural resources, (5) open space and land conservation, and (6) historic and cultural asset preservation. The Strategy will help strengthen the relationship between the environmental review process and transportation planning and programming activities.
- **Convene Congestion Management Task Force** - GNRC will reconvene stakeholders across agencies and levels of government that are involved in the pursuit of mitigating congestion in the region through quarterly meetings to ensure that strategies are comprehensive and coordinated.
- **Preparation of the FYs 2023-2027 Transportation Improvement Program** – During FY 2022, GNRC staff will coordinate with local governments, area transit operators, and TDOT to prepare an update to the Transportation Improvement Program. Formal adoption is anticipated for September 2022 and will be submitted to TDOT for incorporation, by reference, into the new FYs 2023-2027 State Transportation Improvement Program (STIP).
- **Coordination with other Regional Planning Documents** – The work proposed for the FYs 2022-2023 provides an opportunity to align the 2045 Regional Transportation Plan with other regional planning initiatives and products developed by GNRC including the federally required documents like the Comprehensive Economic Development Strategy and Area Plan for Aging and Disability Services, as well as products of regional interest related to environmental quality and resource conservation, solid waste management, social equity, housing affordability, and workforce development.

- **Tooling for the Next Update to the Regional Transportation Plan** – Over the next two years, GNRC staff will work to upgrade planning models and forecasting tools in preparation for the development of the 2050 Regional Transportation Plan and related studies.
- **Ongoing Technical Studies and Analysis** - GNRC has budgeted funds to conduct various planning studies to further refine recommendations for the Regional Transportation Plan including but not limited to modeling and forecasting, congestion management, asset management, freight and goods movement, downtown mobility and parking, transportation demand management strategies, transportation revenue/ funding options, managed lanes and dynamic pricing strategies, and regional corridor management strategies.

### 4.3 Primary Accomplishments During Fiscal Years 2020-2021

Below is a list of the major accomplishments achieved through the MPO work program during FYs 2020-21, some of which relate to activities continuing into FY 2022.

- **Adoption of the 2045 Regional Transportation Plan** – By far, the most visible initiative of the GNRC during FY 2020 and 2021 was the update to the Regional Transportation Plan. A public kickoff was held in Fall 2019 and the development of the Plan remained on schedule despite a global pandemic that altered travel patterns and elevated uncertainty. The development of the plan also incorporated an update to the MPO’s Congestion Management Process (CMP) and set ambitious regional targets for safety performance measures.
- **Adoption of Transportation Improvement Program** – GNRC completed an update to the MPO’s FYs 2020-2023 Transportation Improvement Program (TIP) in October 2019 to align its programming horizon with that (FY 2023) of the State Transportation Improvement Program (STIP) developed by TDOT.
- **Development of Two-Year Unified Transportation Planning Work Program** – In 2021, GNRC began working with its Transportation Coordinating Committee and Transportation Policy Board to develop the FYs 2022-2023 Unified (Transportation) Planning Work Program which represents the two-year UPWP for the MPO program.
- **Reemergence of BPAC** - GNRC reconvened its Bicycle and Pedestrian Advisory Committee (BPAC), a standing advisory committee comprised of representatives of state agencies, local government planning and public works departments, law enforcement and public safety, non-profit organizations and advocacy groups, academic institutions, and other partners interested in improving traveling conditions for pedestrians and bicyclists to provide guidance on issues related to the non-motorized modes of transportation.
- **Established Regional Environmental Roundtable** - GNRC kicked off the roundtable in March 2020 to convene Middle Tennessee’s top natural resource management agencies and environmental experts. The members have helped shape the environmental factors and information into GNRC’s products and programs, particularly through the update of the 2045 Regional Transportation Plan.
- **Kickoff of Downtown Interstate Loop Study** – GNRC, TDOT, Metro Nashville, Downtown Nashville Partnership, and the Nashville Civic Design Center are cooperating on an effort to evaluate options to improve traffic through and around the downtown area. The purpose of the study is to develop a shared vision for continued improvements to the U.S Interstate 24/40/65 loop (“Inner Loop”) around downtown Nashville. The goal is to help guide short-, mid-, and long-range investments into the Loop and key facilities that support access, egress, and parallel movements.
- **Continuation of the South Corridor Study** – GNRC continued its evaluation of major transportation investments along the I-65/ US 31/ SR-6 corridor connecting Nashville, Brentwood, Franklin, Thompsons Station, Spring Hill, and Columbia. The study is largely focused on evaluating rapid transit alternatives but will also identify ancillary roadway and active transportation improvements

and provides guidance for aligning land use and development policies and regulations with desired transportation and mobility patterns.

- **Completed the Smart Mobility Assessment & Updated the Regional ITS Architecture** – GNRC wrapped up work on a study to inventory existing Intelligent Transportation Systems (ITS) across the region and to evaluate the potential for emerging technologies to alter regional travel patterns and system performance. As part of the effort, GNRC worked with TDOT to update the federally-required ITS Architecture.
- **Nashville Region’s Vital Signs Reports** – In 2020 and 2021, GNRC and the Nashville Area Chamber of Commerce released the annual indicators report to draw attention to the region’s strengths and weaknesses related to quality of life and economic prosperity. The report places significant emphasis on mounting challenges related to traffic congestion and regional mobility.

## 4.4 Planning Partners

The activities identified in the Unified (Transportation) Planning Work Program are carried-out through a collaborative effort among GNRC staff and federal, state, and local agencies. In addition, GNRC contracts with area non-profit organizations and private consulting firms in cases where additional capacity, expertise, or independent assessments are required.

### Lead Federal Agencies

The **Federal Highway Administration (FHWA)** administers all federal-aid highway monies available for highway planning and implementation pursuant to the provisions of Title 23, United States Code. Given that TDOT has implemented the Consolidated Planning Grant (CPG) Program, all FHWA and FTA planning funds are combined into a single fund that is administered by FHWA.

The FHWA Tennessee Division Office in Nashville is responsible for issuing regulations and guidelines relative to expenditure of Federal-aid highway monies in Tennessee; monitoring all highway planning, programming and implementation activities; and exercising fiscal control of all Federal-aid highway expenditures through an annual audit.

The **Federal Transit Administration (FTA)** administers all federal-aid monies available through grant allocation for public transportation planning, capital improvement, demonstration and operations pursuant to the provisions of Title 49, United States Code. The FTA Region IV Office in Atlanta is responsible for issuing federal transit regulations and guidelines for use by grant recipient agencies and public transportation agencies, monitoring public transportation planning and demonstration projects, and exercising fiscal controls.

GNRC also coordinates with the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, the U.S. Department of Commerce, and the U.S. Department of Agriculture on matters pertaining to transportation.

### Lead State Agency

The **Tennessee Department of Transportation (TDOT)** is the state agency responsible for managing, operating, and maintaining U.S. Interstates and the State route system. This includes oversight of the design and construction of transportation improvement projects for those roadways, as well as other federal-aid routes when requested to do so on behalf of local communities. Within the context of planning, TDOT is responsible for the preparation of a statewide transportation plan; administration of a data collection program relative to transportation modes and needs; and cooperation with local government members of MPOs in the development of metropolitan area transportation plans.

GNRC also coordinates with the Governor’s Office, the Department of Safety and Homeland Security, the Department of Health, the Department of Economic and Community Development, and the Department of Environment and Conservation, Department of Tourist Development, the TN Commission on Aging and Disability, and the TN Housing Development Agency on matters pertaining to transportation.

## Municipal and County Governments

The Transportation Policy Board consists of the principal elected official (e.g., mayor or county executive) from each of the counties within the formal metropolitan planning area, as well as cities in those counties with a population of 5,000 or more people. Local governments are the primary drivers of the planning process and have the greatest influence on how transportation decisions will affect Middle Tennessee's quality of life.

- City of Brentwood
- City of Columbia
- City of Fairview
- City of Franklin
- City of Gallatin
- City of Goodlettsville
- City of Greenbrier
- City of Hendersonville
- City of LaVergne
- City of Lebanon
- City of Millersville
- City of Mount Juliet
- City of Murfreesboro
- City of Portland
- City of Spring Hill
- City of Springfield
- City of White House
- Town of Nolensville
- Town of Smyrna
- Metropolitan Nashville-Davidson County
- Maury County
- Robertson County
- Rutherford County
- Sumner County
- Williamson County
- Wilson County

## Public Transit Operators

Public transit operators play a critical role in regional transit planning efforts by participating in the long-range planning efforts of the GNRC, but also by carrying out short-term capital planning and operational analysis activities. The **Regional Transportation Authority**, recently rebranded to WeGo Public Transit, is responsible for developing, managing, operating, and maintaining a regional transit system across ten Middle Tennessee counties including all seven counties in the Nashville Metropolitan Planning area. The RTA oversees the largest commuter vanpool program in the Southeast, facilitates thousands of carpools, coordinates Relax & Ride regional bus routes, and operates the area's first regional rail project.

The Nashville Metropolitan Transit Authority, recently rebranded to **WeGo Public Transit**, provides transit service throughout Davidson County. The **Franklin Transit Authority** provides local bus/trolley service to residents in the Franklin and Cool Springs area. The **City of Murfreesboro Transportation Department** provides local bus service, known as Rover, to residents in Murfreesboro.

## Non-Profit Partners

GNRC has an ongoing partnership with each of the following non-profit organizations that help implement activities identified in the work program to connect additional community groups and stakeholders to the planning process.

- **Conexión Américas** works in partnership with the GNRC to foster public involvement on public transportation improvements that prioritize modes of active transportation. Conexión Américas is uniquely qualified to orchestrate public engagement on transportation plans, programs, policies and projects as it has the staff and resources to connect with populations, especially local Latino communities, that would not be reached through the MPO's traditional outreach and communications methods.
- The **Nashville Area Chamber of Commerce** and GNRC co-produce an annual indicators report entitled, "Nashville Region's Vital Signs" to help draw attention to the area's strengths and weakness through ongoing tracking of various performance measures that relate to quality of life. The Nashville Area Chamber of Commerce also helps the GNRC coordinate with other chambers across the region to ensure that local businesses have a voice in the transportation planning process.
- The **Nashville Civic Design Center** works with the GNRC to integrate good urban design considerations into the transportation planning process. Together, the Nashville Civic Design Center and the University of Tennessee at Knoxville School of Architecture and Design partner to publish two booklets per year that illustrate best practices and concepts to provide guidance to the region.
- **Cumberland Region Tomorrow** is a non-profit organization formed in 2000 to inform and educate the region on matters related to quality growth, and to support local communities in their comprehensive planning efforts. Through its work, CRT brings people together to address the challenges and opportunities that come with growth and development in Middle Tennessee. Its mission is to foster communication, collaboration, and action as the region plans for long-term livability, economic vitality and sustainability.
- The **Transportation Management Association (TMA) Group** is a 501(c)(3) non-profit organization which works with local employers to promote transportation demand management strategies such as transit and ridesharing, telecommuting, flexible work schedules, among others. The TMA Group also operates local bus service under contract to Franklin Transit Authority and the regional vanpool program under contract to the Regional Transportation Authority.
- The **Transit Alliance of Middle Tennessee** is comprised of representatives from the business community, the Transit Alliance is a non-profit organization committed to communicating the value of regional mass transportation needs and options. The Alliance fosters education across the region about the economic value of mass transit investments, and works with GNRC on engagement activities with its members.
- The **Leadership Middle Tennessee** is a leadership institute founded in 1999 to provide a regional perspective to a diverse array of public and private-sector community leaders. Through networking, collaboration, and strategic thinking, LMT develops regional leaders who can contribute to long-term solutions that sustain and balance the quality of life and economic growth across Middle Tennessee.

## 4.5 Changes to the Adopted Work Program

Any changes to the Work Program that involves the addition of major studies not previously described in this document, the addition of newly identified federal funding, or the modification of the approved scope of work will require a formal amendment. In addition, any change that is required to be enacted through a formal amendment in accordance with the applicable provisions of 2 CFR 200 or other federal regulations will be processed as such. Formal amendments must be adopted by the Transportation Policy Board according to the procedures outlined in the Public Participation Plan which require a public review and comment period and a public hearing. All other changes may be performed administratively by GNRC and provided to TDOT, FHWA, and FTA, and published to the GNRC website.

# 5.0 Work Tasks and Outcomes

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## Task 1. Program Administration

### Purpose

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Administer a continuous, cooperative, and comprehensive metropolitan planning program to ensure that state and local partners maintain eligibility for the use of federal transportation funds to improve area roadways and transit systems.

### Accomplishments during Fiscal Years 2020-2021

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- Administered the planning activities identified in the adopted FYs 2020-2021 Unified (Transportation) Planning Program.
- Tracked revenue and expenses and prepared quarterly progress reports for reimbursements.
- Carried out procurement process to select a roster of consultants for use in support of regional transportation planning activities.
- Participated in professional development organizations and attended peer exchanges, conferences, and webinars to further advance skillsets and qualifications of staff.
- Participated in the federal certification review process jointly conducted by FHWA and FTA and performed activities related to corrective actions. The certification review ensures that the planning requirements of 23 U.S.C. 134 and 49 U.S.C. 5303 are being satisfactorily implemented.
- Updated the federal-required Transportation Planning Agreement between GNRC, TDOT, and area transit operators to define roles and responsibilities associated with the metropolitan planning process.
- Developed the FYs 2022-2023 UPWP.

### Activities Identified for Fiscal Years 2022-2023

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- Manage the implementation of work tasks and budgets identified within the FYs 2022-2023 Unified (Transportation) Planning Program.
- Coordinate planning activities with TDOT, adjacent MPOs and RPOs, transit agencies, and other transportation stakeholders across the Middle Tennessee region.
- Maintain MPO planning agreements and update as needed.
- Continue the practice of training new members on metropolitan planning programs and services.
- Monitor best practices for transportation/ metropolitan area planning by attending workshops and by participating in associations such as, but not limited to, the National Academies Transportation Research Board, American Planning Association, Association of MPOs, the American Public Transportation Association, Transportation for America, Institute of Transportation Engineers, the American Association of State Highway and Transportation Officials, Association of Bicycle and Pedestrian Professionals, National Association of Regional Councils, FHWA Every Day Counts, among others.
- Host or participate in statewide meetings amongst transportation planning organizations and state and federal partners to improve transportation planning and coordination.
- Host or participate in various regional, statewide, and national conferences to advance best practices in transportation planning and coordination.
- Prepare necessary updates to the Unified (Transportation) Planning Work Program including preparation of the FYs 2024-2025 program.
- Prepare and participate in the Federal Certification Review scheduled for August 2022.

## TDOT Activities

- TDOT will work with the GNRC to establish the administrative and technical procedures required to meet federal planning requirements; prepare and review contractual agreements as necessary; participate in meetings; distribute special and annual reports and study documents; review and analyze individual transportation planning projects and studies; coordinate FTA programs across Tennessee; assist transportation planning organizations with matters pertaining to statewide freight and public transportation systems; and undertake general administrative activities in support of the metropolitan planning program.

## List of Products & Outcomes

- Invoices and progress reports to TDOT (quarterly)
- Printed/ published reports and documents (ongoing)
- Travel and training (ongoing)
- Annual memberships in planning and transportation engineering organizations (ongoing)
- Software and devices for metropolitan planning activities (ongoing)
- Amendments to the FYs 2022-2023 UPWP (as needed)
- FYs 2024-2025 UPWP (August 2023)
- Certification of the Nashville Area MPO (December 2022)

## Anticipated Purchases

- Local travel and other direct costs for meetings across the metropolitan planning area
- Travel and registration for conferences, peer exchanges, study missions; cost of production for hosted conferences including facility rental, necessary food and beverage, speakers, brochure/programs
- Printing and publications for products developed as part of any UPWP task
- Supplies and materials for public workshops and meetings
- Membership fees and organizational dues for industry and trade associations
- Public noticing and advertisements for plans, programs, events, and meetings
- Software and devices to including subscriptions for ESRI ArcGIS, Caliper TransCAD, Caliper TransModeler, and other software necessary to perform the tasks outlined in this Unified Planning Work Program

## Budget Summary

| Task 1. Program Administration, FYs 2022-2023 |                      |                         |                      |                      |                       |                      |
|---|----------------------|-------------------------|----------------------|----------------------|-----------------------|----------------------|
| Revenue Source                                | GNRC Personnel       | GNRC Other Direct Costs | GNRC Indirect Costs  | GNRC Activities      | Consultant Activities | Task Total           |
| <b>CPG (80/5/15) Subtotal</b>                 | <b>\$ 310,000.00</b> | <b>\$ 278,553.78</b>    | <b>\$ 139,500.00</b> | <b>\$ 728,053.78</b> | <b>\$ -</b>           | <b>\$ 728,053.78</b> |
| Federal (80)                                  | \$ 248,000.00        | \$ 222,843.02           | \$ 111,600.00        | \$ 582,443.02        | \$ -                  | \$ 582,443.02        |
| State (5)                                     | \$ 15,500.00         | \$ 13,927.69            | \$ 6,975.00          | \$ 36,402.69         | \$ -                  | \$ 36,402.69         |
| Local (15)                                    | \$ 46,500.00         | \$ 41,783.07            | \$ 20,925.00         | \$ 109,208.07        | \$ -                  | \$ 109,208.07        |
| <b>Total Funding</b>                          | <b>\$ 310,000.00</b> | <b>\$ 278,553.78</b>    | <b>\$ 139,500.00</b> | <b>\$ 728,053.78</b> | <b>\$ -</b>           | <b>\$ 728,053.78</b> |

\*In addition, TDOT expends FHWA SPR funding to cover costs of the Departments participation in the MPO program. Those funds are accounted for in the TDOT Work Program (<https://www.tn.gov/tdot/long-range-planning-home/longrange-administration/longrange-spr.html>).

## Task 2. Regional Planning

### Purpose

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Maintain a long-range plan for the region's transportation needs that is: 1) technically based on the latest available data on land use, demographics, and travel patterns; 2) philosophically based on regional goals and values, and 3) financially based on predictable, reliable funding sources; integrate transportation planning with land use, economic development, environmental, and public health considerations. Contribute to other local and state planning efforts across the area to ensure the incorporation of a regional perspective, and to help increase the effectiveness of regional governance and coordination.

### Accomplishments during Fiscal Years 2020-2021

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- Adopted the 2045 Regional Transportation Plan (RTP).
- Updated analysis of existing conditions and trends, financial constraints, and project prioritization and selection criteria.
- Completed update of asset management analysis of existing road and bridge conditions and the projections of maintenance needs over the life of the plan.
- Completed update of Active Transportation Level of Service (LOS) and Latent Demand Analysis to support the prioritization of bicycle and pedestrian projects for future funding consideration.
- Updated Congestion Management Process.
- Completed Regional Intelligent Transportation Systems/ Smart Mobility Assessment in partnership with TDOT, area chambers of commerce, and local entrepreneurial centers.
- Continued work with Nashville Civic Design Center to incorporate urban design recommendations into the transportation planning process.
- Continued work on the South Corridor Study to make recommendations for transit investment opportunities between Nashville and Williamson and Maury counties, and to align economic and community development practices with those investments.
- Adopted targets for performance-based planning measures related to safety, congestion, system preservation, and transit assets.

### Activities Identified for Fiscal Years 2022-2023

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- Implementation and maintenance of the 2045 Regional Transportation Plan.
- Continue to monitor and implement federal planning requirements for the integration of transportation performance measures for safety, infrastructure, congestion, and other measures identified by federal regulations and guidance. Performance measures and targets will be monitored and updated in coordination with TDOT.
- Continue to maintain the federal functional classification system for the planning area.
- Participate in local and statewide planning efforts to ensure consistency with regional plans, i.e., Metro-Nashville Vision Zero Action Plan, Sumner County Bike/Ped Master Plan, etc.
- Continue efforts to integrate public health considerations into the transportation planning process.
- Continue to evaluate strategies to manage congestion in the region through the development of alternatives to driving alone, and through alignment with local land use decisions.
- Continue participation in Roadway Safety Audit Reviews to identify safety improvements to area roadways.
- Continue to integrate environmental analysis into the planning and project development process through outreach and engagement, data analysis, and project-level analysis.
- Continue to integrate vulnerable populations into the planning and project development process through outreach and engagement, data analysis, and project-level analysis.

- Continue to explore opportunities to integrate innovative design activities into the planning and project development process through practices such as creative-placemaking.
- Complete work on the South Corridor Study to make recommendations for transit investment opportunities between Nashville and Williamson and Maury counties, and to align economic and community development practices with those investments.
- Complete Downtown Interstate Loop Study to develop a shared vision for continued improvements to the U.S Interstate 24/40/65 loop (“Inner Loop”) around downtown Nashville and help guide short-, mid-, and long-range investments into the Loop and key facilities that support access, egress, and parallel movements.
- Conduct Traffic Shed Impact Fee Study to identifying transportation revenue options and growth management tools to support local communities manage future growth and development.
- Conduct Regional Freight Study to identifying strategies to mitigate truck volumes and associated impacts in the downtown inner loop.
- Coordinate with WeGo to update nMotion, the strategic transit plan for the Nashville region.
- Coordinate with the RTA, area transit agencies, and the Mid-Cumberland Human Resource Agency to update the Coordinated Human Services Transportation Plan.
- Conduct Regional Pedestrian Safety Action Plan to focus the region’s attention on improving safety for active transportation users and guiding the implementation of strategies across stakeholders.
- Conduct various small scale planning studies to further refine recommendations for the Regional Transportation Plan including but not limited to modeling and forecasting, congestion management, freight and goods movement, downtown mobility and parking, transportation demand management strategies, transportation revenue/ funding options, managed lanes and dynamic pricing strategies, and regional corridor management strategies.

## TDOT Activities

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- TDOT will work with GNRC to integrate recommendations of the 2045 RTP and the statewide long-range transportation plan; review planning models; attend meetings for planning studies; and provide support to the Tennessee Model Users Group.

## Partner Activities

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- GNRC will partner with the Nashville Civic Design Center to create visualization tools and develop policy guidance to communicate and encourage best practices for the integration of urban design and transportation improvements.

## List of Consultant Activities

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- South Corridor Study
- Downtown Inner Loop Study
- Regional Travel Shed/Impact Fee Study
- Regional Freight Study
- Various General Planning Tasks in Support of the RTP

## List of Products & Outcomes

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- Maintenance of the active Regional Transportation Plan (Ongoing)
- Update Transit Asset Management Targets (October 2022)
- Update Safety Performance Measure Targets (February 2022)
- South Corridor Study Report/Recommendations (December 2021)
- Downtown Inner Loop Study/Recommendations (December 2021)
- Regional Travel Shed/Impact Fee Study (December 2022)

- Regional Freight Study (December 2022)
- Regional Pedestrian Safety Action Plan (September 2023)
- Coordinated Human Services Transportation Plan Update (September 2023)
- Technical reports from planning and modeling activities related to regional transportation plan including land use/ economic growth and development, roadway safety, system preservation, congestion management, freight and goods movement, and financial planning (ongoing)
- Technical reports from transit planning activities (ongoing)
- Update Safety Performance Measure Targets (February 2023)
- Update Infrastructure Condition and System Performance Measure Targets (February 2023)

## Budget Summary

| <b>Task 2. Regional Planning, FYs 2022-2023</b> |                        |                                |                            |                        |                              |                        |
|---|------------------------|--------------------------------|----------------------------|------------------------|------------------------------|------------------------|
| <b>Revenue Source</b>                           | <b>GNRC Personnel</b>  | <b>GNRC Other Direct Costs</b> | <b>GNRC Indirect Costs</b> | <b>GNRC Activities</b> | <b>Consultant Activities</b> | <b>Task Total</b>      |
| <b>CPG (80/5/15) Subtotal</b>                   | <b>\$ 1,240,000.00</b> | <b>\$ -</b>                    | <b>\$ 558,000.00</b>       | <b>\$ 1,798,000.00</b> | <b>\$ 1,182,979.33</b>       | <b>\$ 2,980,979.33</b> |
| Federal (80)                                    | \$ 992,000.00          | \$ -                           | \$ 446,400.00              | \$ 1,438,400.00        | \$ 946,383.46                | \$ 2,384,783.46        |
| State (5)                                       | \$ 62,000.00           | \$ -                           | \$ 27,900.00               | \$ 89,900.00           | \$ 59,148.97                 | \$ 149,048.97          |
| Local (15)                                      | \$ 186,000.00          | \$ -                           | \$ 83,700.00               | \$ 269,700.00          | \$ 177,446.90                | \$ 447,146.90          |
| <b>SPR (80/20) Subtotal</b>                     | <b>\$ -</b>            | <b>\$ -</b>                    | <b>\$ -</b>                | <b>\$ -</b>            | <b>\$ 629,710.00</b>         | <b>\$ 629,710.00</b>   |
| Federal (80)                                    | \$ -                   | \$ -                           | \$ -                       | \$ -                   | \$ 503,768.00                | \$ 503,768.00          |
| Local (20)                                      | \$ -                   | \$ -                           | \$ -                       | \$ -                   | \$ 125,942.00                | \$ 125,942.00          |
| <b>Total Funding</b>                            | <b>\$ 1,240,000.00</b> | <b>\$ -</b>                    | <b>\$ 558,000.00</b>       | <b>\$ 1,798,000.00</b> | <b>\$ 1,812,689.33</b>       | <b>\$ 3,610,689.33</b> |

\*In addition, TDOT expends FHWA SPR funding to cover costs of the Departments participation in the MPO program. Those funds are accounted for in the TDOT Work Program (<https://www.tn.gov/tdot/long-range-planning-home/longrange-administration/longrange-spr.html>).

## Task 3. Transportation Programming

### Purpose

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Maintain a regional program that prioritizes and schedules transportation projects consistent with adopted short- and long-range plans of the state and region; administer competitive grant programs as scheduled.

### Accomplishments during Fiscal Years 2020-2021

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- Adopted the FYs 2020-2023 TIP in coordination with TDOT as the state prepared the State Transportation Improvement Program (STIP).
- Administered and maintained the FYs 2020-2023 TIP by processing formal amendments and administrative modifications.
- Published the list of federally obligated projects for FY 2019 and FY 2020.
- Maintained the web-based TIP software and database at TIP.NashvilleMPO.org.
- Conducted call-for-cost overruns for existing TIP projects in FY 2021.
- Evaluated applications and recommending awards for the EMSID and JARC programs each fiscal year.
- Held call-for-applications related to GNRC's COVID-19 Relief Funds and awarded funds to projects across the MPO planning area to improve access and safety to active transportation facilities and to address COVID-19 impacts.

### Activities Identified for Fiscal Years 2022-2023

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- Maintain the TIP to ensure its compliance with federal regulations and to program additional federal funds as they become available.
- Monitor the progress of project fund obligations and compliance with TIP programming policies.
- Develop an application to house historical obligation information on TIP projects.
- Assist TDOT in the call-for-projects for the state Transportation Alternatives Program, Congestion Mitigation and Air Quality (CMAQ) Program, and Multimodal Access Grant Program.
- Administer a call-for-projects for the Active Transportation Program Grant Program and award grants to local governments and transit agencies to improve walking and bicycling conditions across the region.
- Publish a list of federally obligated projects within 90 days of the FY 2021 closeout.
- Publish a list of federally obligated projects within 90 days of the FY 2022 closeout.
- Evaluate applications and recommend awards for the EMSID and JARC programs in FY 2022 and 2023.
- Prepare and adopt a FYs 2023-2027 TIP. The process will include a call for projects, project prioritization, financial planning, and public review and comment.

### TDOT Activities

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- TDOT will report the obligation status of TIP projects on a regular basis; provide information and assistance to MPO membership regarding project schedules and funding expenditures; and issue various call-for-projects for state-managed grant funds.

### List of Products & Outcomes

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- Maintenance of the active Transportation Improvement Program (Ongoing)
- Award Active Transportation Program grants (December 2021)
- Annual Listing of Federally Obligated Projects for FY 2021 (December 2021)
- Annual Listing of Federally Obligated Projects for FY 2022 (December 2022)
- Adopted FYs 2023-2027 Transportation Improvement Program (September 2022)

## Budget Summary

| <b>Task 3. Transportation Programming, FYs 2022-2023</b> |                       |                                |                            |                        |                              |                      |
|--|-----------------------|--------------------------------|----------------------------|------------------------|------------------------------|----------------------|
| <b>Revenue Source</b>                                    | <b>GNRC Personnel</b> | <b>GNRC Other Direct Costs</b> | <b>GNRC Indirect Costs</b> | <b>GNRC Activities</b> | <b>Consultant Activities</b> | <b>Task Total</b>    |
| <b>CPG (80/5/15) Subtotal</b>                            | <b>\$ 465,000.00</b>  | <b>\$ -</b>                    | <b>\$ 209,250.00</b>       | <b>\$ 674,250.00</b>   | <b>\$ -</b>                  | <b>\$ 674,250.00</b> |
| Federal (80)   | \$ 372,000.00         | \$ -                           | \$ 167,400.00              | \$ 539,400.00          | \$ -                         | \$ 539,400.00        |
| State (5)  | \$ 23,250.00          | \$ -                           | \$ 10,462.50               | \$ 33,712.50           | \$ -                         | \$ 33,712.50         |
| Local (15)   | \$ 69,750.00          | \$ -                           | \$ 31,387.50               | \$ 101,137.50          | \$ -                         | \$ 101,137.50        |
| <b>Total Funding</b>                                     | <b>\$ 465,000.00</b>  | <b>\$ -</b>                    | <b>\$ 209,250.00</b>       | <b>\$ 674,250.00</b>   | <b>\$ -</b>                  | <b>\$ 674,250.00</b> |

\*In addition, TDOT expends FHWA SPR funding to cover costs of the Departments participation in the MPO program. Those funds are accounted for in the TDOT Work Program (<https://www.tn.gov/tdot/long-range-planning-home/longrange-administration/longrange-spr.html>).

## Task 4. Research & Analytics

### Purpose

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Maintain and analyze data to support transportation planning and facility/system design; develop planning models to forecast future population and employment growth, land development, traffic volumes, transit ridership, and to identify potential impacts of growth and/or policy proposals on public health and the environment.

### Accomplishments during Fiscal Years 2020-2021

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- Upgraded the regional activity-based travel demand model and maintained custom software to facilitate data visualization and analysis. The software supports user accounts, custom mapping and reporting, and is intended to increase accessibility to robust datasets and travel forecasts often only used by travel demand modelers.
- Developed new land use model and forecasting tool using UrbanSim platform.
- Deployed a new scenario planning tool using the Urban Footprint platform.
- Deployed a new data visualization tool using the MySidewalk platform.
- Prepared population and employment forecasts for use in the 2045 Regional Transportation Plan.
- Completed data collection for use in the 2045 Regional Transportation Plan.
- Deployed a new capital improvements software to facilitate tracking and prioritization of transportation projects.
- Launched new microsimulation tool to analyze proposed improvements within the region's urban core.

### Activities Identified for Fiscal Years 2022-2023

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- Continue to deploy of the regional land use, travel demand model, and traffic microsimulation model to support studies and area planning efforts.
- Continue to compile and analyze data to monitor regional congestion in accordance with federal planning requirements for a congestion management process.
- Continue to compile and analyze data related to highway, bridge, and transit system conditions using information from Highway Performance Monitoring System, National Bridge Inventory, and the Federal Transit Database.
- Continue to collect and analyze roadway safety (traffic incident) data made available from the Tennessee Department of Safety and Homeland Security.
- Continue to compile and analyze information related to bicycling and pedestrian conditions across the region including measures related to latent demand and level of service.
- Begin compiling base year and forecast data for regional planning models to be used in the development of the 2050 Regional Transportation Plan including land use data, transportation system data, socioeconomic data, environmental quality data, sociocultural data. Datasets are accessible from a variety of sources including state agencies and local governments.
- Partner with the Nashville Area Chamber of Commerce to produce the Nashville Region's Vital Signs data indicators report.

### TDOT Activities

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- TDOT will continue to collect traffic count data for planning and project design and provide support for maintaining traffic accident data for use in safety analysis.

## Partner Activities

- GNRC will partner with the Nashville Area Chamber of Commerce to produce and publish the annual “Nashville Region’s Vital Signs” indicators report.

## List of Consultant Activities

- Data Acquisition and Analysis

## List of Products & Outcomes

- Nashville Region’s Vital Signs Indicators Report (May 2022, May 2023)
- Data Acquisition and Analysis in Support of Regional Planning (Ongoing)
- Technical reports documenting research and data analysis in support of regional planning (Ongoing)

## Budget Summary

| <b>Task 4. Research &amp; Analytics, FYs 2022-2023</b> |                      |                         |                      |                        |                       |                        |
|--|----------------------|-------------------------|----------------------|------------------------|-----------------------|------------------------|
| Revenue Source   | GNRC Personnel       | GNRC Other Direct Costs | GNRC Indirect Costs  | GNRC Activities        | Consultant Activities | Task Total             |
| <b>CPG (80/5/15) Subtotal</b>                          | <b>\$ 775,000.00</b> | <b>\$ -</b>             | <b>\$ 348,750.00</b> | <b>\$ 1,123,750.00</b> | <b>\$ 809,401.94</b>  | <b>\$ 1,933,151.94</b> |
| Federal (80)   | \$ 620,000.00        | \$ -                    | \$ 279,000.00        | \$ 899,000.00          | \$ 647,521.55         | \$ 1,546,521.55        |
| State (5)  | \$ 38,750.00         | \$ -                    | \$ 17,437.50         | \$ 56,187.50           | \$ 40,470.10          | \$ 96,657.60           |
| Local (15)   | \$ 116,250.00        | \$ -                    | \$ 52,312.50         | \$ 168,562.50          | \$ 121,410.29         | \$ 289,972.79          |
| <b>SPR (80/20) Subtotal</b>                            | <b>\$ -</b>          | <b>\$ 245,000.00</b>    | <b>\$ -</b>          | <b>\$ 245,000.00</b>   | <b>\$ -</b>           | <b>\$ 245,000.00</b>   |
| Federal (80)   | \$ -                 | \$ 196,000.00           | \$ -                 | \$ 196,000.00          | \$ -                  | \$ 196,000.00          |
| Local (20)   | \$ -                 | \$ 49,000.00            | \$ -                 | \$ 49,000.00           | \$ -                  | \$ 49,000.00           |
| <b>Total Funding</b>                                   | <b>\$ 775,000.00</b> | <b>\$ 245,000.00</b>    | <b>\$ 348,750.00</b> | <b>\$ 1,368,750.00</b> | <b>\$ 809,401.94</b>  | <b>\$ 2,178,151.94</b> |

\*In addition, TDOT expends FHWA SPR funding to cover costs of the Department’s participation in the MPO program. Those funds are accounted for in the TDOT Work Program (<https://www.tn.gov/tdot/long-range-planning-home/longrange-administration/longrange-spr.html>).

## Task 5. Communications & Outreach

### Purpose

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Keep metropolitan planning partners informed on regional trends and issues and the transportation planning process; engage stakeholders and the public in the development of regional policies; provide opportunities for meaningful input on proposed plans and programs; comply with the guidelines of the adopted Public Participation Plan; continue to seek new methods of outreach.

### Accomplishments during Fiscal Years 2020-2021

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- Participated in various community and stakeholder meetings, presentations, and events as part of the continuing outreach efforts of the regional transportation planning process.
- Maintained the public website and transportation planning content on GNRC.org.
- Transitioned from in-person meetings to virtual meetings to accommodate the Governor’s Executive Order in response to the COVID-19 pandemic.

### Activities Identified for Fiscal Years 2022-2023

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- Maintain compliance with the Public Participation Plan (PPP).
- Evaluate the annual performance of the communications and outreach strategies and methods described in the PPP.
- Maintain member rosters and stakeholder contact lists and databases.
- Expand list of traditionally under-served or under-represented populations (e.g., minorities, low-income, seniors, young adults, among others).
- Maintain contacts with local media for the dissemination of planning related news and events.
- Continue the integration of social media platforms to reach highly mobile residents.
- Continue to publicly notice and advertise plans, programs, meetings.
- Conduct MPO meetings including the annual membership luncheon that will pull together the Transportation Policy Board and Transportation Coordinating Committee.
- Incorporate highlights of MPO accomplishments and planning activities into GNRC annual report.
- Expand the availability and accessibility to GNRC data dashboards, tools, and applications on GNRC.org.
- Continue to find ways to expand public engagement through virtual public involvement by incorporating existing GNRC programs, the arts and creative placemaking into transportation planning efforts.

### List of Consultant Activities

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- Public and Media Relations Support

### List of Products & Outcomes

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- Maintenance and periodic review of the Public Participation Plan (ongoing)
- Public meetings and workshops related to MPO planning and products (ongoing)
- Annual meeting for public hearing on MPO planning documents (January 2022)
- Annual meeting for public hearing on MPO planning documents (January 2023)

## Budget Summary

| Task 5. Communications & Outreach, FYs 2022-2023 |                      |                         |                      |                      |                       |                      |
|--|----------------------|-------------------------|----------------------|----------------------|-----------------------|----------------------|
| Revenue Source                                   | GNRC Personnel       | GNRC Other Direct Costs | GNRC Indirect Costs  | GNRC Activities      | Consultant Activities | Task Total           |
| <b>CPG (80/5/15) Subtotal</b>                    | <b>\$ 310,000.00</b> | <b>\$ -</b>             | <b>\$ 139,500.00</b> | <b>\$ 449,500.00</b> | <b>\$ 130,000.00</b>  | <b>\$ 579,500.00</b> |
| Federal (80)                                     | \$ 248,000.00        | \$ -                    | \$ 111,600.00        | \$ 359,600.00        | \$ 104,000.00         | \$ 463,600.00        |
| State (5)  | \$ 15,500.00         | \$ -                    | \$ 6,975.00          | \$ 22,475.00         | \$ 6,500.00           | \$ 28,975.00         |
| Local (15)                                       | \$ 46,500.00         | \$ -                    | \$ 20,925.00         | \$ 67,425.00         | \$ 19,500.00          | \$ 86,925.00         |
| <b>Total Funding</b>                             | <b>\$ 310,000.00</b> | <b>\$ -</b>             | <b>\$ 139,500.00</b> | <b>\$ 449,500.00</b> | <b>\$ 130,000.00</b>  | <b>\$ 579,500.00</b> |

\*In addition, TDOT expends FHWA SPR funding to cover costs of the Department’s participation in the MPO program. Those funds are accounted for in the TDOT Work Program (<https://www.tn.gov/tdot/long-range-planning-home/longrange-administration/longrange-spr.html>).

## Task 6. Other Planning Studies

The following activities have been identified by transportation planning partners and could be carried out across the region with local, state, or federal revenue not formally programmed into the Unified (Transportation) Planning Work Program at the time of adoption.

### Transit Agency Activities

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- **Transit Shelter Planning and Implementation Study** - To support the development of a new transit facility and future park-n-ride facility, a study will be conducted for current and future bus routes that will prioritize target areas and potential sites for bus services and shelters to meet the growing needs of the community and maximize usage of sheltered stops. The study is expected to be completed by summer 2022. The budget for the study is \$280,805, with \$224,644 in FTA Section 5307 funds and the match split between TDOT and Murfreesboro Transit. (Murfreesboro Public Transit)
- **Quinquennial O/D Survey** - MTA and RTA are charged with the development of a Title VI plan which is submitted to and approved by the Federal Transit Administration (FTA) every three years. As part of this plan, MTA and RTA must collect survey data to document customer demographics and travel patterns. The Origin-Destination survey will gather updated travel behavior data from transit users in the MTA and RTA service areas to gain a better understanding of today's transit riders and how they use the system. The data collected will also be used to improve transit forecasts by updating the Greater Nashville Regional Council's (MPO) regional travel demand model, mainly the mode choice model component. A recalibrated mode choice model, based on quality data, will enhance MTA and RTA's future competitiveness for funds. (WeGo)
- **Access Improvement Study** - A comprehensive study of WeGo Access operations, services, and technology. The study entails a complete review of all aspects of paratransit and demand-responsive transportation services and operations at WeGo Public Transit. All components of the program will be considered, with the goal of establishing specific recommendations to transform existing paratransit from the traditional ADA-required next-day reservations service into a truly dynamic on-demand service platform that is flexible, reliable, efficient, and sustainable. (WeGo)
- **WeGo Star Future Investment Strategy** - Building on the WeGo Star Planning Study (2019), the analysis will help expand on the study's conclusions to establish a knowledge framework to guide future decisions by suggesting a range of activities (and recommended methods) to help lead RTA leadership to well-informed decisions as to the future direction of the Star. (WeGo)

### Local Government Activities

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- **Sumner Countywide Bicycle-Pedestrian Plan** - Prepare a plan to establish policies and priorities for the design and construction of Bike-Ped facilities for all communities in Sumner County including Gallatin, Goodlettsville, Hendersonville, Millersville, Mitchellville, Portland, Westmoreland, and White House. This includes all types of bike and pedestrian facilities including greenways and trails, sidewalks and crosswalks and bridges. (City of Gallatin/Sumner County/TDOT)
- **Cool Springs Transportation Study** - This comprehensive study reviews the Cool Springs area's existing traffic conditions, along with approved, ongoing development and its effects on the transportation infrastructure in this area over the next 10 years. The study will then develop recommendations for future development and redevelopment within this area of Franklin as it relates to traffic impacts and analysis. It is anticipated this study will result in updated needs/requirements for Traffic Impact Studies (TIS) for new development. The Cool Springs Transportation Study is currently underway and has a budget of \$290,100. (City of Franklin)
- **Mt. Juliet Transportation Impact Fee Study** - The study will inform updates to the City's transportation impact fee and fee structure for new developments or redevelopments. (City of Mt. Juliet)
- **Nolensville Major Thoroughfare Plan Update** - The current MTP was adopted in August 2016 and updated in November 2017. Since the plan was updated, the town has grown considerably adding

almost 1,100 homes between 2018 and now. There are an additional 700 plus lots that have already received approval for development that have not yet been permitted. The significant growth and public debate on the town's future development has spurred the decision to rewrite the town's Zoning Ordinance – a separate process that will formally begin in April 2021. (Town of Nolensville)

- **Downtown Neighborhood Traffic Study** - Development of a comprehensive Downtown Mobility Strategy with a transit priority element of enhancing transit operations and service reliability will be crucial to the long-term growth of transit ridership and mode share throughout the Greater Nashville region. (Metro-Nashville)
- **WalknBike Update** - Prepare a five-year update to Metro's sidewalks and bikeways master plan, WalknBike. This update will refresh components of the 2017 master plan and will place added emphasis on equity and Vision Zero safety action plan integration. (Metro-Nashville)

## Summary of Activities

The following activities have been identified by transportation planning partners and could be carried out across the region with local, state, or federal revenue not formally programmed into the Unified (Transportation) Planning Work Program at the time of adoption.

| Activity or Study                                 | Sponsor/Lead Agency         | Description   | Estimated Budget | Funding Source        |
|---|-----------------------------|---|------------------|-----------------------|
| Transit Shelter Planning and Implementation Study | Murfreesboro Public Transit | To support the development of a new transit facility and future park-n-ride facility, a study will be conducted for current and future bus routes that will prioritize target areas and potential sites for bus services and shelters to meet the growing needs of the community and maximize usage of sheltered stops. The study is expected to be completed by summer 2022.   | \$280,805        | FTA 5307, TDOT, Local |
| Quinquennial O/D Survey                           | WeGo (RTA/MTA)              | MTA and RTA are charged with the development of a Title VI plan which is submitted to and approved by the Federal Transit Administration (FTA) every three years. As part of this plan, MTA and RTA must collect survey data to document customer demographics and travel patterns. The Origin-Destination survey will gather updated travel behavior data from transit users in the MTA and RTA service areas to gain a better understanding of today's transit riders and how they use the system. The data collected will also be used to improve transit forecasts by updating the Greater Nashville Regional Council's (MPO) regional travel demand model, mainly the mode choice model component. A recalibrated mode choice model, based on quality data, will enhance MTA and RTA's future competitiveness for funds. | \$550,000        | FTA 5307, TDOT, Local |
| Access Improvement Study                          | WeGo                        | A comprehensive study of WeGo Access operations, services, and technology. The study entails a complete review of all aspects of paratransit and demand-responsive transportation services and operations at WeGo Public Transit. All components of the program will be considered, with the goal of establishing specific recommendations to transform existing paratransit from the traditional ADA-required next-day reservations service into a truly dynamic on-demand service platform that is flexible, reliable, efficient, and sustainable.  | \$700,000        | FTA 5307 (CARES Act)  |
| WeGo Star Future Investment Strategy              | WeGo                        | Building on the WeGo Star Planning Study (2019), the analysis will help expand on the study's conclusions to establish a knowledge framework  | TBD              | FTA 5307 (CARES Act)  |

|  |                                     |   |             |  |
|--|-------------------------------------|---|-------------|--|
|  |                                     | to guide future decisions by suggesting a range of activities (and recommended methods) to help lead RTA leadership to well-informed decisions as to the future direction of the Star.  |             |  |
| Sumner Countywide Bicycle-Pedestrian Plan  | City of Gallatin/Sumner County/TDOT | Prepare a plan to establish policies and priorities for the design and construction of Bike-Ped facilities for all communities in Sumner County including Gallatin, Goodlettsville, Hendersonville, Millersville, Mitchellville, Portland, Westmoreland, and White House. This includes all types of bike and pedestrian facilities including greenways and trails, sidewalks and crosswalks and bridges.   | \$149,900   | FHWA SPR, TDOT, Local                      |
| Cool Springs Transportation Study          | City of Franklin                    | This comprehensive study reviews the Cool Springs area's existing traffic conditions, along with approved, ongoing development and its effects on the transportation infrastructure in this area over the next 10 years. The study will then develop recommendations for future development and redevelopment within this area of Franklin as it relates to traffic impacts and analysis. It is anticipated this study will result in updated needs/requirements for Traffic Impact Studies (TIS) for new development.  | \$290,100   | Local                                      |
| Mt. Juliet Transportation Impact Fee Study | City of Mt. Juliet                  | The study will inform updates to the City's transportation impact fee and fee structure for new developments or redevelopments.   | TBD         | Local                                      |
| Nolensville Major Thoroughfare Plan Update | Town of Nolensville                 | The current MTP was adopted in August 2016 and updated in November 2017. Since the plan was updated, the town has grown considerably adding almost 1,100 homes between 2018 and now. There are an additional 700 plus lots that have already received approval for development that have not yet been permitted. The significant growth and public debate on the town's future development has spurred the decision to rewrite the town's Zoning Ordinance – a separate process that will formally begin in April 2021. | TBD         | Local                                      |
| Downtown Neighborhood Traffic Study        | Metro Nashville                     | Development of a comprehensive Downtown Mobility Strategy with a transit priority element of enhancing transit operations and service reliability will be crucial to the long-term growth of transit ridership and mode share throughout the Greater Nashville region.  | \$1,000,000 | FTA 5307, FHWA SPR, TDOT, Local, Nonprofit |

|                  |                 |  |     |       |
|------------------|-----------------|--|-----|-------|
| WalknBike Update | Metro Nashville | Prepare a five-year update to Metro’s sidewalks and bikeways master plan, WalkNBike. This update will refresh components of the 2017 master plan and will place added emphasis on equity and Vision Zero safety action plan integration. | TBD | Local |
|------------------|-----------------|--|-----|-------|

# Appendix A. List of Consultant Activities

The following is a summary of the anticipated consultant activities scheduled for FYs 2022-2023

| Activity or Study                             | UPWP Task                 | Consultant(s)                      | Estimated Budget  | Funding Source             |
|---|---------------------------|------------------------------------|-------------------|----------------------------|
| Nashville Region's Vital Signs                | Research & Analytics      | Nashville Area Chamber of Commerce | \$70,000 annually | SPR, MPO Program Dues      |
| Transportation & Urban Design                 | Regional Planning         | Nashville Civic Design Center      | \$50,000 annually | SPR, MPO Program Dues      |
| Public Outreach and Media Relations Support   | Communications & Outreach | TBD                                | \$65,000          | CGP, SPR, MPO Program Dues |
| Impact Fee and Travel Shed Study              | Regional Planning         | TBD                                | \$300,000         | CGP, SPR, MPO Program Dues |
| Regional Freight Commission                   | Regional Planning         | TBD                                | \$300,000         | CGP, SPR, MPO Program Dues |
| Data and Support for Regional Planning Models | Research & Analytics      | Various TBD                        | \$1.2 million     | CGP, SPR, MPO Program Dues |

# Appendix B. Multimodal Planning Activities

The following is a summary of the significant multi-modal planning activities scheduled for FYs 2022-2023

| Activity or Study                                     | Description   | UPWP Task         | Consultant(s) | Estimated Budget  | Funding Source(s)                     |
|---|---|-------------------|---------------|---|---------------------------------------|
| WeGo nMotion Update                                   | The nMotion Update will continue to review and develop an action-oriented strategy that leads RTA in a stepwise fashion toward the nMotion vision. The nMotion update will involve revising baseline data and reviewing specific capital and operational services to be prioritized and implemented in the short and longer term.   | Regional Planning | TBD           | \$650,000<br>(\$280,000 – federal)<br>(\$240,000 – federal)<br>(\$65,000 – state)<br>(\$65,000 – local) | FTA 5307,<br>FTA 5303,<br>TDOT, Local |
| Coordinated Human Services Transportation Plan Update | The Coordinated Human Services Transportation Plan update for the Nashville Area and Clarksville Urbanized Area Metropolitan Planning Organizations (MPOs) will assess the available transportation services, identify transportation needs of older adults, persons with disabilities and persons with low income, provide strategies for meeting those identified needs, and prioritize transportation strategies and activities for funding and implementation.  | Regional Planning | TBD           | TBD   | FHWA PL,<br>MPO<br>Program<br>Dues    |
| Regional Pedestrian Safety Action Plan                | The Regional Pedestrian Safety Action Plan will provide a framework for focusing the MPO region’s attention on improving safety for active transportation users. The plan will build off the goals and objectives of the 2045 Regional Transportation Plan to improve safety for all users. It will leverage the regional crash data analysis to further examine areas of high-risk for non-motorized crashes and injuries and help align and prioritize strategies to address safety. Lastly, the plan will guide the implementation of those strategies through the coordination of local and state safety plans and policies to assign roles and responsibilities to effectively advance them. | Regional Planning | TBD           | TBD   | FHWA PL,<br>MPO<br>Program<br>Dues    |

# Appendix C. Planning Products

| Products/Tasks   | Date of Last Adoption | Interim Milestones | Date of Next Major Update |
|--|-----------------------|--------------------|---------------------------|
| <b>Regional Transportation Plan (RTP)</b>                            | <b>Feb 2021</b>       |                    | <b>Feb 2026</b>           |
| Administrative Modifications   |                       | As Needed          |                           |
| Amendments   |                       | As Needed          |                           |
| Implementation & Monitoring  |                       | Ongoing            |                           |
| <b>Transportation Improvement Program (TIP)</b>                      | <b>Oct 2019</b>       |                    | <b>Sept 2022</b>          |
| Administrative Modifications   |                       | Ongoing            |                           |
| Amendment Cycles A-D   |                       | Quarterly          |                           |
| Amendment Cycles A-D   |                       | Quarterly          |                           |
| Publish FY 2021 List of Obligations                                  |                       | Dec 2021           |                           |
| Publish FY 2022 List of Obligations                                  |                       | Dec 2022           |                           |
| FYs 2023-2027 TIP Development Cycle                                  |                       | Jan 2022-Sept 2022 |                           |
| <b>Unified Planning Work Program (UPWP)</b>                          | <b>Aug 2019</b>       |                    | <b>Aug 2023</b>           |
| Administrative Modifications   |                       | As Needed          |                           |
| Amendments   |                       | As Needed          |                           |
| Call-for-Studies and Planning Activities through TCC and TPB         |                       | Feb-Mar 2023       |                           |
| UPWP Drafting and Budgeting  |                       | Apr-May 2023       |                           |
| State and Federal Review   |                       | May-July 2023      |                           |
| Public Review and Comment  |                       | August 2023        |                           |
| Adoption   |                       | August 2023        |                           |
| <b>Public Participation Plan (PPP)</b>                               | <b>June 2019</b>      |                    | <b>TBD</b>                |
| Annual Meeting for Public Hearing on Metropolitan Plans and Programs |                       | Jan 2022           |                           |
| Annual Meeting for Public Hearing on Metropolitan Plans and Programs |                       | Jan 2023           |                           |
| RTP Outreach   |                       | Ongoing            |                           |
| TIP Outreach   |                       | Ongoing            |                           |
| UPWP Outreach  |                       | Ongoing            |                           |
| Monitoring of PPP Effectiveness                                      |                       | Ongoing            |                           |
|  |                       |                    |                           |

| <b>Products/Tasks</b>                          | <b>Date of Last Adoption</b> | <b>Interim Milestones</b>      | <b>Date of Next Major Update</b> |
|--|------------------------------|--------------------------------|----------------------------------|
| <b>Congestion Management Process (CMP)</b>     | <b>Feb 2021</b>              |                                | <b>Feb 2026</b>                  |
| Ongoing Monitoring and Evaluation              |                              | Ongoing                        |                                  |
| Reporting                                      |                              | Monthly/<br>Quarterly/Annually |                                  |
| <b>Performance Measure Targets</b>             |                              |                                |                                  |
| Safety   | Feb 2021                     |                                | Feb 2022 &<br>Feb 2023           |
| Infrastructure Condition (Pavement and Bridge) | Feb 2021                     |                                | Feb 2023                         |
| System Performance (Travel Time Reliability)   | Feb 2021                     |                                | Feb 2023                         |
| Transit Asset Management                       | Oct 2018                     |                                | Oct 2022                         |
| Public Transportation Agency Safety Plan       | June 2021                    |                                | As needed                        |

# Appendix D. Funding Sources

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## **FHWA METROPOLITAN PLANNING (PL) FUNDS**

Metropolitan Planning Funds (PL-Section 112): The Federal Highway Administration (FHWA) annually allocates PL funding to MPO programs across the nation for metropolitan planning activities. The PL funds are used for paying program staff salaries, fringe benefits, overhead and various plans and studies. These funds require a 20% match which is divided between state (5%) and local governments (15%). Local governments pay their share of matching funds to GNRC through annual MPO program dues assessed on a per capita rate. Costs associated with the development or implementation of transportation improvements are not eligible for this grant planning grant program.

## **FTA METROPOLITAN PLANNING (FTA 5303) FUNDS**

Section 5303 Metropolitan Planning Funds are designated for multimodal transportation planning activities that support the metropolitan transportation planning process. These funds require a 20% match which is divided between state (5%) and local governments (15%). Local governments pay their share of matching funds to GNRC through annual MPO program dues assessed on a per capita rate. Costs associated with the development or implementation of transportation improvements are not eligible for this grant planning grant program.

## **CONSOLIDATED PLANNING GRANT (CPG) FUNDS:**

The Tennessee Department of Transportation (TDOT) participates in the Consolidated Planning Grant (CPG) Program whereby FHWA and FTA metropolitan planning funds are combined into a single grant fund administered by FHWA. The funding from this program are distributed to the MPOs through TDOT in accordance with 23 CFR 420.109.

## **FHWA STATE PLANNING AND RESEARCH (SPR) FUNDS**

This is another source of federal funds that are allocated under the FHWA's State Planning & Research Program; and these funds are administered by the Tennessee Departments of Transportation (TDOT) and are shared with MPO programs in cases where an MPO planning area extends beyond the limits of the federally-defined urbanized areas. These funds require a 20% match provided by TDOT and/or local governments. Local governments pay their share of matching funds to GNRC through annual MPO program dues assessed on a per capita rate.

## **FEDERAL PROGRAM GRANTS**

Regulations allow MPOs and their member jurisdictions to use federal transportation grants targeted for programs to pay for planning activities. Typically, those "program" funds come from the FHWA Surface Transportation Block Grant (STBG) Program or the FTA Urban Transit Program (Section 5307) and are intended to cover the costs of corridor or project-level planning activities. In addition, the U.S. Department of Transportation and other federal agencies periodically make available other grant programs that can be used for the purposes of carrying out regional planning activities. Those programs are typically administered on a competitive basis and require a formal application and proposal. In the event that program funds are used for regional planning activities those funds are identified in the region's TIP as well.

## **LOCAL AND STATE MATCHING FUNDS**

In most cases, federal grant funds require at least a 20 percent non-federal match. GNRC receives funding from its member jurisdictions to cover that match based on a per capita rate. Additional contributions may be provided by MPO members, TDOT, or regional partners in order to cover special efforts or those that affect only a subset of the membership.

# Appendix E. Budget Tables

**Table 1. FY 2022-2023 Budget Summary**

| All Tasks, FYs 2022-2023      |                        |                         |                        |                        |                        |                        |
|-------------------------------|------------------------|-------------------------|------------------------|------------------------|------------------------|------------------------|
| Revenue Source                | GNRC Personnel         | GNRC Other Direct Costs | GNRC Indirect Costs    | GNRC Activities        | Consultant Activities  | UPWP Total             |
| <b>CPG (80/5/15) Subtotal</b> | <b>\$ 3,100,000.00</b> | <b>\$ 278,553.78</b>    | <b>\$ 1,395,000.00</b> | <b>\$ 4,773,553.78</b> | <b>\$ 2,122,381.27</b> | <b>\$ 6,895,935.05</b> |
| Federal (80)                  | \$ 2,480,000.00        | \$ 222,843.02           | \$ 1,116,000.00        | \$ 3,818,843.02        | \$ 1,697,905.02        | \$ 5,516,748.04        |
| State (5)                     | \$ 155,000.00          | \$ 13,927.69            | \$ 69,750.00           | \$ 238,677.69          | \$ 106,119.06          | \$ 344,796.75          |
| Local (15)                    | \$ 465,000.00          | \$ 41,783.07            | \$ 209,250.00          | \$ 716,033.07          | \$ 318,357.19          | \$ 1,034,390.26        |
| <b>SPR (80/20) Subtotal</b>   | <b>\$ -</b>            | <b>\$ 245,000.00</b>    | <b>\$ -</b>            | <b>\$ 245,000.00</b>   | <b>\$ 629,710.00</b>   | <b>\$ 874,710.00</b>   |
| Federal (80)                  | \$ -                   | \$ 196,000.00           | \$ -                   | \$ 196,000.00          | \$ 503,768.00          | \$ 699,768.00          |
| Local (20)                    | \$ -                   | \$ 49,000.00            | \$ -                   | \$ 49,000.00           | \$ 125,942.00          | \$ 174,942.00          |
| <b>Total Funding</b>          | <b>\$ 3,100,000.00</b> | <b>\$ 523,553.78</b>    | <b>\$ 1,395,000.00</b> | <b>\$ 5,018,553.78</b> | <b>\$ 2,752,091.27</b> | <b>\$ 7,770,645.05</b> |

**Table 2. GNRC Activities Program Costs, FYs 2022-2023**

| PROGRAM OPERATING COSTS PER YEAR, 2022 and 2023  | 1 Year              | 2 Years             |
|--|---------------------|---------------------|
| <b>Direct Salaries and Fringe</b>                | <b>\$ 1,550,000</b> | <b>\$ 3,100,000</b> |
| <b>Indirect Costs</b>                            | <b>\$ 697,500</b>   | <b>\$ 1,395,000</b> |
| <b>Other Direct Costs</b>                        | <b>\$ 261,777</b>   | <b>\$ 523,554</b>   |
| Local Travel and Parking                         | \$ 10,000           | \$ 20,000           |
| Workshops and Conferences (host and participant) | \$ 60,000           | \$ 120,000          |
| Public Noticing and Advertisements               | \$ 20,000           | \$ 40,000           |
| Printing & Publications                          | \$ 20,000           | \$ 40,000           |
| Consumable Supplies                              | \$ 5,000            | \$ 10,000           |
| Membership and Organizational Dues               | \$ 19,277           | \$ 38,554           |
| Data and Software Subscriptions                  | \$ 122,500          | \$ 245,000          |
| Technology and Devices                           | \$ 5,000            | \$ 10,000           |
| <b>Total Program Operating Costs</b>             | <b>\$ 2,509,277</b> | <b>\$ 5,018,554</b> |

\*Excluding consultant activities

**Table 3. FYs 2022-2023 Revenue Sources**

| CARRYOVER REVENUE  |                      |                     |                     |
|--|----------------------|---------------------|---------------------|
|  | <b>Total Funding</b> |                     |                     |
| <b>Consolidated Planning Grant (Metropolitan Planning)</b> | <b>\$ 2,113,908</b>  |                     |                     |
| FHWA Section 112 Metropolitan Planning (PL)                | \$ 559,402           |                     |                     |
| FTA Section 5303 Metropolitan Planning                     | \$ 1,554,506         |                     |                     |
| <b>State Planning and Research Grant (FHWA SPR)</b>        | <b>\$ -</b>          |                     |                     |
| <b>Total Program Revenue</b>                               | <b>\$ 2,113,908</b>  |                     |                     |
| PROGRAM REVENUE PER YEAR, 2022 and 2023                    |                      |                     |                     |
|  | 1 Year               | 2 Years             | With Carryover      |
|  | Total Funding        | Total Funding       | Total Funding       |
| <b>Consolidated Planning Grant (Metropolitan Planning)</b> | <b>\$ 2,391,014</b>  | <b>\$ 4,782,028</b> | <b>\$ 6,895,935</b> |
| FHWA Section 112 Metropolitan Planning (PL)                | \$ 1,743,970         | \$ 3,487,940        | \$ 4,047,342        |
| FTA Section 5303 Metropolitan Planning                     | \$ 647,044           | \$ 1,294,088        | \$ 2,848,593        |
| <b>State Planning and Research Grant (FHWA SPR)</b>        | <b>\$ 437,355</b>    | <b>\$ 874,710</b>   | <b>\$ 874,710</b>   |
| <b>Total Program Revenue</b>                               | <b>\$ 2,828,369</b>  | <b>\$ 5,656,738</b> | <b>\$ 7,770,645</b> |

\*Estimated based on anticipated spending for the remainder of FY 2021.

# Appendix F. Key Terms and Acronyms

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Additional acronyms and terms are defined online courtesy of the Federal Highway Administration at online at <https://www.fhwa.dot.gov/Planning/glossary/>

**ADA - Americans with Disabilities Act of 1990:** Federal law that requires public facilities (including transportation services) to be accessible to persons with disabilities including those with mental disabilities, temporary disabilities, and the conditions related to substance abuse.

**CFR – Code of Federal Regulations:** The codification of the general and permanent rules published in the Federal Register by the departments and agencies of the Federal Government. It is divided into 50 titles that represent broad areas subject to Federal regulation. Federal transportation planning requirements pertaining to MPOs are generally provided in Titles 23 and 49.

**CMP - Congestion Management Process** (previously known as Congestion Management System): A systematic process to address congestion management through metropolitan planning. The CMP is required under 23 CFR 500.109 and shall include methods to monitor and evaluate the performance of the multi-modal transportation system, identify causes of congestion, identify and evaluate alternative actions, provide information supporting the implementation of actions, and evaluate the efficiency and effectiveness of implementation actions.

**Complete Streets** – Streets that offer transportation choices that are safe and convenient for all ages and ability levels. These choices may include transit, walking, bicycling and automobile travel.

**DOT - Department of Transportation:** Agency responsible for transportation at the local, state, or federal level. For title 23 U.S.C. federal-aid highway actions, this would mean the Federal Highway Administration and for federal-aid transit actions under title 49 U.S.C, this would mean the Federal Transit Administration.

**EA – Environmental Assessment:** The process of identifying, predicting, evaluating and mitigating the biophysical, social, and other relevant effects of development proposals prior to major decisions being taken and commitments made. The purpose of the assessment is to ensure that decision-makers consider environmental impacts before deciding whether to proceed with new projects.

**EJ - Environmental Justice:** Derived from Title VI of the Civil Rights Act of 1964, and established by Executive Order 12898, EJ requires federally funded plans and programs to assess their impact, either positive or negative, on traditionally underserved (e.g., low-income, minority, etc.) communities or segments of the population. The goal of EJ is to ensure public involvement of low income and minority groups in decision making to prevent disproportionately high and adverse impacts on low income and minority groups, and to ensure that these groups receive equal benefits from transportation improvements.

**EPA – U.S. Environmental Protection Agency:** is an agency of the federal government of the United States charged with protecting human health and with safeguarding the natural environment: air, water, and land.

**FHWA - Federal Highway Administration:** Division of the U.S. Department of Transportation responsible for administering federal highway transportation programs.

**FRA – Federal Railroad Administration:** The modal administration of the United States Department of Transportation responsible for the safety and effectiveness of the nation’s railroad infrastructure.

**FTA - Federal Transit Administration:** The modal administration of the United States Department of Transportation responsible for federal transit planning and programs.

**FTA - Franklin Transit Authority:** The local transit agency for Franklin, Tennessee, currently operated on behalf of the city by The TMA Group.

**FY - Fiscal Year:** A federal fiscal or budget year. The FY runs from October 1 through September 30 for the MPO and the federal government. State and local governments operate on a fiscal year beginning July 1 and ending June 30.

**GIS – Geographic Information System:** a system for capturing, storing, analyzing and managing data which is spatially referenced to the earth. GIS is a tool that allows users to create interactive queries (user created searches), analyze the spatial information, edit data, maps, and present the results of all these operations.

**GNRC – Greater Nashville Regional Council:** a regional organization created by State law to serve as the development district for 13 counties in northern Middle Tennessee. GNRC serves as the Area Agency on Aging and Disability, the Middle Tennessee Tourism Council, and provides community planning and economic development assistance to its local government members. In 2017, the GNRC was designated to serve as the MPO sponsor agency, and as such provides staffing and administrative services to the MPO Transportation Policy Board.

**HUD – United States Department of Housing and Urban Development:** Federal agency charged with helping to create strong, sustainable, inclusive communities and quality, affordable homes.

**ITS - Intelligent Transportation System:** Use of computer and communications technology to facilitate the flow of information between travelers and system operators to improve mobility and transportation productivity, enhance safety, maximize the use of existing transportation facilities, conserve energy resources and reduce adverse environmental effects; includes concepts such as “freeway management systems,” “automated fare collection” and “transit information kiosks.”

**LEP – Limited English Proficiency:** A term used in the United States that refers to a person who is not fluent in the English language, often because it is not their native language.

**LRTP – Long-Range Transportation Plan:** A document resulting from regional or statewide collaboration and consensus on a region or state's transportation system, and serving as the defining vision for the region's or state's transportation systems and services. In metropolitan areas, the plan indicates all of the transportation improvements scheduled for funding over the next 20 years. It is fiscally constrained, i.e., a given program or project can reasonably expect to receive funding within the time allotted for its implementation.

**MPO - Metropolitan Planning Organization:** The forum for cooperative transportation decision-making; required for urbanized areas with populations over 50,000.

**MTA – Metropolitan Transit Authority** (recently rebranded as WeGo Public Transit): The public transit agency serving Nashville/Davidson County.

**NEPA – National Environmental Policy Act:** Passed in 1970, NEPA requires federal agencies to integrate environmental values into their decision-making processes by considering the environmental impacts of their proposed actions and reasonable alternatives to those actions.

**NHS - National Highway System:** Consists of roadways important to the nation’s economy, defense, and mobility. The NHS includes the Interstate System, principal arterial highways in rural and urban areas, the Strategic Highway Networks and connectors for national defense purposes, and intermodal connectors that tie together the surface, air, water, and rail transportation systems.

**PPP – Public Participation Plan:** a federally-required document that describes the MPO’s process for involving the public and interested stakeholders in the development and adoption of required plans and programs. The PPP describes the formal procedures used to adopt or amend the Long-Range Transportation Plan, the Transportation Improvement Program, and Unified Planning Work Program.

**RTA – Regional Transportation Authority:** Nine-county regional agency that plans and develops regional transit in the Nashville area.

**STIP - State Transportation Improvement Program:** A priority list of transportation projects developed by the Tennessee Department of Transportation that is to be carried out within the four (4) year period following its

adoption; must include documentation of federal, State, and local funding sources for each project. Transportation projects in the state's 11 metropolitan areas are determined through Metropolitan Planning Organization process.

**TCA – Tennessee Code Annotated:** The codification of Tennessee state laws.

**TCC - Transportation Coordinating Committee:** (Formerly Technical Coordinating Committee) A standing committee of area planners, engineers, and other transportation related agencies which provide advice on plans or actions to the Transportation Policy Board.

**TDEC – Tennessee Department of Environment and Conservation:** State agency responsible for protecting the quality of the natural environment, conserving natural and historic resources, and providing quality outdoor recreational activities through the state park system.

**TDOS – Tennessee Department of Safety and Homeland Security:** State agency responsible for driver's licenses, vehicle titles, highway patrol, handgun permits, public safety, and homeland security

**TDOT – Tennessee Department of Transportation:** State agency responsible for the planning and implementation of Tennessee's multimodal transportation system including roads and bridges, aviation, public transit, waterways, and railroads.

**Title VI of the Civil Rights Act** - Enacted as part of the landmark Civil Rights Act of 1964. It prohibits discrimination on the basis of race, color, and national origin in programs and activities receiving federal financial assistance.

**TIP - Transportation Improvement Program:** A priority list of transportation projects developed by a metropolitan planning organization that is to be carried out within the four (4) year period following its adoption; must include documentation of federal, state, and local funding sources for each project and be consistent with adopted MPO long range transportation plans and local government comprehensive plans.

**TMA - Transportation Management Area:** An area designation by the U.S. Department of Transportation given to all urbanized areas with a population of 200,000 or more (or other area when requested by the Governor and MPO); these areas must comply with special transportation planning requirements regarding congestion management systems, project selection and certification; requirements identified in 23 CFR - 450.300-338.

**Transportation Policy Board (formerly the Executive Board):** A standing committee created for the purpose of serving as spokespersons for the citizens of the metropolitan area and is the designated MPO to prioritize and direct federal transportation funds to local projects.

**The TMA Group:** A local non-profit organization headquartered in Williamson County responsible for carrying out certain transit services on behalf of the Regional Transportation Authority and the Franklin Transit Authority, and for the administration of the regional Clean Air Partnership of Middle Tennessee, under contract to Williamson County and the Nashville Area MPO.

**TOD - Transit Oriented Development:** a mixed-use development that is anchored by a transit station. The transit mode may include bus or rail, and the development may include uses such as housing, office and retail.

**Transportation Disadvantaged:** People who are unable to transport themselves or to purchase transportation due to disability, income status or age.

**UPWP - Unified Planning Work Program:** Developed by Metropolitan Planning Organization (MPOs); identifies all transportation and planning activities anticipated within the next one to two years, including a schedule for the completion of the identified tasks and activities.

**U.S.C – United States Code:** A consolidation and codification by subject matter of the general and permanent laws of the United States. Titles 23 and 49 of the USC pertain to highways and transportation

