Appendix G. Public Noticing, Stakeholder Outreach, and Public Comments
Public Noticing

The adoption of the Plan was publicly noticed in area print media according to the procedures required by the Public Participation Plan (PPP) adopted by the Transportation Policy Board in June 2019. The PPP requires a public review and comment period of no less than 30 days and a formal public hearing prior to adoption. A copy of the PPP is available online at GNRC.org/Transportation.
PUBLIC NOTICE

Notice of Public Meetings and Public Comment Opportunities related to the Greater Nashville Regional Council (GNRC) and its Boards and Committees

Public Meetings

Notice is hereby given that the following public bodies will meet during regular sessions for the purposes of considering and transacting business on behalf of the GNRC and its membership.

- **Transportation Coordinating Committee (TCC)** – Will meet online* or at 220 Athens Way, Suite 200, Nashville, TN 37228 on Feb. 3 at 10:30 a.m. for the purposes of developing recommendations to be considered by the Transportation Policy Board.

- **Mid-Cumberland Area Development Corporation Board of Directors (MADC)** – A federally-recognized Certified Development Company administered by GNRC will meet online* or at 220 Athens Way, Suite 200, Nashville, TN 37228 on Feb. 4 and Feb. 18 at 1:30 p.m. to conduct regular business related to the approval of small business loans backed with federal resources.

- **Finance and Personnel Committee (F&P)** – Will meet online* or at 220 Athens Way, Suite 200, Nashville, TN 37228 on Feb. 9 at 10:00 a.m. for the purposes of developing recommendations to be considered by the Regional Council’s governing body.

- **Transportation Policy Board (TPB)** – Will meet online* or at 211 Athens Way, Nashville, TN 37228 on Feb. 17 at 10:15 a.m. to conduct business related to regional transportation policy and plans of the Nashville Area Metropolitan Planning Organization.

- **Executive Board (XB)** – Will meet online* or at 211 Athens Way, Nashville, TN 37228 on Feb. 17 at 11:30 a.m. to conduct business on behalf of GNRC membership.

Further notice is given that all public meetings are posted online at GNRC.org. *Please check the website or call 615-862-8828 for the latest information about virtual meetings or other items of public notice.

Documents for Public Review

GNRC is seeking public review and comment on the following item(s). Comments may be submitted in writing by email to comments@gnrc.org. Please include the document name in the subject line. Items will be posted for review at https://www.gnrc.org/PublicNotices and available, by appointment, at GNRC offices located at 220 Athens Ways, Suite 200, Nashville, TN 37228.

- **Regional Transportation Plan for FYs 2021-2045 (RTP)** – The RTP is a federally-required document which represents the collective transportation goals of Middle Tennessee city and county governments, transit agencies, and TDOT. The purpose of the RTP is to identify how governmental partners intend to allocate federal transportation funding to improve transportation options across Davidson, Maury, Robertson, Rutherford, Sumner, Williamson, and Wilson counties. Projects identified in RTP were proposed by city and county governments, public transit agencies, and TDOT in response to a call-for-projects issued by GNRC in 2019. A public hearing is scheduled in conjunction with the TPB meeting on Feb. 17. Written comments will be accepted between Jan. 15 and Feb. 17, 2021.

About the GNRC

GNRC is established by the TN General Assembly as an association of local governments empowered 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. GNRC serves as the region’s federally-recognized Metropolitan Planning Organization (MPO), Area Agency on Aging and Disability (AAAD), and Economic Development District (EDD).

GNRC does not discriminate on the basis of race, color, national origin, limited English proficiency, gender, gender identity, sexual orientation, age, religion, creed or disability in admission to, access to, or operations of its programs, services, or activities. Complaints or requests for accommodation should be directed to Grant Kehler, Non-Discrimination Coordinator, 220 Athens Way, Suite 200, Nashville, TN 37228, phone number 615-862-8828.
Regional Transportation Plan
Released for Public Review, Adoption Hearing Set

Area residents and businesses encouraged to provide feedback on proposed transportation investments

January 26, 2021

Nashville, Tenn. - The Greater Nashville Regional Council (GNRC) has released an update to the Regional Transportation Plan (RTP) for public review and comment. The Plan outlines recommendations for prioritizing more than $10.5 billion in anticipated federal grants and matching funds between 2021 and 2045. A public workshop will be held on February 4, and the plan document is available for review at GNRC.org/Transportation.

GNRC serves as the federally required Metropolitan Planning Organization (MPO) for a seven-county area that includes Davidson, Maury, Robertson, Rutherford, Sumner, Williamson, and Wilson counties. As required by federal law, GNRC has developed a major update to the Regional Transportation Plan. The Plan, last adopted in 2016 by area mayors and transportation officials who serve on the GNRC Transportation Policy Board, is Middle Tennessee’s gateway to federal transportation funding. It is updated every five years in accordance with federal laws and regulations. The Plan establishes goals and objectives for the region and identifies federal funding priorities for investments to improve the region's network of roadways, transit services, and walking and bicycling facilities out to the year 2045.

Much of the Plan's funding is positioned to support the ongoing implementation of the IMPROVE Act passed by the Tennessee General Assembly in 2017. That legislation included a list of transportation projects to be implemented by the Tennessee Department of Transportation (TDOT). Last year, regional mayors came together to declare 2020 as the "Year of Transportation," as local and state public officials and community leaders rallied together to address Middle Tennessee's growing traffic issues. That bold step was tempered by the emergence of the Coronavirus and the spread of the COVID-19 disease. As a result of the pandemic, leaders reprioritize resources to address the public health crisis.

The proposed update to the Regional Transportation Plan is scheduled for adoption by the GNRC Transportation Policy Board on February 17, 2021. Even with this update, GNRC's work with local and state leaders – including those who oversee city and county governments, WeGo Public Transit, and TDOT – will be an ongoing process as the region recovers from the pandemic.

How to Participate:

- To review the draft plan, visit GNRC.org/Transportation or call 615-862-8828 to request assistance with accessing the documents.
• A virtual public workshop will be held on Thursday, February 4 at 5:30 p.m. Registration is not required. Visit GNRC.org/Calendar for more information about the public workshop. The meeting will be recorded and made available on GNRC's website for continued viewing.

• A series of small group discussion sessions will be held the week of February 8 to allow those interested in further conversation to ask regional planners' questions or express their support or concerns about the draft plan. Registration for these sessions will be required. Further instructions will be made available at GNRC.org on February 4.

• A final public hearing is scheduled for February 17, 2021 at 10:15 a.m. in conjunction with the regular monthly meeting of the Transportation Policy Board. Members of the public may address the Board during the online meeting or can submit comments in writing beforehand by emailing comments@gnrc.org. Additional information about the public hearing is available at GNRC.org/Calendar.

Federal regulations require metropolitan areas in the United States to conduct continuing, comprehensive, and collaborative transportation planning by developing a long-range transportation plan. In Middle Tennessee, the RTP fulfills this requirement. The Plan is updated every five years to account for shifts in community and regional priorities, advancements in technologies, fluctuations in funding levels, increases to project cost and changes in federal laws and regulations.

###

**About the Greater Nashville Regional Council:** GNRC is established by the TN General Assembly as the regional council of governments for Middle Tennessee. The Regional Council convenes more than 60 area mayors with state and federal officials for cooperative policymaking and to prioritize public funding for infrastructure projects and social services. It is federally recognized as the region's lead transportation planning organization, economic development district, and area agency on aging and disability. More info at GNRC.org.
We are Updating the Regional Transportation Plan

Join us for a Virtual Workshop to learn more!

Thursday, February 4, 2021
5:30 p.m. to 6:30 p.m.
Online Meeting via Microsoft Teams

The Greater Nashville Regional Council (GNRC) has released an update to the Regional Transportation Plan for public review and comment. The Plan provides recommendations for how to invest more than $10.9 billion in anticipated federal grants and matching funds to improve our roadways, public transit services, and walking and bicycling conditions between 2021 and 2045.

The Plan, last adopted in 2016 by area mayors and transportation officials who serve on the GNRC Transportation Policy Board, is Middle Tennessee’s gateway to federal transportation funding. It is updated every five years to account for shifts in community and regional priorities, advancements in technologies, fluctuations in funding levels, and increases to project costs.

Visit [GNRC.org/Transportation](http://GNRC.org/Transportation) to preview the draft update to the Regional Transportation Plan.

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Connect with us.

Greater Nashville Regional Council
220 Athena Way • Suite 200
Nashville, Tennessee 37228
Phone: (615) 862-8828 • [GNRC.org](http://GNRC.org)
Stakeholder Outreach

Regional planning partners and community stakeholders were consulted in the development of the Plan. The following list of organizations were notified of the draft plan and invited to share comments and concerns.
Subject: Draft Update to the Regional Transportation Plan – Request for Review and Comment from Partner Agencies and Regional Stakeholder Organizations

Dear Transportation Planning Partner:

The Greater Nashville Regional Council (GNRC) serves as the region’s federally required Metropolitan Planning Organization (MPO) for a seven-county area that includes Davidson, Maury, Robertson, Rutherford, Sumner, Williamson, and Wilson counties. As required by federal law, GNRC has developed a major update to the Regional Transportation Plan. The Plan, adopted by area mayors and transportation officials who serve on the GNRC Transportation Policy Board, serves as Middle Tennessee’s gateway to federal transportation funding. It is updated every five years in accordance with federal laws and regulations. The plan establishes goals and objectives for the region and identifies federal funding priorities for transportation investments to improve the region’s network of roadways, transit services, and walking and bicycling facilities out to the year 2045.

The draft update to the Regional Transportation Plan was released for public and stakeholder review and comment on January 15, 2021 and is scheduled for adoption on February 17. GNRC is seeking input from federal, state, and local agencies and organizations that have an interest in future growth and development, traffic congestion, roadway safety, environment, social equity, and economic opportunity, and/or other aspects related to the transportation planning process. Draft documents are available at the following website: GNRC.org/Transportation

GNRC is requesting your organization’s written comments to comments@gnrc.org on or before February 16. In addition, you may present your comments during the public hearing of the Transportation Policy Board scheduled for 10:15 a.m. on February 17, 2021. Please feel free to pass this information on to other organizations in your network that may have an interest in reviewing or commenting on the draft plan. Information on upcoming outreach events will be available at www.gnrc.org/transportation. If you have any questions about the process or how to comment, please contact Daniel Capparella at dcapparella@gnrc.org.

We thank you for your continued support of a more livable and sustainable Middle Tennessee. We look forward to working with you in the future as we continue to develop plans for tomorrow.

Sincerely,

Sean Pfalzer
Transportation Planning Manager

Connecting Communities. Empowering People.
220 Athens Way, Suite 200 • Nashville, TN 37228 • GNRC.org
List of Stakeholders Receiving Invitation to Review and Comment

Federal Agencies

- Federal Highway Administration
- Federal Transit Administration
- US Army Corps of Engineers
- US Dept of Agriculture
- US Fish and Wildlife Service

State Agencies

- Tennessee Housing Development Agency
- Tennessee State Historic Preservation Office
- Tennessee Wildlife Resource Agency
- TN Dept of Agriculture
- TN Dept of Economic & Community Development
- TN Dept of Environment & Conservation
- TN Dept of Health
- TN Dept of Transportation

Partners and Non-Profit Organizations

- Cumberland Region Tomorrow
- Harpeth River Conservancy
- Land Trust for Tennessee
- Tennessee Environmental Council
- Tennessee Parks & Greenways Foundation
- Tennessee Wildlife Federation
- The Nature Conservancy
- The Southern Environmental Law Center
- Walk Bike Nashville
- Greenways for Nashville
- Bike ‘n’ Walk Hendersonville
- Bike Walk Tennessee
- Downtown Nashville Partnership
- Forward Sumner
- Nashville Civic Design Center
- Urban Land Institute
- AARP Tennessee
- Boys & Girls Club of Middle Tennessee
- Conexion Americas/ Casa Azafran
- Islamic Center of Nashville
- Salahadeen Center of Nashville
- The Equity Alliance
Chambers of Commerce

- Donelson Hermitage Chamber of Commerce
- Gallatin Area Chamber of Commerce
- Goodlettsville Chamber of Commerce
- Hendersonville Chamber of Commerce
- Lebanon Wilson County Chamber of Commerce
- Madison Rivergate Chamber of Commerce
- Maury Alliance
- Nashville Area Chamber of Commerce
- Nashville Area Hispanic Chamber of Commerce
- Nashville Black Chamber of Commerce
- Nashville Latin American Chamber
- Nashville LGBT Chamber of Commerce
- Portland Chamber of Commerce
- Robertson County Chamber of Commerce
- Rutherford County Chamber of Commerce
- White House Chamber of Commerce
- Williamson Inc.

Educational Institutions

- Lipscomb University
- Tennessee State University
- Vanderbilt University
Public Comments

The following comments were received from members of the general public and stakeholder organizations during the formal public review period held between January 15, 2021 and February 17, 2021.
<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>Nature of Comment</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael J Pavin</td>
<td>Michael J Pavin Landscape Architecture</td>
<td>Concern</td>
<td>Concern that Nashville's City Central Greenway Concept is not fully realized in the plan. It includes sections such as 440 Phase 2 and Charlotte Pike Corridor sections, but does not realize the full loop that would provide valuable connections to underserved populations near TSU and along the Brown's Creek Corridor. At minimum the plan should include the additional planning that is need to formalize a plan and begin to acquire the property and right-of-ways needed before they are gone or it is too late.</td>
</tr>
<tr>
<td>Addam McCormick</td>
<td>City of Goodlettsville</td>
<td>Request</td>
<td>Request that the City of Goodlettsville's previously identified Top Priority Project outside of the current TIP and CMAQ projects, is project#2629 that made neither the fiscally constrained or illustrative projects list. The City request this project to replace projects 2605 and/or 2598 both 2045 horizon projects. Understand if the project #2629 could be on illustrative list then at least would be subject to a possible scenario for funding opportunities during the 2045 plan.</td>
</tr>
<tr>
<td>Chuck Downham</td>
<td>City of Spring Hill</td>
<td>Request</td>
<td>Request that the base map should be updated to reflect the extension of Saturn Parkway to Beechcroft Rd recently completed by TDOT.</td>
</tr>
<tr>
<td>Keith Wilschetz</td>
<td>MNAA (BNA)</td>
<td>Concern/Request</td>
<td>Concern that Nashville International Airport’s (BNA) plans are not considered in developing the RTP, and the Metropolitan Nashville Airport Authority (MNAA) should be considered a stakeholder in developing the plan. Unfortunately, MNAA’s role in the RTP was limited and GNRC does not consider MNAA a stakeholder agency, as shown in Chapter 2, Regional Collaboration. It is suggested that an Aviation Element be added to the RTP. Request that Appendix A be updated to reflect current statistics.</td>
</tr>
<tr>
<td>Victor H. Lay</td>
<td>Town of Nolensville</td>
<td>Concern</td>
<td>Concern that the Town of Nolensville’s projects were classified as &quot;unfunded needs.&quot; The Town has required developments to reserve ROW for the expansion of Hwy 31A as well as for the bypass of the Town’s historical district. The Town will be approaching the GNRC TPB about nearer term funding partnerships for some of these improvements.</td>
</tr>
<tr>
<td>Concerned Sumner County Commuter</td>
<td>General Public</td>
<td>Concern</td>
<td>Concern that I-24 Widening project will worsen congestion and safety near trinity lane and exit 40. Concern that proper peer research was not conducted.</td>
</tr>
<tr>
<td>Greg Wathen</td>
<td>TWRA</td>
<td>Concern/Request/Support</td>
<td>Concern that the plan does not appropriately address how the region’s transportation systems can be transformed to meet the challenges of climate change. Request that the TPB make a strong commitment to mass transit options included in the plan. Request that the plan acknowledges that transportation systems and planning can drive where growth occurs, and that the RTP should recognize the linkages between transportation, population growth, and land use. Request that the following environmental indicators be included in the plan (Upland forest, water quality/aquatic connectivity). Support of the Regional Conservation Strategy. Concern that the current level of funding is inadequate to meet the region’s needs.</td>
</tr>
</tbody>
</table>
### Compilation of Public and Stakeholder Comments Received between January 15, 2021 and February 17, 2021

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Laurel Creech</td>
<td>Metro Nashville</td>
<td>Request</td>
<td>Request that the plan include information related to electrification, both commercial and residential transition to EVs as well as EV charging infrastructure along major corridors. The Drive Electric Tennessee Plan along with municipalities adopting mandates towards electrification over the next 3-5 years coupled with the new Biden administration’s commitment to electrification, I would like to see at a the minimum a recognition that this is a trend that is coming in the very near future and that GNRC is working with federal, state, and local governments as well as LPCs and TVA to be a partner and vital contributor for this transition.</td>
</tr>
<tr>
<td>Jennifer Westerholm</td>
<td>Metro Nashville</td>
<td>Request</td>
<td>Request that the plan include information on EV charging infrastructure.</td>
</tr>
<tr>
<td>Michelle Hamman</td>
<td>Metro Nashville</td>
<td>Request</td>
<td>Request that the plan include information on EV charging infrastructure. Electrification of our vehicles are not mentioned in Chapter 3: Issues, Trends and Forecasts, even though it will be a main issue over the next 10-20 years. We need EV charging along the main transit corridors, and specifically fast charging stations with amenities. Planning is needed for the massive change coming to our vehicles and buses.</td>
</tr>
<tr>
<td>Brooke Ellis</td>
<td>Metro Nashville</td>
<td>Concern</td>
<td>There is no mention of electrification along corridors in preparation for a rise in electric vehicles... This should be made an area of focus</td>
</tr>
<tr>
<td>Betsy Garber</td>
<td>General Public</td>
<td>Concern</td>
<td>Concern that not enough specific protections/guidelines are in place to include the critical requirement that we proceed with the development of our transportation systems in a way that significantly decreases pollution/green house gases &amp; sprawl, and protects and rehabilitates our parks, green spaces, forests, and waters. I also did not see any development of infrastructure for EV - I may have just missed this.</td>
</tr>
<tr>
<td>William Barbour</td>
<td>Vanderbilt University</td>
<td>Concern</td>
<td>Concern that environmental and equity impacts are not evaluated and considered appropriately in the plan. Many of the candidate projects are road widening projects, which because of induced demand will lead to more VMT on these roads (plus higher speeds) and hurt the residents around them. Air quality and noise pollution impacts should be considered in the plan alongside those related to land use and development. Concern that the impact on the region’s system caused by freight is not considered enough. 1-840 is heavily under-utilized and should be leveraged from the strategic level to unburden the urban sections of the region’s interstates. Concern that improvements in active transportation and transit are vague and not ambitious enough.</td>
</tr>
<tr>
<td>Jennifer Tribble</td>
<td>TDEC</td>
<td>Concern/Request/Support</td>
<td>Concern that the RTP does not address cultural resources and request that the RTP include a statement concerning coordination with TDOT and State Historic Preservation Office as well as compliance with Section 106 of the National Historic Preservation Act in relation to any undertaking with potential impacts to cultural resources. TDEC recommends that GNRC consider energy use, cost, and reduction strategies as part of its RTP. Such a prioritization could be added to the RTP and associated Transportation Improvement Program (TIP) within the Goals and Objectives table within Section 4.3. TDEC recommends that GNRC consider partnership with external stakeholders, such as local employers located in high traffic density areas, to drive TDM strategies and investments. TDEC recommends that GNRC prioritize the resiliency benefits of transportation sector fuel diversity and potential investments that could be made in alternative fuel infrastructure within its RTP. Concern that there is no mention of transportation electrification in the plan. Support of Bike/Ped elements, consideration for public health, and transit improvements.</td>
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<tr>
<td>Name</td>
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<td>Nature of Comment</td>
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<tr>
<td>Amanda Garcia</td>
<td>SELC</td>
<td>Concern/Request</td>
<td>Request that GNRC should build on its project evaluation framework to provide more transparency and to weed out poor-performing legacy projects. Request that GNRC should set performance targets for plan performance and evaluate alternative scenarios. Request that local transportation funding and locally-funded projects should be included in the plan request that the plan should provide more clarity on the allocation of funds. Request that the plan should provide more information and analysis to document the need for improved transit service. Request that reducing greenhouse gas emissions should be a priority for the plan. Request that GNRC should look beyond transportation demand management and focus on reducing vehicle miles traveled. Request that GNRC should pursue policies and investments that discourage further sprawling growth of the region. Request that GNRC should continue to refine its transportation equity analysis. Request that including more emphasis on function rather than geography, and request that GNRC should evaluate the opportunities and the challenges presented by vehicle electrification.</td>
</tr>
</tbody>
</table>
February 16, 2021

Via Electronic Mail
Mr. Michael Skipper
Executive Director
Greater Nashville Regional Council
220 Athens Way #200,
Nashville, TN 37228
comments@gnrc.org

RE: Comments on Draft Regional Transportation Plan Update

Dear Mr. Skipper:

On behalf of the Southern Environmental Law Center, I am writing to submit comments on the Greater Nashville Regional Council’s Draft Update to its Long-Range Transportation Plan ("the Plan"). SELC is a non-partisan, non-profit organization that works throughout the Southeast to promote transportation and land use decisions that strengthen our communities, protect our environment, and improve our quality of life.

As the overarching transportation plan for the Nashville region, the Plan plays a key role in setting the policies and funding the transportation projects that will shape the region’s growth for the coming decades. In many ways, the Plan includes important work to address key issues in transportation planning like the use of performance metrics in project selection, incorporating climate resilience into the planning process, and considering the equity impacts of transportation projects. But there is more work to be done. In particular, GNRC must focus on the implementation of its policies to ensure that the Plan’s aspirational goals and objectives translate into the best transportation projects on the ground.

Please consider the following comments regarding the Plan and future steps that GNRC can take to move the Nashville region toward a more sustainable, equitable, and environmentally sensitive future.

1. **GNRC Should Build On Its Project Evaluation Framework To Provide More Transparency And To Weed Out Poor-Performing Legacy Projects.**

   GNRC should be commended for its efforts to evaluate the performance of all projects in both the funded and aspirational portions of the Plan. Evaluating so many projects is no small undertaking, and this task provides important information regarding the performance of the Plan’s projects. Further, the project categories and color key allow different types of projects to
be compared. GNRC should build on this work and refine its project evaluation process in three important respects.

First, GNRC should provide a narrative explanation when low scoring projects are included in the Plan. This explanation is particularly important when a new, low-performing project is added to the Plan. According to Appendix B, a number of new projects were added to the Plan despite receiving low performance scores. There may be a reasonable justification for including these projects, but GNRC should provide that explanation. The performance evaluation need not be the final word on whether to include a project, but it should be a starting point and the counter-intuitive decision to include a low-performing project should be explained.

Second, GNRC should consider removing low-performing legacy projects from the Plan. The Plan is an update to the region’s existing long rate transportation plan, and it reflects both new projects and projects that are already in the development pipeline. But, like the sunk cost fallacy in economics, a project’s inclusion in a prior plan is not sufficient reason to complete it. GNRC should use the performance metrics to identify low-performing projects and, for projects still in the design and engineering phases, illustrate how their shortcomings can be improved. If projects cannot be improved, GNRC should consider whether they should be removed from the Plan. In short, GNRC should use the its performance analysis both to avoid making mistakes in the future and to rectify mistakes made in the past.

Third, GNRC should incorporate a cost benefit component into its performance analysis. It is not possible to understand a project’s benefits without considering its cost as context – a project with modest benefits looks very different depending on whether it costs $1 million or $1 billion. This context is particularly important for poor performing or very high cost projects. Although the Plan includes project cost estimates, the Plan should use this information to rate projects on a cost-effectiveness basis rather than treating these two data points as unrelated. Without understanding the return on its investment, GNRC cannot allocate its limited transportation funds most effectively.

2. GNRC Should Set Performance Targets For Plan Performance And Evaluate Alternative Scenarios.

As the Plan recognizes, both federal guidance and industry practice have encouraged more performance-based planning. In such an approach, a plan should set performance goals and use the plan’s decisions to achieve them. The Plan includes 24 regional policy objectives and includes a “Performance Monitoring” section that identifies 64 performance measures linked to the policy objectives.

But the Plan stops short of setting measurable performance targets and does not model the Plan’s anticipated success in achieving these goals. In the rare instances where a performance

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1 Examples include Project ID numbers: 2838, 2847, 2862, 2848, 2822, 2828, and 2857.
target is identified (e.g., the goal of reducing traffic fatalities by one percent annually to achieve the “Improve Roadway Safety for All Users” objective), the Plan does not explain whether this goal will be met. The Plan should set measurable targets for all performance measures and grade the Plan’s success in achieving these goals.

Further, the Plan models future travel conditions but only provides this data based on “current transportation system, with no additional capacity improvements.” (Figure 3-47). Rather than simply extrapolating out the status quo, the Plan should compare the status quo against future performance with the projects in the Plan.

The Atlanta Regional Commission’s current long range transportation plan provides an example of how these various planning steps can be linked. Its “Performance” section includes breakout bubbles that link plan objectives to a measurable performance metric, and a clear statement of the Plan’s performance compared to the status quo.

![Average Commute Travel Time in Minutes by Personal Vehicle](image)

*The Atlanta Region’s Plan* (Atlanta Regional Commission Feb 2020) at 140. Simply measuring performance is not enough; GNRC must set measurable benchmarks and evaluate the Plan’s success in achieving these goals compared to the status quo.

Finally, GNRC should look beyond the specific combination of projects currently proposed and evaluate alternate suites of projects. There is no question that the project in the

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Plan will improve performance compared to doing nothing; the better question is whether the Plan’s specific combination of projects performs better than other ways GNRC could spend $10 billion. Would a different mix of projects yield a better result? There are an infinite number of alternate project combinations, but GNRC could compare the Plan’s performance against other illustrative scenarios. For example, would a scenario heavily weighted in favor of maintenance projects perform better? Or a VMT reduction scenario? Or a transit expansion scenario? Without a scenario analysis to compare the Plan against, it is impossible to gauge the success of the current proposal.

3. **Local Transportation Funding And Locally-Funded Projects Should Be Included In The Plan.**

Even if not technically required to do so, GNRC should include local funding and local projects in the Plan. Federal regulations require regional transportation plans to include all projects that utilize federal funds or are regionally significant. But this provision is a minimum requirement, and regional transportation plans are encouraged to provide a “continuing, cooperative, and comprehensive” view of transportation in their metropolitan region. 23 C.F.R. § 450.300. Further, local roads and locally-funded projects certainly play a role in the region’s ability (or inability) to reach its performance targets. Including these local projects also will allow GNRC to more comprehensively address issues like funding allocation, maintenance backlogs, system resilience, and areas of underinvestment. In short, even if GNRC is not required to include locally-funded project in the Plan, doing so will result in better planning and a more complete picture of the region.

4. **The Plan Should Provide More Clarity On The Allocation Of Funds.**

As the adage goes, “Show me your budget and I will tell you what you value.” The funding summaries found in the Plan make it difficult to compare how much money would be spent on different categories of projects and, as a consequence, how different priorities are being advanced through the Plan. The Plan should provide succinct summaries of how transportation funds would be spent across different funding categories and different project purposes.

For example, Figure 5-8 categorizes expenditures across four categories: State of Good Repair, Roadway Safety, Congestion Management, and Economic Opportunity. (Plan at 5-18). Yet the Plan includes the caveat that “the categories are not mutually exclusive and cannot be summed to a total.” (In fact, the sum of these percentages is 251%). Although projects can serve multiple purposes, in most cases a project has a primary purpose (replacing a bridge, widening a road, etc). Appendix B, for example, assigns a “proposal type” to all projects in the Plan. But the Plan does not provide a clear summary of expenditures across different project types and different project purposes. As a result, it is difficult for one to compare the Plan’s relative investment in different areas.
Atlanta’s Regional Transportation Plan provides a useful example of how plan expenditures can be organized in different formats, categorizing allocations by program area and sub-area. *The Atlanta Region’s Plan* (Atlanta Regional Commission Feb 2020) at 112.³

GNRC could use a similar approach, displaying expenditures based on the categories in Figure 5-8 and by the proposal types in Appendix B. However, should it choose to use the categories in Figure 5-8, GNRC should assign projects to a single category rather than multiple categories. If this is not possible using the current categories, GNRC should consider altering the categories so a zero sum approach can be used.

5. **The Plan Should Provide More Information and Analysis to Document The Need For Improved Transit Service.**

GNRC should provide more comprehensive information regarding the quality and scope of transit service in the region. The Plan provides a variety of information related to Nashville’s transit service including transit peer comparisons (Plan at 3-41), the challenges facing transit service in the region (Plan at 3-34), and the projected increase in transit trips over the life of the plan. The Plan also discusses the long-term vision for transit expansion in the region. (Plan at 5-3).

But the Plan should provide more context for this information and provide more information quantifying the benefits of improved transit service. For example, GNRC could describe the benefits of improved transit service in more relatable terms by:

- Calculating and mapping the number of jobs accessible by transit;
- Mapping the travel time catchment areas for accessing job centers by transit;
- Identifying key travel corridors that are not served, or are under-served, by existing transit service;
- Evaluating the demographics of transit-dependent communities to identify inequities;
- Calculating the percentage of household income spent on transportation and comparing that to peer cities; and
- Comparing the Plan’s funding for transit to its funding for roadways, on a total and per capita basis.

Some of this information is available elsewhere in the Plan, but the limited information does not tell the story of Nashville’s under-investment in transit. Providing a comprehensive view of the consequences of Nashville’s inadequate transit service will illustrate this problem in more relatable and compelling terms.


GNRC should treat the resilience challenges posed by climate change and the role of transportation emissions in creating the problem as Plan priorities. Climate change is the most pressing environmental challenge of our lifetime, and the transportation sector is now the leading source of greenhouse gas emissions (GHG) in Tennessee and nationally. To avoid irreversible changes to our climate, dramatic action must be taken to reduce these emissions in the lifetime of this Plan.

Greater focus on climate change is also sound planning. As the Plan acknowledges, federal guidance “to incentivize planning and investment in climate resilient infrastructure” is likely forthcoming. (Plan at 3-3). Climate change will likely be a key focus of federal transportation policy for the next four years and moving forward. This federal focus is likely to include both the effects of a changing climate on transportation infrastructure and the transportation sector’s role in GHG emissions. Orienting the Plan to focus more directly on climate change will better position this document, and the region’s transportation projects, to align with federal priorities.

Currently, the Plan makes brief reference to GHG emissions, identifying “Carbon Dioxide (CO2) levels vehicle emissions” as one of the Plan’s 64 performance measures. The Plan discusses the effects of climate change in more detail, identifying “Planning for Climate Scenarios” as a Plan objective and discussing the risks a changing climate pose to transportation
infrastructure. (Plan at 4-10). Given the far-reaching consequences for the planet and for Nashville residents, GNRC must treat climate change as a top priority and consistent theme for its planning efforts.

GNRC should make GHG reduction a theme running throughout the Plan: GHG reduction should be a Plan goal; GHG reduction targets should be adopted; and projects should be evaluated based on their GHG emission footprint. Further, GNRC should embrace low-carbon transportation strategies like VMT reduction, transit expansion, and vehicle electrification as Plan objectives.

With respect to climate resilience, GNRC should build on its work to identify the most at-risk projects and design them to be more climate resilient. GNRC should assess existing infrastructure to identify those at risk from flooding or other extreme weather events. GNRC should also identify proposed projects in the Plan that would be located in vulnerable areas and require that these projects be designed to higher standards for climate resilience. Finally, GNRC should evaluate whether new road projects are intended facilitate growth in vulnerable areas and, if so, remove these projects from the Plan.

7. GNRC Should Look Beyond Transportation Demand Management And Focus On Reducing Vehicle Miles Traveled.

As the plan recognizes, “Middle Tennesseans are on the roadways for far greater distances” than residents of comparable peer regions. (Plan at 3-39). The rapid population growth and continued outward expansion anticipated by the Plan will only exacerbate this situation further and lead to a myriad of undesirable outcomes, from increased GHG emissions and maintenance costs to lower quality of life and reduced worker productivity.

Therefore, GNRC should adopt reducing Vehicle Miles Traveled (VMT) as a Plan objective. The Plan currently references the use of Transportation Demand Management (TDM) in its discussion of Goal 3 (Mitigate Congestion to Keep Region Moving). (Plan at 4-6). But cities, regions, and states around the county have recognized the importance of moving beyond TDM as a congestion management strategy and adopting VMT reduction targets as an orienting objective for their transportation plans. Adopting VMT reduction goals as part of a transportation plan can:

- Help achieve specific planning objectives including congestion reduction, facility cost savings, consumer savings, accident reductions, improved mobility for non-drivers, energy conservation, emissions reductions, and improved public health.

- Support policy and planning reforms, such as efficient pricing, more comprehensive planning, and least-cost investment practices.
• Align policies between different levels of government and organizations, for example, to ensure that local governments support state and federal goals.

• Respond to current demographic, economic and technical trends that are reducing demand for automobile travel and increasing demand for other modes and multi-modal communities.

“Are Vehicle Travel Reduction Targets Justified? Evaluating Mobility Management Policy Objectives Such as Targets to Reduce VMT and Increase Use of Alternative Modes,” Todd Litman, Victoria Transport Policy Institute (October 2020)4. Treating VMT reduction as a policy goal, rather than a strategy or metric, will help orient the Plan around a lower consumption model for transportation that will provide efficiencies and advance outcomes that the Plan already seeks to achieve.

8. GNRC Should Pursue Policies And Investments That Discourage Further Sprawling Growth Of The Region.

Nashville’s explosive growth will be a critical challenge over the coming decades, and the Plan must take more affirmative action to dampen the uncontrolled, sprawling growth that is otherwise projected.

The Plan describes its use of a Regional Growth Allocation Model to project where and how Nashville will grow over the coming decades. (Plan at 3-9). This model does not paint a pretty picture: Nashville will continue its sprawling growth patterns; this uncontrolled growth will further outstrip the available transportation infrastructure; and the performance of the transportation system will decline. The Plan treats this modeling as an inevitability; an immutable future that it must plan around. But GNRC can influence growth patterns through its policies and funding decisions and, having previewed this concerning future, it should act now to change it.

At best, the Plan’s objectives only tangentially describe efforts to control further sprawling growth (e.g., reducing travel distance). The Plan’s narrative discussion describes efforts to “coordinate with land use decisions” by “establishing corridor management agreements among TDOT and local elected officials” and other measures. (Plan at 4-7). But this approach seeks to address the symptoms rather than the underlying illness.

Like many of the other issues detailed above, GNRC should start by acknowledging that continued urban expansion is a problem that must be addressed. GNRC should then consider the ways it can use its policies and funding decisions to focus, control, and in some cases deter further sprawling growth. Just because GNRC does not directly control local land use decisions does not mean it is powerless to influence how and where Nashville grows. Knowing that

4 https://vtpi.org/vmt_red.pdf
continued outward expansion will only further strain the transportation system and exacerbate many of the challenges Nashville currently faces, GNRC must take whatever measures it can to disincentivize this growth rather than stand by as it unfolds.

9. **GNRC Should Continue To Refine Its Transportation Equity Analysis, Including More Emphasis On Function Rather Than Geography.**

With respect to transportation equity, the Plan should continue to refine its approach to identifying and mitigating projects that pose environmental justice and transportation equity concerns. In particular, GNRC should move beyond a location-based approach to evaluating transportation equity and develop a more functional approach.

The Plan identifies minimizing impacts on vulnerable communities as a Plan objective, and the narrative discussion further explains that those same vulnerable communities are also “often underserved by transportation systems.” (Plan at 4-11). These bring the Plan in line with federal environmental justice guidance, which focus both on a project’s impacts and its distribution of benefits.5

To implement these goals, the Plan maps the location of vulnerable communities and identifies projects that “overlap with areas that contain higher than average rates of the nine vulnerable populations.” (Plan at 6-8 and Appx. F). Yet this location-based approach tells us little about how a project interacts with the adjacent communities, and does not address the larger issue of how transportation benefits are distributed.

Transportation planning organizations around the country have struggled to identify an effective way to model and evaluate the impacts a project will have on adjacent communities. But there is a large and growing body of research offering analysis and recommendations for how to better refine planning efforts around transportation equity.6 GNRC should adopt industry best practices in its equity analysis and should continue to refine its approach. GNRC should also conduct public engagement in vulnerable communities to verify its assumptions and modeling.

Further, GNRC should recognizing the historical injustice embodied in our current transportation system and pursue the remedial goal of transportation justice. Rather than simply comply with the minimum “do no harm” goals embodied in federal policy, GNRC should recognize that our transportation system reflects a history of transportation inequity and work

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5 Department of Transportation Updated Environmental Justice Order 5610.2(a) (May 2, 2012) [https://www.fhwa.dot.gov/environment/environmental_justice/ej_at_dot/orders/order_56102a/](https://www.fhwa.dot.gov/environment/environmental_justice/ej_at_dot/orders/order_56102a/)

affirmatively to cure those inequities.\(^7\) It is insufficient to simply treat everyone equally now, if our existing transportation system embodies a legacy of unequal treatment. GNRC should adopt this affirmative approach of transportation justice in all levels of the Plan, from adding transportation justice as a Plan objective to incorporating the use of performance measures that specifically evaluate Plan performance for our most disadvantaged citizens.

**10. GNRC Should Evaluate The Opportunities And The Challenges Presented By Vehicle Electrification.**

One dramatic shift likely to occur over the life of the Plan will be the electrification of the transportation sector. For example, General Motors recently announced its goal to have 40% of its light duty vehicles EVs by 2025, and all vehicles electric by 2035.\(^8\) This announcement aligns with the plans of many other automakers.

The shift to electrified transportation could happen quickly and has the potential to significantly reduce air pollution from the transportation sector. By one estimate, an average EV in Tennessee emits just 27.8% of the GHG emissions of a traditional gas-powered car and this gap will widen as Tennessee’s electrical grid becomes cleaner.\(^9\) In addition, due in part to improvements in battery technology, EVs are becoming more affordable and a more viable option as their range-per-charge rapidly increases. But if the rollout of EVs is not done properly, it also has the potential to exacerbate inequities, strain the electrical grid, erode transportation funding, or be delayed by poor planning and infrastructure development. GNRC should evaluate the opportunities and challenges presented by vehicle electrification, and its role in addressing them.

Specifically, GNRC should use regional trip data to identify the availability and need for EV charging infrastructure. The Tennessee Valley Authority recently announced plans to develop a statewide EV plan focused on interstate corridors.\(^10\) But a more granular, regional plan would look beyond the Interstate system and identify areas where additional charging infrastructure is needed based on vehicle volumes, travel patterns, and gaps in the existing charging network. Optimizing the deployment of new EV charging infrastructure requires an understanding of regional travel patterns and no organization has more expertise in this area than GNRC. GNRC certainly has a better understanding of how and where Nashville residents are traveling than the TVA. Optimizing the deployment of charging investments will help overcome

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\(^7\) “From Transportation Equity to Transportation Justice: Within, Through, and Beyond the State,” by Alex Karner *et al* (May 29, 2020) [https://journals.sagepub.com/doi/10.1177/0885412220927691](https://journals.sagepub.com/doi/10.1177/0885412220927691)


range anxiety, will help ensure that public funds are invested wisely, and will help expedite the electrification of the transportation sector.

**Conclusion**

Thank you for your consideration of these comments. Please contact me with any questions or concerns at bgist@selcga.org or (404) 521-9900.

Sincerely,

Brian Gist    Amanda Garcia
Senior Attorney    Tennessee Office Director

cc: Mr. Ben Gramling (GNRC)
February 16, 2021

Via Electronic Mail to Greater Nashville Regional Council
Greater Nashville Regional Council
220 Athens Way, Suite 200
Nashville, TN 37228

Greater Nashville Regional Council:

The Tennessee Department of Environment and Conservation (TDEC) appreciates the opportunity to provide comments on the Greater Nashville Regional Council’s (GNRC) Regional Transportation Plan (RTP), which outlines transportation goals and proposed projects for the years 2021 to 2045. The projects contained in this plan account for the projected $10.5 billion or more in funding available between federal grants and matching dollars. The RTP covers Davidson, Maury, Robertson, Rutherford, Sumner, Williamson, and Wilson counties. TDEC has reviewed the updated RTP and offers the following comments:

Cultural and Natural Resources
TDEC finds that the RTP does not address cultural resources and requests that the RTP include a statement concerning coordination with the Tennessee Department of Transportation and the State Historic Preservation Office as well as compliance with Section 106 of the National Historic Preservation Act in relation to any undertaking with potential impacts to cultural resources.

Energy Resources
According to the U.S. Energy Information Administration, the transportation sector is the largest energy consuming end-use sector in Tennessee, representing 28.8% of Tennessee’s total energy consumption in 2018. Given the energy impacts of the transportation sector, TDEC recommends that GNRC consider energy use, cost, and reduction strategies as part of its RTP. Such a prioritization could be added to the RTP and associated Transportation Improvement Program (TIP) within the Goals and Objectives table within Section 4.3.

Congestion Mitigation: Of itemized projects, 47% of funding is proposed to go toward road widening projects to address future congested conditions within the RTP’s candidate projects and funding allocations list (Appendix B. List of Funding Allocations, Illustrative Priorities for Programmatic Funding, and Candidate Projects). GNRC should emphasize increased investments in Transportation Demand Management (TDM) programming, active transport infrastructure (e.g., bike lanes, pedestrian trails, etc.), enhancements to the transit system (e.g., dedicated transit lanes, bus rapid transit, increased transit service, etc.), and other solutions designed to reduce the number of single-occupancy vehicle trips within the region for those project funds that can support such activities (e.g., National Highway Performance Program, Surface Transportation Block Grant Program, etc.).
TDEC is pleased to see the explicit mention of TDM within the RTP as a means of addressing congestion at the root of the problem and reducing the number of vehicles on the road. TDM can be an effective way to mitigate congestion, reduce energy consumption within the transportation sector, and improve ambient air quality by decreasing transportation-related emissions. TDEC recommends that GNRC consider partnership with external stakeholders, such as local employers located in high traffic density areas, to drive TDM strategies and investments.

**Bicycle and Pedestrian:** TDEC is pleased to see the emphasis and planned investment in bicycle and pedestrian transportation opportunities in many of the projects identified in the RTP (Appendix B. List of Funding Allocations, Illustrative Priorities for Programmatic Funding, and Candidate Projects).

**Resilience through Fuel Diversity:** Recent crises such as the COVID-19 pandemic, destructive tornadoes, the Nashville Christmas Day explosion, and ongoing threats of cyberattacks to the transportation and energy industries have brought about increased attention to the issue of fuel security and how to enhance it while mitigating impacts from potential fuel disruptions. Projects that promote a diversified fuel supply with vehicles capable of running on alternative fuels such as compressed natural gas (CNG), propane, biofuels (biodiesel and ethanol), and electricity could mitigate vulnerability to fuel shortages caused by natural or human-made disasters or fuel supply disruptions, strengthening emergency preparedness and the resiliency of the transportation sector. TDEC recommends that GNRC prioritize the resiliency benefits of transportation sector fuel diversity and potential investments that could be made in alternative fuel infrastructure within its RTP.

**Alternative Fuels / CMAQ:** With regard to activities funded by the Congestion Mitigation and Air Quality Improvement Program\(^1\) (CMAQ), the use of alternative fuels such as CNG, propane, biofuels, and electricity can achieve significant reductions in criteria pollutant and greenhouse gas emissions. In particular, alternative fuels reduce or, in some cases, eliminate the tailpipe emissions of nitrogen oxides (NOx) and volatile organic compounds (VOCs), which are precursors to ozone. As such, the potential for ozone non-attainment under the U.S. Environmental Protection Agency’s (EPA) National Ambient Air Quality Standards can be reduced by replacing gasoline or diesel vehicles with vehicles powered by alternative fuels. With regard to vehicles, CMAQ can cover the incremental cost of an alternative fuel vehicle as compared to a conventionally-fueled vehicle. Additionally, establishment of alternative fuel refueling facilities and other related infrastructure is eligible for funding if the facility is publicly owned or leased. TDEC advises that GNRC look for opportunities to deploy alternative fuels under CMAQ and other relevant funding opportunities in the future.\(^2\)

Please note that the Surface Transportation Block Grant Program (STBG) can also fund alternative fuel vehicle and infrastructure projects, including electric vehicle and natural gas vehicle infrastructure in accordance with 23 U.S.C. 137.\(^3\) Additional funding opportunities that may be leveraged to support alternative fuel vehicle and infrastructure projects include the State of Tennessee’s annual allocation under the U.S. EPA Diesel Emissions Reduction Act Program, which is managed on behalf of TDEC by the East Tennessee Clean Fuels Coalition, as well

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1. CMAQ has an anticipated federal funding of $307 million from 2021-2045.
2. Please visit [https://www.fhwa.dot.gov/Environment/air_quality/cmaq/reference/alternative_fuel/index.cfm](https://www.fhwa.dot.gov/Environment/air_quality/cmaq/reference/alternative_fuel/index.cfm) for more information on how CMAQ funds can be leveraged to support alternative fuel infrastructure and vehicle projects.
3. Please visit [https://www.fhwa.dot.gov/specialfunding/stp/160307.cfm#d](https://www.fhwa.dot.gov/specialfunding/stp/160307.cfm#d) for more information on how STBG funds can be leveraged to support alternative fuel infrastructure and vehicle projects.
as the State of Tennessee’s initial allocation under the Volkswagen Environmental Mitigation Trust\(^4\), which is managed by TDEC’s Office of Energy Programs.

**Public Transit:** TDEC commends GNRC for recommending funding to several transit enhancement projects for organizations such as WeGo Public Transit, Franklin Transit Authority, and the City of Murfreesboro, including vehicle upfitting or replacement, expansion of transit service access, improvements to bus stops and terminals, and more. TDEC recommends that these organizations consider the following when performing such transit projects:

- The use of alternative fuels can mitigate transportation emissions as well as strengthen emergency preparedness and resiliency through fuel diversity. Additionally, use of alternative fuels in fleet applications can result in significant operational and maintenance savings over the life of a vehicle.\(^5\) Some Tennessee cities, including Memphis, Knoxville, and Chattanooga, have recently committed to electric transit bus adoption and have already begun implementation of vehicles and infrastructure to their communities’ benefit. As such, TDEC encourages renewed effort focused on adoption of electric transit buses in the greater Nashville area to secure the region’s role in promoting a clean and efficient transit option to the public. STBG and CMAQ may fund the purchase of alternative fuel transit and shuttle buses and/or associated refueling infrastructure. Leveraging such funds for alternative fuel projects can help mitigate the upfront costs for these vehicles, which tend to be higher than their conventional diesel and gasoline fuel counterparts.

- WeGo’s Secondary Downtown Transit Hub project (ID #2815) and other transit facility upgrade projects may include elements to enhance multimodal connectivity such as scooter and bike charging stations, scooter and bike parking, enhanced bus shelters, seating, sidewalk improvements, real time information displays, and bus berthing areas. TDEC recommends that GNRC consider installing dedicated parking and charging infrastructure at the transit hubs for passenger electric vehicles, whose owners may transfer from their cars to transit or shuttle services and subsequently leverage multiple transportation modes for their daily commutes. Additionally, a mobility hub/super stop could also be an ideal location for electric bus on-route charging.

**Transportation Electrification:** Transportation electrification is seldom mentioned within this RTP; however, it is a vital tool for lowering emissions and reducing energy consumption for the region. While CO, CO\(_2\), PM 2.5, NO\(_x\), and VOC emissions reductions from vehicles are singled out as metrics of performance measures in Section 4.4 Key Metrics for Measuring Performance, these are associated only with the element of multimodality. While increased investment in multimodal projects is essential for reducing pollutants, transportation electrification is another necessary pathway to maximizing achievement of this goal. Several recent actions and resources highlight the opportunities in transportation electrification:


\(^5\) For example, WeGo had previously adopted Proterra electric buses for its fleet, which were once used for the cost-free Music City Circuit and were recharged on-route in just ten minutes. Lifetime maintenance costs for these electric buses is expected to be $135,000 less than their diesel counterparts. In their first year of operation in 2015, the buses provided more than 300,000 rides for residents and visitors in downtown Nashville, reducing CO\(_2\) emissions by 56,000 lbs.
• TDEC published the Electric Vehicle Charging Infrastructure Opportunity Map⁶, which identifies key primary (interstates, shown in green) and secondary corridors (select U.S. and State highways, shown in blue) to support the goal of establishing a statewide corridor fast charging network that improves transportation efficiency, reduces vehicle emissions, drives EV adoption, strengthens the resiliency of the transportation sector, and connects both rural and urban areas in Tennessee. A secondary companion map⁷ highlights existing EV fast chargers (direct current fast chargers or DCFC) along the selected corridors.

• In February 2021, TDEC and the Tennessee Valley Authority announced a partnership to develop a statewide EV fast charging network to power the growth of EVs across Tennessee and reduce barriers to transportation electrification. Specifically, the two have signed an agreement to collaborate and fund a network of fast charging stations every 50 miles along Tennessee’s interstates and major highways.⁸

• A consortium of Tennessee stakeholder organizations has come together to form Drive Electric Tennessee (DET), whose goal is to increase the state’s electric vehicle adoption from 11,000 in 2020 to 200,000 vehicles in 2028.⁹ In January 2019, DET published the Tennessee Electric Vehicle Roadmap¹⁰, which identified projects and initiatives for local stakeholder implementation to drive electric vehicle adoption across multiple Tennessee use cases and sectors. Further, in November 2019, DET published the Statewide Electric Vehicle Charging Infrastructure Needs Assessment¹¹ to evaluate the condition of Tennessee’s current electric vehicle charging infrastructure as well as to identify where new chargers should be placed to promote electric vehicle adoption throughout the state. This Assessment has been used to inform the development of DET’s electric vehicle programming and partnerships since publication.

TDEC recommends that GNRC and its partners consider opportunities for these resources and actions to promote the adoption of electric vehicles to meet the region’s transportation, resiliency, and environmental goals in the RTP.

Solid Waste
TDEC notes that there is discussion of water and air media with regard to potential environmental impacts of land use but that the RTP does not specifically mention projections or strategies concerning the anticipated solid waste generation. TDEC asks that GNRC consider and include more specific information about the waste generated from specific projects, including management plans and considerations of sustainability.

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⁷ Please visit https://www.tn.gov/content/dam/tn/environment/energy/documents/EVChargingOpportunityMap_DCFC_11.20.pdf to view the secondary companion map.
⁸ For more on this partnership and its goals, see http://tn.gov/EVfastcharge and http://tva.com/ev.
⁹ Several of the organizations represented within the consortium’s working groups are located within the Greater Nashville area, including Metro Nashville, Nashville Electric Service, Nissan, Earth Rides, Vanderbilt University, Bridgestone, Schneider Electric, City of Clarksville, Middle Tennessee Electric Membership Corporation, Urban Green Lab, and Tennessee Municipal Electric Power Association.
For example, in Figure 3-42 there is a projection that waste and scrap will increase by 98% from 3.36 million to 6.66 million between 2012 and 2040. However, TDEC notes that it is not clear whether this forecasted projection is independent of anticipated waste generation from the projects described in the RTP.

**Community Impacts**

TDEC commends the inclusion of consideration for project impacts on vulnerable populations and those burdened by cost of living via a data-driven approach by identifying vulnerable areas and degrees of vulnerability (Section 6.3 Minimizing Disruption of Proposed Projects). This is identified as an objective within the RTP’s main goals (Section 4.3 Regional Goals, Objectives, and Strategies) alongside building resiliency, minimizing pollution, and minimizing conflicts with environmental assets. TDEC supports the continued emphasis and focus on potential project disruptions when planning and committing funding.

TDEC is also pleased to see a consideration for public health in the RTP, particularly regarding air quality, vehicular crashes, and obesity. TDEC supports the continued emphasis on public health for evaluating and recommending proposed projects for the region.

TDEC appreciates the opportunity to comment on this RTP. Please note that these comments are not indicative of approval or disapproval of the proposed action or its alternatives, nor should they be interpreted as an indication of future permitting decisions by TDEC. Please contact me should you have any questions regarding these comments.

Sincerely,

Jennifer Tribble, PhD  
Policy Analyst, Office of Policy and Sustainable Practices  
Tennessee Department of Environment and Conservation  
Jennifer.Tribble@tn.gov  
(615) 532-5043

cc: Kendra Abkowitz, PhD, TDEC, OPSP  
Benjamin Almassi, TDEC, DSWM  
Ben Bolton, TDEC, OEP  
Daniel Brock, TDEC, DA  
Lacey Hardin, TDEC, APC  
Matthew Taylor, TDEC, OPSP
February 8, 2021

Mr. Sean Pfalzer
Transportation Planning Manager
Greater Nashville Regional Council
220 Athens Way, Suite 200
Nashville, TN  37228

Subject:  Comments on Draft Update to the Regional Transportation Plan

Dear Mr. Pfalzer:

Thank you for the opportunity to provide comments on the draft update to the Regional Transportation Plan (RTP). We appreciate the opportunity to participate in developing this important planning document. In general, we agree with the information, conclusions, and assumptions made in the document. However, we offer the following comments:

Nashville International Airport (BNA) is a major traffic generator within the Nashville region and it significantly influences the traffic patterns on the southeast side of Nashville. As such, BNA’s plans and programs should be considered in developing the RTP, and the Metropolitan Nashville Airport Authority (MNAA) should be considered a stakeholder in developing the plan. Unfortunately, MNAA’s role in the RTP was limited and GNRC does not consider MNAA a stakeholder agency, as shown in Chapter 2, Regional Collaboration.

BNA’s air passengers, employees and cargo operations generated 60,000 to 80,000 vehicle trips per day prior to COVID, which is on par with the largest traffic generators in the region. Further, BNA’s traffic generation characteristics are complex, with varying peaking characteristics throughout each day and week. A trip generator of this size and complexity has a significant impact on the region’s transportation network, especially on roadways and transit services providing direct access to and from each side of BNA. Not only does BNA have a direct impact on the surrounding road system, but changes in the regional roadways or transit services can also influence the paths or routes that passengers, employees, and cargo shippers select when travelling to/from BNA.
Given BNA’s known daily vehicle trips, the traffic model used for the RTP appears to have significantly underestimated the traffic generated by BNA. Section 7.1 of Appendix H, Model Documentation, shows that BNA generates approximately 18,000 non-work trips each day—roughly the same as the Murfreesboro Regional Airport or the Walmart in Lebanon, which are much smaller than BNA. In fact, traffic analyses performed as part of the recently completed BNA Master Plan show that BNA passengers alone generate 25,000 – 26,000 trips inbound and another 25,000 - 26,000 trips outbound each day. These numbers exclude other non-work trips generated from BNA’s cargo and general aviation operations. This should be reviewed.

It is suggested that MNAA be a stakeholder in development of the RTP, and that ongoing coordination be conducted between the GNRC and MNAA. This would benefit both agencies, helping to ensure that our collective planning assumptions, especially those regarding future traffic and development in the vicinity of BNA, are consistent.

Additional Comments:

- It is suggested that an Aviation Element be added to the RTP. This could be a relatively brief section, discussing the state of the region’s major airports and key planning and development initiatives. It would help to make the RTP a true regional transportation plan, rather than a plan that focuses solely on roadways and transit. MNAA staff would be willing to assist GNRC staff in developing this section.

- Appendix A, Air & Water Freight Facilities, summarizes BNA’s and John C. Tune’s cargo operations and/or capabilities. The summary is outdated and should be replaced with the following language:

  - Nashville International Airport (BNA): With nearly 18.3 million passengers in 2019, Nashville International Airport® has been one of the fastest growing airports in North America. According to a recent study, in 2019 alone, BNA® generated more than $9.9 billion in total economic impact and supported more than 66,000 regional jobs. The Nashville Airport covers 4,600 acres and is served by 17 passenger airlines and 4 cargo operators. Combined annual cargo through BNA was almost 50,000 tons in 2020.

  - John C. Tune Airport (JWN): Located in the Cockrill Bend area of west Nashville, John C. Tune provides a valuable and much-needed function as a reliever
airport to BNA and serves the rapidly growing needs of the region’s corporate and private aircraft. The airport is capable of accommodating freight shipments, but it does not offer scheduled air cargo services.

- Specific development projects included in the recently adopted BNA Master Plan that will likely impact the region’s roads and transit are detailed below. It is suggested these projects be included as background projects in the RTP modeling effort:
  - Runway 2L Extension - This project will extend Runway 2L over Murfreesboro Pike resulting in changes to the Murfreesboro Pike tunnel and Knights Valley Road.
  - Employee Parking Lot Expansion - This project will expand employee parking along Faircloth Road, impacting future traffic characteristics on Murfreesboro Pike and other roads in the vicinity of the lot.
  - Future Eastern Parallel Runway – This project will provide a fifth parallel runway on the east side of the airport. The adopted location and protection zones will impact the future Harding Place Extension.
  - Development of a future transit hub along Murfreesboro Pike together with an Automated People Mover connection to the airport terminals that will impact the traffic in the Murfreesboro Pike corridor.
  - Potential expansion of a public parking garage and consolidated rental car facility near I-40 and Donelson Pike that will likely impact traffic on these roadways.

We appreciate the opportunity to provide comments on the RTP and look forward to future collaboration with GNRC. Please contact us if we can provide additional information or assistance.

Respectfully,

Keith Wilschetz
Director, Strategic Planning
Metropolitan Nashville Airport Authority

cc: D. Kreulen, CEO, MNAA
    R. Ramsey, COO, MNAA
    T. Holton, AVP, MNAA
February 15, 2021

Greater Nashville Regional Council
Transportation Policy Board

Comments on Greater Nashville Regional Council’s *Regional Transportation Plan Update (2021)*

Thank you for the opportunity to review the GNRC Regional Transportation Plan Update (2021). I offer the following comments for consideration by the Transportation Policy Board for their February 17, 2021, meeting:

- The Plan notes that the population of the middle Tennessee region (Nashville Metropolitan Statistical Area) is expected to grow by about 1,000,000 people by 2045, which will bring increased pressures on the region’s already stressed transportation systems, including increased traffic congestion, longer commute times, and increased numbers of injuries and fatalities from automobile crashes, including an increase in fatal accidents involving pedestrians.

- Population growth will also stress the region’s natural and cultural resources. As land development pressures increase across the region, we can expect that open lands, green space, and forestlands will decrease, and it will be more difficult to maintain the region’s water quality.

- Climate change is one of the most daunting challenges facing our nation and indeed, the global community in the 21st century. The Plan appropriately notes the challenges that climate change will have on the region’s transportation infrastructure, especially the anticipated increase in extreme weather events such as tornadoes, flooding and drought. However, the Plan does little to address how the region’s transportation systems can be transformed to meet the challenges of climate change. I believe that there is both a need and an opportunity to more proactively and strategically address the issue of climate change through this Regional Transportation Plan.
• Nationally, the transportation sector represents approximately 28% of all US CO2 emissions, and is the largest sector of CO2 emissions, according to the Environmental Protection Agency (https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions). Also, the US Energy Information Administration (EIA) found that while other major sectors (industrial, residential and commercial) have seen their CO2 emissions declining in recent years, emissions from the transportation sector have increased from 2012 to 2018 (U.S. Energy-Related Carbon Dioxide Emissions, 2019).

• Electric vehicles, and infrastructure to support EV’s - plug-in electronic vehicles provide an important opportunity to both reduce greenhouse gas emissions and improve the Nashville region’s air quality. According to the Dept. of Energy, annual sales of EV’s have grown significantly in the last decade, from less than 20,000 in 2011 to more than 300,000 EV’s by 2019 (https://afdc.energy.gov/data/10567). General Motors Corporation recently announced that it would convert its entire fleet of vehicles to EV’s by 2035, and will have 30 EV’s in production by 2025 (https://www.gm.com/electric-vehicles.html). GM is also investing $2 billion to transition its Spring Hill, TN, assembly plant to build EV’s, including the Cadillac LYRIQ (https://media.gm.com//media/us/en/gm/home.detail.html/Pages/news/us/en/gm/home.detail.html/Pages/news/us/en/2020/oct/1020-event.html).

• The expected increase in EV’s over the next decade may require substantial upgrades in infrastructure to support the charging needs and other support services for EV’s. The Regional Transportation Plan should include a section to address these new technologies and how the Nashville region can best plan for them. The Dept. of Energy provides more community plug-in electric vehicle readiness information at https://afdc.energy.gov/pev-readiness.html.

• In addition to the anticipated transformation to EV’s on our highways, our region is past due for a dramatic increase in reliable and safe mass transit options. I am pleased to mass transit options included in the Plan, and urge the Transportation Policy Board to make a strong commitment to turn these options into reality. Mass transit options should focus on climate friendly options such as light rail and all-electric or hydrogen fuel cell powered buses.

• Land use and land use policies can have a dramatic impact on transportation needs and the two are intricately linked. The Plan notes that transportation systems are needed to address the growing population of the region, which is true. However, it should also be noted that transportation systems and planning can also drive where growth occurs. An example for the middle Tennessee region is Interstate 840, which has driven significant land use
change and growth along its route, especially in Wilson and Rutherford counties. The Regional Transportation Plan should recognize the linkages between transportation, population growth, and land use, and especially recognize the importance of strategic regional growth by ensuring that transportation routes do not result in growth in areas where it is undesirable.

• Minimize conflict with environmental assets - the Regional Transportation Plan establishes a goal to *Minimize Disruptive Impacts of Transportation Projects*, and an objective to *Minimize Conflict With Environmental Assets* (Goal 5, Objective 20). While this goal and objective are laudable and represent good practices for good environmental stewardship, I believe the Plan could go further in developing more proactive and wholistic environmental outcomes. While it is desirable for road projects to avoid conflicts with environmentally sensitive areas, it would be even better for the Plan to be fully integrated into the Nashville region’s quality of life, including the natural and cultural resources that make Nashville a desirable location. To that end, I recommend that key environmental performance measures be integrated into the Regional Transportation Plan. A couple of examples follow, although additional metrics should be reviewed and applied as appropriate.

• The Southeast Conservation Adaptation Strategy has adopted a goal of 10% greater improvement in the health, function, and connectivity of Southeastern ecosystems by 2060, and developed a number of environmental indicators to evaluate regional achievements towards that goal. Two indicators appear to be particularly relevant to the Nashville region:

  • Upland forest - because of population growth and resultant land use change from open lands to developed, the Nashville region is projected to lose upland forestlands at a greater rate than surrounding rural counties. This is perhaps intuitive, but nevertheless undesirable for the region’s environmental quality and livability. Forests provide a variety of important ecosystem services to the region, including floodwater retention and mitigation, climate-regulation of extreme temperatures, carbon sequestration, and many other environmental benefits.

  • Water quality/aquatic connectivity - transportation systems can have enormous impacts on the quality and connectivity of rivers and streams. Middle Tennessee is blessed with an abundance of lakes, rivers and streams that provide the region’s drinking water, multiple outdoor recreational opportunities, and abundant habitat for the region’s fish and wildlife. Indeed, middle Tennessee rivers and streams are some of the most biodiverse water systems in North America.
• Establishment of the Environmental Roundtable and development of a Regional Conservation Strategy - I applaud the establishment of the Environmental Roundtable for GNRC, and fully support the development of a Regional Conservation Strategy that can further develop environmental performance metrics that can be integrated into the Regional Transportation Plan and other planning enterprises of the GNRC.

• Vulnerable communities - I am encouraged to see the Regional Transportation Plan include consideration for vulnerable communities as an objective (Chapter 4, Goal 5, Objective 19. Minimize impacts on vulnerable communities). However, there is little detail on how the Plan will be implemented to benefit vulnerable communities. I recommend that the Performance Measures be updated to include more focused metrics that specifically address vulnerable communities and their benefits from an improved transportation system.

• Funding
  • Current level of funding is inadequate to meet the region’s needs. 50% of funding is allocated towards ongoing projects already in the pipeline for short term needs of the region.
  • With a new federal government administration, it is expected that infrastructure will be an important focus for future funding, especially for infrastructure to address climate change goals and objectives. GNRC should look for opportunities to apply for funding to develop and employ climate-smart strategies into the Regional Transportation Plan.

• Editorial comments:
  • Chapter 3 - page 3-38, last sentence at the bottom of the page. Change “383” to “38%”.
  • Chapter 4 - missing narrative on “Goal 5. Minimize disruptive impacts of transportation projects.”
  • Chapter 4 - Initial Set of Performance Measures (pp. 14-15), there appears to be a mismatch between cited objectives for performance measures 57, 63 and 64. Objective 19 references vulnerable communities, while Objective 20 references environmental assets. I believe that the document incorrectly lists Objective 19 for performance measures 57, 63, and 64.

Sincerely,

Greg Wathen
1637 Stewarts Ferry Pike
Hermitage, TN 37076
I-24 Widening from Fern Ave to Trinity Ln is not going to help.

I drive from Sumner County every day into downtown and encounter the same delay at Trinity every day. I see exactly what happens when people entering Trinity Lane onramp are forced to get all the way to the left in order to go straight South on 24, instead of being forced to get on 40. There is less than a quarter of a mile for them to get over multiple lanes to the left in the middle of heavy traffic, while at the same time, heavy traffic is trying to merge right to get onto the 40 onramp.

This is the worst design I have ever seen, and I have lived in LA, Dallas, San Diego, and Salt Lake City.

Widening the lanes will not help. What is needed is an elevated onramp from Trinity that will go over traffic and let S bound 24 traffic to enter on the left side of the road, not the right. The existing right hand entry could be kept for drivers entering on the Trinity onramp but needing to exit to 40.

PLEASE, PLEASE, PLEASE visit other cities. Look at elevated onramps that cross the road and enter on the left side. More lanes will not fix this problem. DFW knows how to build highways. Please learn from other congested cities.

The only other option is to force Trinity onramp traffic to go right with barriers or prevent it altogether.

Thanks,
Concerned Sumner County Commuter