

## APPENDIX A

### TDOT's Statewide Grouping Descriptions

Activities delivered from TDOT's statewide groupings are limited to work types that are:

1. Located in non-metropolitan or rural areas - any located in a metropolitan area must be programmed in the MPO's TIP,
2. Not considered to be of appropriate scale for individual identification in a given program year,
3. Environmentally-neutral as categorical exclusions under 23 CFR 771.117(c) and (d),
4. Non-regionally significant, in non-attainment and maintenance areas, and
5. Exempt as defined in the EPA's transportation conformity regulations in 40 CFR Part 93, in non-attainment and maintenance areas.

Activities that do not meet these requirements must be individually identified in the STIP or respective MPO's TIP. The following tables elaborate on the allowable work types for the statewide groupings.

Grouping	Function	Allowable Work Types
Safety Grouping	Any strategy, activity or project on a public road that is consistent with the data-driven State Strategic Highway Safety Plan (SHSP) and corrects or improves a hazardous road location or feature or addresses a highway safety problem, including workforce development, training and education activities.	
Safety Grouping	<p>Eligibility of specific projects, strategies, and activities is generally based on:</p> <ul style="list-style-type: none"> <li>a. Consistency with SHSP,</li> <li>b. Crash experience, crash potential, or other data-supported means,</li> <li>c. Compliance with the requirements of Title 23 of the USC, and</li> <li>d. State’s strategic or performance-based safety goals to reduce fatalities and serious injuries on all public roads.</li> <li>e. Projects to upgrade railway-highway grade crossings by eliminating hazards and installing protective devices.</li> </ul>	<ol style="list-style-type: none"> <li>1. Intersection safety improvements</li> <li>2. Pavement and shoulder widening (including a passing lane to remedy an unsafe condition)</li> <li>3. Installation of rumble strips or another warning devices, if they do not adversely affect the safety or mobility of bicyclists and pedestrians</li> <li>4. Installation of skid-resistant surface at intersections or locations with high crash frequencies</li> <li>5. Improvements for pedestrian or bicyclist safety</li> <li>6. Construction and improvement of a railway-highway grade crossing safety feature, including installation of protective devices</li> <li>7. The conduct of a model traffic enforcement activity at a railway-highway crossing</li> <li>8. Construction of a traffic calming feature</li> <li>9. Elimination of a roadside hazard</li> <li>10. Installation, replacement, and other improvements of highway signage and pavement markings, or a project to maintain minimum levels of retro-reflectivity that addresses a highway safety problem consistent with the SHSP</li> <li>11. Installation of emergency vehicle priority control systems at signalized intersections</li> </ol>

<p>Safety Grouping</p>		<ol style="list-style-type: none"> <li>12. Installation of traffic control or other warning devices at locations with high crash potential</li> <li>13. Transportation safety planning</li> <li>14. Collection, analysis, and improvement of safety data</li> <li>15. Planning integrated interoperable emergency communications equipment or operational or traffic enforcement activities (including police assistance) related to work zone safety</li> <li>16. Installation of guardrails, barriers (including barriers between construction work zones and traffic lanes), and crash attenuators.</li> <li>17. The addition or retrofitting of structures or other measures to eliminate or reduce crashes involving vehicles and wildlife</li> <li>18. Installation of yellow-green signs and signals at pedestrian and bicycle crossings and in school zones.</li> <li>19. Construction and operational improvements on high risk rural roads.</li> <li>20. Geometric improvements to a road for safety purposes that improve safety.</li> <li>21. Road safety audits.</li> <li>22. Roadway safety infrastructure improvements consistent with FHWA's "Highway Design Handbook for Older Drivers and Pedestrians" (FHWA-RD-01-103)</li> <li>23. Truck parking facilities eligible for funding under Section 1401 of MAP-21</li> <li>24. Systemic safety improvements</li> <li>25. Installation of vehicle-to-infrastructure communication equipment.</li> <li>26. Pedestrian hybrid beacons.</li> <li>27. Roadway improvements that provide separation between pedestrians and motor vehicles,</li> </ol>
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Safety Grouping		<p>including medians and pedestrian crossing islands.</p> <p>28. Other physical infrastructure projects not specifically enumerated in the list of eligible projects.</p> <p>29. Workforce development, training, and education activities</p>
<b>Grouping Category</b>	<b>Function of Grouping Activities</b>	<b>Allowable Work Types</b>
Safety Grouping (Section 130)	Activities included as part of the Highway Railroad Grade Crossing program	<ol style="list-style-type: none"> <li>1. Elimination of hazards of railway-highway crossings, including the separation or protection of grades at crossings.</li> <li>2. Reconstruction of existing railroad grade crossing structures.</li> <li>3. Relocation of highways to eliminate grade crossings.</li> <li>4. Installation of protective devices.</li> </ol>
<b>Grouping Category</b>	<b>Function of Grouping Activities</b>	<b>Allowable Work Types</b>
Highway Infrastructure Program (HIP)	Provide flexible funding to address State and local transportation needs through the construction of highways, bridges, tunnels, including designated routes of the Appalachian development highway system and local access roads under Section 14501 of Title 40.	Construction of highways, bridges, tunnels, including designated routes of the Appalachian development highway system and local access roads under Section 14501 of Title 40.
<b>Grouping Category</b>	<b>Function of Grouping Activities</b>	<b>Allowable Work Types</b>
National Highway System Infrastructure Grouping	<p>Projects for the preservation and improvement of the conditions and performance of the National Highway System (NHS), including</p> <ol style="list-style-type: none"> <li>a. Rehabilitation, resurfacing, restoration, preservation, and operational improvements,</li> <li>b. Traffic operations,</li> <li>c. Bridge and tunnel improvements,</li> <li>d. Safety improvements,</li> <li>e. Bicycle and pedestrian improvements, and</li> <li>f. Environmental mitigation.</li> </ol>	<ol style="list-style-type: none"> <li>1. Minor rehabilitation, pavement resurfacing, preventative maintenance, restoration, and pavement preservation treatments to extend the service life of highway infrastructure, including pavement markings and improvements to roadside hardware or sight distance</li> <li>2. Highway improvement work including slide repair, rock fall mitigation, drainage repairs, or other preventative work necessary to maintain or extend the service life of the existing infrastructure in a good operational condition.</li> </ol>

<p>National Highway System Infrastructure Grouping</p>		<ol style="list-style-type: none"> <li>3. Minor operational and safety improvements to intersections and interchanges such as adding turn lanes, addressing existing geometric deficiencies, and extending on/off ramps</li> <li>4. Capital and operating costs for intelligent transportation systems (ITS) and traffic monitoring, management, and control facilities and programs:</li> <li>5. Infrastructure-based intelligent transportation systems (ITS) capital improvements.</li> <li>6. Traffic Management Center (TMC) operations and utilities.</li> <li>7. Freeway service patrols.</li> <li>8. Traveler information.</li> <li>9. Bridge and tunnel construction (no additional travel lanes), replacement, rehabilitation, preservation, protection, inspection, evaluation, and inspector training and inspection and evaluation of other infrastructure assets, such as signs, walls, and drainage structures.</li> <li>10. Development and implementation of a State Asset Management Plan including data collection, maintenance and integration, software costs, and equipment costs that support the development of performance-based management systems for infrastructure.</li> <li>11. Rail-highway grade crossing improvements.</li> <li>12. Highway safety improvements:</li> <li>13. Installation of new or improvement of existing guardrail.</li> <li>14. Installation of traffic signs and signals/lights.</li> <li>15. Spot safety improvements.</li> <li>16. Sidewalk improvements.</li> <li>17. Pedestrian and/or bicycle facilities.</li> <li>18. Traffic calming and traffic diversion improvements.</li> <li>19. Noise walls,</li> </ol>
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National Highway System Infrastructure Grouping		<ul style="list-style-type: none"> <li>20. Wetland and/or stream mitigation</li> <li>21. Environmental restoration and pollution abatement,</li> <li>22. Control of noxious weeds and establishment of native species</li> </ul>
Grouping Category	Function of Grouping Activities	Allowable Work Types
Surface Transportation Program Grouping	<p>Projects and programs for the preservation and improvement of the conditions and performance of Federal-aid highways and public roads, including:</p> <ul style="list-style-type: none"> <li>a. Rehabilitation, resurfacing, restoration, preservation, and operational improvements on Federal-aid highways and designated routes of the Appalachian Development Highway System (ADHS) and local access roads under 40 USC 14501,</li> <li>b. Traffic operations on Federal-aid highways,</li> <li>c. Bridge and tunnel improvements on public roads,</li> <li>d. Safety improvements on public roads,</li> <li>e. Environmental mitigation</li> <li>f. Scenic and historic highway programs,</li> <li>g. Landscaping and scenic beautification,</li> <li>h. Historic preservation,</li> <li>i. Infrastructure projects for improving non-driver access</li> </ul>	<p>Activities previously authorized under the Surface Transportation Program</p> <ul style="list-style-type: none"> <li>1. Minor rehabilitation, pavement resurfacing, preventative maintenance, restoration, and pavement preservation treatments to extend the service life of highway infrastructure, including pavement markings and improvements to roadside hardware or sight distance</li> <li>2. Highway improvement work including slide repair, rock fall mitigation, drainage repairs, or other preventative work necessary to maintain or extend the service life of the existing infrastructure in a good operational condition</li> <li>3. Minor operational and safety improvements to intersections and interchanges such as adding turn lanes, addressing existing geometric deficiencies, and extending on/off ramps.</li> <li>4. Capital and operating costs for intelligent transportation systems (ITS) and traffic monitoring, management, and control facilities and programs: <ul style="list-style-type: none"> <li>a. Infrastructure-based intelligent transportation systems (ITS) capital improvements.</li> </ul> </li> </ul>

<p>Surface Transportation Program Grouping</p>	<p>to public transportation and enhanced mobility,</p> <p>j. Community improvement activities</p>	<ul style="list-style-type: none"> <li>b. Traffic Management Center (TMC) operations and utilities.</li> <li>c. Freeway service patrols,</li> <li>d. Traveler information</li> </ul> <p>5. Bridge and tunnel construction (no additional travel lanes), replacement, rehabilitation, preservation, protection, inspection, evaluation, and inspector training and inspection and evaluation of other infrastructure assets, such as signs, walls, and drainage structures</p> <p>6. Development and implementation of a State Asset Management Plan including data collection, maintenance and integration, software costs, and equipment costs that support the development of performance-based management systems for infrastructure.</p> <p>7. Rail - Highway grade crossing improvements</p> <p>8. Highway safety improvements</p> <ul style="list-style-type: none"> <li>a. Installation of new or improvement of existing guardrail.</li> <li>b. Installation of traffic signs and signals/lights.</li> <li>c. Spot safety improvements.</li> </ul> <p>9. Sidewalk improvements,</p> <p>10. Pedestrian and/or bicycle facilities,</p> <p>11. Traffic calming and traffic diversion improvements,</p> <p>12. Transportation Alternatives as defined by 23 USC 213(B), 23 USC 101(A)(29), and Section 1122 of MAP-21.</p> <p>13. Noise walls,</p> <p>14. Wetland and/or stream mitigation,</p> <p>15. Environmental restoration and pollution abatement,</p> <p>16. Control of noxious weeds and establishment of native species</p>
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<p><b>Surface Transportation Program Grouping</b></p>	<p><b>k. Transportation Enhancement projects</b></p>               <p><b>i. Safe Routes to School (SRTS) projects</b></p>	<p><b>Activities previously authorized under the Transportation Enhancement Program</b></p> <ul style="list-style-type: none"><li>1. Pedestrian and bicycle facilities, safety, and educational activities.</li><li>2. Acquisition of scenic easements and scenic or historic sites.</li><li>3. Scenic or historic highway programs,</li><li>4. Landscaping and other scenic beautification activities,</li><li>5. Historic preservation,</li><li>6. Rehabilitation and operation of historic transportation buildings, structures, or facilities,</li><li>7. Preservation of abandoned railway corridors,</li><li>8. Inventory, control, and removal of outdoor</li><li>9. Advertising,</li><li>10. Archaeological planning and research,</li><li>11. Environmental mitigation to address water pollution due to highway runoff or reduce vehicle-caused wildlife mortality while maintaining habitat connectivity.</li><li>12. Establishment of transportation museums,</li><li>13. Activities under the Tennessee Roadscapes grant program, including landscaping, irrigation, benches, trash cans, paths, and signage</li></ul> <p><b>Infrastructure related activities:</b></p> <ul style="list-style-type: none"><li>1. Sidewalk improvements</li><li>2. Traffic calming and speed reduction improvements</li><li>3. Pedestrian and bicycle crossing improvements</li><li>4. On-street bicycle facilities</li><li>5. Off-street bicycle and pedestrian facilities</li><li>6. Secure bicycle parking facilities</li><li>7. Traffic diversion improvements approximately within 2 miles of a school location</li></ul>
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<p>Surface Transportation Program Grouping</p>	<p>m. Safe Routes To School (SRTS) projects</p> <p>n. Transportation Alternatives (TA) projects</p> <p>o. On- and off-road pedestrian and bicycle facilities</p> <p>p. Transportation Alternatives projects</p>	<p>Non-infrastructure related activities:</p> <ol style="list-style-type: none"> <li>1. Public awareness campaigns and outreach to press and community leaders.</li> <li>2. Traffic education and enforcement in the vicinity of schools             <ol style="list-style-type: none"> <li>a. Student sessions on bicycle and pedestrian safety, health, and environment</li> <li>b. Funding for training, volunteers, and managers of safe routes to school program.</li> </ol> </li> </ol> <p>Activities previously authorized under the Transportation Alternatives Program (TAP)</p> <ol style="list-style-type: none"> <li>1. Transportation Alternatives projects, construction, planning, and design of on-road and off-road trail facilities for pedestrians, bicyclists, and other non-motorized forms of transportation, including:</li> <li>2. Sidewalk improvements.</li> <li>3. Bicycle infrastructure.</li> <li>4. Pedestrian and bicycle signals.</li> <li>5. Traffic calming techniques.</li> <li>6. Lighting and other safety-related infrastructure.</li> <li>7. Transportation projects to achieve compliance with the Americans with Disabilities Act of 1990</li> </ol> <ol style="list-style-type: none"> <li>1. Construction, planning, and design of infrastructure-related projects and systems that will provide safe routes for non-drivers, including children, older adults, and individuals with disabilities to access daily needs</li> <li>2. Conversion and use of abandoned railroad corridors for trails for pedestrians, bicyclists, or other non-motorized transportation users</li> <li>3. Construction of turnouts, overlooks, and viewing areas</li> </ol>
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<p><b>Surface Transportation Program Grouping</b></p>	<p>q. Transportation Alternatives projects</p> <p>r. Transportation Alternatives projects</p> <p>s. Projects for the creation, rehabilitation, and maintenance of multi-use recreational trails</p>	<p>Community improvement activities, which include but are not limited to:</p> <ol style="list-style-type: none"> <li>1. Inventory, control, or removal of outdoor advertising.</li> <li>2. Historic preservation and rehabilitation of historic transportation facilities.</li> <li>3. Vegetation management in transportation rights-of-way to improve roadway safety, prevents invasive species, and provides erosion control.</li> <li>4. Archaeological activities relating to impacts from implementation of a transportation project eligible under Title 23 of the USC</li> </ol> <p>Any environmental mitigation activity, including pollution prevention and pollution abatement activities and mitigation to:</p> <ol style="list-style-type: none"> <li>1. Address storm water management, control, and water pollution prevention or abatement related to highway construction or due to highway runoff.</li> <li>2. Reduce vehicle-caused wildlife mortality or to restore and maintain connectivity among terrestrial or aquatic habitats</li> </ol> <p>Recreational Trails Program activities under 23 USC 206</p> <ol style="list-style-type: none"> <li>1. SRTS Program infrastructure-related projects, non-infrastructure-related activities (such as pedestrian and bicycle safety and educational activities advanced under the SRTS program), and SRTS Coordinator positions.</li> <li>2. Planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways</li> </ol>
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<p>Surface Transportation Program Grouping</p>	<p>t. Recreational Trail Program projects</p>	<p>Recreational Trails Program activities under 23 USC 206.</p> <ol style="list-style-type: none"> <li>1. Maintenance and restoration of existing recreational trails</li> <li>2. Development and rehabilitation of trailside and trailhead facilities and trail linkages for recreational trails</li> <li>3. Purchase and lease of recreational trail construction and maintenance equipment</li> <li>4. Construction of new recreational trails</li> <li>5. Acquisition of easements and fee simple title to property for recreational trails or recreational trail corridors</li> <li>6. Assessment of trail conditions for accessibility and maintenance</li> <li>7. Development and dissemination of publications and operation of educational programs to promote safety and environmental protection</li> <li>8. Payment of costs to the State incurred in administering the program</li> </ol>
<p><b>Grouping Category</b></p>	<p><b>Function of Grouping Activities</b></p>	<p><b>Allowable Work Types</b></p>
<p>Workforce Development, training, and Education Grouping</p>	<p>Surface transportation workforce development, training, and education activities</p>	<p>Direct educational expenses (not including salaries) in connection with the education and training of transportation employees</p> <ol style="list-style-type: none"> <li>1. National Highway Institute (NHI) course participation</li> <li>2. College and University cooperative education programs relating to surface transportation including student internships, outreach to develop interest and promote participation in transportation careers, or activities that will help students prepare for a career in transportation</li> <li>3. Local technical assistance programs (LTAP)</li> </ol>

Grouping Category	Function of Grouping Activities	Allowable Work Types
Highway Infrastructure Programs – Coronavirus Response and Relief Supplemental Appropriations Act (HIP-CRRSAA) Grouping	<p>Provide funding to address coronavirus disease 2019 (COVID-19) impacts related to Highway Infrastructure Programs:</p> <ul style="list-style-type: none"> <li>• Preventive maintenance on non-Federal-aid highways;</li> <li>• Routine maintenance on any public road;</li> <li>• State DOT operations costs (not otherwise Federal-aid reimbursed, such as indirect costs);</li> <li>• State DOT personnel costs (not otherwise Federal-aid reimbursed, such as indirect costs);</li> <li>• Debt service payments for highway surface transportation facilities (not otherwise Federal-aid reimbursed);</li> <li>• Transit operating costs for local public agencies.</li> </ul>	<ul style="list-style-type: none"> <li>• Preventive Maintenance as discussed in 23 U.S.C. 116(e);</li> <li>• Routine maintenance. However, if it is performed by contract, States and subrecipients must follow 2 CFR 200.317 and 1201.317. Routine maintenance may also be performed by State or local forces through normal operations;</li> <li>• Operations costs may include, but are not limited to, labor costs, administrative costs, costs of utilities, and rent, for the highway surface transportation operations of State DOTs or local governments;</li> <li>• Salaries of employees (including those employees who have been placed on administrative leave) or contractors;</li> <li>• The debt service costs allocable to the highway surface transportation projects associated with the bond issuance;</li> <li>• Funds for availability payments related to highway surface transportation;</li> <li>• The State incurred a cost for the identified “Special Authority” cost objective(s) and the State demonstrates that a cost was incurred and is allocable to the identified HIP-CRRSAA cost objective(s);</li> <li>• Projects with a public tolling agency or ferry system, preferably through a subrecipient / subaward type grant agreement between the entity and the State;</li> <li>• STBG Eligible activities in 23 USC 133(b);</li> </ul>

		<ul style="list-style-type: none"><li>• <b>Advance Construction conversion, obligation and outlay for projects prior to incurrence of cost and which have been included in a STIP.</b></li></ul>
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## APPENDIX B

### Descriptions of Federal Programs

**The Infrastructure Investment and Jobs Act (IIJA), aka Bipartisan Infrastructure Law (BIL)**, was signed into law by President Biden on November 15, 2021. The law authorizes \$1.2 trillion for transportation and infrastructure spending with \$550 billion of that figure going toward “new” investments and programs. Funding from the IIJA is expansive in its reach, addressing energy and power infrastructure, access to broadband internet, water infrastructure, and more. Additional information on the BIL or IIJA can be found [Infrastructure Investment and Jobs Act \(IIJA\) Implementation Resources \(gfoa.org\)](#).

#### A. FEDERAL HIGHWAY FUNDING PROGRAMS

**Advanced Transportation Technologies and Innovative Mobility Development IIJA** provides \$900 million in competitive grants, cooperative agreements, and other contracts to state or local governments, transit agencies, metropolitan planning organizations or a multi-jurisdictional group or academic institutions.

- This program will make funds available to deploy, install, and operate advanced transportation technologies.
- Eligible uses are for projects that improve safety, mobility, efficiency, system performance, intermodal connectivity, and infrastructure return on investment. Additional information will be coming at a later date.

**Airport Terminal Program** IIJA provides \$5 billion (\$1 billion for FY 2022) for this program through competitive grants. Eligible if the airport is operated within the National Air Transportation System. It provides grants for passenger terminal buildings, traffic control towers, and on-airport rail access projects. [Bipartisan Infrastructure Law - Airport Terminals Program | Federal Aviation Administration \(faa.gov\)](#).

**All Stations Accessibility Program** IIJA provides \$1.75 billion in grants to state and local government authorities.

This program provides capital funding to upgrade the accessibility of legacy rail fixed guideway public transportation systems for people with disabilities, including those who use wheelchairs. [Fact Sheet: All Stations Accessibility Program | FTA \(dot.gov\)](#).

**Appalachian Development Highway System Grants** IIJA provides \$1.25 billion in formula grants to states in the Appalachian region.

- \$250 million will be set aside for FY2022 for the construction of the Appalachian Development Highway System
- This program will provide funds for the construction of the Appalachian Development Highway System. Additional information can be found at [FHWA Notice N 4510.862 - Apportionment Of Fiscal Year \(FY\) 2022 Highway Infrastructure Program Funds for the Appalachian Development Highway System Pursuant to the Infrastructure Investment and Jobs Act | Federal Highway Administration \(dot.gov\)](#).

**Appalachian Development Public Transportation Assistance Program** IJA provides approximately \$137.4 million in formula grants to states, counties, cities, townships, special districts, tribal governments and other nonprofit organizations.

- Approximately \$26.3 million is given out for FY 2022.

This program provides funding for states in the Appalachian region to support the provision of public transit services in rural areas.

**Bridge Formula Program** IJA provides approximately \$26.68 billion in formula grants to states, the District of Columbia, and Puerto Rico.

- \$5.5 billion will be set aside for the program for FY2022.
- This program provides funding for bridge replacement, rehabilitation, preservation, protection, or construction projects on public roads.
- This program includes three set-asides: 15 percent will be set-aside for use on off-system bridges, 3 percent will be set-aside for use on Tribal Transportation Facility bridges, and 0.5 percent will be set-aside for administrative expenses of the Federal Highway Administration. Additional information can be found at [Bipartisan Infrastructure Law - Bridge Formula Program \(BFP\) Fact Sheet | Federal Highway Administration \(dot.gov\)](#).

**Bridge Investment Program** IJA provides \$12.2 billion in competitive grants to states, metropolitan planning organizations with more than 20,000 members, local governments, special purpose districts, and tribal governments. The program will support projects to improve bridge and culvert condition, safety, efficiency, and reliability. Eligible uses include:

- Projects to replace, rehabilitate, preserve or protect one or more bridges on the National Bridge Inventory.
- Projects to replace or rehabilitate culverts to improve flood control and improve habitat connectivity for aquatic species.

Large Bridge Projects that receive a BIP award of not less than \$100 million are eligible for multi-year grants, in which DOT can award available funds to a project over the course of several years in accordance with an agreement and in alignment with its schedule. In selecting Bridge Projects and Large Bridge Projects, FHWA will consider the extent to which BIP funds

leverage non-Federal contributions from sponsors and stakeholders involved in the planning, design, and construction of eligible projects. Additional information can be found at [DOT Announces Historic Bridge Investment Under Bipartisan Infrastructure Law | US Department of Transportation](#).

**Broadband Equity, Access, and Deployment (BEAD) Program** IIJA Appropriates \$42.45 billion for states, territories, the District of Columbia, and Puerto Rico to utilize for broadband deployment, mapping, and adoption projects.

- This is a program to get all Americans online by funding partnerships between states or territories, communities, and stakeholders, to build infrastructure where we need it to and increase adoption of high-speed internet.
- While funding goes directly to states, it is intended to support planning efforts including building capacity in state broadband offices and outreach and coordination with local communities.
- Each state, the District of Columbia, and Puerto Rico will receive an allocation of at least \$100 million and the United States Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands will each receive \$25 million.

Example eligible uses of funds include:

Planning for deployment of internet

Deploying or upgrading internet

Installing internet in multi-tenant buildings

Implementing adoption and digital equity problems, and workforce and job training

**Building Resilient Infrastructure and Communities** IIJA provides \$1 billion in grants to states, local governments, tribes, and territories. The Building Resilient Infrastructure and Communities program makes federal funds available for hazard mitigation activities. Federal Emergency Management Agency will provide financial assistance to eligible Building Resilient Infrastructure and Communities applicants for the following:

- Capability and Capacity-Building
- Mitigation Projects
- Management Costs

Additional information can be found at [Building Resilient Infrastructure and Communities \(BRIC\) | US EPA](#).

**Bus Grant- Low or No Emission** - IIJA provides approximately \$5.62 billion of competitive grants. \$1.1 billion is available for FY of 2022. Funding is available for states, counties, cities/townships to help transit agencies purchase or lease low or no-emission buses. Additional information can be found at [Low or No Emission Vehicle Program - 5339\(c\) | FTA \(dot.gov\)](#).

**Bus and Bus Facilities Competitive Grants** IIJA provides approximately \$1.97 billion of competitive grants for bus and bus facilities. \$372 million is available for FY of 2022. Funding is available for states, counties, and cities/townships to replace, rehabilitate, purchase, or lease



buses, bus-related equipment, and bus-related facilities. [Grants for Buses and Bus Facilities Program | FTA \(dot.gov\)](#)

**Bus and Bus Facilities Formula Grants** IIJA provides approximately \$1.97 billion of competitive grants for bus and bus facilities. \$372 million is available for FY of 2022. Funding is available for states, counties, and cities/townships to replace, rehabilitate, purchase, or lease buses, bus-related equipment, and bus-related facilities. [Grants for Buses and Bus Facilities Program | FTA \(dot.gov\)](#)

**Capital Investment Grants (CIG) Program** funds transit capital investments, including heavy rail, commuter rail, light rail, streetcars, and bus rapid transit. Federal transit law requires transit agencies seeking Capital Investment Grants funding to complete a series of steps over several years. The law also requires projects to be rated by Federal Transit Administration at various points in the process according to statutory criteria evaluating project justification and local financial commitment. Additional information can be found at [Fact Sheet: Capital Investment Grants Program | FTA \(dot.gov\)](#).

IIJA guarantees \$8 billion, and authorizes \$15 billion more in future appropriations.

- This grant program funds transit capital investments, including heavy rail, commuter rail, light rail, streetcars, and bus rapid transit.
- Federal transit law requires transit agencies seeking Capital Investment Grants funding to complete a series of steps over several years.

The law also requires projects to be rated by Federal Transit Administration at various points in the process according to statutory criteria evaluating project justification and local financial commitment

**Carbon Reduction Program** IIJA provides approximately \$6.42 billion in formula grants to states and the District of Columbia.

- This program will provide grants to reduce transportation emissions or the development of carbon reduction strategies. Additional information can be found at [President Biden, USDOT Announce New Guidance and \\$6.4 Billion to Help States Reduce Carbon Emissions Under the Bipartisan Infrastructure Law | FHWA](#)
- Eligible projects include the construction, planning, and design of trail facilities for pedestrians, bicyclists, and other non-motorized forms of transportation; public transportation projects; and congestion management technologies.

**Charging and Fueling Infrastructure Grants** IIJA provides \$2.5 billion in competitive grants to states, political subdivision of states, metropolitan planning organizations, local governments, special purpose districts, public authorities with a transportation function, tribes, or territories.

- Program funds will be made available each fiscal year for Community Grants, to install electric vehicle charging and alternative fuel in locations on public roads, schools, parks, and in publicly accessible parking facilities.
- It also uses funds to deploy electric vehicle charging and hydrogen/propane/natural gas fueling infrastructure along designated alternative fuel corridors and in communities.
- These grants will be prioritized for rural areas, low-and moderate-income neighborhoods, and communities with low ratios of private parking, or high ratios of multi-unit dwellings.

Eligible uses of funds include the acquisition and installation of publicly accessible electric vehicle charging or alternative fueling infrastructure, operating assistance (for the first 5 years after installation), acquisition and installation of traffic control devices.

**Clean School Bus Program** IIJA provides \$5 billion in grants and rebates to state or local governments, eligible contractors, and nonprofit school transportation associations.

- Fifty percent of the funds are authorized for zero-emission school buses and fifty percent of the funds are authorized for alternative fuels and zero-emission school buses.
- Funds may be prioritized for rural or low-income communities and entities that have matching funds available.

The Environmental Protection Agency Administrator is authorized to provide funds to cover up to 100 percent of the costs for the replacement of the bus.

**Commercial Driver's License Implementation Program** IIJA provides \$297.5 million in grant and cooperative agreements to state agencies, local governments, and any person.

The discretionary grant seeks to improve highway safety by supporting Commercial Driver's License Programs on a State and National level.

The funding assists grant partners in achieving compliance with the commercial driver's license regulations in 49 CFR Parts 383 and 384 by providing funding directly to states and other entities capable of executing national projects to aid states in their compliance efforts.

**Congestion Mitigation and Air Quality Improvement Program (CMAQ):** The CMAQ program provides a flexible funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) and for former nonattainment areas that are now in compliance (maintenance areas). Generally the funding is 80 federal, 20% local match, however, some projects can be funded at 100% federal funds. In Tennessee, in order to obtain CMAQ funds, a local government agency must go through a competitive grant application process that is administered by TDOT. IIJA provides approximately \$13.2 billion in formula grants to states and the District of Columbia.

- The Federal Highway Administration has requested \$2.5 billion in funds for FY2022.
- The program provides flexible funding to state and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act.
- It also provides funding to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality for ozone, carbon monoxide, or particulate matter.
- Eligible uses include transportation projects that reduce congestion and reduce the mobile source emissions for which an area has been designated non-attainment or maintenance for ozone, carbon monoxide, and particulate matter by the Environmental Protection Agency.

Additional information can be found at [FHWA Notice N 4510.858 - Apportionment of Federal-Aid Highway Program Funds For Fiscal Year \(FY\) 2022 | Federal Highway Administration \(dot.gov\)](https://www.fhwa.dot.gov/noticeofinterest/)

**Congestion Relief Program** IIJA provides \$250 million in competitive grants to states, metropolitan planning organizations, cities, or municipalities. This program will advance innovative, integrated, and multimodal solutions to reduce congestion and the related economic and environmental costs in the most congested metropolitan areas with an urbanized area population of 1 million+. Eligible uses include:

- Deployment and operation of integrated congestion management systems, systems that implement or enforce high occupancy vehicle toll lanes or pricing strategies, or mobility services
- Incentive programs that encourage carpooling, non-highway travel during peak periods, or travel during non-peak periods.

Subject to certain requirements and approval by the Secretary, provides for tolling on the Interstate System as part of a project carried out with a grant under the program.

**Consolidated Rail Infrastructure and Safety Improvement Grants** IIJA provides \$5 billion (\$1 billion annually) in competitive grants to fund projects that improve the safety, efficiency, and reliability of intercity passenger and freight rail.

- An additional \$5 billion may be appropriated (\$1 billion annually).

Potential recipients include:

- States, including the District of Columbia.
- A group of States.
- An Interstate Compact.
- A public agency or publicly chartered authority established by 1 or more States.
- A political subdivision of a State.
- Amtrak and other rail carriers providing intercity rail passenger transportation.

- Class II/III Railroads and associations that represent Class II/III Railroads.
- Rail carriers & equipment manufacturers, in partnership with at least 1 of the first 5 entities above.
- Federally recognized Indian Tribes.
- Transportation Research Board.
- University Transportation Centers engaged in rail-related research.
- Non-profit labor organizations representing rail employees.

Eligible projects include a wide range of freight and passenger rail capital, safety technology deployment, planning, environmental analyses, research, workforce development, and training projects.

**Construction of Ferry Boats and Ferry Terminal Facilities** IJA provides \$912 million in formula grants to states and eligible ferry operations.

- The Federal Highway Administration requests \$80 million for FY2022.

This program provides funding for ferry services that are important links in the network of Federal-aid highways, and in many cases, are the only reasonable form of transportation.

**Crash Data Program** IJA provides \$750 million in competitive grants and contracts to states, territories, and the Secretary of Interior (for Indian tribes).

Funding will be used to improve crash data collection and analysis:

- To revise non-motorist data collection to distinguish individual personal conveyances like electric scooters and bicycles
- Update the Model Minimum Uniform Crash Criteria
- Collect additional data elements related to vulnerable road users
- Coordinate with Centers for Disease Control and Prevention on national database of ped injuries & fatalities
- Increase participation in Electronic Data Transfer protocol via new State grant program and internal investment

Expand the Crash Investigation Sampling System by adding sites, broadening scope, and adopting on-scene investigation protocol.

**Digital Equity Act Programs** There are three programs that provide funding to promote digital inclusion and advance equity for all.

- They aim to ensure that all communities can access and use affordable, reliable, high-speed internet to meet their needs and improve their lives.
- State Digital Equity Planning Grant Program: \$60 million formula grant program for states and territories to develop digital equity plans.

- State Digital Equity Capacity Grant Program: \$1.44 billion formula grant program for states and territories distributed via annual grant programs over 5 years to implement digital equity projects and support the implementation of digital equity plans.
- Digital Equity Competitive Grant Program: \$1.25 billion discretionary grant program distributed via annual grant programs over 5 years to implement digital equity projects. Eligible applicants include (among others) specific types of political subdivision, agency, or instrumentality of a state.

Example eligible uses of funds include:

- o Developing digital equity plans; states must develop a plan to be eligible for state capacity grants
- o Making awards to other entities to help make digital equity plans
- o Improving accessibility and inclusivity of public resources
- o Implementing digital equity plans and related activities
- o Providing digital literacy and digital skills education
- o Facilitating the adoption of high-speed internet

**Disadvantaged Business Enterprises IIJA** provides \$50 million of competitive grants, contracts, and allocations to states.

- The Federal Highway Administration requests \$10 million for FY2022.
- This program will provide funds to assist small and disadvantaged firms with building capacity and improving their ability to compete for Federal-aid highway contracts. Additional information can be found at [Disadvantaged Business Enterprise \(DBE\) Program | US Department of Transportation](#).

**Distance Learning, Telemedicine, and Broadband Program: Reconnect Program IIJA** will provide \$1.93 billion in grants, direct loans, or a combination of the two to states, local governments, or any other related organization for the Reconnect Program.

- The program receives funds to build infrastructure and install equipment that provides modern, reliable high-speed Internet service in rural America.
- The program can be used to fund the costs of construction, improvement, or acquisition of facilities and equipment needed to provide broadband service capable of delivering 100 Mbps symmetrical service and the acquisition of an existing system not currently providing sufficient access to broadband service, under certain circumstances, and with restrictions. Up to five percent of the award may be used for preapplication expenses.

**Electric or Low Emitting Ferry Program IIJA** provides \$250 million in competitive grants to a variety of recipients.

- \$49 million is made available for FY2022.

- An additional \$250 million is subject to appropriation and can be made available in Division C of the IIJA for a total of \$500 million over 5 years.

This program establishes an electric or low-emitting ferry pilot program that makes federal funding available to support the transition of passenger ferries to low or zero emission technologies. [Fact Sheet: Electric or Low Emitting Ferry Pilot Program | FTA \(dot.gov\)](#).

**Emergency Relief (ER or ERFO)** provides funds for emergency repairs and permanent repairs on Federal-aid highways and roads, tribal transportation facilities, and roads on Federal lands that the Secretary finds have suffered serious damage as a result of natural disasters or catastrophic failure from an external cause.

**Federal Share:**

Emergency repair work: 100% Federal share for emergency repair work—work to restore essential travel, minimize the extent of damage, or protect the remaining facilities—that is accomplished in the first 180 days after the disaster occurs. FHWA may extend this time period based on delay in the ability to access damaged areas.

Permanent repairs: Up to 90% Federal share for eligible permanent repairs to restore damaged facilities if the total eligible expense that a State incurs due to natural disasters or catastrophic failures in a Federal fiscal year exceeds the State's apportionments under 23 U.S.C. 104 for the fiscal year in which the event occurred. Additional information can be found at <http://www.fhwa.dot.gov/fastact/factsheets/emergencyrelieffs.cfm>.

**Enabling Middle Mile Broadband Infrastructure Program** Establishes and funds a \$1 billion program for the construction, improvement or acquisition of middle mile infrastructure.

- Eligible applicants include (among others) States, political subdivisions, public utility districts, and regional planning councils.
- The purpose of the program is to expand and extend middle mile infrastructure to reduce the cost of connecting unserved and underserved areas to the internet backbone.
- Middle mile infrastructure refers to the mid-section of Internet infrastructure that carries large amounts of data at high speeds over long distances and connects the “backbone” of internet infrastructure to the “last mile”, which connects to end users.
- Example uses of funds include: Construction, improvement, or acquisition of facilities and equipment
  - o Engineering design, permitting, and work related projects
  - o Personnel costs, including salaries and benefits
  - o Other costs necessary to program’s activities

**Enhanced Mobility of Seniors and Individuals with Disabilities** IIJA provides approximately \$2.2 billion in formula grants to states, counties, cities/townships, special districts, tribes and nonprofits.

- Approximately \$49 million is given out in FY 2022.

These grants will provide financial assistance in meeting the transportation needs of seniors and individuals with disabilities where public transportation services are unavailable, insufficient, or inappropriate. [Enhanced Mobility of Seniors & Individuals with Disabilities - Section 5310 | FTA \(dot.gov\)](#)

**Federal Lands Access Program:** The Federal Lands Access Program (Access Program) provides funds for projects for transportation facilities that are located on or adjacent to, or that provide access to Federal lands. Federal share: 90% for Interstate System projects (including projects to add high occupancy vehicle lanes or auxiliary lanes but excluding projects to add other lanes) and 80% for all other projects or activities. Additional info can be found at <http://www.fhwa.dot.gov/fastact/factsheets/fedlandsaccessfs.cfm>.

**Federal Lands Transportation Program (FLTP):** The FLTP funds projects that improve access within the Federal estate (national forests, national parks, national wildlife refuges, national recreation areas, and other Federal public lands) on transportation facilities in the national Federal Lands transportation inventory and owned and maintained by the Federal government. Federal share: 100%. Additional info can be found at <http://www.fhwa.dot.gov/fastact/factsheets/fedlandstransfs.cfm>.

**Federal-State Partnership for Intercity Passenger Rail Grants** IIJA provides \$36 billion in competitive grants (\$7.2 billion annually) to fund capital projects that reduce the state of good repair backlog, improve performance, or expand or establish new intercity passenger rail service, including privately operated intercity passenger rail service if an eligible applicant is involved.

- An additional \$7.5 billion may be appropriated (\$1.5 billion annually).

Potential recipients include:

- States, including the District of Columbia.
- A group of States.
- An Interstate Compact.
- A public agency or publicly chartered authority established by 1 or more States.
- A political subdivision of a State.
- Amtrak, acting on its own behalf or under a cooperative agreement with 1 or more States.
- Federally recognized Indian Tribe.
- Any combination of the entities above.

**Ferry Service for Rural Communities Program** IIJA provides \$2 billion in grants to states.

- The Ferry Service for Rural Communities Program makes federal resources available to states to ensure basic essential ferry service is provided to rural areas.

These funds are limited to ferry services that operated a regular service at any time during the five-year period ending Marching 1, 2020 and that served no less than two rural areas located more than 50 nautical miles apart. [Fact Sheet: Ferry Service For Rural Communities | FTA \(dot.gov\)](#).

**Formula Grants for Rural Communities** IIJA provides approximately \$4.1 billion in formula grants to states, counties, cities, townships, special districts, tribal governments, and other organizations.

- Approximately \$893.7 million is given out for FY 2022.
- Approximately \$586 million of the total available funding will be provided from the Growing States formula factors.

This program will provide funds to improve, initiate, or continue public transportation service in non-urbanized areas (rural areas and small cities under 50,000 in population) and to provide technical assistance for rural transportation providers. [Formula Grants for Rural Areas - 5311 | FTA \(dot.gov\)](#).

**Flood and Inundation Mapping and Forecasting, Water Modeling, and Precipitation Studies** IIJA provides \$492 million through various funding mechanisms to states, counties, cities, townships, special districts, tribes, educational institutions, and nonprofits.

- This program will allow the National Oceanic and Atmospheric Administration (NOAA) to transform water prediction by delivering operational, continental-scale coastal and inland flood models and mapping capabilities.
- Mapping capabilities include flood forecasts and projections that will provide actionable decision support services equitably delivered to communities across the nation.

Eligible uses include coastal, inland flood, and inundation mapping and forecasting and next-generation water modeling activities - including modernized precipitation frequency and probable maximum studies.

**Flood Mitigation Assistance Grants** IIJA provides \$3.5 billion in grants to states, local governments, tribes, territories, and local communities.



The Flood Mitigation Assistance program makes federal funds available to reduce or eliminate the risk of repetitive flood damage to buildings and structures.

**Fostering Advancements in Shipping and Transportation for the Long-Term Achievement of National Efficiencies (FASTLANE) Grants** to provide financial assistance—competitive grants, known as FASTLANE grants, or credit assistance—to nationally and regionally significant freight and highway projects that align with the program goals to—

- improve the safety, efficiency, and reliability of the movement of freight and people;
- generate national or regional economic benefits and an increase in global economic competitiveness of the U.S;
- reduce highway congestion and bottlenecks;
- improve connectivity between modes of freight transportation;
- enhance the resiliency of critical highway infrastructure and help protect the environment;
- improve roadways vital to national energy security; and
- address the impact of population growth on the movement of people and freight.

**Federal Share:** A FASTLANE grant may not exceed 60% of the total eligible project costs. An additional 20% of project costs may be funded with other Federal assistance, bringing total Federal participation in the project to a maximum of 80%. There is an exception for projects carried out by Federal land management agencies, which can use Federal funds other than those made available by titles 23 and 49, United States Code to pay the non-Federal share of the project cost, bringing the total Federal participation up to 100%. [23 U.S.C. 117(j)]. Additional information can be found at <http://www.fhwa.dot.gov/fastact/factsheets/fastlanegrantsfs.cfm>

**High Priorities Activities Program** IJA provides \$432.5 million in grants and cooperative agreements to states, local governments, tribes, any other political jurisdictions as necessary, and any person.

The High Priority Activities grant program is a discretionary (competitive) grant program designed to provide Federal financial assistance to enhance states' commercial vehicle safety plan activities, including commercial vehicle inspections, traffic enforcement, and outreach while supporting innovative technology development and/or new project(s) not included in the commercial vehicle safety plan that will have a positive impact on commercial vehicle safety.

**Highway Safety Improvement Program (HSIP):** FAST Act continues the Highway Safety Improvement Program (HSIP) to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned public roads and roads on tribal lands. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance. The Federal share: Except as provided in 23 U.S.C. 120(c) and 130, the Federal share is 90%.

**Eligible activities:** A highway safety improvement project is any strategy, activity or project on a public road that is consistent with the data-driven State Strategic Highway Safety Plan (SHSP) and corrects or improves a hazardous road location or feature or addresses a highway safety

problem. MAP-21 provides an example list of eligible activities, but HSIP projects are not limited to those on the list. Workforce development, training, and education activities are also an eligible use of HSIP funds. Additional information can be found at <http://www.fhwa.dot.gov/fastact/factsheets/hsipfs.cfm>. IJA provides approximately \$15.6 billion in formula grants to states and the District of Columbia.

- The Federal Highway Administration has requested \$2.7 billion for FY2022.
- The program provides states with critical safety funding that is used to save lives and prevent serious injuries on all public roads.
- It is also based on a performance-driven process that identifies and analyzes highway safety programs and advances highway safety improvement projects that have the greatest potential to reduce fatalities and serious injuries. [FHWA Notice N 4510.858 - Apportionment of Federal-Aid Highway Program Funds For Fiscal Year \(FY\) 2022 | Federal Highway Administration \(dot.gov\)](#).

**Highway Safety Research & Development** IJA provides \$970 million in grants, cooperative agreements, and contracts to states, counties, cities, townships, special districts, tribes, educational institutions, nonprofits, businesses, and/or individuals.

This program funds research and development activities for:

- highway and traffic safety systems
- human behavioral factors and their effect on highway and traffic safety
- evaluation of the effectiveness of countermeasures to increase highway and traffic safety
- development of technologies to detect drug impaired drivers
- driver education programs and other research and development programs

**Highway Use Tax Evasion Projects** IJA provides \$20 million in competitive grants and allocations to states and the IRS.

- The Federal Highway Administration requests \$4 million for FY 2022.
- This program provides funding to states and the IRS to carry out intergovernmental enforcement efforts, along with training and research, to reduce evasion of payment of motor fuel and other highway use taxes, which are the principal sources for Federal and State highway funding.

**Infrastructure for Rebuilding America (INFRA) Grant Program** IJA provides **\$10.9 billion** over 5 years for competitive grants including highway or bridge projects to add capacity or improve mobility, intermodal or freight projects, and rail-highway grade crossing separation.

- Approximately \$1.55 billion will be given out for FY 2022. Maximum of 85% of the funding will go towards projects larger than \$100 million and a minimum of 15% of the

funding will go towards projects smaller than \$100 million (12 states have a different, lower threshold for large vs. small between \$56 million and \$95 million instead of the \$100 million threshold for the other states).

- Eligible Applicants:
  - A state, or group of states
  - A metropolitan planning organization that serves more than 200,000 individuals (as stated by the Bureau of the Census)
  - A unit of local government or a group of local governments
  - A political subdivision of a state or local government
  - A special purpose district or port authority with a transportation function, including a port authority.
  - A Federal land management agency that applies jointly with a state or group of states.
  - A tribal government or a group of tribal governments.
  - A multistate corridor organization.
  - A multistate or multijurisdictional group of entities described above. Additional information can be found at [The INFRA Grants Program | US Department of Transportation](#)

**Interstate Rail Compacts Grant Program** IJA provides \$15 million (\$3 million annually) in competitive grants for interstate rail compacts' administrative costs and to conduct railroad systems planning, promotion of intercity passenger rail operations, and the preparation of grant applications.

- An additional \$15 million may be appropriated (\$3 million annually).
- Recipients include entities implementing interstate rail compacts.

**Lead Service Line Replacement (through Drinking Water State Revolving Funds)** \$15 billion (49 percent of funds will be provided to communities as grants or principal forgiveness loans; 51 percent of funds will be available to communities for low-interest loans).

**Metropolitan Planning Program** IJA provides \$2.28 billion in formula grants to metropolitan planning organizations.

- The Federal Highway Administration has requested \$357.9 million in funds for FY2022.
- The IJA continues this program, which provides funds for a cooperative, continuous, and comprehensive framework for making transportation investment decisions in metropolitan areas.

Metropolitan planning activities include the collection and analysis of data on demographics, trends, and system performance; travel demand and system performance forecasting; identification and prioritization of transportation system improvement needs; and coordination of the planning process and decision-making with the public, elected officials, and stakeholder

groups. Additional information can be found at [FHWA Notice N 4510.858 - Apportionment of Federal-Aid Highway Program Funds For Fiscal Year \(FY\) 2022 | Federal Highway Administration \(dot.gov\)](#).

**Metropolitan Transportation Planning Program** IIJA provides approximately \$799.4 million in formula grants to states and metropolitan planning organizations.

- Approximately \$152.2 million is given out for the FY 2022.

This program will provide funding for work elements that result in a balance and comprehensive intermodal transportation planning for the movement of people and goods in the metropolitan area

**National Culvert Removal, Replacement, & Removal Grant** IIJA provides \$1 billion in competitive grants to states, units of local governments, or tribes.

- The program provides supplemental funding for projects that replace, remove, and/or repair culverts or weirs.
- Eligible projects include projects that would meaningfully improve or restore fish passage for anadromous fish, improve or restore infrastructure to facilitate fish passage around or over the weir, and weir improvements.

**National Electric Vehicle Infrastructure (NEVI)** is part of the \$1.2 trillion Infrastructure Investment and Jobs Act (IIJA) signed into law by President Biden in November 2021. IIJA commits significant federal funding to clean transportation and energy programs throughout the U.S. to reduce climate changing greenhouse gas emissions. The U.S. Department of Transportation's (DOT) Federal Highway Administration (FHWA) NEVI Formula Program will provide funding to states to strategically deploy electric vehicle (EV) charging stations and to establish an interconnected network to facilitate data collection, access, and reliability. Funding is available for up to 80% of eligible project costs, including:

- The acquisition, installation, and network connection of EV charging stations to facilitate data collection, access, and reliability;
- Proper operation and maintenance of EV charging stations; and,
- Long-term EV charging station data sharing.

Additional information can be found at [Alternative Fuels Data Center: National Electric Vehicle Infrastructure \(NEVI\) Formula Program \(energy.gov\)](#)

**National Highway Freight Program (NHFP)** to improve the efficient movement of freight on the National Highway Freight Network (NHFN) and support several goals, including—

- a. Investing in infrastructure and operational improvements that strengthen economic competitiveness, reduce congestion, reduce the cost of freight transportation, improve reliability, and increase productivity;
- b. Improving the safety, security, efficiency, and resiliency of freight transportation in rural and urban areas;
- c. Improving the state of good repair of the NHFN;
- d. Using innovation and advanced technology to improve NHFN safety, efficiency, and reliability;
- e. Improving the efficiency and productivity of the NHFN;
- f. Improving State flexibility to support multi-State corridor planning and address highway freight connectivity; and
- g. Reducing the environmental impacts of freight movement on the NHFN

**Eligible activities:** Generally, NHFP funds must contribute to the efficient movement of freight on the National Highway Freight Network (NHFN) and be identified in a freight investment plan included in the State's freight plan (required in FY 2018 and beyond). [23 U.S.C. 167 (i)(5)(A)] In addition, a State may use not more than 10% of its total NHFP apportionment each year. Additional information concerning the National Highway Freight Program and the National Highway Freight Network can be found at <http://www.fhwa.dot.gov/fastact/factsheets/nhfpfs.cfm>. IJA provides \$7.15 billion in formula grants for states and the District of Columbia.

- The Federal Highway Administration has requested \$1.5 billion in funds for FY2022.
- The program provides funds to improve the efficient movement of freight on the National Highway Freight Network.
- Projects that contribute to the efficient movement of freight on the National Highway Freight Network and are identified in a freight investment plan included in the State's freight plan are eligible for funding.
- A State may not use more than 30 percent of its total National Highway Freight Program funds each year for freight intermodal or freight rail projects, subject to certain restrictions. Additional information can be found at [FHWA Notice N 4510.858 - Apportionment of Federal-Aid Highway Program Funds For Fiscal Year \(FY\) 2022 | Federal Highway Administration \(dot.gov\)](#)

**National Highway Performance Program (NHPP):** The NHPP provides support for the condition and performance of the National Highway System (NHS), for the construction of new facilities on the NHS, and to ensure that investments of Federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a State's asset management plan for the NHS. The Federal share is 90% for Interstate System projects (including projects to add high occupancy vehicle lanes or auxiliary lanes but excluding projects to add other lanes) and 80% for all other projects or activities. IJA provides \$148 billion in formula grants to states and the District of Columbia.

- The Federal Highway Administration has requested \$24.2 billion in funds for FY2022.
- \$639 million is exempt from obligation limitations.

- The program provides support for conditions and performance on highways and constructs new facilities.
- It also provides support for activities to increase the resiliency of the National Highway System to mitigate the cost of damages from sea level rise, extreme weather events, flooding, wildfires, or other natural disasters.

Lastly, the program will also ensure that investments of federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a state's asset management plan for the National Highway System.

**National Infrastructure Project Assistance (MEGA):** IJA provides \$5 billion in competitive grants for states, local governments, tribes, a unit of local government, a political subdivision of a state, a special purpose district, and other related organizations. \$1 billion will be given out for FY2022. 50% of the funding will be awarded to projects greater than \$500 million and 50% will be awarded to projects between \$100 million and \$500 million. This program provides funding for megaprojects that will likely generate national, regional, economic, mobility, or safety benefits. Eligible projects include a highway or bridge project, a freight intermodal or freight project that provides a public benefit, a railway-highway grade separation or elimination project, or an intercity passenger rail project. Additional information can be found at [National Infrastructure Project Assistance: Publication of project evaluation and selection criteria | US Department of Transportation](#).

**Nationally Significant Federal Lands and Tribal Projects** IJA provides \$275 million in competitive grants to any entity eligible to receive funding under the Tribal Transportation Program, Federal Lands Transportation Program, or Federal Lands Access Program. In addition, a state, county, or local government may apply if sponsored by an eligible Federal land management agency or Indian tribe.

- The program provides funding for the construction, reconstruction, and rehabilitation of nationally-significant of Federal lands transportation projects and Tribal transportation projects.
- Eligible projects are projects that are on a Federal lands transportation facility, a Federal lands access facility, or a Tribal transportation facility.

**On-the-Job Training Supportive Services Program** IJA provides \$50 million of competitive grants and allocation to states.

- The Federal Highway Administration requests \$10 million for FY2022.
- This program will help develop the capacity of the Nation's current and future highway construction industry workforce by providing the development and diversity of skilled

labor to move minorities, women, and disadvantaged individuals into journey-level positions. Additional information can be found at [On-the-Job Training \(OJT\) and On-the-Job Training and Supportive Services Programs \(OJT/SS\) - Civil Rights | Federal Highway Administration \(dot.gov\)](#).

**Passenger Ferry Grant Program** IIJA provides \$150 million in competitive grants to states, counties, cities, townships, special districts and tribal governments.

- \$36.5 million is given out in FY 2022.

This program will provide funds for projects that support passenger ferry systems in urbanized areas. Additional information can be found at [Passenger Ferry Grant Program - Section 5307 | FTA \(dot.gov\)](#).

**Pilot Program for Transit Oriented Development** IIJA provides approximately \$68.9 million in competitive grants to state or local government authorities that are Federal Transit Administration grant recipients.

- Approximately \$13.2 million was given out in FY 2022.

This program will help support the FTA's mission of improving public transportation for America's communities by providing funding to local communities to integrate land use and transportation planning with a new fixed guideway or core capacity transit capital investment. Grants may be used for site specific and comprehensive planning funded through the program. But, it must examine ways to improve economic development and ridership, foster multimodal connectivity and accessibility, improve transit access for pedestrian and bicycle traffic, engage the private sector, identify infrastructure needs, and enable mixed-use development near transit stations.

**Pollution Prevention Grant** IIJA provides \$100 million in grants to states, state-sponsored institutions, tribes, and tribal institutions. This program will guarantee the delivery of technical assistance to businesses - including those communities with environmental justice concerns - to identify and adopt source reduction practices and technologies that benefit businesses, communities, and local economies.

**Port Infrastructure Development Program Grants** IIJA provides \$2.25 billion for this program through competitive grants. \$450 million is available for the FY of 2022. It provides grants for addressing sea-level rise, flooding, extreme weather events, earthquakes, and tsunami inundation. It also funds projects that reduce or eliminate pollutants and greenhouse gases in ports. [Port Infrastructure Development Program Grant Information | MARAD \(dot.gov\)](#).

**Promoting Resilient Operations for Transformative, Efficient and Cost-Saving Transportation (PROTECT) Grants** IIJA provides **\$1.4 billion** in competitive grants to states (or a political subdivision of a state), metropolitan organizations, local governments, special purpose districts, tribes, and federal land management agency

(applying jointly with states). PROTECT Grants will support planning, resilience improvements, community resilience and evacuation routes, and at-risk coastal infrastructure. States may use PROTECT Formula Program funds to conduct resilience planning, strengthen and protect evacuation routes, and increase the resilience of surface transportation infrastructure from the impacts of sea level rise. Highway, transit, and certain port projects are eligible. Additional information will be coming at a later date.

**Railroad Crossing Elimination Grant Program** IIJA provides \$3 billion (\$600 million annually) in competitive grants for the mitigation or elimination of hazards at railway-highway crossings. An additional \$2.5 billion may be appropriated (\$500 million annually). Recipients: States, including the District of Columbia, Puerto Rico, and other United States; territories and possessions; A political subdivision of a State; Federally recognized Indian Tribes; A unit of local government or a group of local governments; A public port authority; A metropolitan planning organization; A group of the entities described above. Additional information can be found at [Bipartisan Infrastructure Law Information from FRA | FRA \(dot.gov\)](#).

**Rail Vehicle Replacement Grants** IIJA provides \$1.5 billion in competitive grants to state and local government authorities. \$300 million will be provided for FY2022.

This program provides funding for capital projects for the replacement of rail rolling stock. Not more than three new competitive awards to eligible projects may be announced each fiscal year. FTA may select projects for multi-year awards.

**Railway-Highway Crossing Program** IIJA provides approximately \$1.23 billion in formula grants to states and the District of Columbia.

- The program supports projects with the goal of reducing the number of fatalities, injuries, and crashes at public railway-highway grade crossings.

**Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Discretionary Grant program** IIJA increases funding for the program by **\$15 billion** with half of that in guaranteed appropriations. Recipients include states, the District of Columbia, any territories or possession of the United States, a unit of local government, public agencies, special purpose districts, or other related organizations It is a competitive grant program which provides funding for road, rail, transit, and other surface transportation of local and/or regional significance. Selection criteria includes safety, sustainability, equity, economic competitiveness, mobility, and community connectivity. Additional information can be found at [RAISE Discretionary Grants | US Department of Transportation](#).

**Reconnecting Communities Pilot Program** IIJA provides **\$500 million** over 5 years for:



- Planning grants to carry out feasibility studies on the impact of removing or mitigating physical infrastructure barriers, including within communities, to improve accessibility and facilitate economic development at an 80 percent federal share (\$150 million); and
- Capital construction grants to owners of eligible facilities including at-grade crossings, limited access highways, and other principal arterial facilities acting as a barrier. Facility owners may partner with a local government to carry out eligible projects.
- Grants greater than or equal to \$5 million are for capital construction projects, including the removal and replacement of eligible facilities. Planning grants will be given out at less than or equal to \$2 million. Additional information can be found at [Reconnecting Communities Pilot Program – Planning Grants and Capital Construction Grants | US Department of Transportation](#)

**Reduction of Truck Emissions at Port Facilities** IIJA provides \$400 million in competitive grants.

This program will study and award competitive grants to reduce truck idling and emissions at ports, including through the advancement of port electrification.

Competitive grants are intended to test, evaluate, and deploy projects that reduce port-related emissions.

**Research, Development, Demonstration, and Deployment Project** IIJA provides approximately \$132.2 million in competitive grants, cooperative agreements, and contracts to states, cities, townships, special districts, tribes, and other institutions. This program provides funding to assist innovative projects and activities that advance and sustain, safe, efficient, equitable, climate-friendly public transportation.

- Eligible research and demonstration under this program explore novel approaches to improve public transportation service - especially for transit-dependent individuals; advance vehicle and system technologies for safety, energy efficiency, and operational performance; use data for enhanced insights; and undertake other activities that help transit agencies meet equity, safety, climate change and transformation goals for a safer, environmentally cleaner, socially just and connected public transportation system.

This program provides funding to assist innovative projects and activities that advance

**Restoration & Enhancement Grant Program** IIJA provides \$250 million in competitive grants (\$50 million annually from Amtrak National Network Fund) to provide operating assistance to initiate, restore, or enhance intercity passenger rail service.

- An additional \$250 million may be appropriated (\$50 million annually).

Potential recipients include:

- States, including the District of Columbia.
- An entity implementing an interstate compact. A public agency/publicly chartered authority established by 1 or more States.
- A political subdivision of a State.
- Federally recognized Indian Tribes.
- Amtrak & Other Intercity Passenger Rail Carriers.
- Rail Carriers in partnership with at least 1 of the entities described above.

Eligible uses include:

- (1) establishing new services;
- (2) additional frequencies;
- (3) service extensions;
- (4) offering new on-board services

**Rural Surface Transportation Grant Program (RURAL) IIJA** provides \$1 billion in competitive grants to states, local governments, tribes, and regional transportation planning organizations. The program will provide funds to improve and expand the surface transportation infrastructure in rural areas to increase connectivity, improve the safety and reliability of the movement of people and freight, and generate regional economic growth and improve quality of life. \$300 million will be given out in FY 2022. A minimum of 90% of all projects have a minimum \$25 million rural grant award. There is no award minimum for the other 10%.

**Rural Transportation Assistance Program IIJA** provides approximately \$91.6 million in formula grants to states.

- Approximately \$17.6 million is given out for FY 2022.

This program provides funding to states for transportation research, technical assistance, training, and related support services in rural areas. [Rural Transportation Assistance Program - 5311\(b\)\(3\) | FTA \(dot.gov\)](#).

**Safe Streets and Roads for All (SS4A) Grant Program** \$5 billion in competitive grants to support local initiatives to prevent death and serious injury on roads and streets, commonly referred to as “Vision Zero” or “Toward Zero Deaths” initiatives.

- An eligible project for funding from this program includes projects to develop a comprehensive safety action plan; to conduct planning, design, and development activities for projects and strategies identified in a comprehensive safety action plan; or to carry out projects and strategies identified in a comprehensive safety action plan.

- Eligible recipients include metropolitan planning organizations, political subdivisions of a state, federally recognized tribal governments, or a multijurisdictional group of entities described here.

There are two types of grants:

- An Action Plan Grant is given to recipients who have yet to create and develop an action plan for preventing death and serious injuries on roads.
- An Implementation Grant is given to recipients who have already developed an action plan and are ready to implement their action plan.

Applications are due at 11:59 PM EST on September 15, 2022. Additional information can be found at [Safe-Streets-and-Roads-for-All-Fact-Sheet\\_March-2022.pdf \(transportation.gov\)](#).

**State and Local Cybersecurity Grant Program** IJA provides \$1 billion administered through the Department of Homeland Security's [Cybersecurity and Infrastructure Security Agency \(CISA\)](#) for state and local governments to address cybersecurity risks and cybersecurity threats to information systems that they own or operate.

**State of Good Repair Grants** IJA provides approximately \$21.6 billion in formula grants to states, counties, cities, townships, special districts, and tribal governments. Approximately \$4.1 billion is given out for FY2022.

- This program provides funding to assist in capital projects for existing fixed guideway systems (including rail, bus rapid transit, and passenger ferries) and high intensity motorbus systems (buses operating in high-occupancy vehicle lanes) to maintain public transportation systems in a state of good repair and to ensure public transportation operate safely, efficiently, reliably, and sustainably so that communities can offer balanced transportation choices that helps to improve mobility, reduce congestion, and encourage economic development. [State of Good Repair Grants - 5337 | FTA \(dot.gov\)](#).

**Statewide Transportation Planning Program** IJA provides approximately \$167 million in formula grants to states and metropolitan planning organizations.

- Approximately \$32 million was given out in FY 2022.

The funding for this program can be used for comprehensive planning, engineering, design, and evaluation of public transportation projects and studies involving modes other than transit when performed as part of the metropolitan transportation planning process.

**Strengthening Mobility and Revolutionizing Transportation (SMART) Grants** IJA provides \$500 million in competitive grants to states, political subdivisions of a state, tribal governments, public transit agencies or authorities, public toll authorities, metropolitan planning organizations, or a group of 2 or more eligible entities described before.

The program provides supplemental funding grants to rural, mid-sized, and large communities to conduct demonstration projects focused on advanced smart city or community technologies and systems in a variety of communities to improve transportation safety and efficiency.

In general, a Strengthening Mobility and Revolutionizing Transportation grant may be used to carry out a project that demonstrates at least one of the following:

- (i) Coordinate Automation
- (ii) Connected Vehicles
- (iii) Intelligent, sensor-based infrastructure
- (iv) Systems integration
- (v) Commerce delivery and logistics
- (vi) Leveraging use of innovative aviation technology
- (vii) Smart grid
- (viii) Smart technology traffic signals

**Surface Transportation Block Grant Program (STBG):** The Surface Transportation Block Grant Program (STBG) provides flexible funding that may be used by States and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals. It should be noted that the Transportation Alternatives Program (TAP) and the Safe Routes to School Program have been placed under the STBG program. In general, STBG projects may not be on local or rural minor collectors; however, there are a number of exceptions to this requirement. It can be used on federal-aid highways, bridges for public roads, and transit capital projects.

The Federal share is 90% for Interstate System projects (including projects to add high occupancy vehicle lanes or auxiliary lanes but excluding projects to add other lanes) and 80% for all other projects or activities. IJA provides \$72 billion in formula grants to states and the District of Columbia.

- The Federal Highway Administration has requested \$12.1 billion in funds for FY2022.
- The program promotes flexibility in state and local transportation decisions and provides flexible funding to best address state and local transportation needs.

**Transportation Alternatives Program (TAP):** The TAP replaces the funding from pre-MAP-21 programs including Transportation Enhancements, Recreational Trails, Safe Routes to School, and several other discretionary programs, wrapping them into a single funding source. TAP is now a subset of the STBG program. Two common types of projects that use TAP funds

are greenway trails and sidewalks. The Federal share is 90% for Interstate System projects (including projects to add high occupancy vehicle lanes or auxiliary lanes but excluding projects to add other lanes) and 80% for all other projects or activities. Additional information can be found at <http://www.fhwa.dot.gov/fastact/factsheets/transportationalternativesfs.cfm>.

**Transportation Infrastructure Finance and Innovation Act (TIFIA) Program**, which provides Federal credit assistance to eligible surface transportation projects, including highway, transit, intercity passenger rail, some types of freight rail, intermodal freight transfer facilities, and some modifications inside a port terminal.

Types of financial assistance: The FAST Act continues the authority of the TIFIA program to provide to States (including D.C. and Puerto Rico), localities, or other public authorities, as well as private entities undertaking projects sponsored by public authorities, three distinct types of financial assistance:

- a. *Secured loans* are direct Federal loans to project sponsors offering flexible repayment terms and providing combined construction and permanent financing of capital costs.
- b. *Loan guarantees* provide full-faith-and-credit guarantees by the Federal Government to institutional investors, such as pension funds, that make loans for projects.
- c. *Lines of credit* are contingent sources of funding in the form of Federal loans that may be drawn upon to supplement project revenues, if needed, during the first 10 years of project operations. [23 U.S.C. 603 and 604].

Additional information can be found at <http://www.fhwa.dot.gov/fastact/factsheets/tifiafs.cfm>.

**Tribal Transportation Program (TTP):** The purpose of the TTP is to provide access to basic community services to enhance the quality of life in Indian country.

The Federal share is 100%. Eligible activities: TTP funds may be used by the Secretary and the Secretary of Interior to pay the costs of transportation planning, research, maintenance, engineering, rehabilitation, restoration, construction, and reconstruction of tribal transportation facilities. Additional information of the Tribal Transportation Program can be found at <http://www.fhwa.dot.gov/fastact/factsheets/tribaltransportationfs.cfm>.

**Urbanized Area Formula Grants** IIJA provides approximately \$33.4 billion in formula grants to states, counties, cities/townships, special districts, and tribes.

- Approximately \$3.3 billion will also be provided from the Growing States and High-Density states formula factors. (total funding).
- Approximately \$6.9 billion was made available for FY 2022.

This program makes federal resources available to urbanized areas and to governors for transit capital and operating assistance in urbanized areas and for transportation-related planning. Additional information can be found at [Urbanized Area Formula Grants - 5307 | FTA \(dot.gov\)](http://www.fhwa.dot.gov/urbanizedareaformula/grants/5307-FTA)

**Vehicle Safety and Behavioral Research** IIJA provides \$548.5 million in grants, cooperative agreements, or contracts to states, counties, cities, townships, special districts, tribal governments, educational institutions, nonprofits, businesses, and/or individuals.

This program provides supplemental funding to accelerate vehicle and behavioral safety research.

**Water and Groundwater Storage, and Conveyance Program** IIJA provides \$1.15 billion to states and local governments. Water storage, groundwater storage, and conveyance projects with existing feasibility study or construction authorization are eligible for funding. The project must be found feasible and with benefits proportionate to federal investment. Funding will be provided through a combination of internal formulation and competitive grant processes.

**Water Infrastructure Improvements for the Nation Small and Underserved Communities Emerging Contaminants Grant Program** IIJA provides \$5 billion in grants for this program.

- States initially receive funding, then provide funds through grants to water utilities and other eligible entities in small and/or underserved/disadvantaged communities. Tribes and territories are also eligible to receive funds under this program.
- This grant program provides grants to public water systems in small and underserved/disadvantaged communities that are unable to finance activities needed to comply with drinking water regulations.

Bipartisan Infrastructure Law prioritizes the funding to focus on small and disadvantaged communities in addressing emerging contaminants, including PFAS.

**Watershed and Flood Prevention Operations** IIJA provides \$500 million in technical and financial assistance to local sponsors or legal subdivisions of state or tribal governments.

- Eligible sponsors: cities, counties, towns, conservation districts, and/or tribes.
- This program provides planning, design, and construction of measures that address resource concerns in a watershed.
- Eligible uses include flood prevention, watershed protection, public recreation, public fish and wildlife, agriculture water management, municipal and industrial water supply, or water quality management. Additional information can be found at [Watershed and Flood Prevention Operations \(WFPO\) Program | NRCS \(usda.gov\)](#).

**Watershed Rehabilitation Program** IIJA provides \$118 million in technical and financial assistance to local sponsors or legal subdivisions of state or tribal governments.

- Eligible Sponsors: cities, counties, towns, conservation districts, or tribes.
- This program provides planning, design, and construction for Department of Agriculture assisted dams to extend their service life and meet current safety requirements.

It also rehabilitates high hazard watershed dams previously installed under the four following authorities: PL 83-566, PL 78-534, RC&D, and Pilot Program.

**Wildlife Crossings Pilot Program** IIJA provides \$350 million in grants (over five years) to state highway agencies, metropolitan planning organizations, local governments, regional transportation authority, special purpose districts or public authorities with a transportation function, tribes, and Federal land management agencies.

The Wildlife Crossings Pilot Program will support projects that seek to reduce the number of wildlife-vehicle collisions, and in carrying out that purpose, improve habitat connectivity.

[Wildlife+Crossings+Pilot+Program+Summary\\_November+2021.pdf \(squarespace.com\)](#).

## B. FEDERAL TRANSIT ADMINISTRATION FUNDING PROGRAMS

**Urbanized Area Formula Grants (Section 5307):** This program provides grants to Urbanized Areas (an area with a population of 50,000 or more, defined and designated) for public transportation capital, planning, job access and reverse commute projects, as well as operating expenses in certain circumstances. Federal Share: 50% for operating assistance; 80% for planning and capital assistance; 90% for ADA related equipment and facilities, 90% for bicycle facilities.

Eligible Activities:

- Capital projects;
- Planning;
- Job access and reverse commute projects that provide transportation to jobs and employment opportunities for welfare recipients and low-income workers;
- Operating costs in areas with fewer than 200,000 in population;
- Operating costs, up to certain limits, for grantees in areas with populations greater than 200,000, and which operate a maximum of 100 buses in fixed-route service during peak hours.

**Capital Investments Grants (CIG) (Section 5309)** for funding major transit capital investments, including heavy rail, commuter rail, light rail, streetcars, and bus rapid transit. There are four categories of eligible projects under the CIG program: New Starts, Small Starts, Core Capacity, and Programs of Interrelated Projects.

New Starts projects are new fixed guideway projects or extensions to existing fixed guideway systems with a total estimated capital cost of \$300 million or more, **or** that are seeking \$100 million or more in Section 5309 CIG program funds. Maximum amount of federal CIG share is 60%. The maximum amount from all federal sources for a New Starts project is 80%.

Small Starts projects are new fixed guideway projects, extensions to existing fixed guideway systems, or corridor-based bus rapid transit projects with a total estimated capital cost of less than \$300 million **and** that are seeking less than \$100 million in Section 5309 CIG program funds. Maximum amount of federal funds is 80%.

Core Capacity projects are substantial corridor-based capital investments in existing fixed guideway systems that increase capacity by not less than 10 percent in corridors that are at capacity today or will be in five years. Core capacity projects may not include elements designed to maintain a state of good repair. Maximum amount of federal funds is 80%.

Programs of Interrelated Projects are comprised of any combination of two or more New Starts, Small Starts, or Core Capacity projects. The projects in the program must have logical connectivity to one another and all must begin construction within a reasonable timeframe. Maximum amount of federal funds is 80%.



**Mobility of Seniors and Individuals with Disabilities (Section 5310):**

This program is intended to enhance mobility for seniors and persons with disabilities by providing funds for programs to serve the special needs of transit-dependent populations beyond traditional public transportation services and Americans with Disabilities Act (ADA) complementary paratransit services. This program replaces the funding from pre-MAP-21 programs include the New Freedom Program and Elderly and Disabled Program. Federal Share: 50% for operating assistance; 80% for capital assistance.

**Eligible Activities:**

- At least 55% of program funds must be used on capital projects that are public transportation projects planned, designed, and carried out to meet the special needs of seniors and individuals with disabilities when public transportation is insufficient, inappropriate, or unavailable.
- The remaining 45% may be used for:
  - o Public transportation projects that exceed the requirements of the ADA.
  - o Public transportation projects that improve access to fixed-route service and decrease reliance by individuals with disabilities on complementary paratransit.
  - o Alternatives to public transportation that assist seniors and individuals with disabilities.

**Rural Area Formula Grants (Section 5311):** Provides capital, planning, and operating assistance to states to support public transportation in rural areas with populations less than 50,000, where many residents often rely on public transit to reach their destinations.

From the Section 5311 apportionment, the following sums are to be set aside:

**Tribal Programs**

- \$5 million discretionary tribal program.
- \$25 million tribal formula program for tribes providing public transportation.

**Appalachian Development Public Transportation Assistance Formula Program**

- \$20 million formula program for states in the Appalachian Region.

Federal Share: 50% for operating assistance; 80% for capital assistance.

Eligible Activities: Planning, capital, operating, job access and reverse commute projects, and the acquisition of public transportation services.

**Public Transportation Innovation (Section 5312)** Provides funding to develop innovative products and services assisting transit agencies in better meeting the needs of their customers.

**Eligible Recipients:** Eligible recipients are determined for each competition, and may include: universities, public transportation systems, state DOTs, non-profit and for-profit entities, amongst others.

**Funding Opportunities:** Funds may be allocated on a discretionary basis. Grant opportunities are posted on <http://www.grants.gov/> under the CFDA Number 20.514. Interested parties may subscribe on that website to receive notification of all FTA research opportunities by entering 20.514 where it requests the CFDA Number.

**Eligible Activities:** Research, development, demonstration and deployment projects, and evaluation of technology of national significance to public transportation.

**Emergency Relief (ER) Program (Section 5324)** enables FTA to provide assistance to public transit operators in the aftermath of an emergency or major disaster. On October 5, 2015, FTA published its final Emergency Relief Manual: A Reference Manual for States & Transit Agencies on Response and Recovery from Declared Disasters and FTA's Emergency Relief Program (49 U.S.C. 5324) (PDF). Visit the Federal Register Notice: Emergency Relief Program: Proposed Guidance.

This manual provides guidance on FTA's Emergency Relief (ER) Program and is intended for states and transit agencies that may be affected by a declared emergency or disaster and may seek funding under FTA's ER Program. In addition to guidance on the ER Program, this document provides information on other disaster relief resources available through FTA and from the Federal Emergency Management Agency (FEMA). The manual also contains a discussion of recommended practices for disaster preparation and frequently asked questions relating to disaster recovery.

**State of Good Repair (SGR) (Section 5337)** Provides capital assistance for maintenance, replacement, and rehabilitation projects of existing high-intensity fixed guideway and high-intensity motorbus systems to maintain a state of good repair. Additionally, SGR grants are eligible for developing and implementing Transit Asset Management plans.

Eligible Recipients: State and local government authorities in urbanized areas with rail fixed guideway and high intensity motorbus systems that have been in operation for at least 7 years.

Eligible Activities: Projects that maintain, rehabilitate, and replace capital assets, as well as projects that implement transit asset management plans.

Federal Share: 80%

**Bus and Bus Facilities Program (Section 5339):** Provides capital funding to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities.  
Federal share: 80%

Eligible Activities: Capital projects to replace, rehabilitate and purchase buses, vans, and related equipment, and to construct bus-related facilities.

## APPENDIX C

### Annual Listing(s) of Obligated Projects

As revised by the SAFETEA-LU, 23 U.S.C. 134(j)(7)(B), 23 U.S.C. 135(g)(4)(B), 49 U.S.C. 5303(j)(7)(B), and 49 U.S.C. 5304(g)(4)(B) require "...an Annual Listing of projects, including investments in pedestrian walkways and bicycle transportation facilities, for which Federal funds have been obligated in the preceding year shall be published or otherwise made available by the cooperative effort of the State, transit operator, and metropolitan planning organization for public review. The listing shall be consistent with the funding categories identified in each metropolitan transportation improvement program (TIP)."

A listing of obligated projects can be found by clicking on <https://www.lamtpo.com/annual-obligations>, or by visiting the [www.lamtpo.com](http://www.lamtpo.com) website under the LRTP tab, then under the Annual Obligations tab.

LAMTPO staff receives a new obligated project listing every year from TDOT, which usually comes out in November of any given year.

Once LAMTPO staff received the listing of obligated projects, LAMTPO staff advertises in 4 local newspapers, including 1 Hispanic newspaper, as well as posting the annual listing of obligated projects on the [www.lamtpo.com](http://www.lamtpo.com) website before it is brought before the TAC and Executive Board for informational purposes.

**APPENDIX D**  
**Public Participation Listing**

Agency	Name	Address_1	Address_2	City_St_Zip
Carson Newman University	President	1646 S. Russell Ave		Jefferson City, TN 37760
Walters State Community College	President	500 S. Davy Crockett Pkwy		Morristown, TN 37813
Hamblen Co. Dept. of Education	Director	210 E. Morris Blvd		Morristown, TN 37813
Jefferson County Schools	Director	114 Gay St	PO Box 190	Dandridge, TN 37725
Social Security	Director	3112 Millers Point Dr		Morristown, TN 37813
Central Services	Director	2450 Old Hwy 25E		Morristown, TN 37813
Morristown-Hamblen Healthcare System	Director	908 W. 4th North St		Morristown, TN 37814
Jefferson County Chamber of Commerce	Director	532 Patriot Dr		Jefferson City, TN 37760
Jefferson County Chamber of Commerce	Director	PO Box 890		Dandridge, TN 37725
Morristown Area Chamber of Commerce	Director	825 W. 1st North St		Morristown, Tn 37814
Jefferson City Library	Director	108 City Center DR		Jefferson City, TN 37760
Morristown-Hamblen Library	Director	417 W. Main St		Morristown, TN 37814
White Pine Library	Director	1708 Main St		White Pine, TN 37890
MATS	Director	733 W Main St		Morristown, TN 37814
Healthstar Physicians	Director	420 W. Morris Blvd		Morristown, TN 37813

Agency	Name	Address_1	Address_2	City_St_Zip
Hamblen County EMS	Director	511 W. 2nd North St		Morristown, TN 37814
Hamblen County Health Dept.	Director	331 W. Main St.		Morristown, TN 37814
Veterans Service Center	Director	511 W. 2nd North St		Morristown, TN 37814
Hamblen County Human Services	Director	2416 W. Andrew Johnson Hwy		Morristown, TN 37814
TN Senior Benefits	Director	2351 E. Morris Blvd		Morristown, TN 37813
Childrens Services	Director	1077 E Morris Blvd		Morristown, TN 37813
Tennessee Technology Center	Director	821 W. Louise Ave		Morristown, TN 37813
Tennessee Community Assistance Corporation	Director	740 E. Main St		Morristown, Tn 37814
Jefferson County EMS	Director	581 W Old AJ Hwy		New Market, TN 37820
Jefferson County Health Dept.	Director	931 Industrial Park Rd		Dandridge, TN 37725
Jefferson City Senior Citizens Center	Director	807 W. Jefferson St		Jefferson City, TN 37760
Jefferson City Community Center	Director	1247 N Hwy 92		Jefferson City, TN 37760
Jefferson County Family Resource Center	Director	341 W. Broadway		Jefferson City, TN 37760
TENNOVA/ St. Mary's Hospital	Director	110 Hospital Dr		Jefferson City, TN 37760
Jefferson City Housing Authority	Director	942 E. Ellis St		Jefferson City, Tn 37760
Morristown Housing Authority	Director	600 Sulphur Springs Rd		Morristown, TN 37813

Agency	Name	Address_1	Address_2	City_St_Zip
Morristown Senior Citizens Center	Director	841 Lincoln Ave		Morristown, TN 37813
Douglas Cherokee Economic Authority	Director	534 E. 1st North St		Morristown, Tn 37814
ETHRA	Mike Patterson	9111 Cross Park Dr, Suite D-100		Knoxville, TN 37923
RPO N and S East Tennessee District	Don Brown		P. O. Box 249	Alcoa, TN 37701
ETDD	Director		P. O. Box 249	Alcoa, TN 37701
Darby House	Director	249 E. Broadway		Jefferson City, TN 37760
Regency Retirement Village	Director	739 E. 2nd North St		Morristown, TN 37814
TDOT - Title VI Program Regions I and II	Pamela Sharp	James K Polk Bldg, 18th Floor	505 Deaderick St,	Nashville, TN 37243
TDOT Civil Rights Division	Vince Malone, Director	James K Polk Bldg, 18th Floor	505 Deaderick St,	Nashville, TN 37243
TDOT Civil Rights Division	Cynthia Howard, Title VI Program Director	James K Polk Bldg, 18th Floor	505 Deaderick St,	Nashville, TN 37243
TDOT Civil Rights Division	David Neese, Small Business Development Director	James K Polk Bldg, 18th Floor	505 Deaderick St,	Nashville, TN 37243
TDOT	Troy Ebbert	Region I	7345 Region Lane	Knoxville, TN 37914
TDOT	Mathew Cushing	James K Polk Bldg- Suite 1800	505 Deaderick St,	Nashville, TN 37243
TDOT, OCT	Michelle Christian	Region I	7345 Region Lane	Knoxville, TN 37914
City of Morristown	Tony Cox	100 W. 1st North St		Morristown, TN 37814
City of Jefferson City	John Johnson	P.O. Box 530		Jefferson City, TN 37760-0530
Town of White Pine	Bob Hardy	1548 Main St,	PO Box 66	White Pine, TN 37890-0066
Knoxville TPO	Mike Conger	400 Main St, Suite 403		Knoxville, TN 37902

Agency	Name	Address_1	Address_2	City_St_Zip
Knoxville TPO	Jeff Welch	400 Main St, Suite 403		Knoxville, TN 37902
Corps of Engineers, Memphis District	Commander	167 North Main Street		Memphis, TN 38002
US Fish and Wildlife Service	Field Supervisor	446 Neal Street		Cookeville, TN 38501
US EPA, Region 4	Regional Administrator		61 Forsyths Street	Atlanta, Georgia 30303
US EPA, Region 4	EPA Director		61 Forsyths Street	Atlanta, Georgia 30303
Regional NEPA Coordinator	NEPA Coordinator	Sam Nunn Atlanta Federal Center	61 Forsyth Street, SW	Atlanta, GA 30303-8960
Tennessee Valley Authority	Director	400 West Summit Hill Drive		Knoxville, TN 37902-1499
National Park Service	Ms. Pat Hooks, Regional Director	100 Alabama Street SW	1924 Building	Atlanta, GA 30303
National Park Service	Philip Campbell, Unit Manager	PO Box 429	208 N. Maiden Street	Wartburg, TN 37887
National Park Service	Superintendent	Big South Fork National Recreation Area	4564 Leatherwood Road	Oneida TN 37841
National Park Service	Superintendent	Stones River National Battlefield	3501 Old Nashville Hwy	Murfreesboro, TN 37129
National Park Service	Asst. Superintendent	Great Smoky Mountains National Park	107 Park Headquarters Road	Gatlinburg, TN 37738
National Park Service	Asst. Superintendent	Natchez Trace Parkway	2680 Natchez Trace Parkway	Tupelo, MS 38804
USDA Forest Service	Regional Forester	Region 8 (Southern Region)	1720 Peachtree Road NW	Atlanta, GA 30309
USDA Forest Service	Director	Cherokee National Forest	2800 N. Ocoee St	Cleveland, TN 37312
USDA Forest Service	Director	100 Van Morgan Drive		Golden Pond, KY 42211

Agency	Name	Address_1	Address_2	City_St_Zip
US Coast Guard	Rear Admiral	Hale Boggs Federal Building	500 Poydras Street	New Orleans, LA 70130
US Coast Guard	Bridge Administrator	1222 Spruce Street		St. Louis, MO 63103-2398
Tennessee Department of Environment and Conservation	Manager	711 RS Gass Blvd		Nashville, TN 37243
Tennessee Department of Environment and Conservation	Deputy Commissioner	711 RS Gass Blvd		Nashville, TN 37243
USDA	Director	367 Dr MLK Jr Pkwy		Morristown, TN 37813
FHWA	Director/ Planner	404 BNA Dr, Bldg 200, Suite 508		Nashville, TN 37217
FTA	Andres Ramirez	230 Peachtree Street NW Suite 800		Atlanta, GA 30303
FTA, Civil Rights	Carlos Gonzales/ Dee Foster	230 Peachtree Street NW Suite 800		Atlanta, GA 30303
Norfolk-Southern Railroad	Susan Terpay	Three Commercial Place		Norfolk, VA 23510-9217
Norfolk-Southern Railroad	Director	249 E Manley Court Circle		Morristown, TN 37814
TDEC Environmental Field Offices	Senior Director	3711 Middlebrook Pike		Knoxville, TN 37921
TDEC Parks and Conservation Operations	Assistant Commissioner	711 RS Gass Blvd		Nashville, TN 37243
Tennessee Wildlife Resources Agency	Executive Director	5107 Edmondson Pike		Nashville, TN 37211
Tennessee Wildlife Resources Agency	Director	3030 Wildlife Way		Morristown, TN 37814
Tennessee State Historic Preservation Office	Executive Director	Clover Bottom Mansion	2941 Lebanon Road	Nashville, TN 37243-0442



Agency	Name	Address_1	Address_2	City_St_Zip
TDEC Air Resources	Senior Director	711 RS Gass Blvd		Nashville, TN 37243
TDEC Land Resources	Senior Director	711 RS Gass Blvd		Nashville, TN 37243
TDEC Water Resources	Senior Director	711 RS Gass Blvd		Nashville, TN 37243
TN NAACP	President	PO Box 14096		Knoxville, TN 37914
TN NAACP	President	PO Box 1878		Johnson City, TN 37601
FHWA DBE	Joi HamiltonJones	404 BNA Dr, Bldg 200, Suite 508		Nashville, TN 37217
Hamblen County Democratic Party	Director	910 W Main St.		Morristown, TN 37814
Hamblen County Republican Party	Director	4327 W Andrew Johnson Hwy Suite 5		Morristown, TN 37814
Panther Creek SP	Director	2010 Panther Creek Rd		Morristown, TN 37814
Hola Lakeway	Director	2450 S Cumberland St		Morristown, TN 37813
Hispanic Chamber of Commerce of East TN	Director	PO Box 31552		Knoxville, TN 37930

## APPENDIX E

### LAMTPO Scoresheets for TIP Projects

SCORER'S/ ENTITY'S NAME:								
Project Request By								
Project Description								
					SCORING			
					0 =	1 =	2 =	3 =
					No	Minor	Moderate	Major
					Effect	Effect	Effect	Effect
Category								
<b>1. Economic Vitality</b>								
A	Promotes general economic development							
B	Specifically improves or enhances tourism							
C	Specifically improves or enhances the movement of freight and services							
D	Improves or enhances the movement of workers							
E	Provides new access to jobs and opportunities							
F	Improves the value of residential or nonresidential properties							
G	Enhances welfare to work trips							
H	Improves access to terminal (sea, air, multimodal)							
I	Enhances the ability of the freight system to support product export/ imports							
<b>2. Safety and Security</b>								
A	Reduces vehicular accidents							
B	Denies unauthorized access to the system							
C	Assists the monitoring or patrolling of the system							
D	Increases access to accident incidences and/or disabled motorists							
E	Enhances or adds to the system of bike lanes and sidewalks							
F	Enhances the public safety of pedestrians							
G	Contributes to a reduction in traffic volume							
H	Improves the handling of hazardous materials movement							
I	Separates vehicular or non-vehicular modes of travel							

<b>3. Accessibility and Mobility</b>					
A	Provides enhanced or new capacity or mobility to the transportation system to move people				
B	Provides enhanced or new accessibility to the transportation system to move people				
C	Provides enhanced or new capacity or mobility to the transportation system to move freight.				
D	Provides enhanced or new accessibility to the transportation system to move freight				
E	Enhances the range of freight service options available to local businesses				
F	The size and weight restrictions are lessened for freight vehicles				
<b>4. Environment/ Energy/ Quality of Life</b>					
A	Reduces vehicle emissions				
B	Reduces vehicle noise				
C	Decreases fuel consumption				
D	Adds to the convenience or efficiency of the system				
E	Specifically protects wetlands or other natural habitats				
F	Decreases air or water pollution				
G	Promotes non-motorized travel				
H	Promotes traffic calming				
I	Supports cultural and/or historic property retention or development				
J	Supports community cohesion and design				
K	Protects various environmental aspects (physical, cultural, historical, wildlife)				
L	Enhances development of brownfields				

<b>5. Integration and Connectivity</b>					
A	Improves intermodal connectivity for non-freight vehicular traffic				
B	Improves the integration/connectivity for non-freight vehicular traffic				
C	Improves intermodal connectivity for the freight transportation system				
D	Improves the integration/connectivity within a freight serving mode				
E	Enhances the information/telecommunications networks that integrate freight modes.				
<b>6. Efficient System Management</b>					
A	Uses ITS technology				
B	Offers Access Management/ Access Control				
C	Offers Incident Management (incident detection) incident management, emergency vehicle preemption				
D	Contributes to better vehicle tracking				
E	Enhances administrative productivity/efficiency				
F	Enhances electronic processing of vehicle information				
<b>7. System Preservation</b>					
A	Contributes to better system maintenance				
B	Emphasizes system rehabilitation rather than expansion				
C	Incorporates new technologies				
D	Maximizes existing capacity				
E	Provides technologies to alert freight providers to road conditions/ alternate routing.				
F	Optimizes use of existing infrastructure to enhance freight service.				
<b>8. Local/ Regional Factors</b>					
A	Conformance with regional or state plan				
B	Project ready for implementation				
C	Provides benefit for multiple jurisdictions				
D	Advances smart growth objectives (Tennessee Code Annotated (TCA) Public Chapter (PC) 1101 urban growth areas, corridor studies, etc.) (conformity to P.C.1101, corridor studies, other plans)				

APPENDIX F  
PERFORMANCE MEASURES

### **TIP Addendum Purpose**

The Lakeway Area Metropolitan Transportation Planning Organization (LAMTPO) is required to develop and regularly update the Transportation Improvement Program (TIP) for the LAMTPO metropolitan planning area (MPA) in cooperation with the Tennessee Department of Transportation (TDOT) and any affected public transportation operators. The TIP serves as a four-year implementation plan of federally funded and regionally significant projects derived from the longer-term Long Range Transportation Plan (LRTP) for the region. The primary requirements of the TIP are:

1. It shall cover a period of no less than four years, updated at least every four years, and approved by the LAMTPO Executive Board, Federal Highway Administration (FHWA), Federal Transit Administration (FTA), and Governor.
2. It shall provide all interested parties with a reasonable opportunity to comment on the proposed TIP through formal public meeting and public review via electronic accessible formats such as the World Wide Web.
3. It shall include capital and non-capital surface transportation projects for funding that are consistent with the adopted LRTP.
4. It shall include a financial plan demonstrating how the projects in the plan can be fiscally implemented.
5. It shall include all regionally significant projects.

The current TIP, covering the federal fiscal years 2017-2020, was initially adopted by the LAMTPO Executive Board on October 12, 2016. This addendum serves to supplement the existing document with regard to Performance Measures regulations and guidance that have been finalized since the time of approval.

Performance and outcome-based planning was first emphasized in the 2012 transportation funding authorization bill, Moving Ahead for Progress in the 21st Century (MAP-21), and is continued through the current Fixing America's Surface Transportation Act (FAST Act). The bills direct the use of a performance-based planning and programming (PBPP) process to inform strategic transportation investment decisions with a focus on achieving performance outcomes. A PBPP process can serve to encourage progress toward the Region's desired multimodal transportation system in addition to its link to national goals. Through data collection and monitoring of the transportation system's performance, transportation agencies can strategically allocate resources to critical need areas. Investing in projects based on their ability to meet established goals is a key element of a PBPP process.

Congress established seven "National Goals" to guide the planning process and federal investments toward the following areas:

1. Safety: To achieve a significant reduction in traffic fatalities and serious injuries on all public roads;
2. Infrastructure condition: To maintain the highway infrastructure asset system in a state of good repair;

3. Congestion reduction: To achieve a significant reduction in congestion on the National Highway System (NHS);
4. System reliability: To improve the efficiency of the surface transportation system;
5. Freight movement and economic vitality: To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development;
6. Environmental sustainability: To enhance the performance of the transportation system while protecting and enhancing the natural environment; and,
7. Reduced project delivery delays: To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices

To monitor the performance of the transportation system, and the effectiveness of programs and projects as they relate to the National Goals, a series of performance measures were established in the areas of safety (PM1), infrastructure condition (PM2), and system performance (PM3). These measures are outlined in 49 USC 625 and 23 CFR 490.

**Table 1: Federal Highway Performance Measures: See 23 CFR 490**

Performance Measure	National Goal	Performance Area	Performance Measures
PM1	Safety	Injuries and Fatalities	<ol style="list-style-type: none"> <li>1. Number of Fatalities</li> <li>2. Fatality Rate (per 100 million vehicle-miles traveled)</li> <li>3. Number of Serious Injuries</li> <li>4. Serious Injury Rate (per 100 million vehicle-miles traveled)</li> <li>5. Number of non-motorized fatalities and non-motorized serious injuries</li> </ol>
PM2	Infrastructure Condition	Pavement Condition	<ol style="list-style-type: none"> <li>1. Percentage of Pavements on the Interstate System in Good Condition</li> <li>2. Percentage of Pavements on the Interstate System in Poor Condition</li> <li>3. Percentage of Pavements on the non-interstate National Highway System (NHS) in Good Condition</li> <li>4. Percentage of Pavements on the non-interstate NHS in Poor Condition</li> </ol>
		Bridge Condition	<ol style="list-style-type: none"> <li>1. Percentage of NHS Bridges classified as in Good Condition</li> <li>2. Percentage of NHS Bridges classified as in Poor Condition</li> </ol>
PM3	System Reliability	System Performance: Performance of the NHS	<ol style="list-style-type: none"> <li>1. Percentage of person-miles traveled on the Interstate System that are reliable</li> <li>2. Percent of person-miles traveled on the non-interstate NHS that are reliable</li> </ol>
	Freight Movement and Economic Vitality	System Performance: Freight Movement of the Interstate System	Truck Travel Time Reliability index
	Congestion Reduction	System Performance: Traffic Congestion	<ol style="list-style-type: none"> <li>1. Annual hours of peak hour excessive delay per capita</li> <li>2. Percent of non-single-occupant vehicle travel</li> </ol>
	Environmental Sustainability	System Performance: Congestion Mitigation and Air Quality Program	Total Emissions Reductions

Recipients of public transit funds are required to establish performance targets, develop transit asset management and safety plans, and report on their progress toward achieving



targets. Public transportation operators are directed to share information with MPOs and states so that all plans and performance reports are coordinated.

**Table 2. Federal Transit Performance Measures: See 49 USC 625**

National Goals	Performance Area	Performance Measures
Infrastructure Condition	Equipment	Percentage of vehicles that have met or exceeded their Useful Life Benchmark
	Rolling Stock	Percentage of Revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark
	Infrastructure	Percentage of track segments with performance restrictions
	Facilities	Percentage of facilities within an asset class rate below 3.0 on the FTA Transit Economic Requirements Model scale.

### Responsibilities

For each roadway performance measure, LAMTPO is required to establish a Regional performance target or adopt TDOT's target and therefore agree to plan and program projects that contribute toward meeting the targets. PM1 targets are updated annually. PM2 and PM3 are based on a 4-year "Performance Period", the first of which is from 2018 to 2021. Separate 2-year and 4-year targets are established for various particular measures under PM2 and PM3, as applicable under 23 CFR part 490.

Transit performance measures require MPOs to establish performance targets not less than 180 days from the establishment of the transit provider TAM targets or standards established under 23 CFR part 490, and 49 U.S.C. 5326(c). MPOs will have one year from the establishment of the transit agency safety targets to establish performance targets that address the performance measures or standards established under 23 CFR part 490, and 49 U.S.C. 5329(d).

LAMTPO reporting responsibilities must be integrated into the LRTP and TIP. The LRTP must describe the performance measures and targets used to assess system performance, evaluate the performance of the transportation system with respect to the performance targets, and report on progress made. The TIP must link investment priorities to the targets in the Mobility Plan and describe, to the maximum extent practicable, the anticipated effect of the program toward achieving established targets.

This addendum serves to address these requirements for the established safety performance measure (PM1) targets, while also creating a format upon which forthcoming infrastructure condition (PM2), system performance (PM3), and transit targets will be integrated.



**Lakeway Area Metropolitan Transportation Planning Organization (LAMTPO)**  
Morristown, TN – Jefferson City, TN – White Pine, TN – Hamblen County, TN – Jefferson County, TN

**RESOLUTION 2022-012**  
**SUPPORTING THE SAFETY PERFORMANCE MEASURE TARGETS FOR**  
**THE STATE OF TENNESSEE**

WHEREAS, the Lakeway Area Metropolitan Transportation Planning Organization (LAMTPO) is the organization responsible for planning an efficient transportation system in the Lakeway Region and for the appropriate use of federal transportation funds in that area; and

WHEREAS, in 2012 Congress passed the Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) and Fixing America's Surface Transportation (FAST) Act that mandate the establishment of a performance and outcome based program for transportation decisions; and

WHEREAS, a national goal has been established to achieve a significant reduction in traffic fatalities and serious injuries on all public roads; and

WHEREAS, the Safety Performance Management Measures regulations support the Highway Safety Improvement Program (HSIP) and require State DOTs and MPOs to set Safety Performance Measure Targets, which apply to all public roads, for 5 areas; including number of fatalities, rate of fatalities per 100 Vehicle Miles Traveled (VMT), number of serious injuries, rate of serious injuries per 100 VMT, and number of non-motorized fatalities and serious injuries; and

WHEREAS, MPOs have 180 days following the establishment and reporting of the State targets in the HSIP Annual Report to make a decision regarding whether to support each state's targets or to establish their own; and

WHEREAS, the Tennessee Highway Safety Office (THSO) submitted the FFY23 Highway Safety Plan (HSP) on July 1, 2022; and

WHEREAS, Official reporting of all 5 PM1 targets by TDOT occurred through the Highway Safety Improvement Program (HSIP) in August 2022; and

WHEREAS, the 2017-2021 Safety Performance Measure Targets adopted by the State are shown on the next page, and

WHEREAS, the LAMTPO Technical Advisory Committee (TAC) approved and supported the Tennessee Department of Transportation (TDOT) 2017-2021 PM1 Safety Performance Measure Targets at their scheduled meeting on November 3, 2022; and

WHEREAS, the LAMTPO Executive Board approves and supports the Tennessee Department of Transportation (TDOT) 2022 PM1 Safety Performance Measure Targets at their scheduled meeting on November 9, 2022; and

BE IT FURTHER RESOLVED, that the LAMTPO Executive Board hereby approves and supports TDOT's 2022 Safety Performance Measure Targets.



\_\_\_\_\_  
Chair,  
LAMTPO

November 9, 2022  
Date

## Verification of Safety Target Reporting (2022)

Please find attached a copy of the 2019-2023 PM1 Safety Performance targets and justification that TDOT submitted in the 2022 Highway Safety Improvement Program annual report. The targets have been reviewed and approved by TDOT executive leaders and the Tennessee Highway Safety Office (THSO).

THSO submitted the FFY23 Highway Safety Plan (HSP) on July 1, 2022. The submittal included the targets for the three common measures that TDOT and THSO share per the final rule. Those measures are number of fatalities, fatality rate, and number of serious injuries.

Official reporting of all 5 PM1 targets by TDOT occurred through the Highway Safety Improvement Program in August 2022.

For each measure, MPOs can choose to support the statewide PM1 target or establish their own numerical target. Those decisions must be made within 180 days after State targets have been officially reported (no later than 27 February 2023). MPOs must make a determination for each of the following PM1 measures:

- Number of fatalities
- Rate of fatalities
- Number of serious injuries
- Rate of serious injuries
- Number of non-motorized fatalities and non-motorized serious injuries

Additionally, TDOT provided the following information in the HSIP regarding baseline data:

Performance Measures	2017	2018	2019	2020	2021	Anticipated Baseline*
<b>Fatalities</b>	1,024	1,040	1,135	1,217	1,327	1,148.6
<b>Serious Injuries</b>	7,129	5,742	5,555	5,537	6,015	5,995.6
<b>Fatality Rate (per HMVMT)</b>	1.240	1.280	1.370	1.594	1.600	1.417
<b>Serious Injury Rate (per HMVMT)</b>	8.911	6.960	6.701	7.248	7.260	7.416
<b>Number of non-motorized fatalities</b>	132	147	157	189	192	
<b>Number of non-motorized serious injuries</b>	417	362	345	368	423	
<b>Number of non-motorized fatalities and serious injuries combined</b>	549	509	502	557	615	546.4

\*The Federal Highway Administration (FHWA) is responsible for calculating baselines. This table identifies baselines TDOT anticipates will be published by FHWA at their [State Performance Dashboard and Reports](#) webpage.

Please note that this table reflects only what TDOT has submitted in the annual HSIP. TDOT reports only annual data in the HSIP and only those areas in blue are reported. Update cycles and data sources may vary from those identified for use in the PM1 Final Rule. Because baseline data is still preliminary at the time of reporting to FHWA, TDOT does not anticipate these will be the actual baselines used to assess the state's performance in December 2024.

For questions about the 2021 HSIP reporting requirements, please contact Jeff Murphy at [Jeff.Murphy@tn.gov](mailto:Jeff.Murphy@tn.gov) or (615) 741-0968.

## ***Safety Performance Targets Calendar Year 2022 Targets \****

### ***Number of Fatalities:1201.4***

#### ***Describe the basis for established target, including how it supports SHSP goals.***

The number of traffic fatalities in Tennessee for 2020 increased marking the 5th consecutive year of 1,000 fatalities or more. According to preliminary data, one thousand two hundred seventeen (1,217) fatalities occurred during Calendar Year 2020. This marked a 7.4% increase in fatalities over 2019. This increase occurred despite traffic reductions due to school closures, workforce closures and shifts, and state and local policies. The governor issued a Safer at Home<sup>1</sup> executive order to combat the COVID-19 pandemic that was in effect from March 31, 2020 to April 30, 2020, though many businesses chose to close or have employees work from home prior to and after the order expired. Current YTD fatalities as of June 1, 2021, show 114 more fatalities over the same date in 2020.

The COVID-19 pandemic caused changes in fatal and serious injury crashes. During 2020, Tennessee saw increases in many types of fatality crashes over 2019. Most notably, fatalities with large trucks involved increased by 25% likely due to increased freight volumes.<sup>2</sup> Further, fatality crashes in urban areas increased by almost 14% while rural fatality crashes remained consistent with 2019. These changes increased uncertainty about future fatal and serious injury crash totals as Tennessee continues to recover and traffic patterns and trends shift.

The Tennessee state legislature passed the 2017 IMPROVE Act requiring TDOT to complete 962 projects over an unspecified period. Some of the IMPROVE Act projects include safety improvements, however, there is a lag between the time safety projects are implemented to completion and additional time needed for those projects to then have an impact on traffic safety. TDOT is hopeful that a long-term transportation bill will be passed in 2021 which may help to increase the number of projects completed by the end of the performance period in 2022.

Work to increase traffic safety in Tennessee is ongoing. Tennessee's Strategic Highway Safety Plan<sup>3</sup> update was completed and approved in 2020. Strategies are being implemented in six emphasis areas to reduce traffic fatalities and serious injuries: data collection and analysis, driver behavior, infrastructure improvements, vulnerable road users, operational improvements, and motor carrier safety.

Targeted safety and enforcement campaigns are being conducted around the state. In January 2021, TDOT and the Tennessee Department of Safety and Homeland Security launched a

public safety campaign after noting the increase in fatalities despite the decrease in traffic.<sup>4</sup> The Tennessee Highway Safety Office is running a Slow Down Tennessee<sup>5</sup> campaign to highlight the close to 23,000 speed-related crashes that occurred between 2017 and 2019.

Targets were set by consensus among working group participants which consisted of members of the Tennessee Highway Safety Office, TDOSHS, Tennessee Division Office of Federal Highway, and various divisions within TDOT. Input from the Knoxville Regional Transportation Planning Organization, the Greater Nashville Regional Council, and Bristol Urban Area MPO was included in the target decision making process.

Leadership approved a target of 1,201.4 for the 2018-2022 target setting performance cycle. This target assumes that January – May 2021 fatality data will remain as reported in early June and that June – December data will mimic fatalities from 2020. Fatalities for 2022 are projected as 2019 fatality totals plus the standard deviation for each month based on data from 2015-2022.

It is always the intent of the Tennessee Department of Transportation and our partner agencies to reduce traffic fatalities on our roadways. These targets are performance projections based on historical data and influencing factors.

## **REFERENCES**

1Tennessee Office of the Governor, (2020). "AN ORDER DIRECTING TENNESSEANS TO STAY HOME UNLESS ENGAGING IN ESSENTIAL ACTIVITIES TO LIMIT THEIR EXPOSURE TO AND SPREAD OF COVID-19," [Online]. Available:  
<https://publications.tnsosfiles.com/pub/execorders/exec-orders-lee22.pdf>

2Tennessee Department of Safety and Homeland Security, TITAN Division, (2021). "Historical Data Fatality Report 2020." [Data set]. Available:  
<https://www.tn.gov/content/dam/tn/safety/documents/dailyfatality2020.pdf>

3Tennessee Department of Transportation, Strategic Transportation Investments Division, (2021). "Tennessee Strategic Highway Safety Plan 2020-2024," [Online]. Available:  
<https://www.tn.gov/content/dam/tn/tdot/strategic/SHSP-2020.pdf>

4 Tennessee Department of Transportation, (2021). "TDOT and TDOSHS Launch Public Safety Campaign: Deadly Crashes Up, Traffic Volumes Down." [Online]. Available:  
<https://www.tn.gov/tdot/news/2021/1/25/tdot-and-tdoshs-launch-public-safety-campaign.html>

5Tennessee Highway Safety Office, (2021). "No Title" [Online]. Available:  
<https://tntrafficsafety.org/microsites/slow/>

## **Number of Serious Injuries:5588.6**

### **Describe the basis for established target, including how it supports SHSP goals.**

Tennessee has been experiencing a decrease in serious injuries since 2015 but this decrease has begun to stabilize. A 19% decrease in serious injuries occurred in Tennessee from CY 2017 to CY 2018. In compliance with the Federal Highway Administration's (FHWA) Safety Performance Management Measures Final Rule (23 CFR 490), Tennessee revised the crash report in December 2017 to reflect the Model Minimum Uniform Crash Criteria Fourth Edition (MMUCC 4th edition) "Suspected Serious Injury (A)" attribute found in the "Injury Status" element. All states were required to comply with the new definition by April 15, 2019. While it is thought that the drastic decrease in serious injuries in 2018 is likely an effect of updating the crash report to meet FHWA's requirement, the number of serious injuries continued to decrease from 2018 to 2019 by 3%. The reduction of serious injuries slowed to 0.4% from 2019 to 2020. Additional information about serious injures can be found on the Tennessee Department of Safety and Homeland Security's Fatal and Serious Injury Crashes Dashboard.<sup>1</sup>

The Tennessee state legislature passed the 2017 IMPROVE Act requiring TDOT to complete 962 projects over an unspecified period of time. Some of the IMPROVE Act projects include safety improvements, however, there is a lag between the time safety projects are implemented to completion and additional time needed for those projects to then have an impact on results. It is unclear how long these trends may continue. TDOT is hopeful that a long-term transportation bill will be passed in 2021 which may help to increase the number of projects completed by the end of the performance period in 2022.

Work to increase traffic safety in Tennessee is ongoing. Tennessee's Strategic Highway Safety Plan<sup>2</sup> update was completed and approved in 2020. Strategies are being implemented in six emphasis areas to reduce traffic fatalities and serious injuries. Emphasis areas include data collection and analysis, driver behavior, infrastructure improvements, vulnerable road users, operational improvements, and motor carrier safety.

Targeted safety and enforcement campaigns are being conducted around the state. In January 2021, TDOT and the Tennessee Department of Safety and Homeland Security launched a public safety campaign after noting the increase in fatalities despite the decrease in traffic.<sup>3</sup> Currently, the Tennessee Highway Safety Office is running a Slow Down Tennessee<sup>4</sup> campaign to highlight the close to 23,000 speed-related crashes that occurred between 2017 and 2019.

Targets were set by consensus among working group participants which consisted of members of the Tennessee Highway Safety Office, TDOSHS, Tennessee Division Office of Federal Highway, and various divisions within TDOT. Input from the Knoxville Regional Transportation Planning Organization, the Greater Nashville Regional Council, and Bristol Urban Area MPO was included in the target decision making process.



Leadership approved a target of 5,588.6 for the 2018-2022 target setting performance cycle. This target assumes that the number of serious injuries for both 2021 and 2022 will remain at or below the 2019 total of 5,555.

It is always the intent of the Tennessee Department of Transportation and our partner agencies to reduce traffic fatalities on our roadways. These targets are performance projections based on historical data and influencing factors.

## **REFERENCES**

1Department of Safety and Homeland Security, TITAN Division, (2021). "Fatal & Serious Injury Crashes." [Data set]. Available:

<https://www.tn.gov/safety/stats/dashboards/fatalseriousinjurycrashes.html>

2Tennessee Department of Transportation, Strategic Transportation Investments Division, (2020). "Tennessee Strategic Highway Safety Plan 2020-2024," [Online]. Available:

<https://www.tn.gov/content/dam/tn/tdot/strategic/SHSP-2020.pdf>

3Tennessee Department of Transportation, (2021). "TDOT and TDOSHS Launch Public Safety Campaign: Deadly Crashes Up, Traffic Volumes Down." [Online]. Available:

<https://www.tn.gov/tdot/news/2021/1/25/tdot-and-tdoshs-launch-public-safety-campaign.html>

4Tennessee Highway Safety Office, (2021). "No Title" [Online]. Available:

<https://tntrafficsafety.org/microsites/slow/>

### ***Fatality Rate:1.476***

### ***Describe the basis for established target, including how it supports SHSP goals.***

Generally, as the number of vehicle miles traveled (VMT) increases, the opportunity for severe vehicle crashes to occur also rises. However, 2020 VMT dropped by approximately 8% while traffic fatalities increased by 7% during the same time period.

Travel trends in the first half of 2021 are comparable to 2019 traffic volumes. However, the lingering impacts of COVID-19 may continue to impact traffic volumes for the foreseeable future. A recent article by McKinsey & Company estimates that 20% of business travel may not return. Further, the same article reports that a survey of 278 executives representing 8 countries planned to reduce office space by 30%.<sup>1</sup>

Published VMT from Federal Highway's Office of Highway Policy Information (OHPI) Highway Statistics Series Table VM-22 were used for calendar years 2019 and prior. TDOT's Long

Range Planning Division estimates calendar year 2020 VMT at 76,393 million miles. (Note: Because it is anticipated that VMT numbers will continue to change until published by FHWA, no updates have been made to the agreed upon 2016-2020 baseline.)

Based on the uncertainty of travel patterns as a result of the COVID-19 pandemic, the team reviewed travel data available for March, April and early May and considered several scenarios before opting to take an optimistic but conservative approach for identifying the fatality rate target. The team estimates Tennessee's 2021 VMT will resemble 2019 data and will increase by 1% in 2022. Once the VMT estimates for calendar years 2021 and 2022 were agreed upon, the rate was then calculated using the 1,201.4 fatality number target to obtain the 1.476 target for the 2018-2022 target setting performance cycle.

Targets were set by consensus among working group participants which consisted of members of the Tennessee Highway Safety Office, Tennessee Department of Safety and Homeland Security, Tennessee Division Office of the Federal Highway Administration, and various divisions within TDOT. Input from the Knoxville Regional Transportation Planning Organization and the Bristol Urban Area MPO was included in the target decision making process.

It is always the intent of the Tennessee Department of Transportation and our partner agencies to reduce traffic fatalities on our roadways. These targets are performance projections based on historical data and influencing factors.

**REFERENCES**

1McKinsey Global Institute. "The Future of Work after COVID-19," [Online]. Available: <https://www.mckinsey.com/featured-insights/future-of-work/the-future-of-work-after-covid-19>

2Federal Highway Administration, Office of Highway Policy Information, 2019, *State Tables Vehicle-miles of travel, by functional system*, [Online]. Available: <https://www.fhwa.dot.gov/policyinformation/statistics/2019/pdf/vm2.pdf>

**Justifications – Serious Injuries**

Performance Measure	Baseline	Target	Baseline	Target	Baseline	Target
	2014-2018	2016-2020	2015-2019	2017-2021	2016-2020 (Preliminary)	2018-2022
Number of Serious Injuries	6988.8	6352.4	6,725.4	6,227.1	6310.8	5588.6

**Baseline numbers are determined using preliminary data available as of 4/21/2021 and were used only as a reference point for target setting. TDOT does not anticipate these will be the actual baselines used by FHWA to assess performance.**

Tennessee has been experiencing a decrease in serious injuries since 2015 but this decrease has begun to stabilize. A 19% decrease in serious injuries occurred in Tennessee from CY 2017 to CY 2018. In compliance with the Federal Highway Administration's (FHWA) Safety Performance Management Measures Final Rule (23 CFR 490), Tennessee revised the crash report in December 2017 to reflect the Model Minimum Uniform Crash Criteria Fourth Edition (MMUCC 4th edition) "Suspected Serious Injury (A)" attribute found in the "Injury Status" element. All states were required to comply with the new definition by April 15, 2019. While it is thought that the drastic decrease in serious injuries in 2018 is likely an effect of updating the crash report to meet FHWA's requirement, the number of serious injuries continued to decrease from 2018 to 2019 by 3%. The reduction of serious injuries slowed to 0.4% from 2019 to 2020. Additional information about serious injures can be found on the Tennessee Department of Safety and Homeland Security's Fatal and Serious Injury Crashes Dashboard.<sup>1</sup>

The Tennessee state legislature passed the 2017 IMPROVE Act requiring TDOT to complete 962 projects over an unspecified period of time. Some of the IMPROVE Act projects include safety improvements, however, there is a lag between the time safety projects are implemented to completion and additional time needed for those projects to then have an impact on results. It is unclear how long these trends may continue. TDOT is hopeful that a long-term transportation bill will be passed in 2021 which may help to increase the number of projects completed by the end of the performance period in 2022.

Work to increase traffic safety in Tennessee is ongoing. Tennessee's Strategic Highway Safety Plan<sup>2</sup> update was completed and approved in 2020. Strategies are being implemented in six emphasis areas to reduce traffic fatalities and serious injuries. Emphasis areas include data collection and analysis, driver behavior, infrastructure improvements, vulnerable road users, operational improvements, and motor carrier safety.

Targeted safety and enforcement campaigns are being conducted around the state. In January 2021, TDOT and the Tennessee Department of Safety and Homeland Security launched a public safety campaign after noting the increase in fatalities despite the decrease in traffic.<sup>3</sup> Currently, the Tennessee Highway Safety Office is running a Slow Down Tennessee<sup>4</sup> campaign to highlight the close to 23,000 speed-related crashes that occurred between 2017 and 2019.

Targets were set by consensus among working group participants which consisted of members of the Tennessee Highway Safety Office, TDOSHS, Tennessee Division Office of Federal Highway, and various divisions within TDOT. Input from the Knoxville Regional Transportation

Planning Organization, the Greater Nashville Regional Council, and Bristol Urban Area MPO was included in the target decision making process.

Leadership approved a target of 5,588.6 for the 2018-2022 target setting performance cycle. This target assumes that the number of serious injuries for both 2021 and 2022 will remain at or below the 2019 total of 5,555.

It is always the intent of the Tennessee Department of Transportation and our partner agencies to reduce traffic fatalities on our roadways. These targets are performance projections based on historical data and influencing factors.

## **REFERENCES**

1Department of Safety and Homeland Security, TITAN Division, (2021). "Fatal & Serious Injury Crashes." [Data set]. Available:  
<https://www.tn.gov/safety/stats/dashboards/fatalseriousinjurycrashes.html>

2Tennessee Department of Transportation, Strategic Transportation Investments Division, (2020). "Tennessee Strategic Highway Safety Plan 2020-2024," [Online]. Available:  
<https://www.tn.gov/content/dam/tn/tdot/strategic/SHSP-2020.pdf>

3Tennessee Department of Transportation, (2021). "TDOT and TDOSHS Launch Public Safety Campaign: Deadly Crashes Up, Traffic Volumes Down." [Online]. Available:  
<https://www.tn.gov/tdot/news/2021/1/25/tdot-and-tdoshs-launch-public-safety-campaign.html>

4Tennessee Highway Safety Office, (2021). "No Title" [Online]. Available:  
<https://tntrafficsafety.org/microsites/slow/>

### ***Serious Injury Rate:6.869***

#### ***Describe the basis for established target, including how it supports SHSP goals.***

Generally, as the number of vehicle miles traveled (VMT) increases, the opportunity for severe vehicle crashes to occur also rises. However, 2020 VMT dropped by approximately 8% while serious injuries remained relatively stable during the same time period.

Current travel trends are comparable to 2019 traffic volumes. However, the lingering impacts of COVID-19 may continue to impact traffic volumes for the foreseeable future. A recent article by McKinsey & Company estimates that 20% of business travel may not return. Further, the same article reports that a survey of 278 executives representing 8 countries planned to reduce office space by 30%.<sup>1</sup>

Published VMT from Federal Highway's Office of Highway Policy Information (OHPI) Highway Statistics Series Table VM-22 were used for calendar years 2019 and prior. TDOT's Long Range Planning Division estimates calendar year 2020 VMT at 76,393 million miles. (Note: Because it is anticipated that VMT numbers will continue to change until published by FHWA, no updates have been made to the agreed upon 2016-2020 baseline.)

Based on the uncertainty of travel patterns as a result of the COVID-19 pandemic, the team reviewed travel data available for March, April and early May and considered several scenarios before opting to take an optimistic but conservative approach for identifying the serious injury rate target. The team estimates Tennessee's 2021 VMT will resemble 2019 data and will increase by 1% in 2022. Once the VMT estimates for calendar years 2021 and 2022 were agreed upon, the rate was then calculated using the 5,588.6 serious injury number target to obtain the 6.968 target for the 2018-2022 target setting performance cycle.

Targets were set by consensus among working group participants which consisted of members of the Tennessee Highway Safety Office, Tennessee Department Of Safety and Homeland Security, Tennessee Division Office of the Federal Highway Administration, and various divisions within TDOT. Input from the Knoxville Regional Transportation Planning Organization and the Bristol Urban Area MPO was included in the target decision making process.

It is always the intent of the Tennessee Department of Transportation and our partner agencies to reduce traffic fatalities on our roadways. These targets are performance projections based on historical data and influencing factors.

## **REFERENCES**

1McKinsey Global Institute. "The Future of Work after COVID-19," [Online]. Available: <https://www.mckinsey.com/featured-insights/future-of-work/the-future-of-work-after-covid-19>

2Federal Highway Administration, Office of Highway Policy Information, 2019, *State Tables Vehicle-miles of travel, by functional system*, [Online]. Available: <https://www.fhwa.dot.gov/policyinformation/statistics/2019/pdf/vm2.pdf>

### ***Total Number of Non-Motorized Fatalities and Serious Injuries:534.8***

#### ***Describe the basis for established target, including how it supports SHSP goals.***

Over the past decade (2010-2020), the number of non-motorist serious injuries and fatalities decreased an average of 3% each year. However, the 5-year moving average has been steadily increasing since the average was 432.2 serious injuries and fatalities for the initial baseline reporting period for this measure (2012-2016). A total of 557 fatalities and serious injuries occurred in 2020 marking the highest number in recent years. As of June 1, 2021, there were 3

fewer bicyclist fatalities compared to the same date in 2020 while pedestrian fatalities increased by 3.

Projects to widen roadways and maintain wide travel lanes and sight distances have been identified for completion within Tennessee. While these projects may be necessary to alleviate congestion or other transportation problems, they also tend to decrease safety for pedestrians. To mitigate this, TDOT has started a Pedestrian Road Safety Initiative by identifying 12 high pedestrian crash locations, designing safety upgrades for these areas and using Highway Safety Improvement Program (HSIP) funds to employ countermeasures at these locations. Several of these projects are planned to be available for bid in 2021. TDOT's Multimodal Division has worked with TDOT's Data Visualization office to create an FHWA-approved methodology to rank all roads in Tennessee for prioritization. Using the Multimodal Prioritization Tool, the Multimodal Division is currently selecting additional pedestrian crash locations for continuing the Pedestrian Road Safety Initiative with future upgrades.

TDOT has worked closely with FHWA in its Safe Transportation for Every Pedestrian (STEP) technical assistance program. In the last year, TDOT has helped coordinate a Pedestrian Road Safety Audit in Knoxville and four STEP workshops on countermeasures to increase pedestrian safety, one in each of TDOT's four regions. These countermeasures, approved and promoted by FHWA, are the core of the Pedestrian Road Safety Initiative projects mentioned above. Countermeasures include crosswalk visibility enhancements, leading pedestrian intervals (LPIs), pedestrian hybrid beacons (PHBs), pedestrian refuge islands, raised crosswalks, road diets, and rectangular rapid-flashing beacons.

TDOT has also been working to develop the Statewide Active Transportation Plan<sup>2</sup>. This plan will provide guidance to TDOT staff on how to identify, plan, fund and design infrastructure that allows people to safely walk, bicycle, use a wheelchair or use a scooter on Tennessee state roads, whether in stand-alone projects or by incorporating these into current TDOT processes, projects and workflow. This plan is expected to be completed and ready for implementation by August 31, 2021.

Currently, University of Tennessee Knoxville is conducting a research project: Addressing Traffic Safety to Reduce Pedestrian Injuries and Fatalities in Tennessee. This research is expected to analyze pedestrian crashes in order to develop a risk-based assessment framework that can aid in evaluating multi-criteria decision making. This research project is expected to be completed in early 2022. While implementation of survey findings may not impact pedestrian fatalities this performance cycle, it is hoped that this research will help decrease future pedestrian injuries and fatalities.

TDOT has awarded 75 Multimodal Access Grants<sup>3</sup> representing over \$58 million in state funds since 2014. Another 23 projects representing \$20 Million has been funded for 2021. Most of

these grants cover sidewalk and pedestrian improvements, and addressing safety issues is included in the scoring to award applicants. While it is expected that projects resulting from the Multimodal Access Grants and Pedestrian Road Safety Initiative will be completed by the end of the target setting cycle, TDOT is still projecting that non-motorist serious injuries and fatalities will remain consistent with 2020's increased non-motorized serious injury and fatality number of 557.

Targets were set by consensus among working group participants which consisted of members of the Tennessee Highway Safety Office, TDOSHS, Tennessee Division Office of Federal Highway, and various divisions within TDOT. Input from the Knoxville Regional Transportation Planning Organization, the Greater Nashville Regional Council, and Bristol Urban Area MPO was included in the target decision making process.

The working group has selected a target of 534.8 for the 2018-2022 target setting performance cycle. This target assumes that the number of non-motorized serious injuries and fatalities for 2020 will remain unchanged for 2021 and 2022 despite Tennessee's mitigation efforts.

It is always the intent of the Tennessee Department of Transportation and our partner agencies to reduce traffic fatalities and serious injuries for all users of our roadways. These targets are performance projections based on historical data and influencing factors.

## **REFERENCES**

1 Federal Highway Administration, (2021). "State Highway Safety Report (2018) - Tennessee," [Online]. Available: <https://www.fhwa.dot.gov/tpm/reporting/state/safety.cfm?state=Tennessee>

2 Tennessee Department of Transportation, Multimodal Transportation Division, (2021). "Statewide Active Transportation Plan," [Online]. Available: <https://www.tn.gov/tdot/multimodal-transportation-resources/bicycle-and-pedestrian-program/statewide-active-transportation-plan.html#:~:text=Active%20transportation%20includes%20walking%2C%20bicycling%2C%20and%20traveling%20by,Tennessee%20for%20people%20of%20all>

3 Tennessee Department of Transportation, Multimodal Transportation Division, (2021). "MMAG Previous Awards 2020," [Online]. Available: <https://www.tn.gov/content/dam/tn/tdot/multimodaltransportation/multimodal-access-grant/MMAG%20Previous%20Awards%202020.pdf>





**Lakeway Area Metropolitan Transportation Planning Organization (LAMTPO)**  
Morristown, TN – Jefferson City, TN – White Pine, TN – Hamblen County, TN – Jefferson County, TN

**RESOLUTION 2022-008**  
**SUPPORTING THE PUBLIC TRANSPORTATION AGENCY SAFETY PLAN**  
**(PTASP)**

WHEREAS, the Lakeway Area Metropolitan Transportation Planning Organization (LAMTPO) is the organization responsible for planning an efficient transportation system in the Lakeway Region and for the appropriate use of federal transportation funds in that area; and

WHEREAS, Recipients of public transit funds are required to establish performance targets, develop transit asset management and safety plans, and report on their progress toward achieving targets. Public transportation operators are directed to share information with MPOs and states so that all plans and performance reports are coordinated; and

WHEREAS, On July 19, 2018, FTA published the [Public Transportation Agency Safety Plan \(PTASP\) Final Rule](#), which requires certain operators of public transportation systems that receive federal funds under FTA's [Urbanized Area Formula Grants](#) to develop safety plans that include the processes and procedures to implement Safety Management Systems (SMS); and


WHEREAS, Bipartisan Infrastructure Law (signed on November 15, 2021) establishes additional PTASP requirements, such as mitigation strategies of infectious diseases, and having a Safety Committee that includes frontline workforce; and

WHEREAS, The PTASP regulation requires recipients and sub-recipients of financial assistance under the Urbanized Area Formula Program (49 U.S.C. Section 5307) and rail transit agencies that are subject to the FTA State Safety Oversight Program to establish a compliant Agency Safety Plan; and

WHEREAS, ETHRA participated in the Tennessee Department of Transportation (TDOT) Agency Safety Plan (ASP), and

WHEREAS, the TAC and Executive Board has recommended that LAMTPO adopts this resolution supporting the East Tennessee Human Resource Agency (ETHRA) Public Transportation Agency Safety Plan (PTASP); and

BE IT FURTHER RESOLVED, the LAMTPO Executive Board hereby approves the East Tennessee Human Resource Agency (ETHRA) Public Transportation Agency Safety Plan (PTASP).

  
\_\_\_\_\_  
Chair,  
LAMTPO

September 14, 2022  
Date

# ETHRA

## Agency Safety Plan Targets - 2022

2022

	Fixed Route	Demand Response
Vehicle Revenue Miles	397471	3058364
Number of Fatalities	0	0
Rate of Fatalities per 100K VRM	0	0
Number of Injuries	0	2
Rate of Injuries per 100K WRM	0.00	0.07
Number of Safety Events	1	5
Rate of Safety Events per 100 WRM	0.25	0.16
Total Major Mechanical Failures	6	14
Miles Between Major Mechanical Failure (Reliability)	66245	218455

ETHRA Transportation Safety Committee approval date: 9/9/2022

ETHRA Transportation Committee President:   
Brent Gagley

Date: 9/9/2022

ETHRA Transportation Director:   
Mike Patterson

Date: 9/9/2022

ETHRA Executive Director:   
Gary Holiway

Date: 9/17/2022



**Lakeway Area Metropolitan Transportation Planning Organization (LAMTPO)**  
Morristown, TN – Jefferson City, TN – White Pine, TN – Hamblen County, TN – Jefferson County, TN

**RESOLUTION 2022-007**  
**SUPPORTING THE TRANSIT PERFORMANCE MEASURE TARGETS**

WHEREAS, the Lakeway Area Metropolitan Transportation Planning Organization (LAMTPO) is the organization responsible for planning an efficient transportation system in the Lakeway Region and for the appropriate use of federal transportation funds in that area; and

WHEREAS, in 2012 Congress passed the Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) and Fixing America's Surface Transportation (FAST) Act that mandate the establishment of a performance and outcome based program for transportation decisions; and

WHEREAS, In July 2016, FTA published a Final Rule for Transit Asset Management. The rule requires FTA grantees to develop asset management plans for their public transportation assets, including vehicles, facilities, equipment, and other infrastructure; and

WHEREAS, Recipients of public transit funds are required to establish performance targets, develop transit asset management and safety plans, and report on their progress toward achieving targets. Public transportation operators are directed to share information with MPOs and states so that all plans and performance reports are coordinated; and

WHEREAS, federal transit law requires that transit agencies (East Tennessee Human Resource Agency (ETHRA)/ Lakeway Transit in the LAMTPO MPA) must report facility and infrastructure asset condition and performance data to the National Transit Database (NTD), which will support requirements for Transit Asset Management (TAM) plans, and calculate the State of Good Repair (SGR) related measures; and

WHEREAS, the SGR is defined as the condition at which the capital asset is able to operate at a full level of performance and does not pose unacceptable safety risks for users; and

WHEREAS, Assets are measured against Useful Life Benchmarks (ULB), which are the expected life cycle (period of time) of the asset for a particular operating environment; and

WHEREAS, LAMTPO, in conjunction with ETHRA/ Lakeway Transit, is participating in the TDOT TAM plan for our rural and urban operations; and

WHEREAS, ETHRA participated in the Tennessee Department of Transportation (TDOT) Tier II Sponsored group Transit Asset Management (TAM) Plan, updated October 25, 2019) (attached); and

WHEREAS, the TAC and Executive Board has recommended that LAMTPO supports and adopts the Transit Performance Measure Targets; and

BE IT FURTHER RESOLVED, the LAMTPO Executive Board hereby approves and supports the Transit Performance Measure Targets for each of the above-mentioned measures, and by agreeing to plan and program projects so that they contribute toward the accomplishment of Transit Performance Measure Targets.



\_\_\_\_\_  
Chair,  
LAMTPO

September 14, 2022  
Date

*Pigeon Forge Mass Transit Facility*

*Patriot Park, Pigeon Forge, TN*



# Tier II Sponsored Group Transit Asset Management Plan

Tennessee Department of Transportation

*Updated: October 2022*

# Acknowledgements

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## **Tennessee Department of Transportation**

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Dan Pallme, Interim Multimodal Transportation Director

Kaitlyn McClanahan, Transportation Manager

DRAFT

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## ACRONYMS AND DEFINITIONS

**Accountable Executive:** Means a single, identifiable person who has ultimate responsibility for carrying out the safety management system of a public transportation agency; responsibility for carrying out transit asset management practices; and control or direction over the human and capital resources needed to develop and maintain both the agency's public transportation agency safety plan, in accordance with 49 U.S.C. 5329(d), and the agency's transit asset management plan in accordance with 49 U.S.C. 5326.

**Asset Category:** Means a grouping of asset classes, including a grouping of equipment, a grouping of rolling stock, a grouping of infrastructure, and a grouping of facilities.

**Asset Class:** Means a subgroup of capital assets within an asset category. For example, buses, trolleys, and cutaway vans are all asset classes within the rolling stock asset category.

**Asset Inventory:** Means a register of capital assets, and information about those assets.

**Capital Asset:** Means a unit of rolling stock, a facility, a unit of equipment, or an element of infrastructure used for providing public transportation, with a value of at least \$5,000 and a useful life of at least a year

**Decision Support Tool:** Means an analytic process or methodology: (1) To help prioritize projects to improve and maintain the state of good repair of capital assets within a public transportation system, based on available condition data and objective criteria; or (2) To assess financial needs for asset investments over time.

**Direct Recipient:** Means an entity that receives Federal financial assistance directly from the Federal Transit Administration.

**Equipment:** Means an article of nonexpendable, tangible property having a useful life of at least one year, with a primary use to support revenue service operations

**Exclusive-Use Maintenance Facility:** Means a maintenance facility that is non-commercial and either owned by a transit provider or used exclusively for servicing agency vehicles.

**Facility:** Means a building or structure that is used in the support of public transportation.

**FTA/NTD TAM Target:** means the percentage of vehicles that have met or exceeded their useful life benchmark

**Full Level of Performance:** Means the objective standard established by FTA for determining whether a capital asset is in a state of good repair.

**Horizon Period:** Means the fixed period within which a transit provider will evaluate the performance of its TAM Plan. FTA standard horizon period is every four years.

**Implementation Strategy:** Means a transit provider's approach to carrying out TAM practices, including establishing a schedule, accountabilities, tasks, dependencies, and roles and responsibilities.

**Investment Prioritization:** Means a transit provider's ranking of capital projects or programs to achieve or maintain a state of good repair. An investment prioritization is based on financial resources from all sources that a transit provider reasonably anticipates will be available over the TAM Plan horizon period.

**Key Asset Management Activities:** Means a list of activities that a transit provider determines are critical to achieving its TAM goals.

**Participant:** Means a Tier II provider that participates in a group TAM Plan.

**Performance Measure:** Means an expression based on a quantifiable indicator of performance or condition that is used to establish targets and to assess progress toward meeting the established targets

**Performance Target:** Means a quantifiable level of performance or condition, expressed as a value for the measure, to be achieved within a time period required by the Federal Transit Administration (FTA).

**Public Transportation System:** Means the entirety of a transit provider's operations, including the services provided through contractors.

**Recipient:** Means an entity that receives Federal financial assistance under 49 U.S.C. Chapter 53, either directly from FTA or as a subrecipient.

**Replacement Criticality Scale:** Means the value on the TDOT Replacement Criticality Scale for how critical a vehicle is for an agency's operations. This value is calculated by multiplying how often an agency uses a specific asset multiplied by its respective TDOT TAM Score (Index X TAM Score), and is used as an additional factor in helping agencies and TDOT determine replacement vehicle priorities.

**Rolling Stock:** Means a revenue vehicle used in providing public transportation, including vehicles used for carrying passengers on fare-free services.

**Service Vehicle:** Means a unit of equipment that is used primarily either to support maintenance and repair work for a public transportation system or for delivery of materials, equipment, or tools.

**State of Good Repair (SGR):** Means the condition in which a capital asset can operate at a full level of performance.

**Subrecipient:** Means an entity that receives Federal transit grant funds indirectly through a State or a direct recipient.

**TDOT TAM Score:** the combined average of a vehicle's agency submitted conditioning, useful life, and mileage. These values are based on scales of 1-5 with the lower number representing a greater need and/or age.

**TDOT TAM Target:** Means the percentage of vehicles that have an average combined TAM score of "3" or less

**TERM Scale:** Means the five (5) category rating system used in the Federal Transit Administration's Transit Economic Requirements Model (TERM) to describe the condition of an asset: 5.0—Excellent, 4.0—Good; 3.0—Adequate, 2.0—Marginal, and 1.0—Poor.

**Tier II Provider:** Means a recipient that owns, operates, or manages (1) one hundred (100) or fewer vehicles in revenue service during peak regular service across all non-rail fixed route modes or in any one non-fixed route mode, (2) a subrecipient under the 5311 Rural Area Formula Program, (3) or any American Indian tribe.

**Transit Asset Management (TAM):** Means the strategic and systematic practice of procuring, operating, inspecting, maintaining, rehabilitating, and replacing transit capital assets to manage their performance, risks, and costs over their life cycles, for the purpose of providing safe, cost-effective, and reliable public transportation.

**Transit Asset Management (TAM) Plan:** Means a plan that includes an inventory of capital assets, a condition assessment of inventoried assets, a decision support tool, and a prioritization of investments.

**Transit Provider (provider):** Means a recipient or subrecipient of Federal financial assistance under 49 U.S.C. Chapter 53 that owns, operates, or manages capital assets used in providing public transportation.

**Useful life:** Means the minimal acceptable period of use in service determined by FTA.

**Useful life benchmark (ULB):** Means the acceptable period of use in service for a capital asset, as determined by the default benchmark provided by FTA.

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## CHAPTER 1: INTRODUCTION

### 1.1 Overview

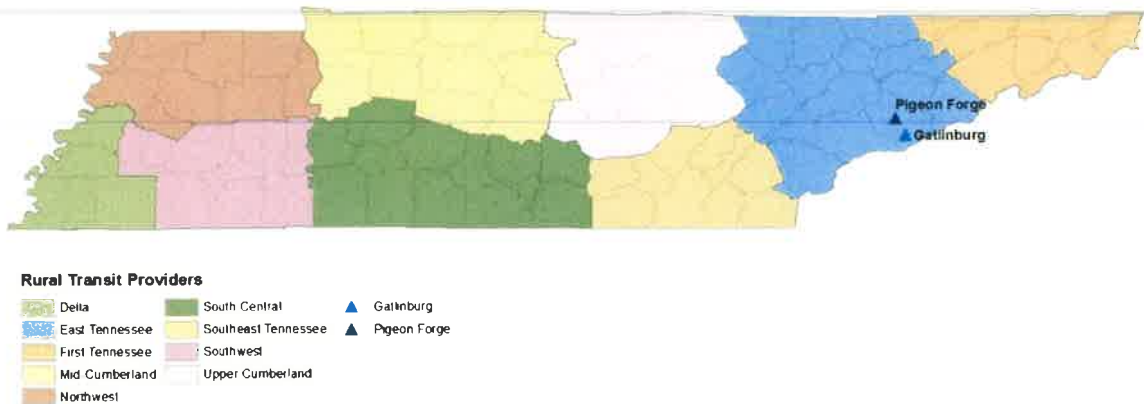
Transit Asset Management (TAM) is a business model that prioritizes funding based on the condition of transit assets to achieve or maintain transit networks in a State of Good Repair (SGR).

In 2012, to address the capital needs of public transit systems across the country, the Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) legislation mandated the creation of a TAM system to be implemented by the Federal Transit Administration (FTA). On July 26, 2016, the FTA published requirements that became effective October 1, 2016 which would establish "a strategic and systematic process of operating, maintaining, and improving public transportation capital assets effectively through the life cycle of such assets." 49 U.S.C. 5326(a)(3). These requirements state that each agency must develop a Transit Asset Management (TAM) Plan if it owns, operates or manages capital assets used to provide public transportation and receives federal financial assistance under 49 U.S.C. Chapter 53 as a recipient or subrecipient.

As the State Department of Transportation that serves as the administrator and recipient of FTA funds, the Tennessee Department of Transportation (TDOT) opted to sponsor a Group Transit Asset Management (TAM) Plan for their Tier II subrecipient agencies that receive Section 5311 Rural Area Formula Program funding. All eleven of TDOT's rural providers qualify as Tier II operators and are part of the TDOT Group TAM Plan as described in Section 1.2.

## 1.2 Transit Providers

This Group TAM Plan covers eleven rural transit systems in Tennessee. Nine transit providers (eight human resource agencies and one developmental district) cover regional rural transportation needs in 94 of 95 counties in the state and two locally operated rural transit providers (Gatlinburg and Pigeon Forge) that operate in the tourist areas of Sevier County. The 11 agencies combined provide demand response, flex route, and fixed route services.



## 1.3 TAM Plan Requirements/Compliance

The Group Transit Asset Management (TAM) Plan will fulfill the requirements of the Federal Transit Administration's (FTA) Final Rule, Volume 81, No. 143, on Transit Asset Management. The rule encompasses a state of good repair and the data collection, prioritization, and data delivery to the National Transit Database (NTD).

A Tier II Group TAM Plan includes four (4) elements of the Final Rule as follows:

- Inventory of Capital Assets: *An inventory of the number and type of capital assets to include rolling stock, facilities, and equipment - 49CFR§625.25 (b)(1)*



- Condition Assessment: *A condition assessment of those inventoried assets for which the transit provider has direct ownership and/or capital responsibilities - 49CFR§625.25 (b)(2)*
- Decision Support Tools: *A description of the analytical processes and decision support tools that the Authority uses to estimate capital investment needs over time, and develops its investment prioritization - 49CFR§625.25 (b)(3)*
- Investment Prioritization: The list of project-based prioritization of investments. - 49CFR§625.25 (b)(4)

The implementation deadline for the TAM Plan to become effective was October 1, 2018. The TAM Plan must cover a horizon period of four years, at which time it should be reviewed and updated in its entirety. The Plan may also be amended as needed, or when there is a significant change to the asset inventory, condition assessment or investment prioritization strategies.

In addition to the TAM Plan, the TAM Final Rule requires the submission of two additional reports to the FTA's National Transit Database (NTD) with the annual reporting package.

- The *Data Report* should describe the condition of the transportation system currently and the SGR performance targets for the upcoming year
- The *NTD Narrative Report*, should describe the changes in the transportation system condition and report progress on meeting the performance targets from the prior year, and describe any revisions to the established goals.

Each transit provider must designate an Accountable Executive to ensure appropriate resources for implementing the agency's TAM Plan. The Accountable Executive of each participating agency is expected to approve the Plan and is ultimately responsible for implementation of the Plan at the participant agency.

## 1.4 State of Good Repair Performance Measure

Each agency is required to establish annual State of Good Repair (SGR) performance measures and targets for each asset category. As the group sponsor, TDOT has established statewide targets. Participating agencies may develop more restrictive targets. TDOT will report on the statewide targets for SGR measures in the following asset categories:

- **Rolling Stock** (revenue vehicles): Percent of vehicles that have either met or exceeded their Useful Life Benchmark (ULB). Condition ratings for vehicles are expressed in terms of the percentage of assets that are at or beyond the ULB -based on FTA Circular 5010.1e.
- **Equipment** (including non-revenue service vehicles): Percent of assets that have either met or exceeded their ULB.
- **Facilities:** Percent of facilities rated below condition 3 on the FTA TERM scale shown in Table 1.

**Table 1: TERM Scale**

<b>5</b>	<b>Excellent</b>	<ul style="list-style-type: none"><li>• No visible defects, <b>new</b> or near new condition</li><li>• May still be under warranty (if applicable)</li></ul>
<b>4</b>	<b>Good</b>	<ul style="list-style-type: none"><li>• Good condition, but no longer new,</li><li>• may be slightly defective or deteriorated, but is overall functional</li></ul>
<b>3</b>	<b>Adequate</b>	<ul style="list-style-type: none"><li>• Moderately deteriorated or defective; but has not exceeded useful life</li></ul>
<b>2</b>	<b>Marginal</b>	<ul style="list-style-type: none"><li>• Defective or deteriorated in need of replacement; exceeded useful life</li></ul>
<b>1</b>	<b>Poor</b>	<ul style="list-style-type: none"><li>• Critically damaged or in need of immediate repair; well past useful life</li></ul>

TDOT established the following SGR targets for rolling stock and equipment (i.e. non-revenue service vehicles) effective July 1, 2022 and submitted them to the FTA as part of the required NTD reporting cycle. Established targets are provided to each participating agency, TDOT's Office of Community Transportation, Metropolitan Planning Organizations, and Rural Planning Organizations. Each participating agency is responsible for providing the established targets these organizations. If a different set of targets are adopted on an individual basis, those need to be provided with justifications to the group plan sponsor accountable executive and the listed agencies.

**Table 2: FTA/NTD & TDOT Sponsored Plan State of Good Repair Targets**

**Rolling Stock**

TDOT utilizes the FTA default ULB for revenue vehicle targets. FTA/NTD State of Good Repair targets are based only on vehicles that have met or exceeded the useful life benchmark for their vehicle type. The State of Good Repair targets used for the TAM Plan are for vehicles with an overall average TDOT TAM Score of "3" or less. Both sets of targets represent that **no more than the listed percentages will meet these criteria**

Vehicle Type	Useful Life Benchmark	FTA/NTD Targets	TDOT TAM Score Target
Automobile (AO)	8	50%	50%
Bus (BU)	14	20%	20%
Cutaway Bus (CU)	10	15%	20%
Minivan (MV)	8	35%	40%
Other Rubber Tire (OR)	14	0%	0%
Van (VN)	8	30%	45%

**Equipment (Non-Revenue Service Vehicles)**

TDOT utilizes the FTA default ULB for non-revenue service vehicles performance targets.

Vehicle Type	Useful Life Benchmark	FTA/NTD Targets	TDOT TAM Score Target
Automobile	8	25%	25%
Trucks/Other Rubber Tire	14	40%	25%

**Facilities**

TDOT utilizes the FTA TERM scale for facility conditioning targets.

<b>Facility Type</b>	<b>FTA TERM RATING</b>	<b>FTA/NTD Targets</b>	<b>TDOT TAM Score Target</b>
Administrative/Maintenance	3	25%	25%
Passenger/Parking	3	25%	25%

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## Chapter 2: Asset Inventory

### 2.1 Data Collection

The TAM final rule requires the transit provider to assess all assets for which they have direct or partial capital responsibility, including those that are owned by a different public agency or private entity. The three categories of assets included are rolling stock, equipment, and facilities. The TAM Plan is to have an inventory of all capital assets in each category that the transit provider owns, operates, or manages.

### 2.2 Rolling Stock

For the purposes of this Plan, rolling stock is defined as revenue service vehicles used for the transport of passengers. As part of the data collection process, participating agencies submitted the following information through a combination of capital asset forms and Excel spreadsheets to be consistent with internal perpetual inventory and National Transit Database (NTD) reporting requirements. Information is reconciled on an annual basis, with only new assets needing the full list.

**Table 3: Data Inventory**

Asset Type	Type of Usage
RVI Code	Anticipated Disposal Date
Model Description	2022 Condition (end of fiscal year)
Vehicle Identification Number (VIN)	2022 Odometer Reading (end of fiscal year)
Make/Manufacturer	Dedicated Fleet
Manufacturer Year	Fuel Type
Tag Number	Other Fuel Type
ADA Vehicle	Dual Fuel Type
Agency Assigned Vehicle Number	Vehicle Length
Current Status	Seating Capacity
Total Item Cost	NTD Funding Type
Beginning Active Service Date	Ownership Type
Purchased Condition	Supports Another Mode/TOS
Depreciation Method	Emergency Contingency Vehicles
Yearly Depreciation Amount	

Table 4 depicts the total rolling stock vehicles by asset type for each transit provider. Asset types are prescribed by the FTA in NTD reporting. There are a total of 1,024 revenue rolling stock assets that are inventoried, conditioned and reported. Table 5 provides the total of each revenue asset type included in the Group TAM Plan. Appendix A provides the inventory of revenue vehicles and equipment (non-revenue vehicles). Appendix D gives a visual breakdown of each participating agency's complete rolling stock and equipment inventory in relation to the established SGR goals.

**Table 4: Rolling Stock Assets by Transit Provider**

<b>DHRA</b>	CU	2	<b>MCHRA</b>	MV	23	<b>SETHRA</b>	AO	8
	MV	4		VN	103		CU	90
	VN	31		Subtotal	<b>126</b>		MV	4
Subtotal		<b>37</b>				Subtotal		<b>102</b>
			<b>NWTHRA</b>	VN	85			
			Subtotal		<b>85</b>			
<b>ETHRA</b>	CU	104				<b>SWHRA</b>	CU	25
	VN	17					VN	41
Subtotal		<b>121</b>				Subtotal		<b>66</b>
<b>FTHRA</b>	MV	36	<b>PFMT</b>	BU	36			
	VN	69		CU	6			
	Subtotal			<b>105</b>	OR	10		
			Subtotal		<b>52</b>			
<b>GMTS</b>	BU	21	<b>SCTDD</b>	BU	13			
	Subtotal			<b>21</b>	MV	14		
				Subtotal		<b>189</b>		
						<b>Total Rolling Stock:</b>		<b>1024</b>

**Table 5: Rolling Stock Assets by Asset Type**

<b>AO</b>	8	<b>CU</b>	256	<b>OR</b>	10
<b>BU</b>	68	<b>MV</b>	81	<b>VN</b>	601

## 2.3 Equipment (Non-Revenue Service Vehicles)

Non-revenue service vehicles used for transportation purposes (e.g. supervisor vehicles) are included as equipment. Equipment with an acquisition value between \$10,000 and \$50,000 may be considered part of an administrative or maintenance facility. If equipment is valued at \$50,000 or more, or is a piece of equipment that is movable and can be taken to a different location, it needs to be inventoried separately. If the equipment is physically attached to the facility, even if valued over \$50,000 (e.g. a bus washer), it is considered as part of the facility and is included in the facility condition assessment.

No agency had equipment valued at \$50,000 or greater that was not considered to be part of a facility.

Eight of the eleven agencies use non-revenue service vehicles which are used for transportation purposes. These 45 vehicles are detailed in Table 6.

**Table 6: Non-Revenue Service Vehicles by Transit Agency**

<b>DHRA</b>	Non-Revenue Automobile	1	<b>PFMT</b>	Non-Revenue Automobile	0
	Truck/ Other Rubber Tire	1		Truck/ Other Rubber Tire	7
	Subtotal	<b>2</b>		Subtotal	<b>7</b>
<b>ETHRA</b>	Non-Revenue Automobile	0	<b>SETHRA</b>	Non-Revenue Automobile	1
	Truck/ Other Rubber Tire	2		Truck/ Other Rubber Tire	3
	Subtotal	<b>2</b>		Subtotal	<b>4</b>
<b>FTHRA</b>	Non-Revenue Automobile	4	<b>SWHRA</b>	Non-Revenue Automobile	0
	Truck/ Other Rubber Tire	1		Truck/ Other Rubber Tire	2
	Subtotal	<b>5</b>		Subtotal	<b>2</b>
<b>GMTS</b>	Non-Revenue Automobile	3	<b>UCHRA</b>	Non-Revenue Automobile	7
	Truck/ Other Rubber Tire	2		Truck/ Other Rubber Tire	11
	Subtotal	<b>5</b>		Subtotal	<b>18</b>

**Total Non-Revenue Service Vehicles: 45**

## 2.4 Facilities

Agencies are required to report the overall condition of all facilities for which they have direct or shared capital responsibility. A single facility is defined as one building. The TAM final rule established performance measures to be reported to the NTD Asset Inventory Module (AIM) at 49 CFR part 625, Subpart D - Performance Management. The TAM Facility Performance Measure Reporting Guidebook (*Version 1.2 March 2018*) outlines the calculation of the Facility Condition Assessment for reporting to the NTD. Facility condition assessments must be conducted by assessing the condition of and assigning a rating for facility assets using FTA's TERM scale shown in Table 1. The 2017 AIM Manual identifies all facility types that will be reported to the NTD. Each of these facility types and any other building where transit administrative, maintenance, or operations functions are conducted should be considered an independent facility even when it is adjacent to or on the same property as another building.

### Administrative and Maintenance Facilities

- Management and supporting activities for transit operations
- Facilities for customer information or ticket sales
- Facilities where routine or heavy maintenance and repairs are done

### Passenger and Parking Facilities

- All passenger stations that are significant enclosed structures used for items such as ticketing, information, restrooms and concessions. Bus stop shelters are not considered to be passenger stations.
- Parking facilities including park & ride lots and parking garages that are immediately adjacent to passenger facilities.

There are a total of 96 transit facilities utilized for operations and administration of public transit services by the participating agencies in the Group TAM Plan (see Appendix B). Of these 96 facilities, transit agencies have direct capital responsibility for 10 facilities (see Table 7). Only facilities where the transit provider has direct capital responsibility need to go through a condition assessment and be included in the TAM Plan.



**Table 7: Facilities with Participant Direct Capital Responsibility**

<b>TRANSIT PROVIDER</b>	<b>FACILITY NAME/LOCATION</b>	<b>TYPE</b>
ETHRA	Loudon County Facility	Maintenance
Gatlinburg	Main Office	Administration
FTHRA	TMB Garage	Maintenance
NWTHRA	Main Office	Administration and Maintenance
Pigeon Forge	Main Office	Administration
SETHRA	Main Office	Administration and Maintenance
SETHRA	Dunlap Storage/Maintenance	Maintenance
SETHRA	Bradley County Facility	Administration and Maintenance
SWHRA	Garage	Maintenance
UCHRA	Main Office	Administration
UCHRA	Garage	Maintenance

## 2.5 Facility Monitoring

As required TDOT has a continuous control plan for monitoring and conditioning all real properties being used by the participating agencies of the group plan.

On an annual basis, either in conjunction with the required NTD reporting or during an agency's pre-certification process for funding opportunities, TDOT will collect a list of all locations that agencies operate or coordinate transportation services from. This list should include:

- Location
- Address
- Copy of Lease, with clearly defined term dates (if applicable)
- General Purpose (Administration, Maintenance, or combination)
- Indication of Capital Responsibility

TDOT will continue to make improvements in this area in coordination with our agencies including the following tasks:

- **Define Capital Responsibility:** Assist participants in determining if their transportation program has capital responsibility for facilities
- **On-Site Conditioning:** TDOT will plan and coordinate on-site conditioning for identified facilities for which the transportation program has identified at least 50% capital responsibility, alternating on an annual basis the with the agency on who has responsibility, with agencies conducting odd calendar years and TDOT even calendar years

## Chapter 3: DECISION SUPPORT TOOLS

In addition to the State of Good Repair (SGR) Goals, TDOT established TAM support tools to assist in evaluating progress toward these goals. These decision support tools are based upon tangible criteria related to asset performance. These decision support tools can help TDOT and the participating agencies determine and predict the cost to improve asset conditions at various stages of the asset life cycle, while balancing prioritization of capital, operating and expansion needs.

### 3.1 Rolling Stock and Equipment (Non-Revenue Service Vehicles)

In order to report on the State of Good Repair for rolling stock and equipment to the NTD data base, the **Group TAM Plan rolling stock assets have been calculated based solely on an asset's relation to the Age/Useful Life Benchmark (ULB)**. The ULB utilized is the ULB benchmark established by the FTA and reflected in Table 2.

In order to establish investment prioritization for both categories, TDOT has established **a decision support tool that combines the average of ULB, mileage, and condition rating** (i.e. "TDOT TAM Score"). TDOT has established the following mileage and condition performance targets (See Tables 8 and 9):

**Table 8: Decision Support Tool Benchmarks**

Asset Class	FTA ULB	USEFUL LIFE	MIN. MILEAGE
Automobile (AO)	8	4	100,000
Cutaway Bus (CU)	10	5	150,000
Minivan (MV)	8	4	100,000
Other Rubber Tire Vehicles (OR)	14	7	200,000
Van (VN)	8	4	100,000
Bus (BU)	14	7	200,000

Useful Life			Mileage		
5	up to 50%	Min Useful Life	5	up to 50%	Min Mileage
4	51-100%	Min Useful Life	4	51-100%	Min Mileage
3	Up to 150%	Min Useful Life	3	Up to 150%	Min Mileage
2	150-200%	Min Useful Life	2	150-200%	Min Mileage
1	Over 200%	Min Useful Life	1	Over 200%	Min Mileage

The condition assessment for rolling stock uses a rating scale to evaluate the current maintenance record for each vehicle. Each transit provider was asked to assess rolling stock by using the following rating scale:

**Table 9: Condition Rating for Rolling Stock**

5	<b>Excellent</b>	<ul style="list-style-type: none"> <li>• <b>Brand new,</b></li> <li>• <b>No major problems exist</b></li> <li>• <b>Only routine preventive maintenance.</b></li> </ul>
4	<b>Good</b>	<ul style="list-style-type: none"> <li>• <b>Elements are in good working order</b></li> <li>• <b>Requiring only nominal or infrequent minor repairs</b> (greater than 6 months between minor repairs).</li> </ul>
3	<b>Fair</b>	<ul style="list-style-type: none"> <li>• <b>Requires frequent <u>minor repairs OR</u></b> (less than 6 months between repairs)</li> <li>• <b>Infrequent major repairs</b> (more than 6 months between major repairs).</li> </ul>
2	<b>Poor</b>	<ul style="list-style-type: none"> <li>• <b>Requires frequent major repairs</b> (less than 6 months between major repairs).</li> </ul>
1	<b>Bad</b>	<ul style="list-style-type: none"> <li>• <b>In a state where continued use presents potential problems.</b></li> </ul>

TDOT calculated an aggregate condition score for each asset and asset type by combining the three performance measure targets for each asset. The raw condition rating score extends to a .00 decimal to serve as an additional factor in the decision support tool to determine which assets across the state are in not in a SGR.

In addition to the previously established decision support tools, TDOT made the decision to introduce a Replacement Criticality Scale based on feedback from the 2019 NTD Closeout letter, NTD Roundtable peers, and internal staffing changes. A preliminary version that defaulted to reflect assets as critical was applied to 2020 data. **This tool only applies to revenue service vehicles.**

A revised method was developed by TDOT staff following the 2020 NTD report and TAM updates being issues. The current formula for determining an asset’s criticality score is:

$$\text{Usage Index X TAM Score} = \text{Replacement Criticality Index Value}$$

**Table 10: Criticality Replacement Scale**

Critical 1	Priority 2	Needed 3	Elective 4
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**Table 11: Usage Definitions**

<b>Daily</b>	These vehicles are scheduled and used <b>daily</b> for public transit and contract trips
<b>Weekly</b>	These vehicles are scheduled for at least <b>weekly</b> use
<b>Monthly</b>	Vehicles are not scheduled <b>more</b> than once or twice a month
<b>Occasional/Spare</b>	Vehicles not in continuous, regular use for <b>providing</b> public transit trips, but are still in acceptable, safe working order to <b>provide</b> trips as a backup in case of accident/emergency situations

**Table 12: Criticality Replacement Matrix**

TAM Score \ Usage	5.0-3.5	3.4-2.5	2.4-1.5	1.4 – 1.0
Daily	4	3	2	1
Weekly	4	3	2	1
Monthly	4	3	2	2
Occasional/Spare	4	4	3	3

The resulting output from using this formula generates a value from 1-20, which can be used as an additional level of support for agencies and TDOT when determining what assets should be replaced.

Listings of ranked assets using this tool can be found in Appendix C

### 3.2 Facilities

To determine the overall condition of a facility, the following applicable components and sub-components inspected and given a TERM scale rating:

<b>Substructure</b>	Basement
	Foundation
<b>Shell</b>	Superstructure/Structural Frame
	Roof
	Exterior
	Shell Appurtenances
<b>Interiors</b>	Partitions
	Stairs
	Finishes
	Passenger Areas
<b>Conveyance</b>	Elevators
	Escalators
	Lifts
<b>Plumbing</b>	Fixtures
	Water Supply
	Sanitary Waste
	Rainwater Drainage
<b>HVAC</b>	Energy Supply
	Heating/Cooling generation and distribution
	Testing, balancing, controls, and instrumentation
	Chimneys and vents
<b>Fire Protection</b>	Sprinklers
	Standpipes
	Hydrants and other fire protection specialties
<b>Electrical</b>	Electrical Service & Distribution
	Lighting & Branch wiring (interior/exterior)
	Communications & Security
	Other Electrical systems

<b>Equipment</b>	Equipment related to the function of the facility
	Equipment related to Fare Collection
	Other major equipment related to the function of the facility
<b>Site</b>	Roadways/Driveways
	Parking Lots
	Pedestrian Areas
	Site Development
	Landscaping
	Site Utilities

TDOT assessed each facility by its individual aspects (secondary level assessments) and then calculated those assessments to determine the overall condition of the asset. TDOT decided to assess all the participating agency facilities in the first year of each TAM Plan horizon period, which means that the facilities are not required to be reassessed until 2026, or four years after this Plan has been submitted, but will reevaluate facilities should major events or request for funding.

***As per FTA regulations, any facility conditioned with a TERM rating below a "3" is considered to not be in a State of Good Repair.***

### 3.3 ASSET CONDITION RESULTS

As stated previously, TDOT selected two methods for the condition analysis: 1) using the FTA default ULB benchmarks and 2) using the decision support tool metric that combines age, condition, and mileage (i.e. the “TAM Plan score”).

#### 3.3.1 Rolling Stock

The 1024 rolling stock assets were compared to the default ULBs set by FTA and reported to NTD for each asset class to determine what percentage meet a state of good repair. As Table 13 indicates, 82.71% of the total Group TAM Plan assets are in a state of good repair based on the ULB benchmarks alone. Table 14 breaks down the information by asset type.

Compared to the 2021 reported NTD targets, all asset categories met or were within the established target zones. However, despite making more accurate projections, TDOT considers that the current situation with excess funding and limited vehicle availability will cause an increase in vehicles dropping out of a state of good repair, and has raised most areas by an additional 5% over the 2021 targets to help mitigate these issues.

**Table 13: SGR for Rolling Stock Based on ULB for FTA/NTD Target**

	<b>Met or Exceeds ULB</b>	<b>Below ULB</b>	<b>Total</b>
<b>Number</b>	177	847	1024
<b>Percentage</b>	17.29%	82.71%	100%

**Table 14: SGR for Rolling Stock by Asset Based on ULB for FTA/NTD Target**

Asset Type	Total Number	% Exceeded ULB	% Under ULB
AO	10	37.50%	62.50%
BU	71	8.82%	91.18%
CU	272	3.91%	96.09%
MV	87	27.16%	72.84%
OR	10	0.00%	100.00%
VN	597	22.63%	77.37%

Table 15 shows the percentage of the Group Plan vehicles in each category using the TDOT TAM Plan combined scoring methodology (age/mileage/condition). In this scenario, it was assumed that a rounded condition score of 3.0 and above rating is in state of good repair. As shown, 71.35% of the vehicles are in SGR. Using the TDOT TAM Targets, again almost all asset classes met the established targets, except for vans, which were over by 3%. TDOT considers that the current situation with excess funding and limited vehicle availability will cause an increase in vehicles dropping out of a state of good repair, and has raised all asset class targets by at least an additional 5% and the target for vans by 10% to help mitigate these issues.

**Table 15: TDOT TAM Score for Rolling Stock**

	1.00-1.49	1.50-2.49	2.50-3.49	3.50-4.49	4.50-5.00	Non-SGR	SGR
AO	0	3	2	3	0	37.50%	62.50%
BU	0	10	28	16	14	14.71%	85.29%
CU	3	23	80	83	67	10.16%	89.84%
MV	3	23	34	19	4	31.33%	68.67%
OR	0	0	7	3	0	0.00%	100.00%
VN	64	165	161	146	65	38.10%	61.90%
%	28.65%		71.35%				



See Appendix B for the full list of Conditioned Assets by FTA ULB criteria

See Appendix C for the full list of the ranked Group TAM Plan assets, including all known named replacements by grant.

See Appendix D for individual plan participant ranked assets, agency specific planning data, and statewide planning tools

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## Equipment (Non-Revenue Service Vehicles)

The non-revenue service vehicles were compared to the ULB performance targets set by FTA for each asset class to determine what percentage has exceeded the ULBs. As Table 16 indicates, 75.56% of the total Group Plan non-revenue service vehicle assets are in a state of good repair based on the ULB benchmarks.

As Table 17 indicates, most of the non-revenue assets are still in a state of good repair, but the asset data analyzed for 2022 suggests that while the target for non-revenue automobiles was appropriate, the target for non-revenue trucks needs to be modified, and will be raised by 10% to help mitigate continuing issues such as vehicle chip shortages, contract issues, and changes in oversight/procedures.

**Table 16: SGR Non-Revenue Service Vehicles based on ULB for FTA/NTD Target**

	<b>Met or Exceeds ULB</b>	<b>Below ULB</b>	<b>Total</b>
<b>Number</b>	16	29	45
<b>Percentage</b>	24.44 %	75.56%	100 %

**Table 17: SGR Non-Revenue Service Vehicles by Class for FTA/NTD Target**

<b>Asset Type</b>	<b>Total Number</b>	<b>% Exceeded ULB</b>	<b>% Under ULB</b>
<b>Non-Revenue/Service Automobile</b>	16	6.25%	93.75%
<b>Truck/Other Rubber Tire</b>	29	34.48%	65.52%

Table 16 shows the percentage of the Group Plan non-revenue vehicles in each category using the TDOT TAM Plan combined scoring methodology (age/mileage/condition). As shown, 91.11% of the vehicles are in SGR, and no modifications are being made to non-revenue vehicle TDOT TAM targets for this year.

**Table 18: TDOT TAM SCORE for Non-Revenue Service Vehicles**

	1.00 -1.49	1.50-2.49	2.50-3.49	3.50-4.49	4.50-5.00	Non-SGR	SGR
<b>Non-Revenue/ Service Automobile</b>	0	2	3	4	7	12.50%	87.50%
<b>Truck/ Other Rubber Tire</b>	0	2	15	8	4	6.90%	91.10%
<b>%</b>	<b>8.89%</b>		<b>91.11%</b>				

### 3.3.2 Facilities

The overall ratings for each facility can be found in the Table 17 (all raw scores were rounded up for ratings that are consistent with NTD reporting fields).

**Table 19: Facility TERM Ratings**

<b>Transit Provider</b>	<b>Facility Name/Location</b>	<b>Type</b>	<b>Rating</b>
ETHRA	Loudon Co. Facility	Maintenance	4
GMTS	Main Office	Administrative	4
FTHRA	TMB Garage	Maintenance	3
NWTHRA	Main Office	Admin/Maintenance	3
PFMT	Main Office	Administrative	4
SETHRA	Main Office	Administrative	4
SETHRA	Dunlap Storage	Administrative	4
SETHRA	Bradley Co. Facility	Admin/Maintenance	4
SWHRA	Main Office	Maintenance	3
UCHRA	Garage	Maintenance	4

## Chapter 4: INVESTMENT PRIORITIZATION

### 4.1 Current Funding Level Trends

There are various funding sources that are resources for the replacement of rolling stock, equipment, and facilities. These funding sources and the estimated annual amounts for FYs 2023, 2024, 2025 and 2026 are shown in Tables 20-23.

Transit service providers either complete an application for competitive funding awards or are allocated a set amount from formula-based programs.

**Table 20: Current State Funding Absent from STIP**

Fiscal Year	Project	Projected Funds
<b>2023</b>	Tennessee IMPROVE Funds	<b>\$21,000,000.00</b>
<b>2024</b>	Tennessee IMPROVE Funds	\$21,000,000.00
<b>2025</b>	Tennessee IMPROVE Funds	<b>\$21,000,000.00</b>
<b>2026</b>	Tennessee IMPROVE Funds	\$21,000,000.00

**Table 21: Current STIP Projected Program Funding – Fiscal Year 2023**

Program	Federal	State	Local	Total
<b>5303</b>	\$ 1,363,000.00	\$ 170,500.00	\$ 170,500.00	\$ 1,704,000.00
<b>5304</b>	\$ 3,436,650.00	\$ 859,500.00	\$ -	\$ 4,296,150.00
<b>5310</b>	\$ 21,142,500.00	\$ 2,649,000.00	\$ 2,649,000.00	\$ 26,440,500.00
<b>5311</b>	\$ 87,411,500.00	\$ 43,707,000.00	\$ 43,707,000.00	\$ 174,825,500.00
<b>5311 RTAP</b>	\$ 2,288,700.00	\$ -	\$ -	\$ 2,288,700.00
<b>5311 App</b>	\$ 3,771,400.00	\$ 1,886,000.00	\$ 1,886,000.00	\$ 7,543,400.00
<b>5316</b>	\$ 223,000.00	\$ 112,000.00	\$ 112,000.00	\$ 447,000.00
<b>5317</b>	\$ 1,101,000.00	\$ 551,000.00	\$ 551,000.00	\$ 2,203,000.00
<b>5329</b>	\$ 2,891,000.00	\$ 364,000.00	\$ 364,000.00	\$ 3,619,000.00
<b>5339</b>	\$ 24,225,000.00	\$ 3,031,000.00	\$ 3,031,000.00	\$ 30,287,000.00
<b>5339(b)</b>	\$ 7,055,000.00	\$ 2,731,000.00	\$ 1,088,000.00	\$ 10,874,000.00
<b>HOPE</b>	\$ 270,000.00	\$ 30,000.00	\$ -	\$ 300,000.00
			<b>Total</b>	<b>\$ 264,828,250.00</b>

**Table 22: STIP Projected Program Funding Fiscal Year 2024**

Program	Federal	State	Local	Total
5304	\$ 495,000.00	\$ 123,800.00	\$ -	\$ 618,800.00
5310	\$ 5,699,000.00	\$ 714,000.00	\$ 714,000.00	\$ 7,127,000.00
5311	\$ 26,301,000.00	\$ 13,151,000.00	\$ 13,151,000.00	\$ 52,603,000.00
5311(f)	\$ 4,641,000.00	\$ 2,321,000.00	\$ 2,321,000.00	\$ 9,283,000.00
5311 RTAP	\$ 515,000.00	\$ -	\$ -	\$ 515,000.00
5311 App	\$ 1,700,000.00	\$ 850,000.00	\$ 850,000.00	\$ 3,400,000.00
5329	\$ 737,000.00	\$ 93,000.00	\$ 93,000.00	\$ 923,000.00
5339	\$ 4,410,000.00	\$ 552,000.00	\$ 552,000.00	\$ 5,514,000.00
			<b>Total</b>	<b>\$ 79,983,800.00</b>

**Table 23: STIP Projected Program Funding - Fiscal Year 2025**

Program	Federal	State	Local	Total
5304	\$ 506,000.00	\$ 126,500.00	\$ -	\$ 632,500.00
5310	\$ 6,042,000.00	\$ 756,000.00	\$ 756,000.00	\$ 7,554,000.00
5311	\$ 28,405,000.00	\$ 14,203,000.00	\$ 14,203,000.00	\$ 56,811,000.00
5311(f)	\$ 5,013,000.00	\$ 2,507,000.00	\$ 2,507,000.00	\$ 10,027,000.00
5311 RTAP	\$ 556,000.00	\$ -	\$ -	\$ 556,000.00
5311 App	\$ 1,836,000.00	\$ 918,000.00	\$ 918,000.00	\$ 3,672,000.00
5329	\$ 796,000.00	\$ 100,000.00	\$ 100,000.00	\$ 996,000.00
5339	\$ 4,631,000.00	\$ 579,000.00	\$ 579,000.00	\$ 5,789,000.00
			<b>TOTAL</b>	<b>\$ 86,037,500.00</b>

**Table 24: STIP Projected Program Funding Fiscal Year 2026**

Program	Federal	State	Local	Total
5304	\$ 518,000.00	\$ 129,500.00	\$ -	\$ 647,500.00
5310	\$ 6,406,000.00	\$ 801,000.00	\$ 801,000.00	\$ 8,008,000.00
5311	\$ 30,678,000.00	\$ 15,339,000.00	\$ 15,339,000.00	\$ 61,356,000.00
5311(f)	\$ 5,414,000.00	\$ 2,707,000.00	\$ 2,707,000.00	\$ 10,828,000.00
5311 RTAP	\$ 600,000.00	\$ -	\$ -	\$ 600,000.00
5311 App	\$ 1,983,000.00	\$ 992,000.00	\$ 992,000.00	\$ 3,967,000.00
5329	\$ 860,000.00	\$ 108,000.00	\$ 108,000.00	\$ 1,076,000.00
5339	\$ 4,863,000.00	\$ 608,000.00	\$ 608,000.00	\$ 6,079,000.00
				<b>\$ 92,561,500.00</b>

## 4.2 Planned Future Revisions

As this TAM plan is a living document, there are times that TDOT must make periodic changes to how the information is presented. One such example is to how in this section regarding Tables 20-24 , which show current projected funding levels. As the multimodal division does not have control or the ability to adjust or predict the information beyond the currently available and approved STIP, we are likely going to adjust how this information is presented in the future.

For this section, we will likely adjust to reflect a more simplified view of both the funding sources and the amounts projected for each year. In addition, we will also be adding a generalized timeline to the life cycle from fund availability to award and execution.

Table 25 shows the approximate period that each grant program will be awarded, depending on availability of staff, federal and/or state allocations, and agency responsiveness.

**Table 25: General Grant Schedule**

<b>Program</b>	<b>Award Season</b>
5310	Spring/Summer
5311	Spring
5339	Fall/Winter
5339b ( <i>Discretionary</i> )	<i>As Awarded/Needed</i>
IMPV	Fall/Winter
Other Programs	<i>As Awarded/Needed</i>

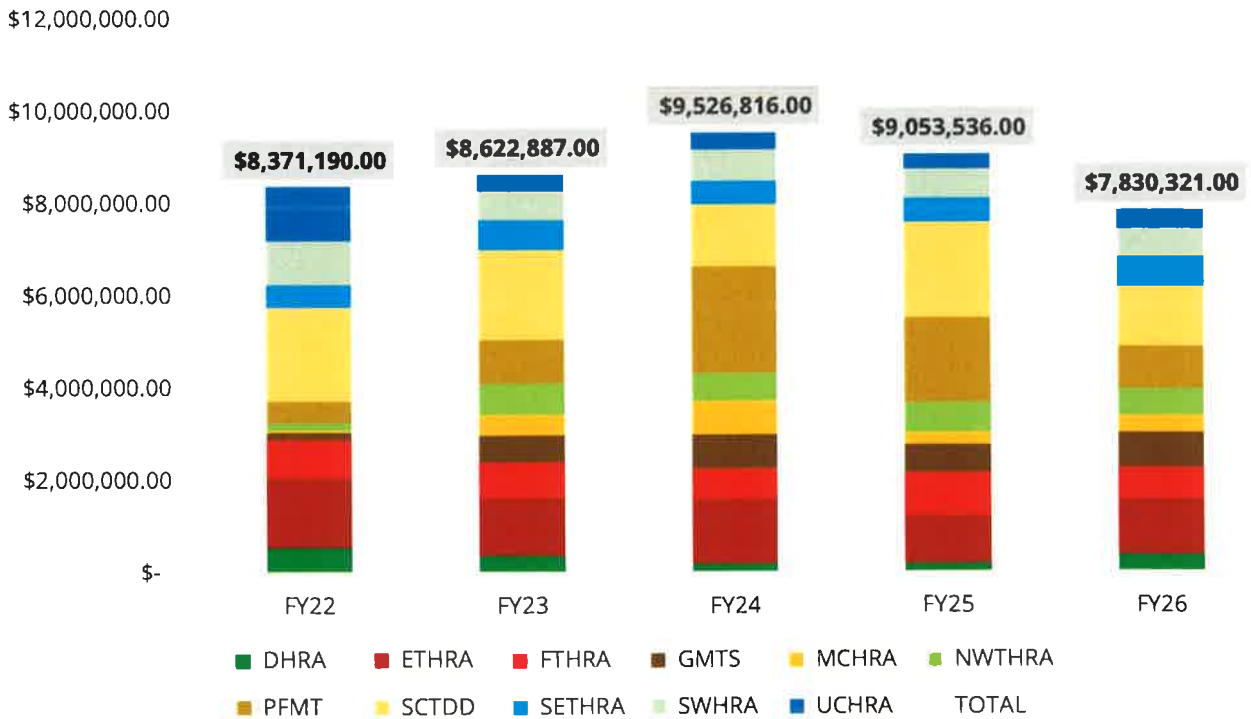
### 4.3 Capital Purchase Forecasting FY2022-2026 (NOT UPDATED IN DRAFT)

As part of TDOT's efforts to help participating agencies get the most benefit out of this group sponsored TAM plan, participants have been asked starting in next year's master TAM Plan update to forecast their capital asset purchases for the next horizon period (2022-2026). To work out some of the details, there was a voluntary submission for this year's 2021 updates. The following was the result of this voluntary submission:

**Table 26: Projected Capital Spending FY 2022-2026**

	FY22	FY23	FY24	FY25	FY26 *
ETHRA	\$ 1,517,512.00	\$ 1,255,872.00	\$ 1,396,750.00	\$ 1,038,474.00	\$ 1,203,544.00
FTHRA	\$ 829,162.00	\$ 776,834.00	\$ 668,168.00	\$ 929,808.00	\$ 688,284.00
GMTS	\$ 154,640.00	\$ 580,903.00	\$ 740,526.00	\$ 614,870.00	\$ 755,850.00
PFMT	\$ 458,942.00	\$ 953,884.00	\$ 2,300,000.00	\$ 1,840,000.00	\$ 930,000.00
SETHRA	\$ 492,256.00	\$ 646,418.00	\$ 511,484.00	\$ 523,280.00	\$ 630,312.00
UCHRA	\$ 1,175,276.00	\$ 354,200.00	\$ 362,220.00	\$ 321,988.00	\$ 398,442.00
MCHRA	\$ 36,220.00	\$ 434,664.00	\$ 724,440.00	\$ 253,554.00	\$ 362,219.00
SCTDD	\$ 2,025,102.00	\$ 1,941,738.00	\$ 1,346,080.00	\$ 2,070,520.00	\$ 1,291,962.00
DHRA	\$ 543,330.00	\$ 362,220.00	\$ 181,110.00	\$ 181,110.00	\$ 362,220.00
NWTHRA	\$ 181,110.00	\$ 688,218.00	\$ 615,774.00	\$ 651,996.00	\$ 579,552.00
SWHRA	\$ 957,640.00	\$ 627,936.00	\$ 680,264.00	\$ 627,936.00	\$ 627,936.00

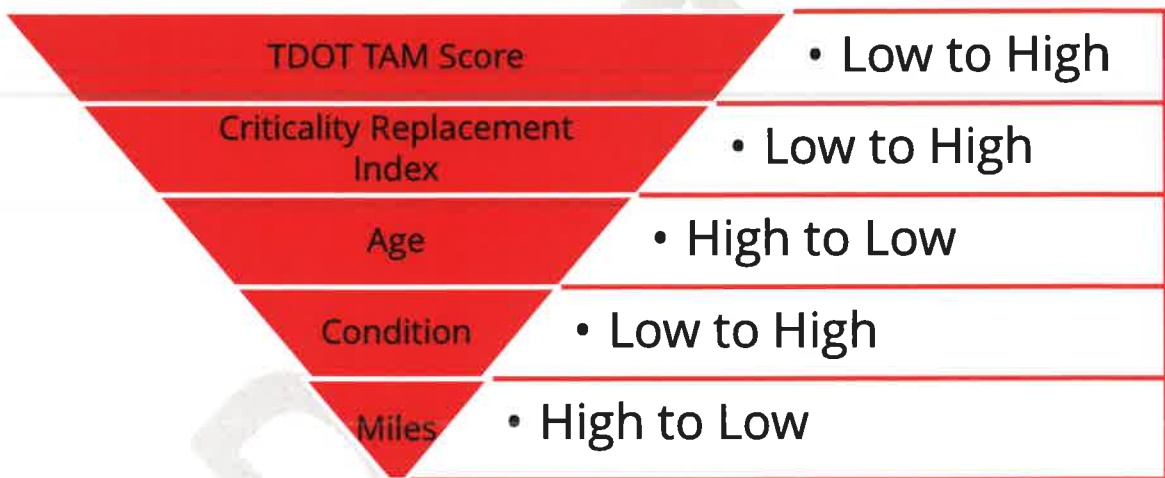
\*MCHRA FY26 data based on average of prior years





#### 4.4 Prioritized List of Investments

TDOT will perform an investment prioritization analysis on an annual basis in order to determine what capital investments are needed to maintain a SGR and meet their performance targets. The Group TAM Plan investment prioritization policy is to replace rolling stock and non-revenue service vehicles starting with the worst ranked vehicles using the TDOT “TAM Plan Score” and Replacement Criticality Scale and continuing until the funding has been expended. In terms of multiple assets having the same TAM score and/or Replacement Index values, the following hierarchy will be used to break the tie:



#### 4.5 Priority Bottom 10% - (Not updated in DRAFT)

The bottom 10% of this year's asset inventory were pulled for an analysis to help determine what agencies and/or types of vehicles should likely be prioritized during the upcoming funding cycles. A high-level summary of the data follows:

- 105 vehicles
  - Automobiles 3
  - Cutaway Buses 7
  - Minivans 9
  - Vans 86
  
- Agencies represented
  - Delta HRA
  - East TN HRA
  - First TN HRA
  - South Central TN Development District
  - Southeast TN HRA
  - Southwest HRA
  - Upper Cumberland HRA
  
- Name Replacements: 49
  - TN2018042 (5310) - 1
  - TN2018044 (5339b) - 3
  - TN2019011 (5339) - 5
  - TN2021011 (5339b) - 40
  
- Average TAM Score: 1.35
  
- Usage
  - Daily 33
  - Weekly 22
  - Monthly 5
  - Occasional/Spare 45
  
- Region Breakdown
  - Region 1 – Knoxville: 5
  - Region 2 – Chattanooga: 23
  - Region 3 – Nashville: 38
  - Region 4 – Jackson: 39

A complete ranked list can be found in Appendix C.

## Chapter 5: National Transit Database (NTD)

As part of the TAM Plan requirements, TDOT will report on an annual basis, starting in FY 2019, a data report and a narrative report to the FTA's National Transit Database (NTD) which contains the following information:

- Inventory of assets
- SGR performance targets for the next fiscal year
- Condition inspection assessments and performance measures of capital assets
- A narrative that provides a description of **any change** in the condition of the transit providers' transit systems or operations from the previous year, and describes the progress made during the reporting year to meet the performance targets set in the previous reporting year.

## Chapter 6: Plan Updates and Conclusions

TDOT will set SGR performance targets for each applicable asset class on an annual basis for each fiscal year. These performance targets will be set and communicated by January 1st of each year. SGR performance targets are based on realistic expectations derived from the most recent available data (ULB/condition/mileage), FTA performance measure criteria, and the financial resources from Section 5339 and 5310 funds that TDOT estimates will be available during the TAM Plan horizon period for capital planning purposes. The Accountable Executive for each transit agency will provide input on setting annual performance targets prior to submission to FTA/NTD.

The TAM Plan will be reviewed on an annual basis. This document covers a horizon period that begins with the completion of the revised TAM Plan on October 1, 2022, and concludes four years later on September 30, 2025.

**Table 27: TAM Plan Update Record**

<b>DATE OF UPDATES</b>	<b>PURPOSE</b>	<b>DETAILS</b>	<b>ACCOUNTABLE EXECUTIVE</b>
September 30, 2022	2022 Revisions	Update plan for new horizon period; all language and references updated	Christopher Broach, TDOT

# Appendices

## A - Complete Asset Inventory

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- *2021 Asset Inventory*

## B – Conditioned Assets

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- *Rolling Stock*
- *Equipment (Non-Revenue Service Vehicles)*
- *Facilities*

## C – TDOT TAM Ranked Assets

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- *Named Replacements by Grant*
- *Complete Statewide Replacement List*
- *Complete TDOT TAM Ranked Asset Inventory – Revenue Vehicles*
- *Complete TDOT TAM Ranked Asset Inventory – Equipment*

## D – Agency Asset Analysis

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- *Statewide*
- *Regional*
- *Individual Agency data with RVI Codes (as of RY2021)*



**Lakeway Area Metropolitan Transportation Planning Organization (LAMTPO)**  
Morristown, TN – Jefferson City, TN – White Pine, TN – Hamblen County, TN – Jefferson County, TN

**RESOLUTION 2021-001**  
**SUPPORTING THE STATE OF TENNESSEE'S PERFORMANCE TARGETS AS**  
**STATED WITHIN THE STATE BIENNIAL PERFORMANCE REPORT FOR**  
**PERFORMANCE PERIOD 2018-2021**

WHEREAS, the Lakeway Area Metropolitan Transportation Planning Organization (LAMTPO) is the organization responsible for planning an efficient transportation system in the Lakeway Region and for the appropriate use of federal transportation funds in that area; and

WHEREAS, in 2012 Congress passed the Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) and Fixing America's Surface Transportation (FAST) Act that mandate the establishment of a performance and outcome based program for transportation decisions; and

WHEREAS, The State of Tennessee submitted the State Biennial Performance Report for Performance Period 2018-2021, 2020 MID PERFORMANCE PERIOD (MPP) PROGRESS REPORT, exported on November 2, 2020 to the Federal Highway Administration (FHWA); and

WHEREAS, a copy of the report is attached to this resolution, which includes a Summary of Performance Measures and Targets is on Page 3 of 43; and

WHEREAS, MPOs have until March 30, 2021 to either adopt TDOT's Targets, or develop/ establish their own targets; and

WHEREAS the TAC and Executive Board has recommended that LAMTPO supports and adopts TDOT's Performance Measure Targets as described in the State Biennial Performance Report for Performance Period 2018-2021, 2020 MID PERFORMANCE PERIOD PROGRESS REPORT, exported on November 2, 2020 to the Federal Highway Administration (FHWA); and

BE IT FURTHER RESOLVED, that the LAMTPO Executive Board hereby approves and supports TDOT's State Biennial Performance Report for Performance Period 2018-2021, 2020 MID PERFORMANCE PERIOD PROGRESS REPORT, exported on November 2, 2020 to the Federal Highway Administration (FHWA).

  
\_\_\_\_\_  
Chair,  
LAMTPO

January 13, 2021

Date

Transportation Performance Management  
State Biennial Performance Report  
for Performance Period 2018-2021

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**2020**

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**MID PERFORMANCE PERIOD  
(MPP) PROGRESS REPORT**

**Tennessee**

Report Due: 10/1/2020  
Report Status: Recommend Acceptance  
Report Updated On:  
Report Exported on 11/2/2020

This document is exported from the Federal Highway Administration's (FHWA)  
web-based Performance Management Form (PMF)  
of the Policy Information Data Portal (PIDP).

The web-based PMF is the State's official report to FHWA.



**State Contact:**

**Name** : Julie Carmean  
**Phone number** : 6157701773  
**Email** : julie.j.carmean@tn.gov

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## Summary of Performance Measures and Targets

Performance Measures	Baseline	2-Year Condition/ Performance	2-Year Target	4-Year Target	4-Year Adjustment
Percentage of Pavements of the Interstate System in Good Condition		71.5%		60.0%	
Percentage of Pavements of the Interstate System in Poor Condition		0.3%		1.0%	
Percentage of Pavements of the Non-Interstate NHS in Good Condition	72.7%	70.6%			
Percentage of Pavements of the Non-Interstate NHS in Good Condition (Full Distress + IRI)		41.6%	42.0%	40.0%	
Percentage of Pavements of the Non-Interstate NHS in Poor Condition	6.7%	7.6%			
Percentage of Pavements of the Non-Interstate NHS in Poor Condition (Full Distress + IRI)		4.0%	4.0%	4.0%	5.0%
Percentage of NHS Bridges Classified as in Good Condition	39.5%	35.1%	36.0%	36.0%	
Percentage of NHS Bridges Classified as in Poor Condition	3.5%	4.1%	6.0%	6.0%	
Percent of the Person-Miles Traveled on the Interstate That Are Reliable	87.7%	88.2%	85.3%	83.0%	
Percent of the Person-Miles Traveled on the Non-Interstate NHS That Are Reliable		89.4%		87.5%	
Truck Travel Time Reliability (TTTR) Index	1.35	1.35	1.35	1.33	1.37
Annual Hours of Peak Hour Excessive Delay Per Capita: Urbanized Area 1		7.5%		18.8%	8.0%
Percent of Non-Single Occupancy Vehicle (Non-SOV) Travel: Urbanized Area 1	16.6%	15.9%	16.5%	16.5%	14.5%
Total Emission Reductions: PM2.5	2.897	7.586	0.120	0.240	7.340
Total Emission Reductions: NOx	363.399	196.176	62.840	125.680	181.679
Total Emission Reductions: VOC	230.025	44.438	30.698	61.396	41.449
Total Emission Reductions: PM10					
Total Emission Reductions: CO	530.282		75.000	150.000	

# Overview

## OVERVIEW SECTION 1

Question No	Description	Field Type
O1	Please provide a discussion on the effectiveness of the investment strategies developed and documented in the State asset management plan for the National Highway System (NHS) required under [23 CFR 490.107(b)(2)(ii)(C)].	TDOT has a long-standing history of commitment to maintaining our infrastructure assets in a state of good repair. To help support that mission, the Department has allocated additional funding for both the pavement and bridge management programs for the 2021 fiscal year. For pavement assets, an additional \$52 million has been added to our annual resurfacing program to fund preservation and rehabilitation projects which will improve the overall condition of our pavements. For bridge assets, an additional \$10 million has been allocated, to be split between maintenance and preservation activities. The results of these increased investments will not be immediately reflected in TDOT's condition data; however, it is anticipated that we should see improved results in the next reporting cycle as a result of these additional investments. TDOT will reevaluate our goals annually and adjust our 2-year and 4-year targets for pavement and bridge assets accordingly.
O2	Please use this space to provide any general comments that may assist FHWA in its review of your submission. You can use this space to provide greater context for your targets and current condition/performance, provide additional background detail or clarification, note any assumptions, or discuss complications. This text may be shared verbatim online. (Optional)	

## OVERVIEW SECTION 2

Question No	Description	Field Type
O3	Who should FHWA contact with questions?	Julie Carmean
O4	What is the phone number for this contact?	6157701773
O5	<i>Please provide 10-digit number (area code and phone number) without formatting. (e.g., 1234567890)</i> What is the email address for this contact?	julie.j.carmean@tn.gov

# Pavement

## Pavement Performance Overview

Question No	Description	Field Type
P1	Please use this space to provide any general comments that may assist FHWA in its review of this part of the submission. You can use this space to provide greater context for your targets and current condition, provide additional background detail or clarification, note any assumptions, or discuss complications. This text may be shared verbatim online. (Optional)	<p>The Tennessee Department of Transportation began work in spring 2020 to evaluate current performance of Pavement Condition Measure targets for the measures identified in 23 CFR 490 Subpart C. The targets represent anticipated performance outcomes for the full extent of the Interstate and non-Interstate NHS regardless of ownership. Target development methodology included building models to predict specific pavement conditions, conducting network analyses based on either funding inputs or draft performance targets, and reviewing analysis output to assess feasibility/probability of targets with current funding. Target consideration included baseline data and trend analysis as well as an assessment of internal and external influencing factors.</p> <p>To set condition targets for both Interstate and Non-Interstate NHS pavements, TDOT used the "full measure" as defined in 23 CFR 490.313(c) which includes IRI, cracking, faulting, and rutting. TDOT is committed to reporting IRI, cracking, and faulting/rutting in the HPMS system moving forward.</p> <p>For more information regarding TDOT's Pavement targets, please contact Mark Woods at <a href="mailto:Mark.Woods@tn.gov">Mark.Woods@tn.gov</a> or at (615) 532-3622.</p>

## Statewide Performance Target for the Percentage of Pavements on the Interstate System in Good Condition

Question No	Description	Field Type
P2	<p>The 2-year statewide percentage of pavements on the Interstate System in Good condition. This value is the actual 2-year condition derived from the latest data collected through the midpoint of the performance period. [23 CFR 490.107(b)(2)(ii)(A)]</p> <p><i>For the 2018-2021 Performance Period, this 2-year condition value will be used as the baseline value for this measure per the phase-in of new requirements for this measure. [23 CFR 490.105(e)(7)(iii)]</i></p>	71.5
P3	The 4-year target for the statewide percentage of pavements on the Interstate System in Good condition for the 2018-2021 Performance Period that was reported in the 2018	60.0

Baseline Performance Period Report. [23 CFR 490.107(b)(1)(ii)(A)]

**P4** Does the State DOT wish to adjust the 4-year target for the statewide percentage of pavements on the Interstate System in Good condition? [23 CFR 490.105(e)(6)] No

**P4a** Please provide the adjusted 4-year target for the statewide percentage of pavements on the Interstate System in Good condition. The adjusted target should reflect expected condition by the end of Calendar Year 2021. This adjustment is only permitted in the MPP Progress Report. [23 CFR 490.105(e)(6) and 23 CFR 490.107(b)(2)(ii)(E)]

*The adjusted target must be reported to the nearest tenth of a percent. For example, enter 86.5% as 86.5. [23 CFR 490.101 (Target definition) and 23 CFR 490.313(f)(2)]*

**P4b** Please provide the basis for adjustment of the 4-year target for the statewide percentage of pavements on the Interstate System in Good condition and describe how the adjusted target supports expectations documented in longer range plans, such as the State asset management plan and the long-range statewide transportation plan. [23 CFR 490.107(b)(2)(ii)(E)]

**Statewide Performance Target for the Percentage of Pavements on the Interstate System in Poor Condition**

Question No	Description	Field Type
P5	The 2-year statewide percentage of pavements on the Interstate System in Poor condition. This value is the actual 2-year condition derived from the latest data collected through the midpoint of the performance period. [23 CFR 490.107(b)(2)(ii)(A)]	0.3
	<i>For the 2018-2021 Performance Period, this 2-year condition value will be used as the baseline value for this measure per the phase-in of new requirements for this measure. [23 CFR 490.105(e)(7)(iii)]</i>	
P6	The 4-year target for the statewide percentage of pavements on the Interstate System in Poor condition for the 2018-2021 Performance Period that was reported in the 2018 Baseline Performance Period Report. [23 CFR 490.107(b)(1)(ii)(A)]	1.0
P7	Does the State DOT wish to adjust the 4-year target for the statewide percentage of pavements on the Interstate System in Poor condition? [23 CFR 490.105(e)(6)]	No
P7a	Please provide the adjusted 4-year target for the statewide percentage of pavements on the Interstate System in Poor condition. The adjusted target should reflect expected condition by the end of Calendar Year 2021. This adjustment is only permitted in the MPP Progress Report. [23 CFR 490.105(e)(6) and 23 CFR 490.107(b)(2)(ii)(E)]	
	<i>This adjusted target must be reported to the nearest tenth of</i>	

**P7b** *a percent. For example, enter 86.5% as 86.5 [23 CFR 490.101 (Target definition) and 23 CFR 490.313(f)(3)]*  
 Please provide the basis for adjustment of the 4-year target for the statewide percentage of pavements on the Interstate System in Poor condition and describe how the adjusted target supports expectations documented in longer range plans, such as the State asset management plan and the long-range statewide transportation plan. [23 CFR 490.107(b)(2)(ii)(E)]

**Statewide Performance Target for the Percentage of Pavements on the Non-Interstate NHS in Good Condition.**

<b>Question No</b>	<b>Description</b>	<b>Field Type</b>
<b>P8</b>	The baseline statewide percentage of pavements on the Non-Interstate NHS in Good condition. This value is from the 2018 Baseline Performance Period Report, and is the condition derived from the latest data collected through the beginning date of the performance period. [23 CFR 490.107(b)(1)(ii)(B)]	72.7
<b>P9</b>	<i>For the first performance period, FHWA calculated this value using IRI only (or PSR values for road sections where speed is less than 40 mph). [23 CFR 490.313(e)]</i> The 2-year statewide percentage of pavements on the Non-Interstate NHS in Good condition. This value is the actual 2-year condition derived from the latest data collected through the midpoint of the performance period. [23 CFR 490.107(b)(2)(ii)(A)]	70.6
<b>P10</b>	<i>For the first performance period, FHWA calculated this value using IRI only (or PSR values for road sections where speed is less than 40 mph). [23 CFR 490.313(e)]</i> If the State DOT reported its 2-year target for the statewide percentage of pavements on the Non-Interstate NHS in Good condition based on "Full Distress + IRI" data in the 2018 Baseline Performance Period Report, FHWA has calculated an actual condition level using "Full Distress + IRI" data. [23 CFR 490.313 (c) and (d)]	41.6
<b>P11</b>	<i>When a State DOT reported the 2-year target based on "Full Distress + IRI" data, FHWA will use this value to determine whether the actual condition level is equal to or better than the established 2-year target as part of the 2-year significant progress determination. [23 CFR 490.109(e)(2)(ii)]</i> The 2-year target for the statewide percentage of pavements on the Non-Interstate NHS in Good condition for the 2018-2021 Performance Period that was reported in the 2018 Baseline Performance Period Report. [23 CFR 490.107(b)(1)(ii)(A)]	42.0
<b>P12</b>	Please provide a discussion of the progress made toward achieving the 2-year target for the statewide percentage of pavements on the Non-Interstate NHS in Good condition. At a minimum, this discussion should address overall progress as of the midpoint of the performance period, and shall include a comparison of the actual 2-year condition with the 2-year target and any reasons for differences in the actual and target values. [23 CFR 490.107(b)(2)(ii)(B)]	The 2-year target of 41.6 was not met by a margin of 0.4%. The baseline value per the "full measure" was 44.8%, indicating a 2-year decline of 3.2%. Local state-of-good-repair metrics indicate a slow decline in the condition of the non-interstate NHS. It is expected

*For State DOTs that established a 2-year target using IRI only, the baseline value (P8), actual condition calculated with IRI only (P9), and the 2-year target (P11) all use the same metrics and can be compared to each other.*

that the end-of-cycle 4-year calculation will be very close to the 4-year target value.

*State DOTs that established a 2-year target using "Full Distress + IRI" will see an actual condition value in both P9 and P10. These values must be used correctly in order to provide a meaningful discussion of progress. [23 CFR 490.107(b)(2)(ii)(B)]*

*-The actual condition calculated with IRI only (P9) is ONLY comparable to the baseline value calculated with IRI only (P8).*

*-The actual condition calculated with "Full Distress + IRI" (P10) is ONLY comparable to the State DOT's 2-year target established based on "Full distress + IRI" (P11).*

**P13**

The 4-year target for the statewide percentage of pavements on the Non-Interstate NHS in Good condition for the 2018-2021 Performance Period that was reported in the 2018 Baseline Performance Period Report. [23 CFR 490.107(b)(1)(ii)(A)]

40.0

**P14**

Does the State DOT wish to adjust the 4-year target for the statewide percentage of pavements on the Non-Interstate NHS in Good condition? [23 CFR 490.105(e)(6)]

No

**P14a**

Please provide the adjusted 4-year target for the statewide percentage of pavements on the Non-Interstate NHS in Good condition. The adjusted target should reflect expected condition by the end of Calendar Year 2021. This adjustment is only permitted in the MPP Progress Report. [23 CFR 490.105(e)(6) and 23 CFR 490.107(b)(2)(ii)(E)]

**P14b**

*This adjusted target must be reported to the nearest tenth of a percent. For example, enter 86.5% as 86.5. [23 CFR 490.101 (Target definition) and 23 CFR 490.313(f)(4)]*

Please provide the basis for adjustment of the 4-year target for the statewide percentage of pavements on the Non-Interstate NHS in Good condition and describe how the adjusted target supports expectations documented in longer range plans, such as the State asset management plan and the long-range statewide transportation plan. [23 CFR 490.107(b)(2)(ii)(E)]

**P15**

Please provide a summary of prior accomplishments and planned activities that will be conducted during the remainder of the performance period to make significant progress toward achievement of the 4-year target for the statewide percentage of pavements on the Non-Interstate NHS in Good condition. [23 CFR 490.107(b)(2)(ii)(F)]

In late 2020, funding for the state route resurfacing program was increased from \$164-million to \$195-million. These added funds will affect the 2021 resurfacing year but are expected to not affect reported condition data until the 2022 data collection period. Thus, benefits from the increase may not be visible until the next performance cycle. Increased use of pavement management data in

support of project selection is expected to improve efficiency in meeting targets, but as this program evolves we expect it will take a few more years before positive results are observed.  
No

**P16** Are there any extenuating circumstance(s) beyond the State DOT's control that prevented it from making significant progress toward achieving its 2-year target for the statewide percentage of pavements on the Non-Interstate NHS in Good condition? [23 CFR 490.107(b)(2)(ii)(G)]

**P16a** Please select the extenuating circumstance(s) that apply. [23 CFR 490.109(e)(5)]

**P16b** Please explain the extenuating circumstance(s) beyond the State DOT's control that prevented it from making significant progress toward achieving its 2-year target for the statewide percentage of pavements on the Non-Interstate NHS in Good condition and quantify the impacts that resulted from these circumstances. [23 CFR 490.107(b)(2)(ii)(G)]

**Statewide Performance Target for the Percentage of Pavements on the Non-Interstate NHS in Poor Condition.**

<b>Question No</b>	<b>Description</b>	<b>Field Type</b>
<b>P17</b>	The baseline statewide percentage of pavements on the Non-Interstate NHS in Poor condition. This value is from the 2018 Baseline Performance Period Report, and is the condition derived from the latest data collected through the beginning date of the performance period. [23 CFR 490.107(b)(1)(ii)(B)]	6.7
	<i>For the first performance period, FHWA calculated this value using IRI only (or PSR values for road sections where speed is less than 40 mph). [23 CFR 490.313(e)]</i>	
<b>P18</b>	The 2-year statewide percentage of pavements on the Non-Interstate NHS in Poor condition. This value is the actual 2-year condition derived from the latest data collected through the midpoint of the performance period. [23 CFR 490.107(b)(2)(ii)(A)]	7.6
	<i>For the first performance period, FHWA calculated this value using IRI only (or PSR values for road sections where speed is less than 40 mph). [23 CFR 490.313(e)]</i>	
<b>P19</b>	If the State DOT reported its 2-year target for the statewide percentage of pavements on the Non-Interstate NHS in Poor condition based on "Full Distress + IRI" data in the 2018 Baseline Performance Period Report, FHWA has calculated an actual condition level using "Full Distress + IRI" data. [23 CFR 490.313 (c) and (d)]	4.0
	<i>When a State DOT reported the 2-year target based on "Full Distress + IRI" data, FHWA will use this value to determine whether the actual condition level is equal to or better than the established 2-year target as part of the 2-year significant progress determination. [23 CFR 490.109(e)(2)(ii)]</i>	
<b>P20</b>	The 2-year target for the statewide percentage of pavements	4.0



on the Non-Interstate NHS in Poor condition for the 2018-2021 Performance Period that was reported in the 2018 Baseline Performance Period Report. [23 CFR 490.107(b)(1)(ii)(A)]

**P21** Please provide a discussion of the progress made toward achieving the 2-year target for the statewide percentage of pavements on the Non-Interstate NHS in Poor condition. At a minimum, this discussion should address overall progress as of the midpoint of the performance period, and shall include a comparison of the actual 2-year condition with the 2-year target and any reasons for differences in the actual and target values. [23 CFR 490.107(b)(2)(ii)(B)]

The 2017 baseline data calculated by TDOT for the "full measure" was 3.24%. TDOT estimates the percentage of Poor routes will continue to increase at a similar rate of 0.4% per year for the remainder of the performance cycle.

*For State DOTs that established a 2-year target using IRI only, the baseline value (P8), actual condition calculated with IRI only (P9), and the 2-year target (P11) all use the same metrics and can be compared to each other.*

*State DOTs that established a 2-year target using "Full Distress + IRI" will see an actual condition value in both P9 and P10. These values must be used correctly in order to provide a meaningful discussion of progress. [23 CFR 490.107(b)(2)(ii)(B)]*

*-The actual condition calculated with IRI only (P9) is ONLY comparable to the baseline value calculated with IRI only (P8).*

*-The actual condition calculated with "Full Distress + IRI" (P10) is ONLY comparable to the State DOT's 2-year target established based on "Full distress + IRI" (P11).*

**P22** The 4-year target for the statewide percentage of pavements on the Non-Interstate NHS in Poor condition for the 2018-2021 Performance Period that was reported in the 2018 Baseline Performance Period Report. [23 CFR 490.107(b)(1)(ii)(A)]

4.0

**P23** Does the State DOT wish to adjust the 4-year target for the statewide percentage of pavements on the Non-Interstate NHS in Poor condition? [23 CFR 490.105(e)(6)]

Yes

**P23a** Please provide the adjusted 4-year target for the statewide percentage of pavements on the Non-Interstate NHS in Poor condition. The adjusted target should reflect expected condition by the end of Calendar Year 2021. This adjustment is only permitted in the MPP Progress Report. [23 CFR 490.105(e)(6) and 23 CFR 490.107(b)(2)(ii)(E)]

5.0

*This adjusted target must be reported to the nearest tenth of a percent. For example, enter 86.5% as 86.5 [23 CFR 490.101 (Target definition) and 23 CFR 490.313(f)(5)]*

**P23b** Please provide the basis for adjustment of the 4-year target for the statewide percentage of pavements on the Non-Interstate NHS in Poor condition and describe how the adjusted target supports expectations documented in longer range plans, such as the State asset management plan and the long-range statewide transportation plan. [23 CFR 490.107(b)(2)(ii)(E)]

TDOT is already at the target level for poor routes at the mid-point of the performance cycle. We are also observing an increase in poor routes and expect the percentage of Poor routes will continue to increase at a similar rate of 0.4%

**P24**

Please provide a summary of prior accomplishments and planned activities that will be conducted during the remainder of the performance period to make significant progress toward achievement of the 4-year target for the statewide percentage of pavements on the Non-Interstate NHS in Poor condition. [23 CFR 490.107(b)(2)(ii)(F)]

per year for the remainder of the performance cycle. Use of pavement management data in support of project selection is expected to improve efficiency in meeting targets, but as this program evolves we expect it will take a few more years before positive results are observed. In late 2020, funding for the state route resurfacing program was increased from \$164-million to \$195-million. These added funds will affect the 2021 resurfacing year but are expected to not affect reported condition data until the 2022 data collection, 2023 reporting. Thus, benefits from the increase may not be visible until the next performance cycle. Additionally, use of pavement management data in support of project selection is expected to improve efficiency in meeting targets, but as this program evolves we expect it will take a few more years before positive results are observed.

**P25**

Are there any extenuating circumstance(s) beyond the State DOT's control that prevented it from making significant progress toward achieving its 2-year target for the statewide percentage of pavements on the Non-Interstate NHS in Poor condition for the 2018-2021 Performance Period? [23 CFR 490.107(b)(2)(ii)(G)]

No

**P25a**

Please select the extenuating circumstance(s) that apply. [23 CFR 490.109(e)(5)]

**P25b**

Please explain the extenuating circumstance(s) beyond the State DOT's control that prevented it from making significant progress toward achieving its 2-year target for the statewide percentage of pavements on the Non-Interstate NHS in Poor condition and quantify the impacts that resulted from these circumstances. [23 CFR 490.107(b)(2)(ii)(G)]

# Bridge

## Bridge Performance Overview

Question No	Description	Field Type
B1	<p>Please use this space to provide any general comments that may assist FHWA in its review of this part of the submission. You can use this space to provide greater context for your targets and current condition, provide additional background detail or clarification, note any assumptions, or discuss complications. This text may be shared verbatim online. (Optional)</p>	<p>The Tennessee Department of Transportation (TDOT) began work in spring 2020 to evaluate current performance of Bridge Condition targets for the measures identified in 23 CFR 490 Subpart D. The targets represent anticipated performance outcomes for all bridges (state, federal, and local) carrying the NHS within the state, and bridges carrying the NHS that cross a State border regardless of ownership.</p> <p>Two key steps of TDOT's target setting process are to analyze baseline and current performance and trends and identify and assess influencing factors. Current actions being taken to help maintain bridge targets include utilizing design practices to deter deterioration, utilizing preservation efforts to extend good condition ratings, and additional projects related to the 2017 Improving Manufacturing, Public Roads, and Opportunities for a Vibrant Economy (IMPROVE) Act coming online. As data was reviewed and targets were discussed, consideration was also given to the following final rule requirements - 1.) overall bridge rating is determined by lowest rated component and 2.) minimum condition threshold requirement for percent of total deck area of bridges classified as structurally deficient must be less than or equal to 10.0%.</p> <p>For more information regarding TDOT's bridge targets, please contact Ted Kniazewycz at Ted.Kniazewycz@tn.gov or at (615) 313-3775.</p>

## Statewide Performance Target for Bridges on the NHS Classified as in Good Condition

Question No	Description	Field Type
B2	<p>The baseline statewide percentage of deck area of bridges on the NHS classified as in Good condition.</p>	39.5
	<p><i>This value is from the 2018 Baseline Performance Period Report, and is the condition derived from the latest data collected through the beginning date of the performance</i></p>	

B3	<p><i>period. [23 CFR 490.107(b)(1)(ii)(B)]</i></p> <p>The 2-year statewide percentage of deck area of bridges on the NHS classified as in Good condition.</p>	35.1
B4	<p><i>This value is the actual 2-year condition derived from the latest data collected through the midpoint of the performance period. [23 CFR 490.107(b)(2)(ii)(A)]</i></p> <p>The 2-year target for the statewide percentage of deck area of bridges on the NHS classified as in Good condition for the 2018-2021 Performance Period that was reported in the 2018 Baseline Performance Period Report. [23 CFR 490.107(b)(1)(ii)(A)]</p>	36.0
B5	<p>Please provide a discussion of the progress made toward achieving the 2-year target for the statewide percentage of deck area of bridges on the NHS classified as in Good condition.</p> <p><i>At a minimum, this discussion should address overall progress as of the midpoint of the performance period, and shall include a comparison of the actual 2-year condition achieved (based on data contained within the National Bridge Inventory as of June 15, 2020, and made available by FHWA) with the 2-year target and any reasons for differences in the actual and target values. [23 CFR 490.107(b)(2)(ii)(B)]</i></p>	<p>TDOT missed the "good" mid-year target by 0.9% based on our initial goal. We understand the average age and number of bridges in our inventory will lead to a decline in the network overall condition. Our efforts to address this include the development of asset preservation projects designed to extend the current condition of various bridge elements. TDOT has instituted various deck preservation initiatives including epoxy deck seals, concrete overlays, and polymer concrete overlays to mitigate the damaging effects of chloride penetration into the bridge decks and beam ends. Results of these efforts should be reflected in the next reporting cycle as many of these bridges will have new inspection data uploaded.</p>
B6	<p>The 4-year target for the statewide percentage of deck area of bridges on the NHS classified as in Good condition for the 2018-2021 Performance Period that was reported in the 2018 Baseline Performance Period Report. [23 CFR 490.107(b)(1)(ii)(A)]</p>	36.0
B7	<p>Does the State DOT wish to adjust the 4-year target for the statewide percentage of deck area of bridges on the NHS classified as in Good condition? [23 CFR 490.105(e)(6)]</p>	No
B7a	<p>Please provide the adjusted 4-year target for the statewide percentage of deck area of bridges on the NHS classified as in Good condition.</p> <p><i>The adjusted target should reflect expected condition by the end of Calendar Year 2021. This adjustment is only permitted in the MPP Progress Report. [23 CFR 490.105(e)(6) and 23 CFR 490.107(b)(2)(ii)(E)]</i></p>	
B7b	<p><i>This adjusted target must be reported to the nearest tenth of a percent. For example, enter 86.5% as 86.5 [23 CFR 490.101 (Target definition) and 23 CFR 490.409(c)(1)]</i></p> <p>Please provide the basis for adjustment of the 4-year target for the statewide percentage of deck area of bridges on the</p>	

NHS classified as in Good condition and describe how the adjusted target supports expectations documented in longer range plans, such as the State asset management plan and the long-range statewide transportation plan. [23 CFR 490.107(b)(2)(ii)(E)]

- B8** Please provide a summary of prior accomplishments and planned activities that will be conducted during the remainder of the performance period to make significant progress toward achievement of the 4-year target for the statewide percentage of deck area of bridges on the NHS classified as in Good condition. [23 CFR 490.107(b)(2)(ii)(F)]
- TDOT has increased funding for preservation efforts. The impacts of this funding increase should be reflected in the next reporting cycle, as TDOT has instituted various deck preservation initiatives to mitigate the damaging effects of chloride penetration into the bridge decks and beam ends.
- B9** Are there any extenuating circumstance(s) beyond the State DOT's control that prevented it from making significant progress toward achieving its 2-year target for the statewide percentage of deck area of bridges on the NHS classified as in Good condition for the 2018-2021 Performance Period? [23 CFR 490.107(b)(2)(ii)(G)]
- No
- B9a** Please select the extenuating circumstance(s) that apply. [23 CFR 490.109(e)(5)]
- B9b** Please explain the extenuating circumstance(s) beyond the State DOT's control that prevented it from making significant progress toward achieving its 2-year target for the statewide percentage of deck area of bridges on the NHS classified as in Good condition and quantify the impacts that resulted from these circumstances. [23 CFR 490.107(b)(2)(ii)(G)]

**Statewide Performance Target for Bridges on the NHS Classified as in Poor Condition**

Question No	Description	Field Type
B10	The baseline statewide percentage of deck area of bridges on the NHS classified as in Poor condition.  <i>This value is from the 2018 Baseline Performance Period Report, and is the condition derived from the latest data collected through the beginning date of the performance period. [23 CFR 490.107(b)(1)(ii)(B)]</i>	3.5
B11	The 2-year statewide percentage of deck area of bridges on the NHS classified as in Poor condition.  <i>This value is the actual 2-year condition derived from the latest data collected through the midpoint of the performance period. [23 CFR 490.107(b)(2)(ii)(A)]</i>	4.1
B12	The 2-year target for the statewide percentage of deck area of bridges on the NHS classified as in Poor condition for the 2018-2021 Performance Period that was reported in the 2018 Baseline Performance Period Report. [23 CFR 490.107(b)(1)(ii)(A)]	6.0
B13	Please provide a discussion of the progress made toward	TDOT maintained better results

	<p>achieving the 2-year target for the statewide percentage of deck area of bridges on the NHS classified as in Poor condition.</p> <p><i>At a minimum, this discussion should address overall progress as of the midpoint of the performance period, and shall include a comparison of the actual 2-year condition achieved (based on data contained within the National Bridge Inventory as of June 15, 2020, and made available by FHWA) with the 2-year target and any reasons for differences in the actual and target values. [23 CFR 490.107(b)(2)(ii)(B)]</i></p>	<p>than our submitted goal. With a target goal of 6% and an actual result of 4.1%, we understand that one or two large structures shifting into the poor category would be enough to shift the results above our target goal.</p> <p>We elect to hold this target until the next reporting cycle.</p>
<b>B14</b>	<p>The 4-year target for the statewide percentage of deck area of bridges on the NHS classified as in Poor condition for the 2018-2021 Performance Period that was reported in the 2018 Baseline Performance Period Report. [23 CFR 490.107(b)(1)(ii)(A)]</p>	6.0
<b>B15</b>	<p>Does the State DOT wish to adjust the 4-year target for the statewide percentage of deck area of bridges on the NHS classified as in Poor condition? [23 CFR 490.105(e)(6)]</p>	No
<b>B15a</b>	<p>Please provide the adjusted 4-year target for the statewide percentage of deck area of bridges on the NHS classified as in Poor condition.</p> <p><i>The adjusted target should reflect expected condition by the end of Calendar Year 2021. This adjustment is only permitted in the MPP Progress Report. [23 CFR 490.105(e)(6) and 23 CFR 490.107(b)(2)(ii)(E)]</i></p>	
<b>B15b</b>	<p><i>This adjusted target must be reported to the nearest tenth of a percent. For example, enter 86.5% as 86.5 [23 CFR 490.101 (Target definition) and 23 CFR 490.409(c)(2)]</i></p> <p>Please provide the basis for adjustment of the 4-year target for the statewide percentage of deck area of bridges on the NHS classified as in Poor condition and describe how the adjusted target supports expectations documented in longer range plans, such as the State asset management plan and the long-range statewide transportation plan. [23 CFR 490.107(b)(2)(ii)(E)]</p>	
<b>B16</b>	<p>Please provide a summary of prior accomplishments and planned activities that will be conducted during the remainder of the performance period to make significant progress toward achievement of the 4-year target for the statewide percentage of deck area of bridges on the NHS classified as in Poor condition. [23 CFR 490.107(b)(2)(ii)(F)]</p>	<p>As previously mentioned, TDOT has funded a new preservation program to help address the good bridge inventory. Many of these projects are under development and will be delivered and reflected in the next reporting cycle.</p> <p>The Improve Act passed in 2017 is based on addressing poor rated bridges on and off the NHS system. As these projects come online, we will be able to assess the impact on our overall bridge inventory and reevaluate out bridge targets for the next cycle.</p>
<b>B17</b>	<p>Are there any extenuating circumstance(s) beyond the State</p>	No

DOT's control that prevented it from making significant progress toward achieving its 2-year target for the statewide percentage of deck area of bridges on the NHS classified as in Poor condition for the 2018-2021 Performance Period? [23 CFR 490.107(b)(2)(ii)(G)]

**B17a** Please select the extenuating circumstance(s) that apply. [23 CFR 490.109(e)(5)]

**B17b** Please explain the extenuating circumstance(s) beyond the State DOT's control that prevented it from making significant progress toward achieving its 2-year target for the statewide percentage of deck area of bridges on the NHS classified as in Poor condition and quantify the impacts that resulted from these circumstances. [23 CFR 490.107(b)(2)(ii)(G)]

# Reliability

## Travel Time Reliability Performance Overview

Question No	Description	Field Type
R1	Please use this space to provide any general comments that may assist FHWA in its review of this part of the submission. You can use this space to provide greater context for your targets and current performance, provide additional background detail or clarification, note any assumptions, or discuss complications. This text may be shared verbatim online. (Optional)	<p>23 CFR Part 490.101 defines travel time reliability as "the consistency or dependability of travel times from day to day or across different times of the day." It is important to note that this measure is not indicative of how congested a road segment may be. Furthermore, these targets are based on the totality of Interstate and Non-interstate National Highway System roads for the state of Tennessee, regardless of whether those roadways are in urban or rural areas of the state.</p> <p>Time and attention were given to review of rule requirements regarding data sources and calculation methods by the System Performance Measure Working Group as they worked through the process to set targets. This working group included members from TDOT, FHWA-TN Division, Memphis MPO, Knoxville TPO, and Chattanooga-Hamilton County/North Georgia TPO.</p> <p>Additional coordination efforts were done individually by each of the MPOs by engaging and updating their leadership on the ongoing efforts related to target setting.</p> <p>For more information regarding TDOT's reliability targets, please contact Michelle Nickerson at Michelle.Nickerson@tn.gov or at (615) 741-0894.</p>

## Statewide Performance Target for the Percent of the Person-Miles Traveled on the Interstate That Are Reliable

Question No	Description	Field Type
R2	The baseline statewide percent of the person-miles traveled on the Interstate that are reliable.	87.7
	<i>This value is from the 2018 Baseline Performance Period Report, and is the condition derived from the latest data collected through the beginning date of the performance period. [23 CFR 490.107(b)(1)(ii)(B)]</i>	
R3	The 2-year statewide percent of the person-miles traveled on the Interstate that are reliable.	88.2
	<i>This value is the actual 2-year condition derived from the</i>	



R4	<p><i>latest data collected through the midpoint of the performance period. [23 CFR 490.107(b)(2)(ii)(A)]</i></p> <p>The 2-year target for the statewide percent of the person-miles traveled on the Interstate that are reliable for the 2018-2021 Performance Period that was reported in the 2018 Baseline Performance Period Report. [23 CFR 490.107(b)(1)(ii)(A)]</p>	85.3
R5	<p>Please provide a discussion of the progress made toward achieving the 2-year target for the statewide percent of the person-miles traveled on the Interstate that are reliable.</p> <p><i>At a minimum, this discussion should address overall progress as of the midpoint of the performance period, and shall include a comparison of the actual 2-year performance with the 2-year target and any reasons for differences in the actual and target values. [23 CFR 490.107(b)(2)(ii)(B)]</i></p>	<p>The statewide percent of person-miles traveled on Tennessee's interstates that are reliable as of December 31, 2019 is 88.2%. TDOT's Interstate Travel Time Reliability increased by 0.5% between January 1, 2018 and December 31, 2019. This outperforms the 2-Year target established in 2018 by 2.9% and suggests that TN will make significant progress towards achieving the 4-year target. Initial targets were set using limited data sets from the NPRMDS to calculate a trend line for the 2019 projected value. The lack of available data at the time caused TDOT to set conservative targets to mitigate potential variability in travel time reliability. This conservative target setting approach likely accounts for some of the difference between the actual and 2-year target values. Other factors that could contribute to the difference include fluctuations in raw data from INRIX including link changes and improved responses to nonrecurring congestion.</p> <p>83.0</p>
R6	<p>The 4-year target for the statewide percent of the person-miles traveled on the Interstate that are reliable for the 2018-2021 Performance Period that was reported in the 2018 Baseline Performance Period Report. [23 CFR 490.107(b)(1)(ii)(A)]</p>	83.0
R7	<p>Does the State DOT wish to adjust the 4-year target for the statewide percent of the person-miles traveled on the Interstate that are reliable? [23 CFR 490.105(e)(6)]</p>	No
R7a	<p>Please provide the adjusted 4-year target for the statewide percent of the person-miles traveled on the Interstate that are reliable.</p> <p><i>The adjusted target should reflect expected condition by the end of Calendar Year 2021. This adjustment is only permitted in the MPP Progress Report. [23 CFR 490.105(e)(6) and 23 CFR 490.107(b)(2)(ii)(E)]</i></p> <p><i>This adjusted target must be reported to the nearest tenth of</i></p>	

**R7b** *a percent. For example, enter 86.5% as 86.5 [23 CFR 490.101 (Target definition) and 23 CFR 490.513(b)]*  
Please provide the basis for adjustment of the 4-year target for the statewide percent of the person-miles traveled on the Interstate that are reliable and describe how the adjusted target supports expectations documented in longer range plans, such as the State asset management plan and the long-range statewide transportation plan. [23 CFR 490.107(b)(2)(ii)(E)]

**R8** Please provide a summary of prior accomplishments and planned activities that will be conducted during the remainder of the performance period to make significant progress toward achievement of the 4-year target for the statewide percent of the person-miles traveled on the Interstate that are reliable. [23 CFR 490.107(b)(2)(ii)(F)]

TDOT is expanding the Transportation Systems Management and Operations (TSMO) concept which will lead to better operations of our highways. The Traffic Operations Division is letting projects that specifically address reliability such as the I-24 Smart Corridor project. This project takes a comprehensive approach to managing the existing infrastructure and improving travel time reliability by integrating freeway and arterial roadway elements to provide drivers with accurate, real-time information to actively manage traffic. Additionally, the central software for the Traffic Management Centers is being updated which will lead to improved management activities. TDOT activities include evaluating expanding service patrols to the rural areas to help address incident management and decrease clearance time. The Traffic Operations Division is updating the TSMO Program Plan which will identify other potential projects to address reliability and performance measures in general. This plan update is focused on the major goals of the department to reduce congestion and improve reliability. Projects in this plan will not affect data during the current performance cycle.

**R9** Are there any extenuating circumstance(s) beyond the State DOT's control that prevented it from making significant progress toward achieving its 2-year target for the statewide percent of the person-miles traveled on the Interstate that are reliable for the 2018-2021 Performance Period. [23 CFR 490.107(b)(2)(ii)(G)]

No

**R9a** Please select the extenuating circumstance(s) that apply. [23 CFR 490.109(e)(5)]

**R9b** Please explain the extenuating circumstance(s) beyond the State DOT's control that prevented it from making significant

progress toward achieving its 2-year target for the statewide percent of the person-miles traveled on the Interstate that are reliable and quantify the impacts that resulted from these circumstances. [23 CFR 490.107(b)(2)(ii)(G)]

**Statewide Performance Target for the Percent of the Person-Miles Traveled on the Non-Interstate NHS That Are Reliable**

Question No	Description	Field Type
R10	<p>The 2-year statewide percent of the person-miles traveled on the non-Interstate NHS that are reliable.</p> <p><i>This value is the actual 2-year performance derived from the latest data collected through the midpoint of the performance period. [23 CFR 490.107(b)(2)(ii)(A)]</i></p>	89.4
R11	<p><i>For the 2018-2021 Performance Period, this 2-year performance value will be used as the baseline value for this measure per the phase-in of new requirements for this measure. [23 CFR 490.105(e)(7)(iii)]</i></p> <p>The 4-year target for the statewide percent of the person-miles traveled on the non-Interstate NHS that are reliable for the 2018-2021 Performance Period that was reported in the 2018 Baseline Performance Period Report. [23 CFR 490.107(b)(1)(ii)(A)]</p>	87.5
R12	Does the State DOT wish to adjust the 4-year target for the statewide percent of the person-miles traveled on the non-Interstate NHS that are reliable? [23 CFR 490.105(e)(6)]	No
R12a	<p>Please provide the adjusted 4-year target for the statewide percent of the person-miles traveled on the non-Interstate NHS that are reliable.</p> <p><i>The adjusted target should reflect expected performance by the end of the Calendar Year 2021. This adjustment is only permitted in the MPP Progress Report. [23 CFR 490.105(e)(6) and 23 CFR 490.107(b)(2)(ii)(E)]</i></p>	
R12b	<p><i>This adjusted target must be reported to the nearest tenth of a percent. For example, enter 86.5% as 86.5 [23 CFR 490.101 (Target definition) and 23 CFR 490.513(c)]</i></p> <p>Please provide the basis for adjustment of the 4-year target for the statewide percent of the person-miles traveled on the non-Interstate NHS that are reliable and describe how the adjusted target supports expectations documented in longer range plans, such as the State asset management plan and the long-range statewide transportation plan. [23 CFR 490.107(b)(2)(ii)(E)]</p>	

# Freight

## Freight Reliability (Movement) Performance Overview

Question No	Description	Field Type
F1	<p>Please use this space to provide any general comments that may assist FHWA in its review of this part of the submission. You can use this space to provide greater context for your targets and current performance, provide additional background detail or clarification, note any assumptions, or discuss complications. This text may be shared verbatim online. (Optional)</p>	<p>23 CFR Part 490.101 defines travel time reliability as "the consistency or dependability of travel times from day to day or across different times of the day." It is important to note that this measure is not indicative of how congested a road segment may be. Furthermore, these targets are based on the totality of the Interstate and Non-interstate National Highway System roads for the State of Tennessee, regardless of whether those roadways are in urban or rural areas of the state.</p> <p>Time and attention were given to review of rule requirements regarding data sources and calculation methods by the System Performance Measure Working Group as they worked through the process to set targets. This working group included members from TDOT, FHWA-TN Division, Memphis MPO, Knoxville TPO, and Chattanooga-Hamilton County/North Georgia TPO.</p> <p>Additional coordination efforts were done individually by each of the MPOs by engaging and updating their leadership on the ongoing efforts related to target setting.</p> <p>TDOT's Statewide Freight Plan is included as an attachment. The Bottleneck Analysis begins on page 88 and concludes on page 95. The accompanying list of potential freight bottleneck locations is on page 94 of this document. Appendix 1 (pages 237-239) lists the FAST Act State Freight Plan Requirements and Location Where Addressed if additional information is needed.</p> <p>For more information regarding TDOT's freight reliability targets, please contact Michelle Nickerson at <a href="mailto:Michelle.Nickerson@tn.gov">Michelle.Nickerson@tn.gov</a> or at (615) 741-0894.</p>
F2	<p>Please discuss progress of the State DOT's efforts in addressing congestion at truck freight bottlenecks within the State (described in § 490.107(b)(1)(ii)(E)) through</p>	<p>TDOT updated and amended the Tennessee Statewide Multimodal Freight Plan in 2019. The freight</p>

comprehensive freight improvement efforts of State Freight Plan or MPO freight plans; the Statewide Transportation Improvement Program and Transportation Improvement Program; regional or corridor level efforts; other related planning efforts; and operational and capital activities targeted to improve freight movement on the Interstate System.

*If the State has prepared a State Freight Plan under 49 U.S.C. 70202, within the previous 2 years, then it may serve as the basis for addressing congestion at truck freight bottlenecks. If the State Freight Plan has not been updated since the previous State Biennial Performance Report, then an updated analysis of congestion at truck freight bottlenecks must be completed. [23 CFR 490.107(b)(2)(ii)(D)]*

*Please upload related document(s) in the "Attachment" tab.*

plan details TDOT's commitment to achieving the policy goals of the National Highway Freight Program and includes both policy and capital investment recommendations as well as a project list developed in coordination with MPOs, RPOs, and other long-range transportation plans and studies.

In addition to the freight plan, TDOT has undertaken other efforts to improve freight movements. A draft bottleneck analysis was completed in 2019 and in 2020, TDOT freight planning staff met with FHWA to discuss federal efforts to determine freight bottleneck locations. TDOT freight planning staff continues to coordinate freight advisory committee meetings and have identified all projects in the 3-year workplan that are located on the National Highway Freight Network to better track freight improvement projects.

#### Statewide Performance Target for the Truck Travel Time Reliability (TTTR) Index

Question No	Description	Field Type
F3	The baseline statewide Truck Travel Time Reliability Index.  <i>This value is from the 2018 Baseline Performance Period Report and is the performance derived from the latest data collected through the beginning date of the performance period. [23 CFR 490.107(b)(1)(ii)(B)]</i>	1.35
F4	The 2-year statewide Truck Travel Time Reliability Index.  <i>This value is the actual 2-year condition derived from the latest data collected through the midpoint of the performance period. [23 CFR 490.107(b)(2)(ii)(A)]</i>	1.35
F5	The 2-year target for the statewide Truck Travel Time Reliability Index for the 2018-2021 Performance Period that was reported in the 2018 Baseline Performance Period Report. [23 CFR 490.107(b)(1)(ii)(A)]	1.35
F6	Please provide a discussion of the progress made toward achieving the 2-year target for the statewide Truck Travel Time Reliability Index.  <i>At a minimum, this discussion should address overall progress as of the midpoint of the performance period, and shall include a comparison of the actual 2-year performance with the 2-year target and any reasons for differences in the actual and target values. [23 CFR 490.107(b)(2)(ii)(B)]</i>	The statewide Truck Travel Time Reliability Index as of Calendar Year 2019 is 1.35. This is consistent with both the baseline and 2-Year target established in 2018.
F7	The 4-year target for the statewide Truck Travel Time Reliability Index for the 2018-2021 Performance Period that was reported in the 2018 Baseline Performance Period Report. [23 CFR 490.107(b)(1)(ii)(A)]	1.33

F8	Does the State DOT wish to adjust the 4-year target for the statewide Truck Travel Time Reliability Index? [23 CFR 490.105(e)(6)]	Yes
F8a	Please provide the adjusted 4-year target for the statewide Truck Travel Time Reliability Index.	1.37
	<i>The adjusted target should reflect expected performance by the end of Calendar Year 2021. This adjustment is only permitted in the Mid Performance Period Progress Report. [23 CFR 490.107(b)(2)(ii)(E)]</i>	
	<i>This adjusted target must be reported to the nearest hundredth. For example, enter 2.54. [23 CFR 490.101 (Target definition) and 23 CFR 490.613(b)]</i>	
F8b	Please provide the basis for adjustment of the 4-year target for the statewide Truck Travel Time Reliability Index and describe how the adjusted target supports expectations documented in longer range plans, such as the State asset management plan and the long-range statewide transportation plan. [23 CFR 490.107(b)(2)(ii)(E)]	<p>Initial 2 and 4-year targets were based on a trend line using the data available at the time. With 2 additional years of data to evaluate during the mid-performance cycle, it was noted that the fluctuation in the TTTR value is very slight. However, the System Performance Measures Working Group decided to adjust the 4 year target in order to ensure TDOT is able to make significant progress while setting an attainable target. This target is equal to the highest value for the last 3 years (2017-2019).</p> <p>TDOT's 25-Year Long-Range Transportation Plan, is a policy plan that was adopted in 2016. The 25-Year Plan contains eight policy papers that cover a range of topics from demographics and employment changes and trends to travel trends and system performance. Each paper offers a set of policy recommendations influenced by peer state comparisons, TDOT's strategic and operational goals, the Department's Guiding Principles, and more than 20,000 community inputs gathered through public and stakeholder outreach. Important to this measure is policy paper Freight Logistics and Planning which supports the efficient movement of people and goods. TDOT is committed to provide a reliable transportation system to further this goal. As such, the adjusted target is consistent with the 25-Year Long-Range Transportation Plan and the Department's use of current and readily available data.</p>

- F9** Please provide a summary of prior accomplishments and planned activities that will be conducted during the remainder of the performance period to make significant progress toward achievement of the 4-year target for the statewide Truck Travel Time Reliability Index. [23 CFR 490.107(b)(2)(ii)(F)]
- Several recently completed projects will improve reliability of freight operations. Those projects include widening of I-440 in Nashville and I-40 widening in Jackson. Additionally, there are approximately 15 railroad grant projects underway. The availability of rail freight reduces the need for trucking freight, which reduces capacity needs. Future projects include the I-24 Smart Corridor Project as well as the ITS expansion projects on I-40 near Nashville. These projects will help improve reliability for freight and other vehicles through TSMO solutions.
- F10** Are there any extenuating circumstance(s) beyond the State DOT's control that prevented it from making significant progress toward achieving its 2-year target for the statewide Truck Travel Time Reliability Index for the 2018-2021 Performance Period? [23 CFR 490.107(b)(2)(ii)(G)]
- No
- F10a** Please select the extenuating circumstance(s) that apply. [23 CFR 490.109(e)(5)]
- F10b** Please explain the extenuating circumstance(s) beyond the State DOT's control that prevented it from making significant progress toward achieving its 2-year target for the statewide Truck Travel Time Reliability Index and quantify the impacts that resulted from these circumstances. [23 CFR 490.107(b)(2)(ii)(G)]

## Peak Hour Excess Delay (PHED)

### Annual Hours of Peak Hour Excessive Delay (PHED) Per Capita Performance Overview

Question No	Description	Field Type
D1	Please use this space to provide any general comments that may assist FHWA in its review of this part of the submission. You can use this space to provide greater context for your targets and current performance, provide additional background detail or clarification, note any assumptions, or discuss complications. This text may be shared verbatim online. (Optional)	<p>A Tri-State working group was formed with representatives from TDOT, Mississippi DOT, Arkansas DOT, Memphis MPO (MMPO), West Memphis MPO (WMMPO), and FHWA representatives from the TN, AR, and MS division offices and the University of Tennessee-Knoxville (UTK) to set initial targets. With the exception of UTK, this same working group was utilized to discuss and assess current performance and factors influencing the state DOTs' ability to meet the previously identified targets. TDOT continued to serve as the lead agency for data analysis and the Memphis MPO provided coordination and facilitated these discussions.</p> <p>Time and attention were given to review of the rule requirements regarding data sources and calculation methods by the Tri-State Working Group while evaluating the current PHED performance and discussing target adjustments. Additional coordination efforts were completed individually by each of the State DOTs and MPOs by engaging and updating their leadership on the ongoing efforts related to this target decision.</p> <p>Once the targets were established for the Tri-State area, both the MMPO and WMMPO took the targets for approval through their respective Technical Committees and Policy Boards. Once approved, the MMPO reported the targets to TDOT and MDOT, whereas the WMMPO reported its targets to ARDOT. The three State DOTs then reported the targets to their respective FHWA Division Offices prior to the October 1, 2020 deadline. A similar coordination effort occurred between the 3 State DOTs and the 2 MPOs in order to compile this report.</p> <p>It is important to note that this measure and the associated targets only apply to the Memphis</p>



Urbanized area. Identified targets, therefore, are not statewide targets.

For more information regarding TDOT's PHED target, please contact Michelle Nickerson at Michelle.Nickerson@tn.gov or at (615) 741-0894.

**D2** The total number of applicable UZA(s) required to establish targets and report progress for the Traffic Congestion Measures in your State are:

1

**Urbanized Area Target #1 - Annual Hours of Peak Hour Excessive Delay Per Capita**

<b>Question No</b>	<b>Description</b>	<b>Field Type</b>
<b>D3</b>	Urbanized Area:	Memphis, TN--MS--AR
<b>D4</b>	The 2-year annual hours of peak hour excessive delay per capita in this UZA. This value is the actual 2-year performance derived from the latest data collected through the midpoint of the performance period. [23 CFR 490.107(b)(2)(ii)(A)]  <i>For the 2018-2021 Performance Period, this 2-year performance value will be used as the baseline value for this measure for this UZA per the phase-in of new requirements. [23 CFR 490.105(e)(8)(vi)(C) and 23 CFR 490.105(f)(5)(vi)(B)]</i>	7.5
<b>D5</b>	The 4-year target for the annual hours of peak hour excessive delay per capita in this UZA for the 2018-2021 Performance Period that was reported in the 2018 Baseline Performance Report. [23 CFR 490.107(b)(1)(ii)(A)] and [23 CFR 490.107(c)(3)(ii)(A)]	18.8
<b>D6</b>	Does the State DOT wish to adjust the 4-year target for the annual hours of peak hour excessive delay per capita in this UZA? [23 CFR 490.105(e)(6)]	Yes
<b>D6a</b>	Please provide the adjusted 4-year target for the annual hours of peak hour excessive delay per capita in this UZA.  <i>Any adjustments made to 4-year targets established for this measure must be agreed upon and made collectively by all relevant State DOTs and MPOs. [23 CFR 490.105(e)(6)]</i>  <i>The adjusted target should reflect expected performance by the end of Calendar Year 2021. This adjustment is only permitted in the Mid Performance Period Progress Report. [23 CFR 490.107(b)(2)(ii)(E) and 23 CFR 490.105(f)(8)]</i>  <i>This adjusted target must be reported to the nearest tenth. For example, enter 7.1. [23 CFR 490.101 (Target definition) and 23 CFR 490.713(b)]</i>	8.0
<b>D6b</b>	Please provide the basis for adjustment of the 4-year target for the annual hours of peak hour excessive delay per capita in this UZA and describe how the adjusted target	The National Performance Management Research Data Set (NPMRDS), as identified in 23 CFR

supports expectations documented in longer range plans, such as the State asset management plan and the long-range statewide transportation plan. [23 CFR 490.107(b)(2)(ii)(E)]

490.709, was used to establish the PHED target for the Memphis Urbanized Area. An Average Vehicle Occupancy (AVO) factor of 1.7, as provided by FHWA, was used for all vehicles with a mode breakdown of 1.7 for cars, 1.0 for trucks, and 7.2 for buses. There were no permanent changes to speed limits in the Tennessee portion of the Memphis Urbanized Area during this time. MDOT provided updated posted speed limit data for the Mississippi portion of the Memphis Urbanized Area to INRIX in 2019 which have been uploaded into their system.

All interested parties (MDOT, TDOT, ARDOT, Memphis MPO, and West Memphis MPO) agreed to take a conservative approach in selecting a target. With the passage of the IMPROVE Act in Tennessee in 2017 and the ensuing legislation to complete 962 projects across the state, there remains a level of uncertainty in regard to the impacts of these projects on PHED – either negatively (delays due to active construction) or positively (completion of projects related to congestion).

With 2 additional years of data to evaluate and updated links from INRIX, the PHED target was reassessed. It was determined that our initial data skewed high with the initial 4-year target being set at 18.8 hours and our midpoint performance at 6.7 hours. Once we evaluated the data, stakeholders determined that we were too conservative in our target. The Tri-State working group reviewed projections based on linear, exponential, and logarithmic trend analysis. Projections using INRIX data, yielded lower values than 2018 performance (8.0 hours). Projection values included linear (7.0 hrs.), exponential (7.0 hrs.), and logarithmic (7.3 hrs.).

The Tri-State working group reviewed the analysis as well as future projects that could potentially be under construction in 2021 and did not feel that the trends would exceed the peak hour

excessive delay using the INRIX data from 2018, which was 8.0 hours. Additionally, this allowed for a 1.0 hour buffer from the linear and exponential projections for 2021. Consensus of the members of the working group was to update the 4-year target for PHED to 8.0 hours.

TDOT's 25-Year Long-Range Transportation Plan, is a policy plan that was adopted in 2016. The 25-Year Plan contains eight policy papers that cover a range of topics from demographics and employment changes and trends to travel trends and system performance. Each paper offers a set of policy recommendations influenced by peer state comparisons, TDOT's strategic and operational goals, the Department's Guiding Principles, and more than 20,000 community inputs gathered through public and stakeholder outreach. Important to this measure is policy paper Travel Trends & System Performance which supports adoption of performance measures specific to monitoring congestion as well as programs for congestion reduction investments. As a data-driven organization, TDOT is committed to continuous process improvement, innovation, and the utilization of up-to-date and readily available data. As such, the adjusted target is consistent with the 25-Year Long-Range Transportation Plan and the Department's use of current and readily available data.

## Percent of Non-SOV Travel

### Percent of Non-Single Occupancy Vehicle (Non-SOV) Travel Performance Overview

Question No	Description	Field Type
T1	Please use this space to provide any general comments that may assist FHWA in its review of this part of the submission. You can use this space to provide greater context for your targets and current performance, provide additional background detail or clarification, note any assumptions, or discuss complications. This text may be shared verbatim online. (Optional)	<p>A Tri-State working group was formed with representatives from TDOT, Mississippi DOT, Arkansas DOT, Memphis MPO (MMPO), West Memphis MPO (WMMPO), FHWA representatives from the TN, AR, and MS division offices and the University of Tennessee-Knoxville (UTK) to set initial targets. With the exception of UTK, this same working group was utilized to discuss and assess current performance and factors influencing the state DOTs' ability to meet the previously identified targets. TDOT continued to serve as the lead agency for data analysis and the Memphis MPO provided coordination and facilitated these discussions.</p> <p>Time and attention were given to review of the rule requirements regarding data sources and calculation methods by the Tri-State Working Group while evaluating the current Non-Single Occupancy Vehicle (Non-SOV) performance and discussing target adjustments. Additional coordination efforts were completed individually by each of the State DOTs and MPOs by engaging and updating their leadership on the ongoing efforts related to this target decision.</p> <p>Once the targets were established for the Tri-State area, both the MMPO and WMMPO took the targets for approval through their respective Technical Committees and Policy Boards. Once approved, the MMPO reported the targets to TDOT and MDOT, whereas the WMMPO reported its targets to ARDOT. The three State DOTs then reported the targets to their respective FHWA Division Offices prior to the October 1, 2020 deadline. A similar coordination effort occurred between the 3 State DOTs and the 2 MPOs in order to compile this report.</p> <p>It is important to note that this</p>

measure and the associated target only apply to the Memphis Urbanized area. The identified target, therefore, is not a statewide target.

For more information regarding TDOT's Non-SOV target, please contact Michelle Nickerson at Michelle.Nickerson@tn.gov or at (615) 741-0894.

**T2** The total number of applicable UZA(s) required to establish targets and report progress for the Traffic Congestion Measures in your State are:

1

**Urbanized Area Target #1 - Percent of Non-Single Occupancy Vehicle (Non-SOV) Travel**

Question No	Description	Field Type
<b>T3</b>	Urbanized Area:	Memphis, TN--MS--AR
<b>T4</b>	The baseline percent of Non-SOV travel.  <i>This value is from the 2018 Baseline Performance Period Report and is the performance derived from the latest data collected through the beginning date of the performance period. [23 CFR 490.107(b)(1)(ii)(B)]</i>	16.6
<b>T5</b>	The 2-year percent of Non-SOV travel.  <i>This value is the actual 2-year performance. [23 CFR 490.107(b)(2)(ii)(A) and [23 CFR 490.107(c)(3)(iii)(A)]</i>  <i>Since the baseline performance submitted in the 2018 Baseline Performance Period Report was based on Method A, the 2-year performance value is based on Method A – American Community Survey (ACS). [23 CFR 490.709 (f)(2) and (3)]</i>	15.9
<b>T6</b>	The 2-year target for the percent of Non-SOV travel for the 2018-2021 Performance Period that was reported in the 2018 Baseline Performance Period Report. [23 CFR 490.107(b)(1)(ii)(A)]	16.5
<b>T7</b>	Please provide a discussion of the progress made toward achieving the 2-year target for the percent of Non-SOV travel.  <i>At a minimum, this discussion should address overall progress as of the midpoint of the performance period, and shall include a comparison of the actual 2-year performance with the 2-year target and any reasons for differences in the actual and target values. [23 CFR 490.107(b)(2)(ii)(B)]</i>	The target was missed by a value of 0.6%. When setting the initial target there was some uncertainties in the cause of an increase in one year (2016) of the ACS data, when the trend was showing a steady decrease from 2012-2015 and most recently in 2017 and 2018. While a conservative approach was taken, the target was still missed by just over half a percent. One contributing factor could be regional development patterns, which are geared toward low density development. While a shift

		is occurring within some of the city's downtown areas, the shift is gradual. Additionally, the transit route from Memphis, TN to West Memphis, AR was eliminated recently, which could have impacted the achievement of the target. Finally, per Shelby County Rideshare reports, a reduction has been seen in the number of trips annually over past several years. All of these could be contributing factors leading to the difference between the actual performance and the 2-year target.
T8	The 4-year target for the percent of Non-SOV travel established for the 2018-2021 Performance Period that was reported in the 2018 Baseline Performance Period Report. [23 CFR 490.107(b)(1)(ii)(A)]	16.5
T9	Does the State DOT wish to adjust the 4-year target for the percent of Non-SOV travel? [23 CFR 490.105(e)(6)]	Yes
T9a	Please provide the adjusted 4-year target for the percent of Non-SOV travel.  <i>Any adjustments made to 4-year targets established for this measure must be agreed upon and made collectively by all relevant State DOTs and MPOs. [23 CFR 490.105(e)(6)]</i>  <i>The adjusted target should reflect expected performance by the end of Calendar Year 2021. This adjustment is only permitted in the Mid Performance Period Progress Report. [23 CFR 490.105(f)(8) and 23 CFR 490.107(b)(2)(ii)(E)]</i>	14.5
T9b	Please provide the basis for adjustment of the 4-year target for the percent of Non-SOV travel and describe how the adjusted target supports expectations documented in longer range plans, such as the State asset management plan and the long-range statewide transportation plan. [23 CFR 490.107(b)(2)(ii)(E)]	The American Community Survey (ACS), as identified in 23 CFR 490.709, was used to establish the adjusted Non-Single Occupancy Vehicle (Non-SOV) target for the Memphis MPO area. The ACS data source was the agreed upon data source by the collaborative effort involving the ARDOT, MDOT, TDOT, Memphis MPO, and West Memphis MPO. Historical data of the 5-year estimates of the "Commuting to Work" section during the period of 2012 to 2018 were analyzed and linear, exponential, and logarithmic projections were conducted to understand current performance and future trends. Review of the survey results from 2012-2018 revealed a steady decline from 17.7% to 15.9%. All analyzed

trends also showed decreasing projections between 15.8% (logarithmic), 15.5% (exponential) and 15.4% (linear.)

The Tri-State working group reviewed the analysis and discussed other factors that could impact the 2021 target including the impacts the COVID-19 pandemic may have on the 2020 survey results. Target discussions were taking place shortly after Tennessee and many other states had issued stay at home orders. During this time, there was much uncertainty about the full impacts of the COVID-19 pandemic on the number of commuters and their transportation decisions. It was noted that those traveling to work were primarily essential employees and may be less likely to have the opportunity to carpool. Further, CDC guidelines for social distancing may limit capacity of buses for those considering transit. Because these factors may cause the future percentage to be lower than projections, the group decided on a conservative approach to adjusting this target. Consensus of the members of the working group was to update the 4-year target for Percent of Non-SOV to 14.5%.

TDOT's 25-Year Long-Range Transportation Plan, is a policy plan that was adopted in 2016. The 25-Year Plan contains eight policy papers that cover a range of topics from demographics and employment changes and trends to travel trends and system performance. Each paper offers a set of policy recommendations influenced by peer state comparisons, TDOT's strategic and operational goals, the Department's Guiding Principles, and more than 20,000 community inputs gathered through public and stakeholder outreach. Important to this measure are policy papers Travel Trends & System Performance and Mobility which support adoption of performance measures specific to monitoring congestion, a call for establishing programs for congestion reduction investments, and greater emphasis and support for public transit, travel

demand management, and non-motorized modes. As a data-driven organization, TDOT is committed to continuous process improvement, innovation, and the utilization of up-to-date and readily available data. As such, the adjusted target is consistent with the 25-Year Long-Range Transportation Plan and the Department's use of current and readily available data.



# Emissions

## Emissions Reduction Performance Overview

Question No	Description	Field Type
E1	Please use this space to provide any general comments that may assist FHWA in its review of this part of the submission. You can use this space to provide greater context for your targets and current performance, provide additional background detail or clarification, note any assumptions, or discuss complications. This text may be shared verbatim online. (Optional)	The applicable areas for the On Road Mobile Source Emissions performance measure in Tennessee are the Memphis urban area and the Knoxville urban area. However, identified targets are statewide targets.
		All data for this measure comes from the CMAQ Public Access System. Time and attention were given to review of rule requirements regarding data sources and calculation methods by the System Performance Measure Working Group as they worked through the process to set targets. This working group included members from TDOT, FHWA- TN Division, Memphis MPO, and the Knoxville TPO. Additional coordination efforts were done individually by each of the MPOs by engaging and updating their leadership on the ongoing efforts related to target setting.
		For more information regarding TDOT's Emission Reduction targets, please contact Michelle Nickerson at Michelle.Nickerson@tn.gov or at (615) 741-0894.
E2	Does the State include any areas designated as nonattainment or maintenance for PM2.5?	Yes
	<i>Note: Based on the response to E2, the State is required to provide a statewide target for annual emissions reductions for PM2.5.</i>	
E3	If the State includes any areas designated as nonattainment or maintenance for PM2.5, are NOx and/or VOC a significant contributor to PM2.5 emissions anywhere in the State?	Yes - NOx ONLY
E4	Does the State include any areas designated as nonattainment or maintenance for PM10?	No
	<i>Note: Based on the response to E4, the State is not required to establish a statewide target for annual emissions reductions for PM10.</i>	
E5	If the State includes any areas designated as nonattainment or maintenance for PM10, are NOx and/or VOC a significant contributor to PM10 emissions anywhere in the State?	

E6	Does the State include any areas designated as nonattainment or maintenance for CO?	No
	<i>Note: Based on the response to E6, the State is not required to establish a statewide target for annual emissions reductions for CO.</i>	
E7	Does the State include any areas designated as nonattainment or maintenance for ozone?	Yes
	<i>Note: Based on the response to E7, the State is required to provide statewide targets for annual emissions reductions for NOx and VOC.</i>	
E8	The number of MPOs within your State that are required to submit a CMAQ Performance Plan to the State DOT are:[23 CFR 490.107(b)(1)(ii)(G)]	1
E9.1	MPO required to submit a CMAQ Performance Plan to the State DOT:	Memphis Urban Area MPO
E10.1	Did you upload the plan to the PMF on the "attachment" tab?	Yes
E10.1a	Please explain why the plan was not uploaded to the PMF.	

**Statewide Total Emission Reductions PM2.5 Target #1**

Question No	Description	Field Type
E11	The baseline emissions reductions (total daily kilograms) of PM2.5.  <i>This value is from the 2018 Baseline Performance Period Report and is the performance derived from the latest data collected through the cumulative statewide estimated emissions reductions (total daily kilograms) for the previous 4 Federal Fiscal Years before the start of the performance period. [23 CFR 490.107(b)(1)(ii)(B)]</i>	2.897
E12	<i>This value is carried over from the 2018 Baseline Performance Period Report.</i> Please provide the current estimated emissions reductions (total daily kilograms) of PM2.5. [23 CFR 490.107(b)(2)(ii)(A) and 23 CFR 490.107(c)(3)(iii)(B)]  <i>The current data for the performance period must include the cumulative reductions in emissions (total daily kilograms) over the Federal Fiscal Years 2018 and 2019.</i>  <i>The data needed to calculate the measure shall come from the CMAQ Public Access System. [23 CFR 490.809(a) and 23 CFR 490(b)(2).</i>  <i>The data must be reported to the nearest one thousandths. For example, enter 86.512. [23 CFR 490.101 (Target definition) and 23 CFR 490.811(b)]</i>	7.586

E13	<p><i>FHWA provided the prepopulated data from the CMAQ Public Access System. If the DOT feels that a different value is appropriate due to an error, please contact the FHWA Division Office in your State.</i></p> <p>The 2-year target for cumulative emissions reduction (total daily kilograms) of PM2.5 for the 2018-2021 Performance Period that was reported in the 2018 Baseline Performance Period Report. [23 CFR 490.107(b)(1)(ii)(A) and 23 CFR 490.107(c)(3)(ii)(B)]</p>	0.120
E14	<p>Please provide a discussion of the progress made toward achieving the 2-year target for cumulative emissions reduction (total daily kilograms) of PM2.5.</p> <p><i>At a minimum, this discussion should address overall progress as of the midpoint of the performance period, and shall include a comparison of the actual 2-year performance with the 2-year target and any reasons for differences in the actual and target values. [23 CFR 490.107(b)(2)(ii)(B)]</i></p>	<p>TDOT PM2.5 emissions reduction totals for only projects in non-attainment and maintenance areas was calculated to be 7.586 kg per day. Using this information, TDOT appears to have exceeded the 2-year target of 0.120 kg/day by 7.466 kg/day. At the time the 2-year target was set, no trend was able to be identified for this measure. Values appeared to be random and based on projects selected each year. The System Performance Measures Working Group did not have a way to reliably predict future values and the determination was made to set a conservative target based on the lowest value over the 4-year baseline period.</p>
E15	<p>The 4-year target for cumulative emissions reduction (total daily kilograms) of PM2.5 established for the 2018-2021 Performance Period that was reported in the 2018 Baseline Performance Period Report. [23 CFR 490.107(b)(1)(ii)(A) and 23 CFR 490.107(c)(3)(ii)(B)]</p>	0.240
E16	<p>Does the State DOT wish to adjust the 4-year target for cumulative emissions reduction (total daily kilograms) of PM2.5? [23 CFR 490.105(e)(6)]</p>	Yes
E16a	<p>Please provide the adjusted 4-year target for cumulative emissions reduction (total daily kilograms) of PM2.5. The adjusted target should reflect expected performance by the end of Federal Fiscal Year 2021. This adjustment is only permitted in the MPP Progress Report. [23 CFR 490.105(e)(6) and 23 CFR 490.107(b)(2)(ii)(E)]</p>	7.340
E16b	<p><i>This adjusted target must be reported to nearest one thousandths. For example, enter 86.512. [23 CFR 490.101 (Target definition) and 23 CFR 490.811(b)]</i></p> <p>Please provide the basis for adjustments of the 4-year target for cumulative emissions reduction (total daily kilograms) of PM2.5 established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(2)(ii)(E) and 23 CFR 490.107(c)(3)(ii)(B)]</p>	<p>After reviewing the CMAQ funded projects in the applicable areas, the working group found the original target to be too conservative. The working group selected the cumulative value estimated to equal the expected PM2.5 reductions after year 3</p>

projects are funded. It is unclear if any projects for year 4 will be funded prior to the cut-off date for the performance period.

**Statewide Total Emission Reductions NOx Target #2**

Question No	Description	Field Type
E17	The baseline emissions reductions (total daily kilograms) of NOx.	363.399
E18	<p><i>This value is from the 2018 Baseline Performance Period Report and is the performance derived from the latest data collected through the cumulative statewide estimated emissions reductions (total daily kilograms) for the previous 4 Federal Fiscal Years before the start of the performance period. [23 CFR 490.107(b)(1)(ii)(B)]</i></p> <p>Please provide the current estimated emissions reductions (total daily kilograms) of NOx. [23 CFR 490.107(b)(2)(ii)(A) and 23 CFR 490.107(c)(3)(iii)(B)]</p> <p><i>The current data for the performance period must include the cumulative reductions in emissions (total daily kilograms) over the Federal Fiscal Years 2018 and 2019.</i></p> <p><i>The data needed to calculate the measure shall come from the CMAQ Public Access System. [23 CFR 490.809(a) and 23 CFR 490(b)(2).</i></p> <p><i>The data must be reported to the nearest one thousandths. For example, enter 86.512. [23 CFR 490.101 (Target definition) and 23 CFR 490.811(b)]</i></p> <p><i>FHWA provided the prepopulated data from the CMAQ Public Access System. If the DOT feels that a different value is appropriate due to an error, please contact the FHWA Division Office in your State.</i></p>	196.176
E19	<p>The 2-year target for cumulative emissions reduction (total daily kilograms) of NOx for the 2018-2021 Performance Period that was reported in the 2018 Baseline Performance Period Report. [23 CFR 490.107(b)(1)(ii)(A) and 23 CFR 490.107(c)(3)(ii)(B)]</p>	62.840
E20	<p>Please provide a discussion of the progress made toward achieving the 2-year target for cumulative emissions reduction (total daily kilograms) of NOx. At a minimum, this discussion should address overall progress as of the midpoint of the performance period, and shall include a comparison of the actual 2-year performance with the 2-year target and any reasons for differences in the actual and target values. [23 CFR 490.107(b)(2)(ii)(B)]</p>	<p>TDOT NOx emissions reduction totals for only projects in non-attainment and maintenance areas was calculated to be 196.176 kg per day. Using this information, TDOT appears to have exceeded the 2-year target of 62.840 kg/day by 133.336 kg/day. At the time the 2-year target was set, no trend was able to be identified for this measure. Values appeared to be random and based on projects selected each year. The System Performance Measures Working Group did not have a way to reliably predict future values and the determination was made to set a conservative target based on the</p>

E21	The 4-year target for cumulative emissions reduction (total daily kilograms) of NOx established for the 2018-2021 Performance Period that was reported in the 2018 Baseline Performance Period Report. [23 CFR 490.107(b)(1)(ii)(A) and 23 CFR 490.107(c)(3)(ii)(B)]	lowest value over the 4-year baseline period. 125.680
E22	Does the State DOT wish to adjust the 4-year target for cumulative emissions reduction (total daily kilograms) of NOx? [23 CFR 490.105(e)(6)]	Yes
E22a	Please provide the adjusted 4-year target for cumulative emissions reduction (total daily kilograms) of NOx.  <i>The adjusted target should reflect expected performance by the end of Federal Fiscal Year 2021. This adjustment is only permitted in the MPP Progress Report. [23 CFR 490.105(e)(6) and 23 CFR 490.107(b)(2)(ii)(E)]</i>	181.679
E22b	<i>This adjusted target must be reported to nearest one thousandths. For example, enter 86.512. [23 CFR 490.101 (Target definition) and 23 CFR 490.811(b)]</i> Please provide the basis for adjustments of the 4-year target for cumulative emissions reduction (total daily kilograms) of NOx established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(2)(ii)(E) and 23 CFR 490.107(c)(3)(ii)(B)].	After reviewing the CMAQ funded projects in the applicable areas, the working group found the original target to be too conservative. The working group selected the cumulative value estimated to equal the expected NOx reductions after year 3 projects are funded. It is unclear if any projects for year 4 will be funded prior to the cut-off date for the performance period.

### Statewide Total Emission Reductions VOC Target #3

Question No	Description	Field Type
E23	The baseline emissions reductions (total daily kilograms) of VOC.  <i>This value is from the 2018 Baseline Performance Period Report and is the performance derived from the latest data collected through the cumulative statewide estimated emissions reductions (total daily kilograms) for the previous 4 Federal Fiscal Years before the start of the performance period. [23 CFR 490.107(b)(1)(ii)(B)]</i>	230.025
E24	Please provide the current estimated emissions reductions (total daily kilograms) of VOC. [23 CFR 490.107(b)(2)(ii)(A) and 23 CFR 490.107(c)(3)(iii)(B)]  <i>The current data for the performance period must include the cumulative reductions in emissions (total daily kilograms) over the Federal Fiscal Years 2018 and 2019.</i>  <i>The data needed to calculate the measure shall come from the CMAQ Public Access System. [23 CFR 490.809(a) and 23 CFR 490(b)(2).</i>	44.438

*The data must be reported to the nearest one thousandths. For example, enter 86.512. [23 CFR 490.101 (Target definition) and 23 CFR 490.811(b)]*

*FHWA provided the prepopulated data from the CMAQ Public Access System. If the DOT feels that a different value is appropriate due to an error, please contact the FHWA Division Office in your State.*

**E25** The 2-year target for cumulative emissions reduction (total daily kilograms) of VOC for the 2018-2021 Performance Period that was reported in the 2018 Baseline Performance Period Report. [23 CFR 490.107(b)(1)(ii)(A) and 23 CFR 490.107(c)(3)(ii)(B)] 30.698

**E26** Please provide a discussion of the progress made toward achieving the 2-year target for cumulative emissions reduction (total daily kilograms) of VOC.

*At a minimum, this discussion should address overall progress as of the midpoint of the performance period, and shall include a comparison of the actual 2-year performance with the 2-year target and any reasons for differences in the actual and target values. [23 CFR 490.107(b)(2)(ii)(B)]*

TDOT VOC emissions reduction totals for only projects in non-attainment and maintenance areas was calculated to be 44.438 kg per day. Using this information, TDOT appears to have exceeded the 2-year target of 30.698 kg/day by 13.740 kg/day. At the time the 2-year target was set, no trend was able to be identified for this measure. Values appeared to be random and based on projects selected each year. The System Performance Measures Working Group did not have a way to reliably predict future values and the determination was made to set targets based on the lowest value over the 4-year baseline period.

**E27** The 4-year target for cumulative emissions reduction (total daily kilograms) of VOC established for the 2018-2021 Performance Period that was reported in the 2018 Baseline Performance Period Report. [23 CFR 490.107(b)(1)(ii)(A) and 23 CFR 490.107(c)(3)(ii)(B)]

61.396

**E28** Does the State DOT wish to adjust the 4-year target for cumulative emissions reduction (total daily kilograms) of VOC? [23 CFR 490.105(e)(6)]

Yes

**E28a** Please provide the adjusted 4-year target for cumulative emissions reduction (total daily kilograms) of VOC.

41.449

*The adjusted target should reflect expected performance by the end of Federal Fiscal Year 2021. This adjustment is only permitted in the MPP Progress Report. [23 CFR 490.105(e)(6) and 23 CFR 490.107(b)(2)(ii)(E)]*

**E28b** Please provide the basis for adjustments of the 4-year target for cumulative emissions reduction (total daily kilograms) of VOC established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(2)(ii)(E) and [23

After reviewing the CMAQ funded projects in the applicable areas, the working group found the original target to be too

CFR 490.107(c)(3)(ii)(B)].

conservative. The working group selected the cumulative value estimated to equal the expected VOC reductions after year 3 projects are funded. It is unclear if any projects for year 4 will be funded prior to the cut-off date for the performance period.

**Statewide Total Emission Reductions PM10 Target #4**

Question No	Description	Field Type
E29	The baseline emissions reductions (total daily kilograms) of PM10.  <i>This value is from the 2018 Baseline Performance Period Report and is the performance derived from the latest data collected through the cumulative statewide estimated emissions reductions (total daily kilograms) for the previous 4 Federal Fiscal Years before the start of the performance period. [23 CFR 490.107(b)(1)(ii)(B)]</i>	
E30	Please provide the current estimated emissions reductions (total daily kilograms) of PM10. [23 CFR 490.107(b)(2)(ii)(A) and 23 CFR 490.107(c)(3)(iii)(B)]  <i>The current data for the performance period must include the cumulative reductions in emissions (total daily kilograms) over the Federal Fiscal Years 2018 and 2019.</i>  <i>The data needed to calculate the measure shall come from the CMAQ Public Access System. [23 CFR 490.809(a) and 23 CFR 490(b)(2).</i>  <i>The data must be reported to the nearest one thousandths. For example, enter 86.512. [23 CFR 490.101 (Target definition) and 23 CFR 490.811(b)]</i>	
E31	<i>FHWA provided the prepopulated data from the CMAQ Public Access System. If the DOT feels that a different value is appropriate due to an error, please contact the FHWA Division Office in your State.</i> The 2-year target for cumulative emissions reduction (total daily kilograms) of PM10 for the 2018-2021 Performance Period that was reported in the 2018 Baseline Performance Period Report. [23 CFR 490.107(b)(1)(ii)(A) and 23 CFR 490.107(c)(3)(ii)(B)]	
E32	Please provide a discussion of the progress made toward achieving the 2-year target for cumulative emissions reduction (total daily kilograms) of PM10.  <i>At a minimum, this discussion should address overall progress as of the midpoint of the performance period, and shall include a comparison of the actual 2-year performance with the 2-year target and any reasons for differences in the actual and target values. [23 CFR 490.107(b)(2)(ii)(B)]</i>	
E33	The 4-year target for cumulative emissions reduction (total daily kilograms) of PM10 established for the 2018-2021 Performance Period that was reported in the 2018 Baseline Performance Period Report. [23 CFR	

490.107(b)(1)(ii)(A) and 23 CFR 490.107(c)(3)(ii)(B)]

**E34** Does the State DOT wish to adjust the 4-year target for cumulative emissions reduction (total daily kilograms) of PM10?[23 CFR 490.105(e)(6)]

**E34a** Please provide the adjusted 4-year target for cumulative emissions reduction (total daily kilograms) of PM10.

*The adjusted target should reflect expected performance by the end of Federal Fiscal Year 2021. This adjustment is only permitted in the MPP Progress Report. [23 CFR 490.105(e)(6) and 23 CFR 490.107(b)(2)(ii)(E)]*

**E34b** Please provide the basis for adjustments of the 4-year target for cumulative emissions reduction (total daily kilograms) of PM10 established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(2)(ii)(E) and 23 CFR 490.107(c)(3)(ii)(B)].

*This adjusted target must be reported to nearest one thousandths. For example, enter 86.512. [23 CFR 490.101 (Target definition) and 23 CFR 490.811(b)]*

**Statewide Total Emission Reductions CO Target #5**

<b>Question No</b>	<b>Description</b>	<b>Field Type</b>
<b>E35</b>	The baseline emissions reductions (total daily kilograms) of CO.  <i>This value is from the 2018 Baseline Performance Period Report and is the performance derived from the latest data collected through the cumulative statewide estimated emissions reductions (total daily kilograms) for the previous 4 Federal Fiscal Years before the start of the performance period. [23 CFR 490.107(b)(1)(ii)(B)]</i>	530.282
<b>E36</b>	Please provide the current estimated emissions reductions (total daily kilograms) of CO. [23 CFR 490.107(b)(2)(ii)(A) and 23 CFR 490.107(c)(3)(iii)(B)]  <i>The current data for the performance period must include the cumulative reductions in emissions (total daily kilograms) over the Federal Fiscal Years 2018 and 2019.</i>  <i>The data needed to calculate the measure shall come from the CMAQ Public Access System. [23 CFR 490.809(a) and 23 CFR 490(b)(2).</i>  <i>The data must be reported to the nearest one thousandths. For example, enter 86.512. [23 CFR 490.101 (Target definition) and 23 CFR 490.811(b)]</i>  <i>FHWA provided the prepopulated data from the CMAQ Public Access System. If the DOT feels that a different value is appropriate due to an error, please contact the FHWA Division Office in your State.</i>	
<b>E37</b>	The 2-year target for cumulative emissions reduction (total daily kilograms) of CO for the 2018-2021 Performance Period that was reported in the 2018	75.000



Baseline Performance Period Report. [23 CFR 490.107(b)(1)(ii)(A) and 23 CFR 490.107(c)(3)(ii)(B)]

- E38** Please provide a discussion of the progress made toward achieving the 2-year target for cumulative emissions reduction (total daily kilograms) of CO.
- At a minimum, this discussion should address overall progress as of the midpoint of the performance period, and shall include a comparison of the actual 2-year performance with the 2-year target and any reasons for differences in the actual and target values. [23 CFR 490.107(b)(2)(ii)(B)]*
- E39** The 4-year target for cumulative emissions reduction (total daily kilograms) of CO established for the 2018-2021 Performance Period that was reported in the 2018 Baseline Performance Period Report. [23 CFR 490.107(b)(1)(ii)(A) and 23 CFR 490.107(c)(3)(ii)(B)] 150,000
- E40** Does the State DOT wish to adjust the 4-year target for cumulative emissions reduction (total daily kilograms) of CO? [23 CFR 490.105(e)(6)]
- E40a** Please provide the adjusted 4-year target for cumulative emissions reduction (total daily kilograms) of CO.
- The adjusted target should reflect expected performance by the end of Federal Fiscal Year 2021. This adjustment is only permitted in the MPP Progress Report. [23 CFR 490.105(e)(6) and 23 CFR 490.107(b)(2)(ii)(E)]*
- E40b** *This adjusted target must be reported to nearest one thousandths. For example, enter 86.512. [23 CFR 490.101 (Target definition) and 23 CFR 490.811(b)]* Please provide the basis for adjustments of the 4-year target for cumulative emissions reduction (total daily kilograms) of CO established for the 2018-2021 Performance Period. [23 CFR 490.107(b)(2)(ii)(E) and 23 CFR 490.107(c)(3)(ii)(B)].

## Attachments

<b>S.No</b>	<b>Section</b>	<b>Attachment Detail</b>
1	Emissions	<b>Filename:</b> 2020_TN_Emissions_Memphis MPO CMAQ Mid Performance Period Plan.pdf <b>Notes:</b> <b>Attachment Url:</b>
2	Freight	<b>Filename:</b> 2020_TN_Freight_TDOT_FreightPlan_AMENDED_04022019.pdf <b>Notes:</b> Freight Bottleneck Report begins on page 88 of TDOT's updated Freight Plan <b>Attachment Url:</b> <a href="https://www.tn.gov/content/dam/tn/tdot/freight-and-logistics/TDOT_FreightPlan_AMENDED_04022019.pdf">https://www.tn.gov/content/dam/tn/tdot/freight-and-logistics/TDOT_FreightPlan_AMENDED_04022019.pdf</a>

APPENDIX G

**MEMORANDUM OF AGREEMENT BETWEEN  
THE TENNESSEE DEPARTMENT OF TRANSPORTATION (TDOT)  
AND  
THE LAKEWAY AREA METROPOLITAN TRANSPORTATION PLANNING  
ORGANIZATION (LAMTPO)  
REGARDING THE DEFINITION AND NEED FOR AMENDMENTS /  
ADMINISTRATIVE MODIFICATIONS TO THE STATEWIDE TRANSPORTATION  
IMPROVEMENT PROGRAM / TRANSPORTATION IMPROVEMENT PROGRAMS IN  
THE STATE OF TENNESSEE**

**MEMORANDUM OF AGREEMENT BETWEEN  
THE TENNESSEE DEPARTMENT OF TRANSPORTATION (TDOT)  
AND  
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ORGANIZATION (LAMTPO)**

**REGARDING THE DEFINITION AND NEED FOR AMENDMENTS /  
ADMINISTRATIVE MODIFICATIONS TO THE STATEWIDE TRANSPORTATION  
IMPROVEMENT PROGRAM / TRANSPORTATION IMPROVEMENT PROGRAMS IN  
THE STATE OF TENNESSEE**

**INTRODUCTION:**

The purpose of this Memorandum of Agreement is to establish two categories of actions to meet Federal requirements and streamline the maintenance of the Statewide Transportation Improvement Program/Transportation Improvement Program (STIP/TIP). One category of action is a "STIP/TIP Amendment" and the other is a "STIP/TIP Administrative Modification."

**DEFINING THE STIP/TIP:**

As detailed in Title 23 Code of Federal Regulations (CFR) Part 450, the STIP is defined in Federal regulations as "a statewide prioritized listing/program of transportation projects covering a period of 4 years that is consistent with the long-range statewide transportation plan, metropolitan transportation plans, and TIPs, and required for projects to be eligible for funding under title 23 U.S.C. and title 49 U.S.C. Chapter 53." All projects and groupings in the STIP and TIPs must list the eligible funding source(s) (e.g., FTA Section program, Surface Transportation Block Grant, etc.). Approval authority over the STIP and all STIP amendments lies with FHWA and FTA.

Per 23 CFR 450.218, the State of Tennessee STIP shall include each metropolitan TIP for each MPO in Tennessee, as approved by the associated MPO and TDOT (as delegated authority from the Governor of the State of Tennessee). Per Federal regulations, TDOT can elect to include the metropolitan TIPs in the STIP directly or by reference, with specific expectations for each option:

- Direct inclusion of the metropolitan TIP – in this situation, TDOT's STIP, as published and approved by FHWA and FTA, will include all projects listed in the approved metropolitan TIP, regardless of project sponsor or funding source. Accordingly, FHWA and FTA will match authorization requests for all projects across the State of Tennessee to the latest approved/amended STIP.
- Inclusion of the metropolitan TIP by reference – in this situation, TDOT's STIP, as published and approved by FHWA and FTA, will make narrative reference to the metropolitan TIPs, as approved by the MPO and TDOT. Accordingly, FHWA and FTA will match all authorization requests for projects in metropolitan areas to the latest approved/amended metropolitan TIP, and all authorization requests for projects in non-metropolitan areas will be matched to the latest approved/amended STIP.

More information on the amendment/administrative modification processes and authorization requests is available below.

#### STIP/TIP AMENDMENT:

An amendment is a revision to the STIP/TIP that involves major changes to a project or the overall program and must meet the requirements of 23 CFR §450.216 and §450.326 regarding public review and comment, re-demonstration of fiscal constraint, and transportation conformity. An amendment is required when changes to the STIP/TIP include:

- A major change in the total project cost (excluding groupings) (see discussion on project cost change thresholds with Table A); or
- Adding a new project or deleting a project from the STIP/TIP; or
- A major change of project scope; examples include, but are not limited to, changing the number of through-lanes, adding/deleting non-motorized facilities (i.e. greenways, sidewalks, bike lanes, transfer stations, etc.), changing mode (e.g., rolling stock or facility type for transit, such as light rail cars instead of trolleys, vans instead of buses, etc. ), changing capital category (i.e., transit funding added to a CMAQ funded project or CMAQ funding substituted for transit funding), or changing termini; or
- Any change requiring a new regional air quality conformity finding (including a grouping); or
- Moving funds between a Metropolitan Planning Organization (MPO) TIP and STIP unless a written agreement exists between the MPO and the Tennessee Department of Transportation (TDOT) that such an action may be processed as an administrative modification; or
- Moving funds between an MPO's TIP and another MPO's TIP unless a written agreement exists between each MPO and TDOT that such an action may be processed as an administrative modification.

#### AMENDMENT DOCUMENT AND APPROVAL PROCEDURES:

The STIP/TIP may be amended at any time, but amendments require Federal approval and redetermination of STIP/TIP fiscal constraint and air quality conformity, where applicable. TDOT will review each TIP amendment, approve its inclusion in the STIP, and submit the amendment to the appropriate Federal Agency. The Federal Agencies will independently review and respond to a formal written request for amendment approval from TDOT within 10 business days of receipt.

#### Documentation:

The MPO will send the following documentation to TDOT:

- Electronic correspondence describing the action taken and requesting review and approval of the proposed amendment;
- A copy of the original and amended TIP pages;
- Documentation supporting:
  - Fiscal constraint,
  - Interested parties' participation (i.e., public involvement, stakeholder involvement, and consultation),
  - Air quality conformity (in non-attainment and/or maintenance areas only), and
  - Required MPO certifications, including the MPO Self-Certification with a current date; and
  - The resolution adopting the amendment.

For financial transactions, the MPO must identify in the documentation the origin and destination of the funds being moved.

Regardless of whether the metropolitan TIP is included directly or by reference into the STIP, both the MPO and TDOT (through authority delegated by the Governor of Tennessee) must approve any TIP amendment including State managed projects before transmittal to FHWA/FTA for inclusion in the STIP. FHWA and FTA still retain authority over the inclusion of any amendments into the STIP, whether the TIP is included directly or by reference. In both cases, TDOT shall send the above-described documentation to FHWA/FTA for review and approval of the TIP amendment, along with a current Self-Certification for the STIP.

When FHWA or FTA approves an amendment, the appropriate approving agency will send to TDOT and the MPO:

- The original amendment review request,
- The original supporting amendment documentation, and
- Letter documenting FHWA's or FTA's approval.
- For transit projects, the Multimodal office should work with the Program Development and Scheduling office to ensure that any amendments are included in the updated STIP.

Amendment documentation will conform to the correspondence standards outlined in Appendix A.

#### STIP/TIP ADMINISTRATIVE MODIFICATIONS:

A STIP/TIP administrative modification is a minor change from the approved STIP/TIP. Administrative modifications must be consistent with 23 CFR Part 450, but they do not require

public review and comment, or a conformity determination in non-attainment or maintenance areas. STIP/TIP administrative modifications are defined as follows:

- A minor change in the total project cost (see Table A)
- A minor change in project description that does not change the air quality conformity finding in maintenance and/or non-attainment areas; or
- A minor change in project description/termini that is for clarification and does not change the project scope such as a length change for reasonable transition purposes or to correct minor clerical errors or discrepancies; or
- Shifting funds between projects or groupings within the STIP/TIP (i.e., funding sources and projects already identified in the STIP/TIP) if the change does not result in a cost increase greater than the amendment threshold (see Table A) for the total project cost of all phases shown within the approved STIP/TIP; or
- Adding an amount of funds already identified in the STIP/TIP for the current or previous year(s) if:
  - The funds are currently identified in the STIP/TIP either in an existing project or as available funds and
  - The change does not result in a cost increase greater than the amendment threshold (project cost change thresholds listed in Table A) for the total project cost of all phases shown within the approved STIP/TIP; or
- Moving project phases or funding from year to year within an approved STIP/TIP, except those that cross air quality horizon years of the project; or
- Adding any phase (if total project cost includes all phases), such as environmental or location study, preliminary engineering, right-of-way, or construction to a project in the STIP/TIP so long as such a change does not result in a cost increase greater than the amendment threshold (see Table A) for the total project cost of all phases shown within the approved/amended STIP/TIP; or
- Changes required to follow FHWA or FTA instructions as to the withdrawal of funds or re-establishment of funds withdrawn at the request of FHWA or FTA; or
- Moving funds between similarly labeled groupings, regardless of percent of change, or adding or removing a project(s) to or from an already established grouping; or
- Adjustments in revenue to match actual revenue receipts; or
- Adding a project with 100% state or non-federal funding for all phases that does not change the air quality conformity finding in maintenance and/or non-attainment areas; or
- Adding or changing a funding source, as long as the change does not result in a cost increase greater than the amendment threshold (see Table A);

ADMINISTRATIVE MODIFICATION DOCUMENT PROCEDURES:

Administrative modifications do not require Federal approval. Accordingly, no interested parties' participation or air quality conformity is required. TDOT and the MPOs will work cooperatively to address and respond to any FHWA and/or FTA comment(s). FHWA and FTA reserve the right to question any administrative action that is not consistent with Federal regulations or with this MOA. Administrative modifications made to TDOT-sponsored projects in the TIP will be requested by TDOT through notification to the MPO upon submission of the administrative modification to FHWA/FTA. The MPO will make the changes to funding tables, and project sheets as needed without the need for distribution.

Documentation:

The MPO will send the following documentation to TDOT for locally-sponsored projects:

- Electronic correspondence describing the action taken;
- A copy of the original and modified TIP pages.

For financial transactions, the MPO must identify in the documentation the origin and destination of the funds being moved. Administrative modification documentation will conform to the correspondence standards outlined in Appendix A.

AUTHORIZATION:

FHWA and FTA match project authorization requests to the STIP/TIP prior to approving a request for project authorization. Therefore, all administrative modifications and amendments must be processed to completion prior to TDOT requesting federal authorization approvals. For projects in MPO areas TDOT must ensure FHWA and FTA receipt of documented notification that the respective MPO has accounted for the administrative modification unless TDOT has a formal agreement with the respective MPO stating otherwise.

In the FMIS authorization request, TDOT shall provide the most recent amendment and administrative modification numbers affecting the project in the "STIP Reference" field or in the "State Remarks" if additional space is required.

PROJECT COST CHANGE THRESHOLDS:

For changes to the cost of projects (excluding groupings and reductions of any amount provided project length, termini, and description remain the same), a sliding scale (see Table A) is outlined to determine which category of revision is required. All measurements for these cost changes will be made from the last approved STIP or STIP amendment/administrative modification to account for incremental changes.



TABLE A

Total programmed funding within the approved STIP/TIP	Amendment	Administrative Modification
Up to \$2 million	≥5%	< 75%
\$2 million to \$15 million	≥0%	< 50%
\$15 million to \$75 million	≥0%	< 40%
\$75 million and above	≥0%	< 30%

**PROJECT PHASE OVERRUNS AND UNDERRUNS:**

Project overruns and underruns for previously authorized phases of projects in a previous TIP will not be programmed in the current TIP. If the phase of the project is in the current TIP then the rules of this document will apply; however, if the phase of the project was authorized in a previous TIP no action will be necessary within the current TIP. If a project programmed in a grouping incurs an overrun or underrun from a previously authorized phase, no TIP action will be needed. Any request for authorization of a new phase will need to follow the rules within this document.

- If a project is being closed out but incurs an overrun, it will not require an amendment or administrative modification.

**PROJECT GROUPINGS:**

The use of project groupings is permitted under 23 CFR §450.218(j) for projects located in the non-metropolitan portion of the STIP and 23 CFR §450.326(h) for projects in an MPO's TIP. Projects that are funded by such groupings are to be of a scale small enough not to warrant individual identification and may be grouped by function, work type, and/or geographic area using the applicable classifications under 23 CFR §771.117(c) and (d) and/or 40 CFR part 93. Project groupings may only include projects that meet the following conditions: non-regionally significant, environmentally neutral, and exempt from air quality conformity. As appropriate, in instances where it is uncertain if specific project(s) meet those conditions in air quality nonattainment or maintenance areas, the sponsoring agency, in coordination with the MPO, must consult with the appropriate Interagency Consultation group (IAC) to determine whether the specific project(s) proposed to be included with the grouping are subject to the requirements of 40 CFR 93.

The STIP/TIP will include a description of all grouping categories, eligible activities, and sufficient financial information to demonstrate the projects that are to be implemented using current and/or reasonably available revenues. The MPO will develop the grouping categories and eligible activities included within the STIP/TIP in consultation with TDOT. All TDOT-sponsored

projects located within an MPO area must be included in the MPO's TIP, including those projects that are eligible for grouping. Therefore, projects eligible for groupings that are located within the MPO planning area may be grouped within the MPO's TIP or listed individually in the MPO's TIP, but may not be included in the STIP.

### **PROJECTS IN RURAL/URBAN AREAS AND PROJECTS IN TWO (2) OR MORE MPOs**

All projects that cross the MPO boundary and include an area outside of the MPO boundary will be programmed in the TIP only.

In instances where a project is in two (2) or more MPO planning areas, the affected MPOs will consult and coordinate as to which MPO is most impacted by the project, taking into consideration project limits, air quality conformity requirements, regional significance, etc. The MPO most impacted will program the project in its TIP and include it in the demonstration of fiscal constraint. The other MPO(s) will reference the project in its TIP for informational purposes. In instances where the MPOs are unable to reach an agreement, TDOT will facilitate a consultation process with the affected MPOs, TDOT, and FHWA/FTA.

### **CONSULTATION PROCESS:**

The MPO will consult with TDOT and the appropriate approving agency (i.e., FTA for transit projects and FHWA for highway projects) on the suitable category of action when the proposed change to the STIP/TIP does not clearly fall into the category of a "STIP/TIP Amendment" or a "STIP/TIP Administrative Modification" or the proposed change involves extenuating circumstances. Consultations will suspend the formal 10 business day review period for "STIP/TIP Amendments" until a resolution is established. The MPO also will consult with the appropriate approving agency prior to adding new non-formula or specialized federal funds (such as BUILD program funds) to a project to determine if the addition of the funds would warrant an amendment.

**PROCESS REVIEW:**

The MPO and TDOT will review this agreement in conjunction with each Statewide Planning Finding or when STIP/TIP management procedures are substantively changed (e.g., implementation of an electronic STIP/TIP). The focus of the review is to verify the appropriate use of the agreed-to amendment and administrative modification processes and consistency with Federal regulations.

We, the undersigned, approve this Memorandum of Agreement. This Agreement will become effective upon approval of signature by all parties, and will remain in effect as long as each agency agrees to and abides by the conditions set forth in this document. This Agreement may be amended at any time, but revisions will require signature by all parties. Any signatory to this Agreement may propose amendment to the agreement at any time.

All prior agreements and correspondence related to the definition and need for amendments or administrative modifications to STIP/TIPs are voided with the execution of this agreement.

**SIGNATURES:**

\_\_\_\_\_  
Chairperson  
LAMTPO Executive Board

\_\_\_\_\_  
Date

\_\_\_\_\_  
Commissioner  
Tennessee Department of Transportation

\_\_\_\_\_  
Date

APPENDIX A: CORRESPONDENCE STANDARDS

All amendment and administrative modification correspondence will be submitted to TDOT's Program Development and Scheduling Office. The MPO will submit the correspondence and documentation to [STIP.Requests@tn.gov](mailto:STIP.Requests@tn.gov) and the Program Monitor in the Program Development and Scheduling Office responsible for the TDOT Region in which the MPO is located.

*Amendment Documentation:*

Amendment documentation will be grouped in a single electronic document with the naming convention, "Amendment [X] ([Project#])", where [X] identifies the amendment's sequential identifier and [Project #] represents the unique project number(s) of the program element(s) being amended.

Email correspondence will use the naming convention, "Amendment [X], [Organization]" in the subject line where [X] identifies the amendment's sequential identifier and [Organization] represents name of the organization (MPO) submitting the amendment. The body of the email or cover letter/project description within the packet will include all applicable information as needed such as: amendment number, PIN, STIP/TIP ID, project sponsor, location of project, route, termini, project description, funding type (e.g., STBG, 5310), length, and description of amendment, financial tables, and air quality conformity documentation. Correspondence will include ccs to the appropriate representatives within TDOT's Long Range Planning Division and/or Multimodal Resources Division.

*Modification Documentation:*

Modification documentation will be grouped in a single electronic file and use the naming convention, "Modification [X] ([Project#])", where [X] identifies the administrative modification's sequential identifier and [Project #] represents the unique project number(s) of the program element(s) being modified.

Email correspondence will use the naming convention, "Modification [X], [Organization]" in the subject line where [X] identifies the administrative modification's sequential identifier and [Organization] represents name of the organization (MPO) submitting the administrative modification. The body of the email or cover letter/project description within the packet will include all applicable information as needed such as: modification number, PIN, STIP/TIP ID, project sponsor, location of project, route, termini, project description, funding type (e.g., STBG, 5310), length, financial tables, and description of amendment. Correspondence will include ccs to the appropriate representatives within TDOT's Long Range Planning Division and/or Multimodal Resources Division.



## APPENDIX H

Air Quality Conformity Determination as prepared by the Knoxville TPO

**Lakeway Area Metropolitan Transportation Planning Organization (LAMTPO)**  
Morristown, TN – Jefferson City, TN – White Pine, TN – Hamblen County, TN – Jefferson County, TN

**Resolution Number: 2022-010**

**A RESOLUTION APPROVING THE AIR QUALITY CONFORMITY DETERMINATION  
REPORT AS PREPARED BY THE KNOXVILLE TPO**

WHEREAS, a comprehensive, cooperative, and continuing transportation planning process is to be carried out in the Lakeway Area Metropolitan Transportation Planning Organization (LAMTPO) study area; and

WHEREAS, The Executive Board of the Lakeway Area Metropolitan Transportation Planning Organization (LAMTPO) serves as a forum for cooperative decision making on transportation issues in the Urbanized Area; and

WHEREAS, the Lakeway Area Metropolitan Transportation Planning Organization promotes the safety, protection, and enhancement of transportation corridors within its jurisdictional boundaries, and

WHEREAS, the Clean Air Act Amendments of 1990 (CAAA) and the Infrastructure Investment and Jobs Act (IIJA) require that transportation plans and programs conform to air quality goals established by the State Implementation Plan (SIP) for regions in nonattainment or maintenance of an air pollution standard; and,

WHEREAS, the Lakeway Area Metropolitan Transportation Planning Organization and the Knoxville TPO are within the same area previously designated nonattainment for the 1997 8-Hour Ozone Standard and have a Memorandum of Agreement to cooperatively address transportation conformity requirements for ozone, and

WHEREAS, the Knoxville TPO has prepared an updated Air Quality Conformity Determination in conjunction with the new FFY2023-2026 Transportation Improvement Program that covers the entire Ozone Maintenance Area, including the LAMTPO planning area within Jefferson County, which has determined that all current plans and programs within LAMTPO meet the air quality conformity requirements.

NOW, THEREFORE, BE IT RESOLVED, that the Lakeway Area Metropolitan Transportation Planning Organization (LAMTPO) Executive Board approves the air quality conformity determination as prepared by the Knoxville TPO.

This Resolution shall be effective upon its passage and approval.

ATTEST:



\_\_\_\_\_  
Chairman  
LAMTPO Executive Board

November 9, 2022  
\_\_\_\_\_  
Date

**MEMORANDUM OF AGREEMENT**  
**Between the Tennessee Department of Transportation (TDOT), the Knoxville**  
**Regional Transportation Planning Organization (KRTPO) and the Lakeway Area**  
**Metropolitan Transportation Planning Organization (LAMTPO) for the**  
**development of Transportation Conformity Determination(s) under the 8-Hour**  
**Ozone and Particulate Matter 2.5 Standards**

**Current Version Adopted by KRTPO Executive Board on 7/27/2022 (Projected)**  
**Original MOA Adopted 10/27/2004**  
**Updated MOA Adopted 8/22/2007**

**I. PURPOSE**

This Memorandum of Agreement (MOA) is for the purpose of conducting cooperative planning and analysis of, and determining transportation conformity for, all transportation projects outside the KRTPO metropolitan planning area, but within the portions of the Knoxville Region that are subject to transportation conformity as either a nonattainment or maintenance area, hereinafter also referred to as the “affected area”.

**II. BACKGROUND**

- A. The U.S. Environmental Protection Agency (EPA) regulates air quality under the Clean Air Act (CAA) by establishing National Ambient Air Quality Standards (NAAQS) for air pollutants, known as “criteria pollutants” that have been deemed especially harmful to human health and the environment. EPA designates regions as attainment or nonattainment based on monitoring data and whether it meets the current NAAQS for a particular pollutant. A nonattainment area that regains compliance with the NAAQS typically transitions to “maintenance area” status for up to twenty (20) years.
- B. Transportation Conformity is one of the major consequences/actions required of nonattainment and maintenance areas and its purpose is to ensure that federal funding is not used on transportation plans, programs or projects that cause or contribute to any new violation of any standard or delay timely attainment of any standard. Transportation Conformity is federally regulated under 40 CFR Part 93, Subpart A, which sets forth policy, criteria and procedures for demonstrating and assuring conformity of such activities to an applicable implementation plan developed pursuant to section 110 and Part D of the CAA.
- C. The Knoxville Region is currently subject to transportation conformity based on the designations under three separate NAAQS in the following specific geographic locations as described below and depicted in the attached map:
  - I. The EPA designated the Knoxville Nonattainment Area for the **1997 8-hour Ozone Standard** as being the counties of Anderson, Blount, Jefferson, Loudon, Knox, Sevier and a portion of Cocke County. This



ozone nonattainment became effective on June 15, 2004. The Region was first designated to attainment with a maintenance plan and subsequently this standard was revoked, but a modified transportation conformity process is still required as an anti-backsliding measure. Refer to Section IV.C.D. for details regarding the modified process.

2. The EPA designated the Knoxville Nonattainment Area for the **2006 Daily Particulate Matter less than 2.5 microns in diameter (PM 2.5) Standard** as being the counties of Anderson, Blount, Knox, Loudon and a portion of Roane County. This PM 2.5 nonattainment became effective on December 14, 2009 and the area was redesignated to attainment with a maintenance plan effective on August 28, 2017.
  3. The EPA designated the Knoxville Nonattainment Area for the **2008 8-hour Ozone Standard** as being the counties of Blount, Knox and a portion of Anderson County. This ozone nonattainment became effective on July 20, 2012 and the area was redesignated to attainment with a maintenance plan effective on August 12, 2015.
- D. The above designated maintenance areas include, and are larger than, the KRTPO Planning Area. In addition, a portion of the former 1997 Ozone Maintenance Area in Jefferson County lies within the jurisdiction of the LAMTPO Planning Area. The areas outside of an established metropolitan planning area boundary, but inside the boundary of a nonattainment or maintenance area are specifically referred to as a "Donut" area in EPA guidance.
- E. 23 CFR 450.314(c) states that if the metropolitan planning area does not include the entire nonattainment or maintenance area, there shall be an agreement among the state department of transportation, state air quality agency, affected local agencies and the metropolitan planning organizations describing the process for cooperative planning and analysis of all projects outside the metropolitan planning area but within the nonattainment or maintenance area. The agreement also must indicate how the total transportation-related emissions for the nonattainment or maintenance area, including areas both within and outside the metropolitan planning area, will be treated for the purposes of determining conformity in accordance with the US Environmental Protection Agency (EPA) conformity regulation. The agreement shall address policy mechanisms for resolving conflicts concerning transportation-related emissions that may arise between the metropolitan planning area and the portion of the nonattainment or maintenance area outside the metropolitan planning area.
- F. Tennessee has a State Transportation Conformity Rule (1200-3-34-.01), which applies to designated nonattainment and maintenance areas and implements the requirements of the federal transportation conformity rule (40 CFR Part 93, Subpart A) concerning several of the requirements in part E above. This MOA is intended to only address the assumption of the responsibility by the TPO for

completing conformity analyses/determinations for the entire affected area of the Knoxville Region subject to transportation conformity.

- G. The KRTPO and LAMTPO are required to update and maintain both a Long-Range Transportation Plan (LRTP) covering a minimum 20-year period and a shorter-range Transportation Improvement Program (TIP) that covers 4-years. TDOT is required to update and maintain a Statewide Transportation Improvement Program (STIP) that coincides with the KRTPO and LAMTPO TIP periods. Transportation conformity determinations are required with each major update of those Plans, with the LRTP updated at least every four (4) years and the TIP/STIP updated every three (3) years. Transportation conformity must also be demonstrated for any project amendments made to those Plans in between major updates.
- H. The KRTPO, TDOT and LAMTPO as the three agencies responsible for carrying out transportation planning/programming and demonstrating transportation conformity in the Knoxville region, have come to an agreement that the KRTPO will assume primary responsibility for facilitating the transportation conformity determination process for the entire affected area. This decision is based primarily on the factors that the KRTPO has previous experience with preparing conformity determination reports and maintains a travel demand forecasting model necessary for performing the technical analysis required to demonstrate transportation conformity. Thus, the KRTPO is in the best position to develop projections of future traffic demand and air quality impacts of proposed transportation projects in a holistic manner thereby ensuring that the entire Region is in compliance with all requirements and federal transportation funding is not jeopardized.

### III. RESPONSIBILITIES

#### A. KRTPO:

1. The KRTPO, in coordination with TDOT and other affected agencies will prepare the transportation conformity analysis for the entire affected area which will comply with the applicable requirements of 40 CFR Part 93. If analysis requirements for the non-TPO area are not specific, clear or well defined, the interagency consultation process will be used to determine appropriate analysis procedures.
2. The KRTPO will facilitate meetings of the Interagency Consultation Group as necessary in order to define the specific processes and adhere to schedules required to complete the conformity determination within the appropriate timelines to ensure that the area does not enter a conformity lapse.
3. The KRTPO will be responsible for the development of a comprehensive and multimodal LRTP and TIP that includes a fiscally constrained

transportation project listing for the TPO planning area, which is comprised of urbanized portions of Knox, Blount, Loudon and Sevier counties.

4. The KRTPO will be responsible for development of a single "Regional" transportation conformity determination report (CDR) coinciding with each major update of the LRTPO and TIP that identifies a listing of transportation projects for the entire affected area (for both PM2.5 and ozone). The Regional CDR will include input from TDOT on projects in the areas outside of the KRTPO and LAMTPO planning area boundaries.
5. The KRTPO will provide for public input opportunities on the Regional CDR.

**B. TDOT:**

1. TDOT, in coordination with local affected agencies, is responsible for the development of a transportation project listing on the state and federal-funded roadway system for the non-urbanized portions of the affected area at appropriate horizon years to be compatible with the conformity analysis.
2. TDOT will provide for public involvement opportunities within the non-urbanized portions of the affected area.

**C. LAMTPO:**

1. LAMTPO will provide to the KRTPO a list of fiscally constrained transportation projects that result from a LRTP and/or TIP prepared for the Lakeway Area planning boundary that are within Jefferson County with projects listed in the appropriate horizon years to be compatible with the conformity analysis.
2. LAMTPO will provide for public input opportunities on the Regional CDR within its planning area.

**IV. PROCEDURAL CONSIDERATIONS**

**A. Data Sources:**

1. Travel Demand Model – The KRTPO will maintain a validated travel demand forecasting model in order to project future vehicle miles of travel within the affected area for purposes of determining conformity of the transportation projects that are proposed. Furthermore, the KRTPO will be responsible for maintaining a travel demand forecasting model that includes the entire LAMTPO Metropolitan Planning Area. If, through the interagency consultation process, a project is determined to be regionally

significant but not included in the model then appropriate off model data forecasting methodologies will be pursued.

2. Off Model Projections – Highway Performance Monitoring System (HPMS) and traffic count data will be used to develop future projections of travel along with other assumptions agreed upon through the interagency consultation process in order to determine conformity of projects in geographic areas unrepresented in the regional travel demand forecasting model such as the portion of Cocke County.

**B. Major Plan Update Conformity Submittal Protocol:**

1. The KRTPO will develop a single conformity determination for the entire affected area to support major updates to both the Knoxville Regional TPO and the LAMTPO Long Range Transportation Plans and Transportation Improvement Programs as well as TDOT's Statewide Transportation Improvement Program (STIP).
- ~~2.~~ The Executive Boards of both the KRTPO and LAMTPO will each formally adopt the regional conformity determination as part of the full Plan/TIP adoption.
- ~~3.~~ The TPO will submit the conformity determination to the Federal Highway Administration and the Federal Transit Administration for their review and approval concurrent with EPA.
- ~~4.~~ The LAMTPO will include the ozone conformity determination documentation within their transportation plans as an appendix.

**C. TIP/STIP Amendment Conformity Process and Submittal Protocol:**

1. This MOA primarily addresses the situation of a major Plan update and coordination of a conformity determination for the entire affected Region, but conformity must also be demonstrated for any project amendments made to the current LRTP and/or STIP/TIP, which are individual actions that may be taken by either KRTPO, LAMTPO or TDOT.
2. Any project amendment proposed by KRTPO, LAMTPO or TDOT will be provided to KRTPO staff for review of conformity implications and to determine the level of conformity analysis depending on the project's conformity exempt/non-exempt status.
3. The KRTPO staff will perform the necessary action to demonstrate conformity based on the following exempt status categories:
  - a. Exempt Project – Provide IAC 14-day review period to confirm Exempt status.
  - b. Non-Exempt Project previously accounted for in a regional emissions analysis -- prepare a "Short Conformity Report" (SCR).
  - c. Non-Exempt Project previously unaccounted for, i.e. new projects or significant change in scope or timeframe of existing projects -- prepare updated regional emissions analysis.

d. Non-Exempt Project within the 1997 8-Hour Ozone "Orphan" Area - prepare conformity report as per EPA guidance described in Section D below.

4. Only the specific Executive Board of the MPO making the Plan amendment will adopt the associated conformity determination as necessary.

C.D. 1997 8-Hour Orphan Area Conformity Process:

1. As referenced earlier in this MOA, the 1997 8-Hour Ozone Standard was previously revoked since it was deemed less stringent than the later 2008 8-Hour Ozone Standard. The revocation was challenged in litigation known as South Coast vs. EPA II and a 2018 court decision was made that certain requirements including transportation conformity shall not be revoked as anti-backsliding measures.
2. The EPA released official guidance for how to address conformity for 1997 8-Hour Ozone areas, and specifically for geographies that were designated attainment for the 2008 8-Hour Ozone Standard, which the court decision referred to as "orphan areas". A "normal" transportation conformity process applies for the areas in the Knoxville Region that were designated nonattainment/maintenance for the 2008 Ozone Standard and were previously designated for the 1997 Ozone Standard (shown in blue on the attached map) while the remaining counties (balance of Anderson outside of the partial 2008 area, Jefferson, Loudon and Sevier) are subject to the new conformity guidance (shown in green on the attached map).
3. Since a large part of this affected area is outside of the KRTPO Planning Area (known as a "donut" area) and portions lie within the LAMTPO Planning Area coordination is required to ensure that project amendments to the STIP and/or the LAMTPO TIP are adequately addressed from a transportation conformity perspective since the KRTPO staff may not otherwise be typically notified of these.
4. The KRTPO shall be notified by TDOT and/or LAMTPO of any project amendments within the so-called donut-orphan area for development of an appropriate conformity determination, i.e. either a full conformity report or consultation to affirm a project's exempt status with the full Knoxville-area IAC group.
5. In the situation of a full conformity report being required, the KRTPO staff shall compile the report and advertise it for public comment in the appropriate newspapers and subject to the required length of time as per the TN Conformity SIP or controlling Public Involvement Plan of the jurisdiction that the project lies, whichever is longer.

**V. AGREEMENT TERMS**

- A. This MOA shall remain in effect as long as each of the parties is in agreement with its terms. The interagency consultation process shall be used for revision of the MOA as necessary.

**VI. SIGNATORIES**

The following signatory parties do hereby agree to comply with the provisions and terms of this MOA.

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Terry Frank, TPO Executive Board Chair



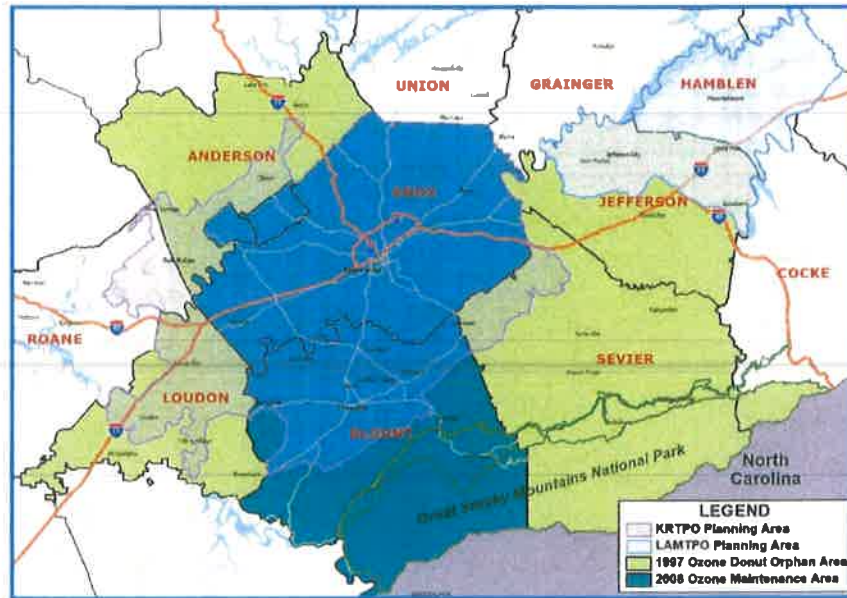
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Mark Potts LAMTPO Executive Board Chair

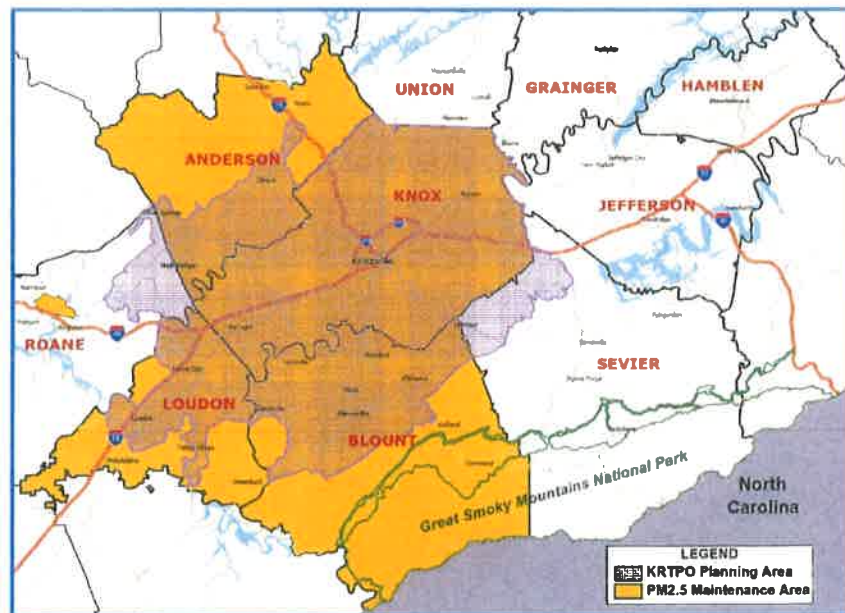
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Joe Galbato?, TDOT Commissioner

Knoxville Region Ozone Maintenance Areas (1997 and 2008 NAAQS)



Knoxville Region PM2.5 Maintenance Area (2006 NAAQS)









APPENDIX I

**Public Comments**

Public Comment Meetings were held on:

1. August 18, 2022
2. September 29, 2022
3. October 27, 2022

No Comments Received.

Copy of advertisements shown on following pages.

The Lakeway Area Metropolitan Transportation Planning Organization (LAMTPO) will hold public comment meetings on the FFY2023-2026 Transportation Improvement Program (TIP). Public engagement activities and the time set for public review and commentary on the TIP will satisfy the Project Program requirement for the Federal Transit Administration's (FTA) urbanized area formula program. TIP FFY2023-2026 information can be obtained from Rich DesGroseilliers at 423-581-6277, or can be viewed on the [www.lamtpo.com](http://www.lamtpo.com) website. The dates of the meetings are as follows:

The dates of the meetings are as follows:

1. Thursday , August 18 , 2022 from 9am to 10am at White Pine Legion Park, Park St., White Pine.
2. Thursday , August 18 , 2022 from 10:30 am to 11:30 am at the Jefferson City Municipal Building, 112 City Center Dr, Jefferson City.
3. Thursday, August 18, 2022 from 1 p.m. to 2 p.m. in the planning conference room, 100 W. 1<sup>st</sup>. North St., Morristown.

All interested parties are invited to attend the meeting. It is LAMTPO's policy not to discriminate on the basis of race, color, national origin, age, sex, or disability in the operation of its programs, services, and activities.

La Organización de Planificación de Transporte Metropolitano del Área de Lakeway (LAMTPO) llevará a cabo reuniones de comentarios públicos sobre el Programa de Mejora del Transporte FFY2023-2026 (TIP). Las actividades de participación pública y el tiempo establecido para la revisión pública y los comentarios sobre el TIP satisfarán el requisito del Programa de Proyecto para el programa de fórmula de área urbanizada de la Administración Federal de Tránsito (FTA). La información de TIP FFY2023-2026 se puede obtener de Rich DesGroseilliers al 423-581-6277, o se puede ver en el sitio web de [www.lamtpo.com](http://www.lamtpo.com). Las fechas de las reuniones son las siguientes:

Las fechas de las reuniones son las siguientes:

1. Jueves , 18 de agosto de 2022 de 9am a 10am en White Pine Legion Park, Park St., White Pine.
2. Jueves , 18 de agosto de 2022 de 10:30 am a 11:30 am en el Edificio Municipal de Jefferson City, 112 City Center Dr, Jefferson City.
3. Jueves 18 de agosto de 2022 de 1 p.m. a 2 p.m. en la sala de conferencias de planificación, 100 W. 1<sup>st</sup>. North St., Morristown.

Todas las partes interesadas están invitadas a asistir a la reunión. Es política de LAMTPO no discriminar por motivos de raza, color, origen nacional, edad, sexo o discapacidad en la operación de sus programas, servicios y actividades.

The Lakeway Area Metropolitan Transportation Planning Organization (LAMTPO) will hold public comment meetings on the FFY2023-2026 Transportation Improvement Program (TIP), and the Air Quality Conformity Determination Report. Public engagement activities and the time set for public review and commentary on the TIP will satisfy the Project Program requirement for the Federal Transit Administration's (FTA) urbanized area formula program. The FFY2023-2026 TIP and Air Quality Conformity Determination report information can be obtained from Rich DesGroseilliers at 423-581-6277, or can be viewed on the [www.lamtpo.com](http://www.lamtpo.com) website. The dates of the meetings are as follows:

The dates of the meetings are as follows:

4. Thursday, September 29, 2022 from 10am to 11am at White Pine Legion Park, Park St., White Pine.
5. Thursday, September 29, 2022 from 11:30 am to 12:30 am Roy Harmon Park, Jefferson City.
6. Thursday, September 29, 2022 from 1:30 p.m. to 2:30 p.m. at Fred Miller Park, Morristown.

All interested parties are invited to attend the meeting. It is LAMTPO's policy not to discriminate on the basis of race, color, national origin, age, sex, or disability in the operation of its programs, services, and activities.

La Organización de Planificación de Transporte Metropolitano del Área de Lakeway (LAMTPO) llevará a cabo reuniones de comentarios públicos sobre el Programa de Mejora del Transporte FFY2023-2026 (TIP) y el Informe de Determinación de la Conformidad de la Calidad del Aire. Las actividades de participación pública y el tiempo establecido para la revisión pública y los comentarios sobre el TIP satisfarán el requisito del Programa de Proyecto para el programa de fórmula de área urbanizada de la Administración Federal de Tránsito (FTA). La información del informe FFY2023-2026 TIP y Determinación de la conformidad de la calidad del aire se puede obtener de Rich DesGroseilliers al 423-581-6277, o se puede ver en el sitio web de [www.lamtpo.com](http://www.lamtpo.com). Las fechas de las reuniones son las siguientes:

Las fechas de las reuniones son las siguientes:

1. Jueves 29 de septiembre de 2022 de 10am a 11am en White Pine Legion Park, Park St., White Pine.
2. Jueves 29 de septiembre de 2022 de 11:30 am a 12:30 am Roy Harmon Park, Jefferson City.
3. Jueves 29 de septiembre de 2022 de 1:30 p.m. a 2:30 p.m. en Fred Miller Park, Morristown.

Todas las partes interesadas están invitadas a asistir a la reunión. Es política de LAMTPO no discriminar por motivos de raza, color, origen nacional, edad, sexo o discapacidad en la operación de sus programas, servicios y actividades.

The Lakeway Area Metropolitan Transportation Planning Organization (LAMTPO) will hold public comment meetings on the FFY2023-2026 Transportation Improvement Program (TIP), and the Air Quality Conformity Determination Report. Public engagement activities and the time set for public review and commentary on the TIP will satisfy the Project Program requirement for the Federal Transit Administration's (FTA) urbanized area formula program. The FFY2023-2026 TIP and Air Quality Conformity Determination report information can be obtained from Rich DesGroseilliers at 423-581-6277, or can be viewed on the [www.lamtpo.com](http://www.lamtpo.com) website. The dates of the meetings are as follows:

The dates of the meetings are as follows:

7. Thursday, October 27, 2022 from 10am to 11am at White Pine Legion Park, Park St., White Pine.
8. Thursday, October 27, 2022 from 11:30 am to 12:30 am Roy Harmon Park, Jefferson City.
9. Thursday, October 27, 2022 from 1:30 p.m. to 2:30 p.m. at Fred Miller Park, Morristown.

All interested parties are invited to attend the meeting. It is LAMTPO's policy not to discriminate on the basis of race, color, national origin, age, sex, or disability in the operation of its programs, services, and activities.

La Organización de Planificación de Transporte Metropolitano del Área de Lakeway (LAMTPO) llevará a cabo reuniones de comentarios públicos sobre el Programa de Mejora del Transporte FFY2023-2026 (TIP) y el Informe de Determinación de la Conformidad de la Calidad del Aire. Las actividades de participación pública y el tiempo establecido para la revisión pública y los comentarios sobre el TIP satisfarán el requisito del Programa de Proyecto para el programa de fórmula de área urbanizada de la Administración Federal de Tránsito (FTA). La información del informe FFY2023-2026 TIP y Determinación de la conformidad de la calidad del aire se puede obtener de Rich DesGroseilliers al 423-581-6277, o se puede ver en el sitio web de [www.lamtpo.com](http://www.lamtpo.com). Las fechas de las reuniones son las siguientes:

Las fechas de las reuniones son las siguientes:

1. Jueves, 27 de octubre de 2022 de 10am a 11am en White Pine Legion Park, Park St., White Pine.
2. Jueves 27 de octubre de 2022 de 1 1:30 am a 12:30 am Roy Harmon Park, Jefferson City.
3. Jueves 27 de octubre de 2022 de 13:30 a 14:30 horas. en Fred Miller Park, Morristown.

Todas las partes interesadas están invitadas a asistir a la reunión. Es política de LAMTPO no discriminar por motivos de raza, color, origen nacional, edad, sexo o discapacidad en la operación de sus programas, servicios y actividades.