

## **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   |
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| 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> |

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| <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> |

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| National Highway System Infrastructure Grouping |  | <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 |  | 20. Wetland and/or stream mitigation<br>21. Environmental restoration and pollution abatement,<br>22. Control of noxious weeds and establishment of native species   |
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| 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> |

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| <p>Surface Transportation Program Grouping</p> | <p>to public transportation and enhanced mobility,</p> <p>j. Community improvement activities</p> | <p>b. Traffic Management Center (TMC) operations and utilities.</p> <p>c. Freeway service patrols,</p> <p>d. Traveler information</p> <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> <p>a. Installation of new or improvement of existing guardrail.</p> <p>b. Installation of traffic signs and signals/lights.</p> <p>c. Spot safety improvements.</p> <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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| Surface Transportation Program Grouping | <p>k. Transportation Enhancement projects</p><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><p>l. Safe Routes to School (SRTS) projects</p> | <p>Activities previously authorized under the Transportation Enhancement Program</p> <ol 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> </ol> <p>Infrastructure related activities:</p> <ol 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> </ol> |
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| Surface Transportation Program Grouping | m. Safe Routes To School (SRTS) projects              | <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>   |
|   | n. Transportation Alternatives (TA) projects          | Activities previously authorized under the Transportation Alternatives Program (TAP)  |
|   | o. On- and off-road pedestrian and bicycle facilities | <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> |
|   | p. Transportation Alternatives projects               | <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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| Surface Transportation Program Grouping | q. Transportation Alternatives projects  | <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> |
|   | r. Transportation Alternatives projects  | <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>   |
|   | s. Projects for the creation, rehabilitation, and maintenance of multi-use recreational trails | <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>   |

| Surface Transportation Program Grouping                 | t. Recreational Trail Program projects   | <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> |
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| Grouping Category                                       | Function of Grouping Activities  | Allowable Work Types   |
| Workforce Development, training, and Education Grouping | Surface transportation workforce development, training, and education activities | <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>   |

## APPENDIX B

### Descriptions of Federal Programs

On December 4, 2015, President Obama signed into law Public Law 114-94, the Fixing America's Surface Transportation Act (FAST Act). The FAST Act funds surface transportation programs—including, but not limited to, Federal-aid highways—at over \$305 billion for fiscal years (FY) 2016 through 2020. It is the first long-term surface transportation authorization enacted in a decade that provides long-term funding certainty for surface transportation. This summary reviews the policies and programs of the FAST Act administered by the Federal Highway Administration (FHWA).

Below is a general listing of programs, and Fact Sheets for each program can be found at <http://www.fhwa.dot.gov/fastact/factsheets/>.

#### A. FEDERAL HIGHWAY FUNDING PROGRAMS

**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.

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

**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>

**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>

**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>.

**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>.

**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>.

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

**Railway-Highway Crossings Program:** The FAST Act continues the Railway-Highway Crossings program, which provides funds for safety improvements to reduce the number of fatalities, injuries, and crashes at public railway-highway grade crossings. The Federal share is



90%. Additional information of the Railway-Highway Crossings program can be found at <http://www.fhwa.dot.gov/fastact/factsheets/railwayhwy crossingsfst.cfm>.

**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.

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/stbgfs.cfm>.

**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>.



## 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      |
| CEASE                                | Director      | PO Box 3359               |            | Morristown, TN 37815-3359 |
| 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      | 1336 N hwy 92             |            | 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                                 | Gary Brewster | 324 N. Hill St            |            | Morristown, TN 37814      |

| Agency                                     | Name           | Address_1                  | Address_2 | City_St_Zip              |
|--|----------------|----------------------------|-----------|--------------------------|
| Healthstar Physicians                      | Director       | 420 W. Morris Blvd         |           | Morristown, TN 37813     |
| 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     |
| Children's Services                        | Director       | 1108 Gateway Service Park  |           | 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 |
| 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               | Marilyn Medley | 600 Sulphur Springs Rd     |           | Morristown, TN 37813     |
| Morristown Senior Citizens Center          | Director       | 841 Lincoln Ave            |           | Morristown, TN 37813     |
| Douglas Cherokee Economic Authority        | Director       | 534 E. 1st North St        |           | Morristown, TN 37814     |

| Agency                               | Name                   | Address_1                          | Address_2          | City_St_Zip                   |
|--------------------------------------|------------------------|------------------------------------|--------------------|-------------------------------|
| ETHRA                                | Mike Patterson         | 9111 Cross Park Dr,<br>Suite D-100 |                    | Knoxville, TN 37923           |
| RPO N and S East Tennessee District  | Don Brown              |                                    | P. O. Box 249      | Alcoa, TN 37701               |
| ETDD                                 | Terry Bobrowski        |                                    | P. O. Box 249      | Alcoa, TN 37701               |
| Human Services Dept.                 | Director               | Hwy 92                             |                    | Dandridge, TN 37725           |
| 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              | Kelsey Finch           | Region One                         | 7345 Region Lane   | Knoxville, TN 37914           |
| TDOT                                 | Troy Ebbert            | Region One                         | 7345 Region Lane   | Knoxville, TN 37914           |
| TDOT                                 | Director               | James K Polk Bldg-<br>Suite 1800   |                    | Nashville, TN 37243           |
| TDOT                                 | Byron Head             | James K Polk Bldg-<br>Suite 1800   |                    | Nashville, TN 37243           |
| TDOT, OCT                            | Michelle Christian     | Region One                         | 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           |
| Knoxville TPO                        | Jeff Welch             | 400 Main St, Suite 403             |                    | Knoxville, TN 37902           |
| Bike/ pedestrian enthusiast          | Jake Greear            | 2240 Sutherland Ave                | Suit 2             | Knoxville TN 37919            |
| 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        |

| Agency   | Name                             | Address_1                               | Address_2                  | City_St_Zip              |
|--|----------------------------------|---|----------------------------|--------------------------|
| 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    |
| 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     |



| Agency  | Name                           | Address_1                            | Address_2         | City_St_Zip              |
|---|--------------------------------|--------------------------------------|-------------------|--------------------------|
| FHWA  | Director/ Planner              | 404 BNA Dr, Bldg 200,<br>Suite 508   |                   | Nashville, TN 37217      |
| FTA   | Andres Ramirez                 | 230 Peachtree Street<br>NW Suite 800 |                   | Atlanta, GA 30303        |
| FTA, Civil Rights                               | Carlos Gonzales/ Dee<br>Foster | 230 Peachtree Street<br>NW Suite 800 |                   | Atlanta, GA 30303        |
| Norfolk-Southern Railroad                       | Susan Terpay                   | Three Commercial<br>Place            |                   | Norfolk, VA 23510-9217   |
| TDEC Environmental Field<br>Offices             | Senior Director                | 3711 Middlebrook Pike                |                   | Knoxville, TN 37921      |
| TDEC Parks and Conservation<br>Operations       | Assistant Commissioner         | 711 RS Gass Blvd                     |                   | Nashville, TN 37243      |
| Tennessee Wildlife Resources<br>Agency          | Executive Director             | Ellington Agricultural<br>Center     | 440 Hogan Road    | Nashville, TN 37204      |
| Tennessee Wildlife Resources<br>Agency          | Director                       | 3030 Wildlife Way                    |                   | Morristown, TN 37814     |
| Tennessee State Historic<br>Preservation Office | Executive Director             | Clover Bottom Mansion                | 2941 Lebanon Road | Nashville, TN 37243-0442 |
| 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 Hamilton-Jones             | 404 BNA Dr, Bldg 200,<br>Suite 508   |                   | Nashville, TN 37217      |

## APPENDIX E

### LAMTPO Scoresheets for TIP Projects

|                                 |   |                |               |                 |               |
|---------------------------------|---|----------------|---------------|-----------------|---------------|
| <b>SCORER'S/ ENTITY'S NAME:</b> |   |                |               |                 |               |
| <b>Project Request By</b>       |   |                |               |                 |               |
| <b>Project Description</b>      |   |                |               |                 |               |
|                                 |   | <b>SCORING</b> |               |                 |               |
|                                 |   | <b>0 =</b>     | <b>1 =</b>    | <b>2 =</b>      | <b>3 =</b>    |
|                                 |   | <b>No</b>      | <b>Minor</b>  | <b>Moderate</b> | <b>Major</b>  |
| <b>Category</b>                 |   | <b>Effect</b>  | <b>Effect</b> | <b>Effect</b>   | <b>Effect</b> |
| <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:<br>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:<br>Freight Movement of the Interstate System     | Truck Travel Time Reliability index  |
|                     | Congestion Reduction                   | System Performance:<br>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:<br>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.

### **Safety Performance Measures (PM1)**

The FHWA published the Highway Safety Improvement Program and Safety Performance Management Measures (PM1) Final Rules in the Federal Register on March 15, 2016, with an effective date of April 14, 2016. The Tennessee Department of Transportation (TDOT) established statewide safety performance targets and LAMTPO adopted those targets at the November 8, 2017 Executive Board meeting.

**Table 3. TDOT and LAMTPO Safety Targets**

| <b>Performance Measure</b>                              | <b>5-Year Rolling Averages</b> |                  |
|---|--------------------------------|------------------|
|   | <b>Baseline</b>                | <b>Target</b>    |
|   | <b>2012-2016</b>               | <b>2014-2018</b> |
| Number of Fatalities                                    | 994.4                          | 1021.4           |
| Fatality Rate   | 1.352                          | 1.337            |
| Number of Serious Injuries                              | 7,324.4                        | 7,630.8          |
| Serious Injury Rate                                     | 9.951                          | 9.982            |
| Number of Non-Motorized Fatalities and Serious Injuries | 432.6                          | 493.2            |

### **LAMTPO Performance Based Planning**

LAMTPO's 2040 LRTP and FFY 2017-2020 TIP project selection criteria prioritize projects that promote safety and security. The selection criteria are presented in Table 4-1 on page 4-1 in the TIP.

Safety for all users should be a top priority in transportation planning. Communication and collaboration among many agencies and the public is a vital part of safety planning. LAMTPO uses best available data to make funding decisions. Specifically, LAMTPO uses TDOT provided crash data for motor vehicles.

In the FFY 2017-2020 TIP \$1,370,224.00 of Highway Safety Improvement Program (HSIP) funds were programmed to projects that promote safety. In addition to the HSIP program, the broader program of projects is encouraged to incorporate safety elements that benefit all modes. For example, intersection projects may address geometric or sight distance concerns, while road widening/reconstruction projects can benefit active transportation by typically including bike facilities and sidewalks

### Future Performance Measures Implementation Update

LAMTPO is actively participating with regional, state, and federal partners to develop targets for the remaining performance measures. The current status of these efforts, and upcoming target setting deadlines are as follows:

Pavement and Bridge Infrastructure Condition Performance Measures (PM2)

TDOT Deadline to Establish Target: May 20, 2018

LAMTPO Deadline to Establish Target: November 16, 2018

**Table 4: TDOT Pavement and Bridge Condition (PM2) Targets**

| Performance Measures |   | Baseline | 2-Year Draft Target | 4-Year Draft Target |
|----------------------|---|----------|---------------------|---------------------|
| Pavement             | Percentage of pavements on the Interstate System in good condition  | 75.6%    | N/A                 | 60.0%               |
|                      | Percentage of pavements on the Interstate System in poor condition  | 0.14%    | N/A                 | 1.0%                |
|                      | Percentage of pavements on the non-Interstate NHS in good condition | 44.8%    | 42.0%               | 40.0%               |
|                      | Percentage of pavements on the non-Interstate NHS in poor condition | 3.24%    | 4.0%                | 4.0%                |
| Bridges              | Percentage of NHS bridges classified as in good condition           | 39.5%    | 36.0%               | 36.0%               |
|                      | Percentage of NHS bridges classified as in poor condition           | 4.9%     | 6.0%                | 6.0%                |

### System Performance Measures (PM3)

TDOT Deadline to Establish Target: May 20, 2018

LAMTPO Deadline to Establish Target: November 16, 2018

**Table 5: TDOT System Performance (PM3) Targets**

| Performance Measures   | Baseline   | 2-Year Draft Target  | 4-Year Draft Target  |
|--|--|--|--|
| Percentage of person-miles traveled on the Interstate System that are reliable | 87.7%  | 85.3%  | 83.0%  |
| Percent of person-miles traveled on the non-Interstate NHS that are reliable   | 89.7%  | N/A  | 87.5%  |
| Truck Travel Time Reliability Index  | 1.35   | 1.35   | 1.33   |
| Total Emissions Reductions   | VOC = 230.025<br>CO = 30.282<br>NOx = 363.399<br>PM2.5 = 2.897 | VOC = 30.698<br>CO = 75.000<br>NOx = 62.840<br>PM2.5 = 0.120 | VOC = 61.396<br>CO = 150.000<br>NOx = 125.680<br>PM2.5 = 0.240 |

### Transit Asset Management (TAM) and Transit Safety

The Federal Transit Administration (FTA) requires recipients of FTA funds to maintain and document minimum Transit Asset Management (TAM) standards. The purpose of these standards is to create a strategic and systematic practice of procuring, operating, inspecting, maintaining, and replacing transit capital assets and to manage their performance, risks, and costs over their life cycles, for the purpose of providing safe, cost effective, and reliable public transportation. The State of Good Repair (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. FTA requires SGR performance measures be set for the urban area. Performance Measures required are set by asset category, which includes Rolling Stock, Equipment (both maintenance equipment or non-revenue vehicles), and Facilities. 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. East Tennessee Human Resource Agency (ETHRA) is the direct recipient and public transportation provider in the LAMTPO MPA.

Transit Agency Deadline to establish TAM targets: January 1, 2017

LAMTPO Deadline to establish Performance targets: Transit Agency targets + 180 days

The National Goals pertaining to the Performance Measures is described in the table on the next page; and

| 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.  |

LAMTPO, in conjunction with ETHRA, is participating in the TDOT TAM plan for our rural and urban operations.

The TDOT Transit Asset management/ State of Good Repair Performance Targets Created on December 22, 2017, with an Effective Date of January 1, 2018 is as follows:

**Rolling Stock:**

Rolling Stock performance measure targets are targets for revenue vehicles

| <b>Vehicle Type</b>        | <b>FTA Default Useful life Benchmark(ULB) (in years)</b> | <b>TDOT Set Performance Measure Target</b>                              |
|----------------------------|--|---|
| Automobile                 | 8  | Less than 25% of automobiles will exceed the 8-year ULB                 |
| Cutaway Bus                | 10   | Less than 25% of the cutaway buses will exceed to 10-year ULB           |
| Minivan                    | 8  | Less than 25% of minivans will exceed the 8-year ULB                    |
| Other Rubber Tire Vehicles | 14   | Less than 25% of other rubber tire vehicles will exceed the 14-year ULB |
| Sport Utility Vehicles     | 8  | Less than 25% of sport utility vehicles will exceed the 8-year ULB      |
| Van                        | 8  | Less than 25% of vans will exceed the 8-year ULB                        |
| Bus                        | 14   | Less than 25% of buses will exceed the 14-year ULB                      |

**Equipment:** Equipment performance measure targets are targets for service vehicles.

| <b>Vehicle Type</b>        | <b>FTA Default Useful life Benchmark(ULB) (in years)</b> | <b>TDOT Set Performance Measure Target</b>                              |
|----------------------------|--|---|
| Automobile                 | 8  | Less than 25% of automobiles will exceed the 8-year ULB                 |
| Minivan                    | 8  | Less than 25% of minivans will exceed the 8-year ULB                    |
| Other Rubber Tire Vehicles | 14   | Less than 25% of other rubber tire vehicles will exceed the 14-year ULB |
| Sport Utility Vehicles     | 8  | Less than 25% of sport utility vehicles will exceed the 8-year ULB      |

The ETHRA 2018/2019 vehicles and facilities within the LAMTPO region are shown in table below:

| <b>Asset Class/ Definition</b>  | <b>Agency</b> | <b>Total Assets</b> | <b>2018 # Assets in Good Repair</b> | <b>2018 # Assets in SGR Backlog</b> | <b>2018 % Assets in SGR Backlog</b> | <b>2019 % Assets in SGR Backlog</b> |
|---|---------------|---------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| <b>Rolling Stock - All Revenue Vehicles</b><br><b>% of revenue vehicles that have met or exceeded their Useful Life Benchmark (ULB)</b>                               |               |                     |                                     |                                     |                                     |                                     |
| Cutaway -5 years (and 150,000 miles)  | ETHRA         | 14                  | 14                                  | 0                                   | 0                                   | 0%                                  |
| Lowered Floor Minivan   | ETHRA         | 1                   | 1                                   | 0                                   | 0                                   | 0%                                  |
| <b>Equipment - Non-Revenue Vehicles</b><br><b>% of non-revenue vehicles that have met or exceeded their Useful Life Benchmark (ULB)</b>                               |               |                     |                                     |                                     |                                     |                                     |
| Support Vehicle 8 years   | ETHRA         | 0                   | 0                                   | 0                                   | 0%                                  | 0%                                  |
| <b>Equipment – Over \$50,000/Owned</b><br><b>% of equipment with a condition rating below 3.0 on FTA's Transit Economic Requirements Model (TERM) Scale</b>           |               |                     |                                     |                                     |                                     |                                     |
| Equipment   | ETHRA         | 0                   | 0                                   | 0                                   | 0%                                  | 0%                                  |
| <b>Facilities - All Buildings or Structures</b><br><b>% of facilities with a condition rating below 3.0 on FTA's Transit Economic Requirements Model (TERM) Scale</b> |               |                     |                                     |                                     |                                     |                                     |
| Facilities (1 leased) (part of shopping complex)  | ETHRA         | 1                   | 1                                   | 0                                   | 0.00%                               | 0.00%                               |



Transit Agency Deadline for TAM Plans: October 1, 2018

Public Transit Agency Safety Plan Final Rule is effective July 19, 2019.

MPO Deadline to establish Transit Safety Performance targets: July 20, 2020.

### **Progress, Monitoring, and Next Steps**

The establishment of LAMTPO and TDOT targets for the PM2 and PM3 measures noted above will result in updates to this addendum. A broader discussion of TIP impacts on established targets will be included in the FY 2020-2023 TIP, due in 2019, as comparisons to the baseline data can be made. This comparative data will serve to inform future LRTP System Performance reporting, as required by 23 CFR 450.324 (f)(4). The next LAMTPO LRTP is due in 2021.

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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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:
  - o Fiscal constraint,
  - o Interested parties' participation (i.e., public involvement, stakeholder involvement, and consultation),
  - o Air quality conformity (in non-attainment and/or maintenance areas only), and
  - o Required MPO certifications, including the MPO Self-Certification with a current date; and
  - o 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

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

12-18-19

Date



Commissioner  
Tennessee Department of Transportation

1/27/2020

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. 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, 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

**Final – 9/18/2019**

**KNOXVILLE REGIONAL TPO  
FY 2020 – 2023 TIP  
APPENDIX D: AIR QUALITY CONFORMITY DETERMINATION**

### **D.1. Background and Purpose**

The purpose of this section is to demonstrate that the Knoxville Regional Transportation Planning Organization (KRTPO) FY 2020-2023 Transportation Improvement Program (TIP) meets the Air Quality Conformity requirements (also known as transportation conformity) of the Clean Air Act and FAST Act. The Knoxville Region is subject to transportation conformity due to it being designated as a “Maintenance Area” for the pollutants of fine particulate matter (PM<sub>2.5</sub>) and ground-level ozone.

Transportation conformity is the process used to ensure that federal funds will not be spent on projects that cause or contribute to any new violations of the Nation Ambient Air Quality Standards (NAAQS); increase the frequency or severity of NAAQS violations; or delay timely attainments of the NAAQS or any required interim milestone.

### **D.2. Knoxville Region Current Air Quality Status**

The Clean Air Act requires the United States Environmental Protection Agency (EPA) to set NAAQS for six “Criteria Pollutants” – Particulate Matter (PM), Ozone, Nitrogen Dioxide, Carbon Monoxide, Sulfur Dioxide, and Lead in order to protect human health and the environment from unsafe levels of these pollutants. These pollutants are regulated through the EPA setting maximum limits on exposure levels that must be reviewed periodically. Regions, which are found to be out of compliance with those limits, may be designated as a “Nonattainment Area”. Once a Nonattainment Area demonstrates compliance with the NAAQS it typically enters a 20-year period where it becomes known as a “Maintenance Area” and transportation conformity is still required as a mechanism to help ensure the standards will continue to be met.

Following are the applicable dates for current air quality designations and the geographic area covered by each for the Knoxville Region:

- 2008 8-Hour Ozone Standard – currently designated as a Maintenance Area. This standard became effective on July 20, 2012 and included the counties of Blount and Knox, plus a small portion of Anderson County surrounding the TVA Bull Run Fossil Plant. The EPA approved a re-designation of the area to Attainment effective on August 12, 2015.
- 2006 Daily PM<sub>2.5</sub> Standard – currently designated as a Maintenance Area. This standard became effective on December 14, 2009 and included the identical geographic area as the 1997 Annual PM<sub>2.5</sub> Standard. The EPA approved a re-designation of the area to Attainment effective on August 28, 2017.

Previous air quality designations that have since been revoked by EPA include the following:

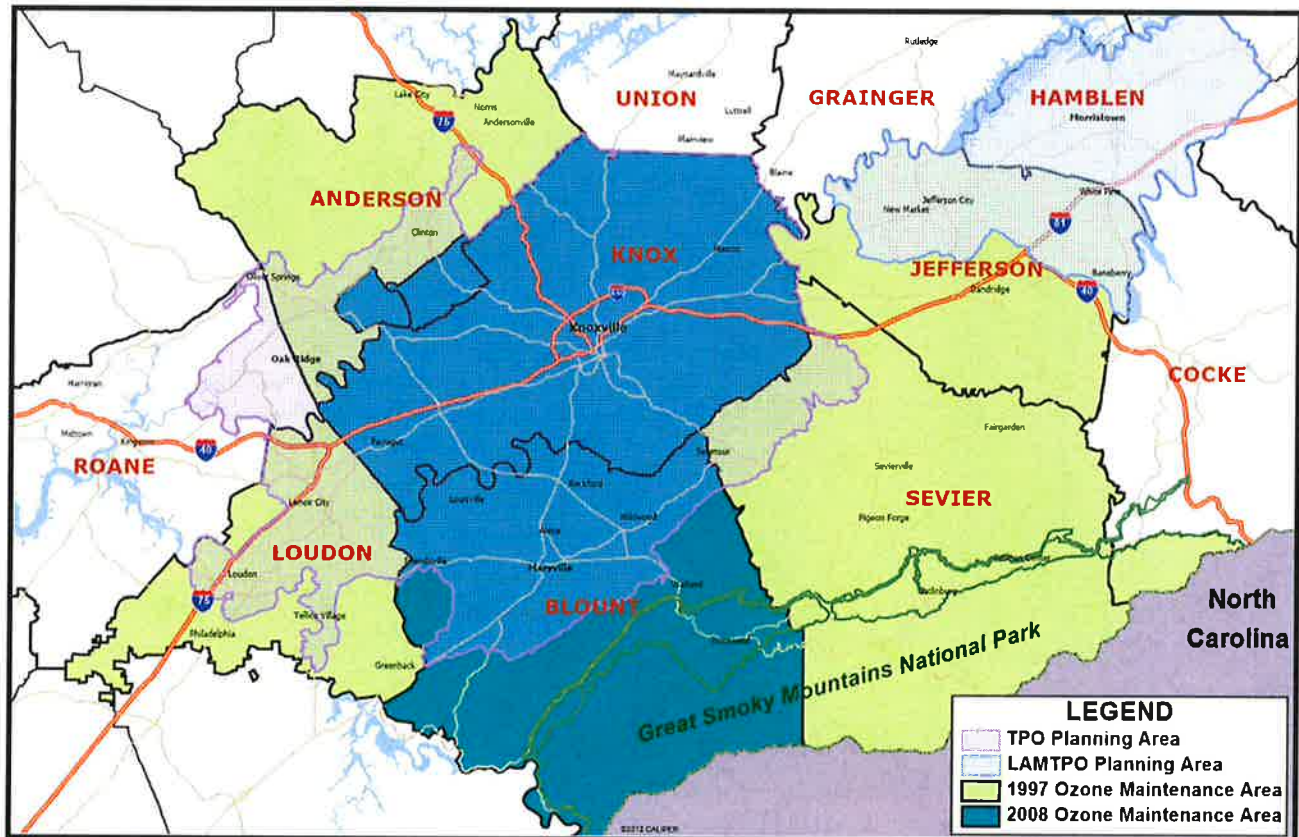
- 1997 8-Hour Ozone Standard – the Knoxville Region had been considered a Maintenance Area for this Standard, which encompassed all of the area within the 2008 8-Hour Ozone Standard Maintenance Area plus the balance of Anderson, Jefferson, Loudon, Sevier and a small portion of Cocke County within the Great Smoky Mountains National Park. The 1997 8-Hour Ozone Standard was revoked by EPA effective on April 6, 2015 however a court ruling issued on February 16, 2018 (*South Coast v. EPA*) stated that transportation conformity for this standard would still be required as an anti-backsliding measure effective for any actions starting one-year after the ruling (February 16, 2019). EPA has issued guidance on the format of the conformity documentation required to satisfy this requirement, which can be applied to just the so-called “orphan” area which is not covered by the 2008 8-Hour Ozone Standard. Section D.6. of this appendix covers conformity for the orphan area, which includes proposed transportation projects in both the Tennessee Department of Transportation (TDOT) FY 2020-2023 Statewide Transportation Improvement Program and the FY 2020-2023 Lakeway Area Metropolitan Transportation Planning Organization (LAMTPO) Transportation Improvement Program.

- 1997 Annual PM<sub>2.5</sub> Standard – the Knoxville Region was considered a Maintenance Area for this Standard and it covered the identical geography as with the 2006 Daily PM<sub>2.5</sub> Standard. The Knoxville Region is meeting the current (2012) Annual PM<sub>2.5</sub> Standard of 12 micrograms per cubic meter and the 1997 Standard (15 micrograms per cubic meter) has been revoked by EPA since it is less stringent than the newer standard. Transportation conformity for this Standard no longer applies.

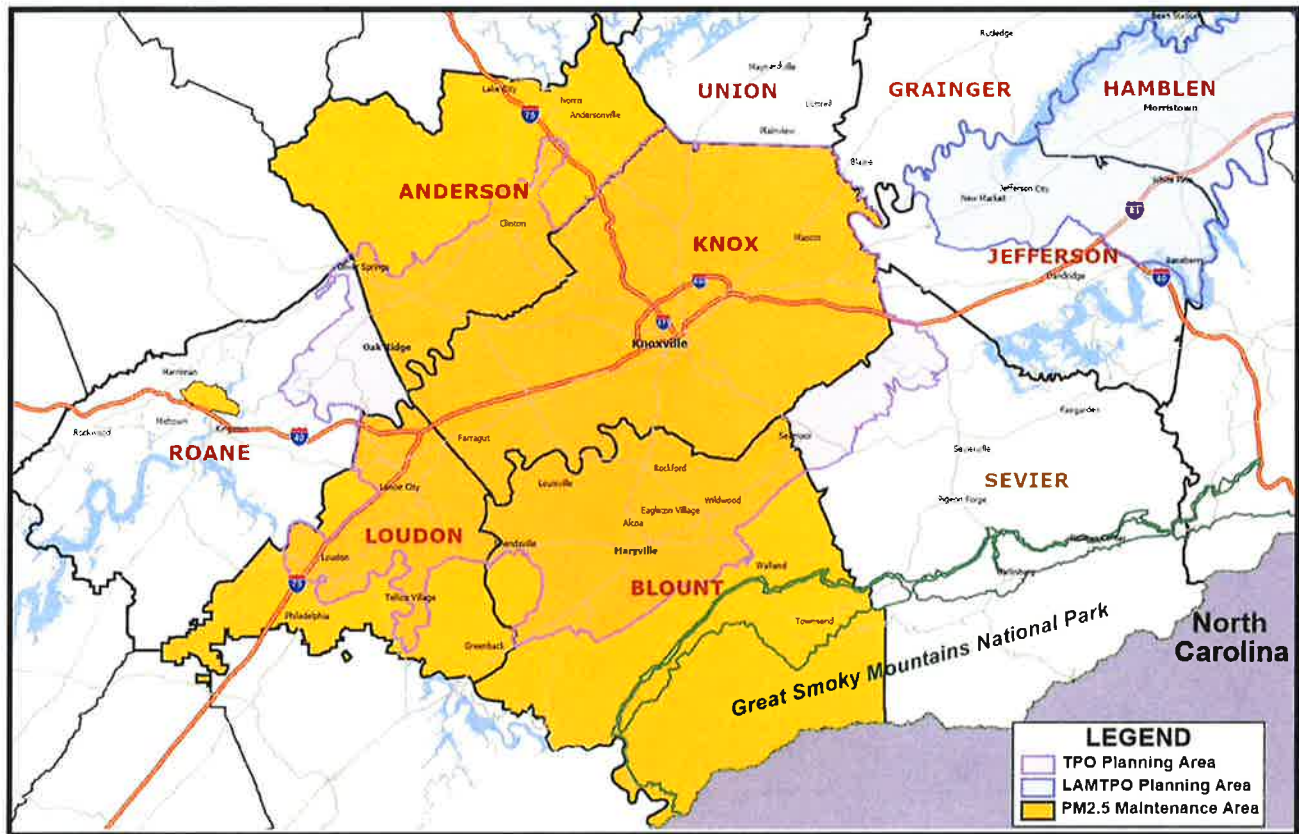
#### MAPS OF CURRENT KNOXVILLE REGION AIR QUALITY STATUS AND AREAS SUBJECT TO TRANSPORTATION CONFORMITY

The following maps show the geographical areas described in the above sections that have been designated as a Maintenance Area for both Ozone and PM<sub>2.5</sub>. They also show the “orphan area” that was previously designated as a Maintenance Area for the 1997 8-hour Ozone Standard and is once again subject to conformity and all of these areas are also shown in relation to the Metropolitan Planning Area boundary for the Knoxville Regional TPO and the Lakeway MTPO.

**Map 1 – 2008 Ozone Maintenance Area and 1997 Ozone “Orphan” Maintenance Area**



Map 2 – Former 1997 Annual and Current 2006 Daily PM2.5 Maintenance Area (Same Region)



### D.3. Emissions Analysis Background

Transportation conformity is demonstrated through a technical process known as an “emissions analysis”, in which future estimates of emissions from the transportation system are compared against what has been determined to be sufficient to allow the area to re-attain the air quality standard. Different types of emissions are involved in the production of Ozone and PM2.5 pollution as described below:

- Ozone: Ozone is not directly emitted into the atmosphere; rather it is formed through a chemical reaction between “Volatile Organic Compounds” (VOC) and “Oxides of Nitrogen” (NOx) in the presence of sunlight. Mobile-sources contribute both sources of emissions – VOC are primarily formed from the evaporation of motor fuel, while NOx is formed from the internal combustion process and emitted in vehicle exhaust.
- There are some PM2.5 emissions, known as “Direct PM2.5”, that are directly emitted from motor vehicles. Direct PM2.5 emissions consist of elements contained in vehicle exhaust as well as particles resulting from brake and tire wear. In addition, it is believed that NOx emissions can contribute to secondary formation of PM2.5 so it is included in the emissions analysis.

### D.4. Current Transportation Conformity Status

A conformity determination using a regional emissions analysis was made on the original 2040 Knoxville Regional Mobility Plan and approved by the U.S. DOT on May 31, 2017. A conformity finding for the FY 2017 – 2020 TIP was made on the same date as several TIP amendments were processed to ensure that the TIP maintained consistency with the Mobility Plan as is required. Since that time there have been multiple project



amendments and one set of which required a full revised regional emissions analysis that was approved by U.S. DOT on November 19, 2018. A full copy of the previous conformity determination requiring revised regional emissions analyses are available on the TPO website at:

<https://knoxtpo.org/wp-content/uploads/2019/05/Mobility-Plan-2040-Appendix-L.pdf>. The most recent conformity determination also addressed the revived transportation conformity requirement for the 1997 8-Hour Ozone area and included a full regional emissions analysis for the “orphan area”. Recent guidance from EPA issued subsequent to the conformity determination indicates that conformity for the orphan area can be demonstrated without a regional emissions analysis and further information is included in section D.X of this appendix.

## **D.5. Conformity Determination for 2008 Ozone Standard and 2006 PM2.5 Standard**

### **D.5.a. Reliance on a Previous Regional Emissions Analysis Overview**

The conformity rule allows for the reliance on the previous regional emissions analysis for conformity determinations on TIPs that are consistent with the transportation plan. Section 93.122 (g) of the conformity rule specifies the requirements for reliance on the previous regional emissions analysis and its applicability is required to be documented in a formal conformity determination report for the updated TIP. This report satisfies that requirement as the subsequent sections document the applicability of 40 CFR 93.122 (g) for using a previous regional emissions analysis to demonstrate transportation conformity of the KRTPO FY 2020-2023 TIP for the 2008 Ozone and 2006 PM2.5 NAAQS.

### **D.5.b. Satisfaction of Section 93.122(g) Requirements for Reliance on Previous Regional Emissions Analysis**

The following language shown in italics is directly from 40 CFR 93.122(g) regarding reliance on a previous regional emissions analysis. There are four requirements that must be met in order to rely on a previous regional emissions analysis to demonstrate conformity and the documentation that satisfies the requirements for conformity of the KRTPO FY 2020-2023 TIP is included below each one.

*Conformity determinations for a new transportation plan and/or TIP may be demonstrated to satisfy the requirements of §§93.118 (“Motor vehicle emissions budget”) or 93.119 (“Interim emissions in areas without motor vehicle emissions budgets”) without new regional emissions analysis if the previous regional emissions analysis also applies to the new plan and/or TIP. This requires a demonstration that:*

*(i) The new plan and/or TIP contain all projects which must be started in the plan and TIP’s timeframes in order to achieve the highway and transit system envisioned by the transportation plan;*

The FY 2020-2023 TIP contains projects directly from and consistent with the 2040 Mobility Plan that are projected to be started in the correct timeframes in order to achieve the highway and transit system envisioned by the transportation plan. Table D-1 at the end of this section contains a cross reference of the projects in the FY 2020-2023 TIP and their corresponding Mobility Plan project ID#’s, exempt and regional significance status and horizon year.

*(ii.) All plan and TIP Projects which are regionally significant are included in the transportation plan with design concept and scope adequate to determine their contribution to the transportation plan’s and/or TIP’s regional emissions at the time of the previous conformity determination;*

The regionally significant projects included in the TIP contain design concepts and scopes that are adequate to determine their contribution to the TIP’s regional emissions. The TPO maintains a regional travel demand forecasting model that is used to evaluate regionally significant project impacts on regional vehicle miles of



travel and traffic operating characteristics in order to determine emissions impacts of proposed transportation projects. Refer to the individual project sheets and summary Table D-1 for applicable project scopes.

*(iii.) The design concept and scope of each regionally significant project in the new plan and/or TIP are not significantly different from that described in the previous transportation plan; and*

The TIP project scopes of each regionally significant project in the new TIP are consistent with those from the conforming 2040 Regional Mobility Plan as referenced in Table D-1.

*(iv.) The previous regional emissions analysis is consistent with the requirements of §§93.118 (including that conformity to all currently applicable budgets is demonstrated) and/or 93.119, as applicable.*

The previous regional emissions analysis is consistent with the requirements of §93.118 (Criteria and procedures: Motor vehicle emissions budget). Conformity is applicable for the two NAAQS noted previously (2008 8-Hour Ozone Standard and 2006 Daily PM<sub>2.5</sub> Standard). Please refer to the complete conformity determination report from the 2040 Mobility Plan and subsequent revision described in Section D.4 for additional information regarding the procedures and results of the previous regional emissions analysis.

Additionally, all relevant planning assumptions included in the conformity determination for the 2040 Mobility Plan are still current and applicable.

#### **D.6. Conformity Determination for 1997 8-Hour Ozone Standard Orphan Area**

##### **D.6.a. Overview of South Coast versus EPA Decision Conformity Ramifications**

On February 16, 2018, the United States Court of Appeals for the District of Columbia Circuit in *South Coast Air Quality Mgmt. District v. EPA* (“South Coast II,” 882 F.3d 1138) held that transportation conformity determinations must be made in areas that were either nonattainment or maintenance for the 1997 ozone national ambient air quality standard (NAAQS) and attainment for the 2008 ozone NAAQS when the 1997 ozone NAAQS was revoked. The Knoxville Region was designated as a “maintenance area” at the time of the 1997 ozone NAAQS revocation on April 6, 2015 and was also designated attainment for the 2008 ozone NAAQS on May 21, 2012.

Per the court’s decision in *South Coast II*, beginning February 16, 2019, a transportation conformity determination for the 1997 ozone NAAQS will be needed in 1997 ozone NAAQS nonattainment and maintenance areas identified by EPA for certain transportation activities, including updated or amended metropolitan MTPs and TIPs. The US DOT made a 1997 ozone NAAQS conformity determination for the 2040 MTP’s for Knoxville and Lakeway on November 19, 2018 and the FY 2017 – 2020 TIPs. Conformity is required no less frequently than every four years as well as for MTP and TIP updates and amendments. This conformity determination report will address transportation conformity for the update of the TIP and STIP to cover fiscal years 2020 through 2023.

##### **D.6.b. Applicable Geography included in 1997 8-Hour Ozone Orphan Area**

This section of the conformity determination report is specifically intended to cover what is known as the “orphan area”, which are the parts of the 1997 8-hour Ozone Standard that were not included within the 2008 8-hour Ozone Standard nonattainment designation. Map 1 in Section D.2 above shows the geographies included in both the 1997 and 2008 8-hour Ozone Standards and their relationship to the planning areas for the KRTPO and the LAMTPO. Areas entirely in green shading are considered part of the TDOT FY 2020-2023 rural area STIP, whereas those areas in green with either purple or blue overlay are covered by Knoxville and Lakeway

respectively. The blue areas of Blount, Knox and portion of Anderson counties are subject to conformity as a maintenance area for the 2008 8-hour Ozone Standard and are therefore covered under Section D.5 of this appendix.

#### **D.6.c. Orphan Area Conformity Requirements**

For the 1997 ozone NAAQS areas, transportation conformity for MTPs and TIPs for the 1997 ozone NAAQS can be demonstrated without a regional emissions analysis, per 40 CFR 93.109(c). This provision states that the regional emissions analysis requirement applies one year after the effective date of EPA's nonattainment designation for a NAAQS and until the effective date of revocation of such NAAQS for an area. The 1997 ozone NAAQS revocation was effective on April 6, 2015, and the South Coast II court upheld the revocation. As no regional emission analysis is required for this conformity determination, there is no requirement to use the latest emissions model, or budget or interim emissions tests.

Therefore, transportation conformity for the 1997 ozone NAAQS for the Knoxville, Lakeway and TDOT FY 2020 – 2023 Transportation Improvement Programs can be demonstrated by showing the remaining requirements in Table 1 in 40 CFR 93.109 have been met. These requirements, which are laid out in Section 2.4 of EPA's guidance and addressed below, include:

- Latest planning assumptions (93.110)
- Consultation (93.112)
- Transportation Control Measures (93.113)
- Fiscal constraint (93.108)

#### **D.6.d. Latest Planning Assumptions**

The use of latest planning assumptions in 40 CFR 93.110 of the conformity rule generally apply to regional emissions analysis. In the 1997 ozone NAAQS areas, the use of latest planning assumptions requirement applies to assumptions about transportation control measures (TCMs) in an approved SIP.

The Tennessee SIP does not include any TCMs, see also Section D.6.f.

#### **D.6.e. Consultation Requirements**

The consultation requirements in 40 CFR 93.112 were addressed both for interagency consultation and public consultation. Interagency consultation was conducted with the Knoxville-Area Interagency Consultation group which includes federal partners such as FHWA, FTA, and EPA as well as state and local partners. Interagency consultation was conducted consistent with the Tennessee Conformity SIP and the conformity regulation's requirements at 40 CFR 93.105. Refer to Section D.7 of this appendix for additional information on interagency consultation.

Public consultation was conducted consistent with planning rule requirements in 23 CFR 450. Refer to Section D.8 for additional information on public consultation.

#### **D.6.f. Timely Implementation of TCMs**

The Tennessee SIP does not include any TCMs, therefore this does not apply in the Knoxville Region.

#### **D.6.g. Fiscal Constraint**

Transportation conformity requirements in 40 CFR 93.108 state that transportation plans and TIPs must be fiscally constrained consistent with DOT's metropolitan planning regulations at 23 CFR part 450. The 2040 MTP's for the Knoxville and Lakeway areas and the FY 2020 – 2023 TIP's for KRTPO and LAMTPO and the TDOT FY 2020 – 2023 STIP are fiscally constrained, as demonstrated in applicable sections of those documents.

#### **D.6.h. Orphan Area Projects**

Table D-2 at the end of this appendix provides a listing of the projects within the geography of the 1997 8-Hour Ozone Standard “orphan area” as shown on the map 1. These projects are from the FY 2020 – 2023 Transportation Improvement Program for the Knoxville Regional TPO or the Lakeway Area MTPO in the case of projects from one of those MPO areas. Projects outside of the MPO areas are considered “rural area” projects and come from the FY 2020 – 2023 TDOT Statewide Transportation Improvement Program (STIP). Guidance from EPA indicates that IAC consultation is still required for projects within the orphan area to determine whether they are exempt or non-exempt, but a regional significance determination is no longer required since that aspect was only applicable to the regional emissions analysis requirement. A project listing within the conformity determination report noting the project’s exempt/non-exempt status is necessary because non-exempt projects need to have a conformity determination, and exempt projects do not. Also, if there’s a change to a non-exempt project, then the plan/TIP will need to be amended and a new conformity determination done for the plan/TIP. If there’s a change to an exempt project, determining conformity for the plan/TIP is not necessary.

#### **D.7. Interagency Consultation Process and Comments**

The Transportation Conformity Rule in 40 CFR Part 93.105 requires that Interagency Consultation (IAC) be a part of conformity determinations. Interagency Consultation allows for formal deliberation of any issues that arise as part of the conformity analysis and allows for input from all stakeholder agencies into the process. Specific consultation procedures are specified in the Tennessee Transportation Conformity Regulation found in 1200-3-34-.01(3) of the Tennessee State Code.

The Knoxville IAC group was provided a draft FY2020-2023 TIP and conformity determination for a 30-day review period between August 19, 2019 and September 17, 2019. An IAC conference call was held on September 4, 2019 to discuss the draft TIP and conformity determination. Minutes from the IAC call are provided at the end of this appendix. Comments that were received through the IAC consultation process along with the TPO staff’s response to each are as follows:

**From Marc Corrigan, TDEC, 9/13/2019**

##### Regarding the TIP:

1. Comment/Question: Should section 4.2 of the TIP mention that there is also a 1997 8-hour ozone maintenance area?

Response: I deleted the specific references to NAAQS in the first sentence in order to make it more ambiguous and to just refer to the fact that the Knoxville Region is considered a “Maintenance Area” since it’s not entirely clear what our status is with respect to the 1997 Ozone Standard. This section later discusses the specific requirements for conformity and references the South Coast decision that brings back conformity for the orphan area. I cleaned up a few other terminology issues in this chapter, which are provided in a marked-up version for IAC review.

##### Regarding the CDR:

2. Comment/Question: Map 2: should the title to this map indicate the “former” 1997 PM2.5 NAAQS area and the “current” 2006 daily PM2.5 NAAQS area?

Response: That is correct, the map title was revised.

3. Comment/Question: Section D.6.b: should the first sentence be modified to state “this section”, or add “also” before “cover what is known”?

Response: Yes, added the words “section of the” before conformity determination report.

4. Comment/Question: Section D.6.f: replace “TDMs” with “TCMs”.

Response: Corrected.

**From Dianna Myers, EPA Region 4, 9/16/2019**

1. Comment/Question: Section D.2 title – Knoxville currently does not have any nonattainment areas. You can delete this word.

Response: Deleted

2. Comment/Question: Last bullet point on Page D-2 – I think you can state that Section D.6. covers conformity for orphan areas.

Response: Modified text to refer to Section D.6.

3. Comment/Question: change to Maintenance

Response: Corrected per TDEC comment #2.

4. Comment/Question: Section iv. on Page D-6 – applicable to two NAAQS instead of three as stated.

Response: Corrected.

5. Comment/Question: Section iv. on Page D-6 – If the last REA included modeling for the 1997 annual PM2.5 standard, you can reiterate here that the standard was revoked and conformity no longer applies.

Response: The last REA did not cover the 1997 annual PM2.5 Standard as it was already revoked. Deleted the words “1997 Annual PM2.5 Standard” from text.

6. Comment/Question: First paragraph under Section D.6.c. – I don't know if you really need this paragraph. You have the requirements spelled out in the following paragraphs.

Response: Correct, this is redundant and deleted.

7. Comment/Question: Under Section D.6.h. regarding reference to the project list – We know now the list is more than just for reference. It is a required element of consultation. You can reword or remove.

Response: Deleted last sentence and replaced with text from Dianna Myers’ follow-up email regarding guidance from EPA HQ to now read as follows:

Guidance from EPA indicates that IAC consultation is still required for projects within the orphan area to determine whether they are exempt or non-exempt, but a regional significance determination is no longer required since that aspect was only applicable to the regional emissions analysis requirement. A project listing within the conformity determination report noting the project’s exempt/non-exempt

status is necessary because non-exempt projects need to have a conformity determination, and exempt projects do not. Also, if there's a change to a non-exempt project, then the plan/TIP will need to be amended and a new conformity determination done for the plan/TIP. If there's a change to an exempt project, determining conformity for the plan/TIP is not necessary.

#### **D.8. Public Involvement and Comments**

A formal 30-day public comment period on the draft FY2020-2023 TIP was provided from September 23, 2019 to October 22, 2019. A public notice for the draft TIP and conformity determination was sent to regional newspapers including for the Lakeway area and links provided to the TPO website for public viewing. Public meetings were held on September 25, 2019 and October 8, 2019. Comments that were related specifically to the conformity determination along with the TPO staff's response to each is included in Appendix A.

#### **D.9. Summary**

Currently there are no transportation control measures (TCMs) in the Tennessee SIP for the Knoxville 8-hour ozone and PM2.5 nonattainment areas. However, should TCMs be introduced in the area, nothing in the KRMP nor the Transportation Improvement Program will prohibit the timely implementation of any that are approved in the SIP for the Knoxville area.

The KRTPO FY 2020-2023 TIP has been demonstrated to conform with air quality regulations found in the Clean Air Act Amendments of 1990 and the FAST Act by relying on a previous regional emissions analysis. The projects included in the FY 2020-2023 TIP come directly from and are consistent with the current conforming long range transportation plan known as the 2040 Knoxville Regional Long Range Mobility Plan, for which conformity was first approved by the U.S. DOT on May 31, 2017 and subsequently amendments approved on November 19, 2018 and a copy of the conformity approval letter from U.S. DOT is on the following page:



U.S. Department  
of Transportation  
Federal Highway  
Administration

Tennessee Division

November 19, 2018

404 BNA Drive, Suite 508  
Nashville, Tennessee 37217  
Phone (615) 781-5770

Ms. Tanisha Hall  
Director, Long Range Planning Division  
Tennessee Department of Transportation  
James K. Polk Building, Suite 900  
Nashville, TN 37243

In Reply Refer To:  
HPD-TN

Subject: Air Quality Conformity Determination for Knoxville, Tennessee

Dear Ms. Hall:

The Federal Highway Administration (FHWA) Tennessee Division and Federal Transit Administration (FTA) Region IV Office, in coordination with the Environmental Protection Agency (EPA) Region IV Office, have reviewed the Air Quality Conformity Determination Report adopted by the Knoxville Regional Transportation Planning Organization (TPO) Executive Board on October 24, 2018 and the Lakeway Metropolitan Transportation Planning Organization (MTPO) Executive Board on October 26, 2018.

The Air Quality Conformity Determination addresses the planned transportation improvements from the Knoxville TPO's amended Mobility Plan 2040; the Knoxville TPO's amended Fiscal Year (FY) 2017-2020 Transportation Improvement Program (TIP); and the Lakeway MTPO's 2040 Long Range Transportation Plan and FY 2017-2020 TIP. This determination covers the Knoxville, TN maintenance area for the 2006 Daily PM<sub>2.5</sub> and 2008 8-hour ozone National Ambient Air Quality Standards (NAAQS) as well as the former maintenance area for the 1997 ozone NAAQS in accordance with FHWA's *Updated Interim Guidance on Conformity Requirements for the 1997 Ozone NAAQS*.

Based on our review, we find the above-referenced documents meet the transportation conformity requirements at 40 CFR Part 93 and associated guidance.

FHWA and FTA appreciate the efforts of the Tennessee Department of Transportation (TDOT), Tennessee Department of Environment and Conservation (TDEC), the Knoxville Regional TPO and the Lakeway MTPO in fully addressing the unexpected transportation conformity requirements associated with the 1997 Ozone NAAQS.

If you have any questions regarding this determination, please contact me at (615) 781-5767.

Sincerely,

Sean Santalla  
Planning & Air Quality Specialist

**Knoxville Air Quality Interagency Consultation Conference Call -  
Meeting Minutes for 9/4/19**

**1) Roll Call**

**Call Participants:**

**Knoxville TPO:**

Mike Conger  
Craig Luebke

**Lakeway MTPO:**

None

**EPA:**

Kelly Sheckler  
Dianna Myers  
Richard Wong

**FHWA:**

Sean Santalla

**FTA:**

None

**National Park Service:**

Jim Renfro

**Tennessee Department of Transportation:**

Deborah Fleming  
Troy Ebbert  
Michelle Christian

**Tennessee Department of Environment & Conservation:**

Marc Corrigan  
Greg Riggs

**Knox County Air Quality Management:**

Coby Webster

**Discussion Items:**

**2) Discussion of Draft Conformity Determination and Changes to Draft Project List for FY 2020-2023  
Transportation Improvement Program (TIP)**

Craig Luebke provided an overview of the overall development process for the new FY 2020-2023 Transportation Improvement Program (TIP). Mike Conger then discussed specific sections of the TIP including the summary air quality and fiscal constraint sections. He explained that the actual conformity determination

was included as Appendix D and provided to the IAC as a separate attachment. He noted that this is currently out for a 30-day IAC review period until September 17<sup>th</sup> and that the TIP itself was also at FHWA for their review. There was some discussion of the schedule moving forward and whether the TPO's goal of adopting the TIP at the October 23<sup>rd</sup> meeting was on track. This is still to be determined based on FHWA's comments and IAC issues that may arise and may need to be pushed back. Mike also noted how the TIP was a living document that was still being amended/adjusted up until the point that the new one was adopted such that some changes may still occur with the draft project list.

Mike discussed the conformity determination report that provides documentation of the process to demonstrate conformity by relying on a previous regional emissions analysis. He noted that this is covered in the conformity regulations under 40 CFR 93.122(g) and there are four elements that must be satisfied to use this process, which is also known as Short Conformity Report. Mike stated that since the Long-Range Plan was updated less than one year ago, the project list modifications made at that time and accounted for in the regional emissions analysis are still consistent with the projects programmed in this new TIP. He stated that there is a table included in this section with a cross reference between the Long-Range Plan project IDs and the TIP projects showing the Long-Range Plan horizon year versus the phases being programmed in the TIP. He also described the challenges involved with specifically determining project completion dates relative to horizon years since it can be difficult to predict exact project schedules. He noted that the TPO staff attempts to meet regularly with TDOT project management division staff to get updates on likely construction dates for projects since the vast majority of the non-exempt, regionally significant projects in the TIP are ones that TDOT is implementing.

Mike reviewed the updated project list in more detail that showed the changes since the last IAC call on June 19<sup>th</sup>. Overall the changes were minor and did not impact the ability to rely on a previous regional emissions analysis, although one issue that did affect the list dealt with how TDOT pulled funding from the 2023 year for any phases listed after determining that they didn't want to show funding beyond the state's current 3-year program that is adopted annually by the State Legislature. Marc Corrigan asked a question about the Pellissippi Pkwy project that was listed and if the change noted affected its horizon year. Mike replied that in that case it was the issue of removing construction funds previously shown in fiscal year 2023, but that did not affect the projected horizon year completion date for the project which is sometime between 2024 and 2030.

### **3) Discussion of Draft Conformity Determination for 1997 8-Hour Ozone Orphan Area**

Mike provided an overview of the separate conformity report that was prepared using the FHWA template that has been distributed to show how conformity can be demonstrated for the 1997 8-hour Ozone Standard without using a regional emissions analysis which is not required per EPA guidance. Mike briefly described how the TPO was demonstrating that the requirements for conformity were being met and that really only two requirements of the four applied to our Region due to their not being any Transportation Control Measures (TCM) in the Tennessee State Implementation Plans applicable to Knox County. The remaining two requirements are interagency consultation and fiscal constraint. Mike noted that he did include an appendix with a project list comprised of projects within the three applicable TIP documents and their non-exempt/regional significance status, which he said he did not think was actually required in this document. Marc Corrigan raised a question which he had previously brought up with EPA regarding whether there was a requirement to include project exempt and regional significance status for orphan area projects. Dianna replied that since a regional emissions analysis was not required that she did not think any project categorization like that would be required from EPA's standpoint, but perhaps there were requirements from the U.S. DOT planning regs that might come into play, especially if fiscal constraint was being impacted. Sean Santalla stated that he would follow up on this matter further on FHWA's perspective and get back to the group.



Mike asked if there were any updates from EPA about whether other steps might be pursued to remove this conformity requirement altogether in further rulemaking. Dianna Myers responded that there were no plans to pursue anything at this point and that conformity requirement would likely remain for the duration of the 20-year maintenance period. Mike noted that this tied in with prior IAC discussions about the development of the next 10-year maintenance plan that TDEC was pursuing using a "limited maintenance plan" approach and asked if there were any updates on that process. Marc Corrigan replied that it was still going through internal review but should be moving forward in near future to be adopted by the State Air Board. He noted that the end date was being requested for 2031 and there were no comments contrary to using that date so far.

There was further discussion regarding the project list requirements in this documentation and whether it might make for good planning practice to go ahead and proceed with having a list. This would position the Region to have a list of agreed-upon exempt status projects that could still move forward in the unlikely event of a conformity lapse if one occurred. There was agreement from the group on this aspect and Mike stated he would continue to document the projects and their exempt status.

Mike asked for guidance regarding where this separate conformity report would be "housed" since it covered essentially three different TIP documents, the Knoxville TPO TIP, the LAMTPO TIP and the TDOT STIP. Dianna responded that the TPO did not necessarily need to use this separate template to cover the 1997 orphan area, but rather it could be included within the regular conformity documentation and basically done the same way as in the past where the TPO had always completed a single conformity determination report for the entire non-attainment area. Mike responded that based on that guidance he would compile the information from the separate report into the current Appendix D and would send back to the IAC for review. If a separate call to discuss this aspect was needed then Mike would coordinate that, especially based on any follow-up guidance from FHWA.

There being no other business the meeting was adjourned.

**Table D-1: 2020-2023 TIP Project Summary List/2040 Mobility Plan ID Horizon Year Cross-Reference**

| New TIP #   | Project Name   | Description   | Termini  | Length | Mobility Plan #      | MP Horizon Year | Exempt Status | Reg. Significant | Lead Agency     | Year | Work |
|-------------|--|---|--|--------|----------------------|-----------------|---------------|------------------|-----------------|------|------|
| 20-2011-082 | Montvale Road (SR-336)                               | Widen existing roadway to 2 – 12 foot travel lanes with a 12 foot center turn lane including curb and gutter, sidewalk, and a multiuse path.  | (Montvale Rd) Montvale Station Road to SR-73(Lamar Alexander Parkway) (IA)   | 0.6    | 09-262               | 2024            | Non-Exempt    | No               | TDOT            | 2021 | ROW  |
| 20-2014-002 | Lovell Rd. (SR-131) Widening                         | Widen 2-lane to 4-lane, including pedestrian and bicycle facilities.  | Cedarvale Ln. to Middlebrook Pk. (SR-169)  | 1.7    | 09-637               | 2024            | Non-Exempt    | Yes              | Knox County     | 2020 | PE-D |
|             |  |   |  |        |                      |                 |               |                  |                 | 2021 | ROW  |
| 20-2014-003 | Alcoa Hwy. (SR-115 / US-129)                         | Reconstruct 4-Lanes and 6-Lanes, including a frontage road system, new interchanges at Singleton Station Road and Topside Road (SR-333), modify the existing SR-115 and SR-162 interchange, and build a multiuse path.                    | Pellissippi Parkway in Blount County to Little River south of Topside Road in Knox County (IA)   | 2.4    | 09-216               | 2030            | Non-Exempt    | Yes              | TDOT            | 2020 | ROW  |
| 20-2014-006 | Schaad Road Widening                                 | Widen 2-lane to 4-lane  | Oak Ridge Hwy. (SR-62) to Pleasant Ridge Rd.   | 1.5    | 09-625               | 2024            | Non-Exempt    | Yes              | Knox County     | 2020 | ROW  |
|             |  |   |  |        |                      |                 |               |                  |                 | 2021 | CON  |
| 20-2014-009 | Queener Rd. Reconstruction                           | Reconstruct 2-lane road. Widen from 15.8 feet to 26 feet. Reduce curves.  | SR-72 to River Road  | 0.7    | 13-402               | 2024            | Exempt        |                  | City of Loudon  | 2020 | CON  |
| 20-2014-025 | Pellissippi Pkwy. (SR-162) extension                 | Construct new 4-Ln  | SR-33 to SR-73 (US-321)  | 4.4    | 09-232               | 2030            | Non-Exempt    | Yes              | TDOT            | 2020 | ROW  |
| 20-2014-032 | South Knoxville Waterfront Roadway Improvements      | Roadway streetscape improvements and utility relocations along Sevier Avenue and will include a new roundabout constructed at the intersection of Foggy Bottom/Sevier Avenue/Island Home Avenue. No additional lanes will be constructed. | Davenport Rd. to Island Home Ave.  | 0.32   | 09-617               | 2024            | Exempt        |                  | Knoxville       | 2020 | CON  |
| 20-2014-035 | SR 115 / US 129 (Relocated Alcoa Hwy.)               | New alignment, new four lane divided facility, construct an interchange at Pellissippi Parkway (SR-162)   | Proposed interchange at Tyson Blvd to Pellissippi Parkway (SR-162)   | 2.9    | 09-257               | 2024            | Non-Exempt    | Yes              | TDOT            | 2021 | CON  |
| 20-2014-037 | Pleasant Ridge Rd.                                   | Reconstruct 2 lane road with addition of turn lanes and bicycle/pedestrian facilities   | Merchant Dr. to City Limits  | 1.6    | 09-616               | 2024            | Exempt        |                  | Knoxville       | 2020 | CON  |
| 20-2014-038 | Washington Pike                                      | Widen from 2 lanes to 4 lanes including pedestrian and bicycle facilities   | North of I 640 to Murphy Rd.   | 1.7    | 09-615               | 2024            | Non-Exempt    | Yes              | Knoxville       | 2021 | ROW  |
| 20-2014-042 | Traffic Control Equipment Upgrade - Knoxville        | Purchase, installation and integration of signal controllers, signal monitors, closed loop equipment and software. Project also includes development of new signal timing plans for the new equipment and software.                       | Broadway Ave. from Foley to Jackson and Kingston Pike from Lovell Rd. to Metron Center Way   | 19     | 13-602               | 2024            | Exempt        |                  | Knoxville       | 2020 | CON  |
| 20-2014-059 | Sevierville Rd.                                      | Reconstruct Sevierville Rd. (SR-35) from 2 lanes to 3, curb and gutter, and sidewalks with intersection improvements  | Washington St. to Walnut St.   | 0.4    | 09-214               | 2024            | Non-Exempt    | Yes              | Maryville/ TDOT | 2020 | PE-D |
|             |  |   |  |        |                      |                 |               |                  |                 | 2020 | ROW  |
|             |  |   |  |        |                      |                 |               |                  |                 | 2023 | CON  |
| 20-2014-060 | Morganton Road roadway improvement                   | Reconstruct two lane section of Morganton Rd. with shoulders  | Foothills Mall Dr. to William Blount Dr. (SR-335)  | 2.2    | 09-211               | 2024            | Exempt        |                  | Blount County   | 2020 | ROW  |
|             |  |   |  |        |                      |                 |               |                  |                 | 2022 | CON  |
| 20-2014-069 | Alcoa Hwy. (SR-115 / US-129)                         | Widening from 4-Ln to 6-Ln including pedestrian and bicycle facilities.   | From Woodson Drive to Cherokee Trail Interchange (IA)  | 1.6    | 09-653               | 2024            | Non-Exempt    | Yes              | TDOT            | 2020 | CON  |
| 20-2014-073 | Knoxville South Waterfront Pedestrian/Bicycle Bridge | Connect the south waterfront to University of Tennessee and the north waterfront trails.  | Clancy Ave. to Upper Concourse of UT Thompson Bowling Arena  | 0.3    | 13-852               | 2030            | Exempt        |                  | Knoxville       | 2023 | PE-D |
| 20-2014-078 | Chapman Highway Advanced Traffic Management System   | Advanced Traffic Management Systems (ATMS) is a component of the Intelligent Transportation Systems (ITS) integrates technology to improve the flow of traffic and improve safety.  | Blount Ave. to Mountain Grove Dr.  | 6.3    | 13-1003              | 2024            | Exempt        |                  | Knoxville       | 2020 | CON  |
| 20-2014-080 | Liberty Street Multimodal Project                    | Install sidewalks on Liberty St. from Sutherland Ave to Division St., and bicycle facilities on Division St. from Sutherland Ave to Liberty St.   | Liberty St., from Sutherland Ave. to Division St. and Division St. from Sutherland Ave. to Liberty St.                                   | 0.75   | 13-1004              | 2024            | Exempt        |                  | Knoxville       | 2020 | CON  |
| 20-2014-082 | Union Road/N. Hobbs Road Improvements                | Reconstruct 2-lane road with addition of turn lanes and bicycle/pedestrian facilities.  | Union Road from N. Hobbs Road to Everett Road (approx. 4,500 ft); N. Hobbs Road from Kingston Pike (SR-1) to Union Road (approx. 750 ft) | 1      | 13-601               | 2024            | Exempt        |                  | Karragut        | 2020 | ROW  |
|             |  |   |  |        |                      |                 |               |                  |                 | 2021 | CON  |
| 20-2014-207 | Smart Trips - Comprehensive Program                  | Coordinator works with businesses to assist them in developing or expanding worksite commute options, programs and other incentives.  | N/A  | N/A    | Consistent w/ Goal 2 | N/A             | Exempt        |                  | TPO             | 2020 | OPER |
| 20-2014-225 | Bike Parking Program                                 | Provide convenient and secure parking destinations by reducing cost for businesses and agencies to provide bike parking for employees and customers.  | N/A  | N/A    | Consistent w/ Goal 2 | N/A             | Exempt        |                  | TPO             | 2020 | PUR  |

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| New TIP #   | Project Name   | Description   | Termini   | Length | Mobility Plan #      | MP Horizon Year | Exempt Status | Reg. Significant | Lead Agency | Year | Work                         |
|-------------|--|---|---|--------|----------------------|-----------------|---------------|------------------|-------------|------|------------------------------|
| 20-2014-229 | Knox County ATMS - Phase 1   | The project is to design and implement advanced traffic management system on two priority roads - Maynardville Pk and Cedar Bluff Rd.   | Cedar Bluff Rd from Sherrill Blvd to Middlebrook Pk (SR-169) (1.3 miles) and Maynardville Pk from Rifle Range Rd to E. Emory Rd (2.0 miles)   | 3.3    | 13-816               | 2024            | Exempt        |                  | Knox County | 2020 | CON                          |
| 20-2014-300 | PM 2.5 Diesel Emissions Reduction Strategies Grouping                | This grouping will be used to fund PM 2.5 Emission Reduction Strategies - Projects to reduce PM 2.5 emissions from on-road heavy duty diesel engines and non-road construction equipment, including: Diesel retrofits, idling reduction, and other strategies to reduce PM 2.5 emissions. Allowable work types include: Vehicle replacement, repowering, engine rebuilding, other technologies as determined by EPA as appropriate for reducing emissions from diesel engines, outreach activities that provide information exchange and technical assistance to diesel owners and operators on retrofit option | N/A   | N/A    | Consistent w/ Goal 1 | N/A             | Exempt        |                  | TOOT/TPO    | 2020 | PUR                          |
| 20-2017-003 | Pellissippi Pkwy/Hardin Valley Interchange                           | Modify existing interchange to improve capacity, safety and operations. Add new northbound on-ramp in northeast quadrant.   | Interchange at Hardin Valley Rd.  |        | 09-634               | 2024            | Non-Exempt    | Yes              | TDOT        | 2020 | CON                          |
| 20-2017-005 | SR-115 (US-129) Widening   | Widen from four to six lanes  | US-129 Bypass from SR-73 (Lamar Alexander Parkway) to SR-35   | 2.9    | 17-202               | 2024            | Non-Exempt    | Yes              | TDOT        | 2020 | PE-D<br>2020 ROW             |
| 20-2017-006 | Maryville to Townsend Greenway Phase 1 (Brown Creek)                 | Shared use path/Greenway from an existing trailhead at Harper Ave. (near Aluminum Ave) to Lamar Alexander Pkwy along Brown Creek.   | Harper Ave, trailhead to East Lamar Alexander Pkwy.   | 1.25   | 13-833               | 2024            | Exempt        |                  | Maryville   | 2020 | PE-D<br>2021 ROW<br>2022 CON |
| 20-2017-009 | First Creek Greenway - Broadway Streetscape                          | Construct a new shared use path extending First Creek Greenway from near Cecil Ave to near Woodland Ave   | Near Cecil Ave to near Woodland Ave   | 0.3    | 13-838               | 2024            | Exempt        |                  | Knoxville   | 2021 | CON                          |
| 20-2017-011 | East Knox Greenway - Phase 1   | Construct a new shared use path connecting First Creek Greenway to Knoxville Botanical Gardens and Arboretum  | Willow Ave, to Knoxville Botanical Gardens  | 1.6    | 17-901               | 2024            | Exempt        |                  | Knoxville   | 2020 | PE-D<br>2022 CON             |
| 20-2017-017 | Magnolia Ave Streetscape - Phase 1 & 4                               | Streetscape improvements in the existing right of way that include raised medians replacing center left-turn lane, signal improvements, bike lanes, improved sidewalks, bus pull-offs and amenities.  | N. Bertrand St. to Cherry St.   | 0.9    | 17-608               | 2030            | Exempt        |                  | Knoxville   | 2021 | PE-D                         |
| 20-2017-024 | Farragut Advanced Traffic Management System: Phase 2                 | Phase 2 of the ATMS project will build upon Phase 1 to include the remaining cabinet, detection, signal head modification, and mast arm upgrades that were not undertaken in Phase 1 due to budget constraints. Additionally, DSRC equipment will be added to each intersection, and CCTV cameras will be installed at up to 5 intersections  | The project limits of Phase 2 will be all 26 signalized intersections maintained by the Town, which includes the corridors of Kingston Pike, Concord Road, Campbell Station Road, and Parkside Drive. These project limits are the same as the Phase 1 project. | 8.7    | Consistent w/ Goal 1 | 2024            | Exempt        |                  | Farragut    | 2020 | CON                          |
| 20-2017-028 | Accelerated Bus Corridor Stops/Passenger Information Systems Install | Accelerated Bus Corridor Stops/Passenger Information Systems Install  | Broadway Ave, at Colonial to Summit Hill (Knoxville Transit Center)   | 6.5    | 17-1006              | 2024            | Exempt        |                  | Knoxville   | 2020 | PE-D<br>2021 ROW<br>2022 CON |
| 20-2017-034 | I-75 ITS Expansion   | ITS expansion includes the deployment of CCTV cameras at critical interchanges. Install power and communications infrastructure and at Least 2 CCTV Cameras at each Interchange.  | ITS expansion, from near MM 109.6 to near SR-61 (Exit 122) (IA)   | 13.03  | 18-600               | 2024            | Exempt        |                  | TDOT        | 2020 | PE-D                         |
| 20-2017-035 | I-40 ITS Expansion   | ITS expansion to include the installation of a power and communication network and ITS devices such as CCTV cameras, DMS, and RDS.  | ITS Expansion, from near Strawberry Plains Pike (Exit 398) interchange to near SR-66 (Sevierville, Exit 407) interchange (IA)   | 10.16  | 18-601               | 2024            | Exempt        |                  | TDOT        | 2020 | CON                          |
| 20-2017-036 | Emory Rd (SR-131)  | Widening 2 lanes to 4 lanes with median and/or center turn lane, including bicycle/pedestrian facilities  | (East Emory Road), from near SR-33 to near SR-331 (IA)  | 4.8    | 09-643               | 2030            | Non-Exempt    | Yes              | TDOT        | 2020 | PE-D                         |
| 20-2017-037 | Edgemoor Road (SR-170)   | Widening 2 Lanes To 4 Lanes with median and/or Center Turn Lane. Also includes bicycle/pedestrian facilities and a new bridge over the Clinch River.  | From SR-62 (Oak Ridge Hwy) to SR-9/US-25W (Clinton Hwy)   | 6.2    | 09-101               | 2030            | Non-Exempt    | Yes              | TDOT        | 2020 | PE-N<br>2020 PE-D            |
| 20-2017-038 | I-640/I-275/I-75 interchange   | Interchange reconstruction along with addition of auxiliary lanes in each direction on I-75   | Interchange at I-640/I-275 (Sharps Gap)   | 0.57   | 09-654               | 2030            | Non-Exempt    | Yes              | TDOT        | 2021 | PE-N<br>2022 PE-D            |

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|-------------|---|---|---|--------|-----------------|-----------------|---------------|------------------|----------------|------|------|
| 20-2017-039 | Northshore Drive (SR-332) at Kingston Pike (SR-1) Intersection Improvements   | Access management improvements, raised median, improve signal timing and various intersection improvements.   | (Kingston Pike), intersection at SR-332 (Northshore Drive) (IA)   | 0.2    | 09-658          | 2024            | Exempt        |                  | TDOT           | 2020 | PE-D |
| 20-2017-040 | Chapman Hwy (SR-71/US-441) Operational and Safety Improvements                | Intersection improvements and/or driveway improvements and/or left turn lanes at various locations throughout the project area.   | (Chapman Hwy), from near Blount Avenue to near SR-338 (Boys Creek Hwy) in Seymour (IA)  | 10.3   | 09-626          | 2024            | Exempt        |                  | TDOT           | 2020 | PE-D |
| 20-2017-041 | I-75 Exit 81 Interchange Lighting Enhancement                                 | Interchange lighting on I-75 interchange at SR-73 (US-321), Exit 81   | Exit 81 off I-75  | N/A    | 18-400          | 2024            | Exempt        |                  | Lenoir City    | 2020 | PE-D |
|             |   |   |   |        |                 |                 |               |                  |                | 2021 | CON  |
| 20-2017-042 | Carpenters Grade Road Widening and Intersection Improvements                  | Widening of existing 2-lane roadway to include 2-12 ft. lanes with curb & gutter and sidewalk with auxiliary turn lanes where needed. Potential for roundabout at intersection of Carpenters Grade/Peterson/Raulston.   | Raulston Rd /Peterson Ln. to Cochran Rd.  | 0.89   | 09-223          | 2024            | Exempt        |                  | Maryville      | 2020 | PE-D |
|             |   |   |   |        |                 |                 |               |                  |                | 2021 | ROW  |
|             |   |   |   |        |                 |                 |               |                  |                | 2023 | CON  |
| 20-2017-043 | SR 61 at SR 62 Intersection at Winter Gap                                     | Replace outdated traffic signal equipment (controller, signal heads and detection) with modern equipment and either radar or video detection to avoid the problems with in pavement detection loops that are subject to breaking. It will also upgrade from span wire to full mast arms and upgrade pavement markings to enhance safety.  | SR 61 at SR 62 Intersection at Winter Gap   | 0      | 18-100          | 2024            | Exempt        |                  | Oliver Springs | 2020 | CON  |
| 20-2017-044 | Boys Creek Highway (SR 338) at Old Knoxville Hwy. Intersection                | Reconfigure existing intersection to improve safety and operations through geometric layout changes, addition of turn lanes, and installation of a new traffic signal.  | Boys Creek Highway (SR 338) at Old Knoxville Hwy. Intersection  | 0      | 18-500          | 2024            | Exempt        |                  | Seymourville   | 2022 | CON  |
| 20-2017-046 | Oak Ridge Rails to Trails   | This Rails to Trails project on abandoned rails from Elza Gate Park at the Oak Ridge Turnpike to the Y-12 National Security Complex on Scarboro Road, and along Belgrade Road, Warehouse Road, Fairbanks Road, and Lafayette Drive.   | Melton Lake Rd /Greenway to Scarboro Rd./Y-12 National Security Complex   | 4.9    | 13-830          | 2030            | Exempt        |                  | Oak Ridge      | 2020 | ROW  |
|             |   |   |   |        |                 |                 |               |                  |                | 2020 | CON  |
| 20-2017-047 | Tazewell Pike Sidewalk  | Construct sidewalk along Tazewell Pike from Old Broadway to Jacksboro Pike.   | Old Broadway to Jacksboro Pike.   | 0.6    | 17-910          | 2024            | Exempt        |                  | Knoxville      | 2021 | PE-D |
|             |   |   |   |        |                 |                 |               |                  |                | 2021 | PE-D |
|             |   |   |   |        |                 |                 |               |                  |                | 2022 | CON  |
| 20-2017-048 | Blount County Greenway Trail - Ph. 1  | Construction of 3.3 mile greenway.  | Maryville city limits on US 321 at NW corner of Helton Rd. to Perry's Mill with additional bike access link to Old Walland Hwy. | 3.3    | 18-202          | 2024            | Exempt        |                  | Blount County  | 2020 | PE-D |
| 20-2017-049 | South Waterfront Greenway - East of Sultree                                   | Construct greenway trail along the Tennessee River connecting the cantilevered riverwalk section along Island Home Avenue to Sultree Landing Park riverwalk.  | Sultree Landing Park to Island Home Ave.  | 0.6    | 17-850          | 2024            | Exempt        |                  | Knoxville      | 2020 | PE-D |
|             |   |   |   |        |                 |                 |               |                  |                | 2021 | ROW  |
|             |   |   |   |        |                 |                 |               |                  |                | 2022 | CON  |
| 20-2017-050 | I-140 ITS Expansion   | I-140 ITS expansion to include the installation of a power and communication network and ITS devices such as CCTV cameras, DMS, and ROS.  | From near MM 2 to near MM 11 (SR-115/US-129/Alcoa Hwy)  | 9.2    | 18-201          | 2024            | Exempt        |                  | TDOT           | 2020 | PE-D |
|             |   |   |   |        |                 |                 |               |                  |                | 2022 | CON  |
| 20-2017-051 | Middlebrook Pike (SR-169) ATMS Expansion                                      | Purchase, installation and integration of fiber optics, signal controllers, signal monitors, closed loop equipment, enhanced detection, DSRC, traffic signal cable and software. Project also includes development of new signal timing plans for the new equipment and software.   | Western Ave. to Joe Hinton Rd.  | 6.5    | 18-603          | 2024            | Exempt        |                  | Knoxville      | 2020 | PE-D |
|             |   |   |   |        |                 |                 |               |                  |                | 2020 | CON  |
| 20-2017-053 | Oak Ridge Signal Timing Optimization Ph. 2                                    | Install advanced traffic signal controllers at 11 intersections, install aerial and underground fiber optic to connect 14 signals that are within the City's existing fiber network. Replace unreliable loop detectors with non-intrusive radar detection and establish a traffic operations center to be located in the City Central Service Complex. Along Georgia Ave, fiber optic cable will be installed to connect new fiber to the existing fiber network. | Illinois Ave. (SR 62) to Florida Ave /Fairbanks Ave.  | 2.85   | 13-802          | 2024            | Exempt        |                  | Oak Ridge      | 2020 | CON  |
| 20-2017-056 | I-75  | Widen From 4 to 6 Lanes   | From SR-131 (Emory Road) to SR-170 (Raccoon Valley Road)  | 4.85   | 09-692          | 2030            | Non-Exempt    | Yes              | TDOT           | 2020 | PE-D |
| 20-2017-057 | Pellissippi Pkwy (SR-162) Interchange at Oak Ridge Hwy (SR 62) in Solway (IA) | Interchange modification to include additional (new) ramp for westbound to southbound movement.   | Pellissippi Pkwy (SR-162) Interchange at Oak Ridge Hwy (SR 62) in Solway  | 0.45   | 09-649          | 2024            | Non-Exempt    | Yes              | TDOT           | 2020 | PE-D |
|             |   |   |   |        |                 |                 |               |                  |                | 2020 | PE-D |
|             |   |   |   |        |                 |                 |               |                  |                | 2022 | ROW  |
|             |   |   |   |        |                 |                 |               |                  |                | 2023 | CON  |

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|-------------|---|---|--|--------|----------------------|-----------------|---------------|------------------|-------------|-----------|------|
| 20-2017-058 | Broadway DSRC and Enhanced Detection Traffic Signal Improvements    | Signal upgrades at existing installations including DSRC, data probing hardware, enhanced vehicle detection, battery backup, etc.   | Broadway from Jackson Ave to Colonial Circle and 3 other spot locations on Tazewell Pk/Old Broadway (30 traffic signals total)   | 5.6    | Consistent w/ Goal 1 | 2024            | Exempt        |                  | Knoxville   | 2020      | PE-N |
|             |   |   |  |        |                      |                 |               |                  |             | 2020      | PE-D |
|             |   |   |  |        |                      |                 |               |                  |             | 2020      | CON  |
| 20-2017-059 | Chapman Hwy DSRC and Enhanced Detection Traffic Signal Improvements | Signal upgrades at existing installations including DSRC, data probing hardware, enhanced vehicle detection, battery backup, etc.   | Chapman Hwy from Blount Ave to Mountain Grove Dr (17 traffic signals)  | 6.4    | Consistent w/ Goal 1 | 2024            | Exempt        |                  | Knoxville   | 2020      | PE-N |
|             |   |   |  |        |                      |                 |               |                  |             | 2020      | PE-D |
|             |   |   |  |        |                      |                 |               |                  |             | 2020      | CON  |
| 20-2017-060 | Kingston Pk DSRC and Enhanced Detection Traffic Signal Improvements | Signal upgrades at existing installations including DSRC, data probing hardware, enhanced vehicle detection, battery backup, etc.   | Kingston Pk from Cherokee Blvd to Huxley Rd and 3 signals on West Town Way (44 traffic signals total)  | 10.6   | Consistent w/ Goal 1 | 2024            | Exempt        |                  | Knoxville   | 2020      | PE-N |
|             |   |   |  |        |                      |                 |               |                  |             | 2020      | PE-D |
|             |   |   |  |        |                      |                 |               |                  |             | 2020      | CON  |
| 20-2017-061 | Traffic Signal Improvements for the U.T. Area                       | Addition of following elements: an ATMS data server, DSRC capable ATC controllers, high speed wireless network, and radio equipment. This proposal will increase ATMS capabilities and decrease traffic delay by being better able to sense traffic flow and provide SPaT and related data sharing features | A total of 39 signals will be upgraded along Cumberland Ave, Neyland Dr, 17th St/Ailor, Western Ave and Joe Johnson Dr. Signal improvements along Henley St will connect two ongoing projects between Broadway and Chapman Highway.  | N/A    | Consistent w/ Goal 1 | 2024            | Exempt        |                  | Knoxville   | 2020      | PE-N |
|             |   |   |  |        |                      |                 |               |                  |             | 2020      | PE-D |
|             |   |   |  |        |                      |                 |               |                  |             | 2021      | CON  |
| 20-2017-062 | Lenoir City CMAQ ITS Phase II                                       | The proposed project is a Phase II to the Lenoir City CMAQ ITS. It includes additional features not included in Phase I to enhance traffic flow and to reduce emissions. DSRC with Advanced Traffic Controllers with cellular modems / batteries will be installed along with radar detection devices.      | US-321 / SR-73 / SR-2 US-321 at US-70 US-321 at I-40 Ramps, (22 Traffic signals)   | 8.6    | Consistent w/ Goal 1 | 2024            | Exempt        |                  | Lenoir City | 2020      | PE-D |
|             |   |   |  |        |                      |                 |               |                  |             | 2020      | CON  |
| 20-2017-063 | Knox County Advanced Traffic Management System - Phase II           | Installation of DSRC, video detection, and battery backups at all ten intersections from Phase I, and five new intersections; replace all 15 intersections; and install new signal cabinets and wireless interconnect at four new signals.  | Phase II - E. Emory Rd. (SR131) at Andersonville Pike, Norris Freeway (SR71/US441) at Sam Walton Way, Watt Rd I-40 EB and WB ramps, Maynardville Pk (SR 33/US 441) at Andersonville Pk. Phase I Additions - Maynardville Pk (9) and Norris Fwy (1)   | N/A    | Consistent w/ Goal 1 | 2024            | Exempt        |                  | Knox County | 2020      | PE-D |
|             |   |   |  |        |                      |                 |               |                  |             | 2021      | CON  |
| 20-2017-064 | Oak Ridge Signal Timing Optimization Program: Phase III             | Installation of: advanced traffic controllers, wireless interconnect, radar detection and DSRC.   | Project is primarily located along Illinois Ave (SR 62) and Lafayette Dr. The project includes the following (11) signalized intersections: Illinois Ave (SR 62) at Robertsville Rd; Illinois Ave (SR 62) at Ivanhoe Rd/Ivanhoe Lane; Illinois Ave (SR 62) at ORAU Way/Tulsa Rd; Illinois Ave (SR 62) at Tulane Av/Tuskegee Dr; Illinois Ave (SR 62) at East Tulsa Rd; Illinois Ave (SR 62) at South Rutgers Ave; Illinois Ave (SR 62) at Woodland Terrace; Illinois Ave (SR 62) at Lafayette Dr/Scarboro Rd; Lafayette Dr at Manchester Rd/Hendrix Dr; Lafayette Dr at Emory Valley Rd; Lafayette Dr at Laboratory Rd | 3.44   | Consistent w/ Goal 1 | 2024            | Exempt        |                  | Oak Ridge   | 2020      | PE-D |
|             |   |   |  |        |                      |                 |               |                  |             | 2021      | CON  |
| 20-2017-209 | Smart Trips - Ride Share Program                                    | Continuation of Smart Trips program that encourages alternatives to driving alone through an online ride matching and logging database, incentives, marketing and outreach. Operations funds are used for rideshare operations.   | N/A  | N/A    | Consistent w/ Goal 2 | N/A             | Exempt        |                  | TPO         | 2020      | OPER |
| 20-2020-200 | Section 5307 Funds  | 5307 formula transit funding  | N/A  | N/A    | 13-860               | N/A             | Exempt        |                  | Knoxville   | 2020-2023 | PUR  |
| 20-2020-201 | Section 5310 Funds  | 5310 formula transit funding  | N/A  | N/A    | 13-869               | N/A             | Exempt        |                  | TPO         | 2020-2023 | PUR  |
| 20-2020-202 | Section 5339 Funds  | 5339 formula transit funding  | N/A  | N/A    | 13-871               | N/A             | Exempt        |                  | Knoxville   | 2020-2023 | PUR  |
| 20-2020-203 | ETHRA Transit Vehicle Replacement                                   | ETHRA will purchase transit vehicles to replace medium duty 10 passenger vehicles and wheelchair cutaway vehicles that have met their useful life guidance of 5 years and/or 150,000 miles.   | N/A  | N/A    | 17-1002              | 2024            | Exempt        |                  | ETHRA       | 2020-2023 | PUR  |
| 20-2020-204 | Knox CAC Transit Vehicle Replacement                                | CAC will purchase replacement vehicles for demand response service.   | N/A  | N/A    | 13-861               | 2024            | Exempt        |                  | CAC         | 2020-2023 | PUR  |

**Table D-1: 2020-2023 TIP Project Summary List/2040 Mobility Plan ID Horizon Year Cross-Reference**

| New TIP #   | Project Name  | Description   | Termini  | Length | Mobility Plan #      | MP Horizon Year | Exempt Status | Reg. Significant | Lead Agency | Year             | Work |
|-------------|---|---|--|--------|----------------------|-----------------|---------------|------------------|-------------|------------------|------|
| 20-2020-205 | KAT Purchase Transit Vehicles (7 buses and 4 trolleys)                            | KAT purchase of heavy-duty transit vehicles (buses and trolleys) that have exceeded their useful life.  | N/A  | N/A    | 17-1007, 17-1008     | 2024            | Exempt        |                  | KAT         | 2020, 2021, 2023 | PUR  |
| 20-2020-001 | Knoxville TPO Regional Pavement Management System                                 | Conduct a program using collected inventory and condition data to evaluate roadway pavements in all jurisdictions that want to participate for the purpose of establishing current and future resurfacing or other appropriate interim treatment needs and costs.   | N/A  | N/A    | Consistent w/ Goal 1 | N/A             | Exempt        |                  | TPO         | 2020             | PE-N |
| 20-2020-002 | Virtue Road Improvements Ph. 2  | Widen Virtue Rd. to two 11' lanes with curb and gutter, and provide shared use path connection to existing and planned bike/ped facilities.   | 2200' south of Broadwood Dr. to Boyd Station Rd.                                       | 0.95   | 09-630               | 2040            | Exempt        |                  | Farragut    | 2021             | PE-N |
|             |   |   |  |        |                      |                 |               |                  |             | 2022             | PE-D |
| 20-2020-003 | Middlebrook Pike Complete Street  | Install protected bicycle facilities, improve sidewalks and upgrade bike/pedestrian treatments at three intersections. Project connects existing bike/ped facilities on University Avenue to the greenway on Middlebrook Pike at Proctor Street.  | Western Ave. to Proctor St.  | 0.85   | Consistent w/ Goal 2 |                 | Exempt        |                  | Knoxville   | 2020             | PE-N |
|             |   |   |  |        |                      |                 |               |                  |             | 2021             | PE-D |
|             |   |   |  |        |                      |                 |               |                  |             | 2022             | ROW  |
| 20-2020-004 | Woodland Avenue Complete Street   | Install bike lanes, sidewalks, and pedestrian crossing improvements. Project connects a greenway to existing bike lanes.  | N. Broadway to West Glenwood Ave.  | 0.5    | Consistent w/ Goal 2 |                 | Exempt        |                  | Knoxville   | 2022             | CON  |
| 20-2020-005 | Foothills Mall Dr. Extension Ph. 2  | Construct new 2-lane road with center turn lane and sidewalks.  | Foch St. to McCammon Ave.  | 0.66   | 10-260               | 2030            | Non-Exempt    | No               | Mayville    | 2021             | PE-N |
|             |   |   |  |        |                      |                 |               |                  |             | 2022             | PE-D |
| 20-2020-006 | SR-33 West Broadway Ave. Widening   | Widening and intersection improvements along US 411/SR-33   | US 321 (Lamar Alexander Pkwy.) to South Cedar St.                                      | 0.45   | 09-242               | 2030            | Non-Exempt    | Yes              | Mayville    | 2022             | PE-N |
|             |   |   |  |        |                      |                 |               |                  |             | 2023             | PE-D |
| 20-2020-007 | I-75 ITS Instrumentation at SR-61 (Andersonville Hwy., Exit 122) interchange (IA) | Install ITS Instrumentation And Communications  | ITS Instrumentation at SR-61 (Andersonville Hwy., Exit 122) interchange (IA)           | 0.59   | Consistent w/ Goal 1 |                 | Exempt        |                  | TDOT        | 2021             | PE-N |
|             |   |   |  |        |                      |                 |               |                  |             | 2021             | PE-D |
| 20-2020-009 | SR-115/US-129   | Smartway Geographic Expansion   | ITS expansion from south of Topside Road to Cherokee Trail interchange (IA) Priority 1 | 5.27   | 18-200               | 2024            | Exempt        |                  | TDOT        | 2021             | PE-D |
|             |   |   |  |        |                      |                 |               |                  |             | 2021             | CON  |
| 20-2020-010 | SR-115/US-129   | Smartway Geographic Expansion   | ITS expansion from I-140 to south of Topside Road                                      | 2.27   | 18-200               | 2024            | Exempt        |                  | TDOT        | 2021             | PE-D |
| 20-2020-210 | KAT Bus Mid-Life Overhauls  | In order to maintain the KAT fleet in a state of good repair, KAT is requesting funding for mid-life overhauls on 46 transit buses. An "overhaul" is a mid-life action on a major component that enables an asset to achieve its useful life and is an FTA-eligible activity under Circular 5010.1E (Award Management). | N/A  | N/A    | Consistent w/ Goal 2 | N/A             | Exempt        |                  | KAT         | 2020-2023        | PUR  |
| 20-2020-301 | HSIP Grouping   | Any strategy, activity or project on a public road that is consistent with the state strategic highway plan (SHSP) and corrects or improves a hazardous road location or feature or addresses a highway safety problem, including workforce development.  | N/A  | N/A    | Consistent w/ Goal 1 | N/A             | Exempt        |                  | TDOT        | 2020-2023        | CON  |
| 20-2020-302 | STBG Grouping   | Resurfacing, guardrail, slide repair, signs, signals, marking, intersection/interchange modifications, noise walls, wetland or stream mitigation, safety improvements, bridge replacement, repair.  | N/A  | N/A    | Consistent w/ Goal 1 | N/A             | Exempt        |                  | TDOT        | 2020-2023        | CON  |
| 20-2020-303 | NHPP Grouping   | Resurfacing, guardrail, slide repair, signs, signals, marking, intersection/interchange modifications, noise walls, wetland or stream mitigation, safety improvements, bridge replacement, repair.  | N/A  | N/A    | Consistent w/ Goal 1 | N/A             | Exempt        |                  | TDOT        | 2020-2023        | CON  |
| 20-2020-304 | PHSIP Grouping  | Any strategy, activity or project on a public road that is consistent with the state strategic highway plan (SHSP) and corrects or improves a hazardous road location or feature or addresses a highway safety problem, including workforce development.  | N/A  | N/A    | Consistent w/ Goal 1 | N/A             | Exempt        |                  | TDOT        | 2020-2023        | CON  |

**Table D-1: 2020-2023 TIP Project Summary List/2040 Mobility Plan ID Horizon Year Cross-Reference**

| New TIP #   | Project Name  | Description   | Termini | Length | Mobility Plan #      | MP Horizon Year | Exempt Status | Reg. Significant | Lead Agency | Year      | Work  |
|-------------|---|---|---------|--------|----------------------|-----------------|---------------|------------------|-------------|-----------|-------|
| 20-2020-305 | STBG/STBG-1A Bike/Pedestrian and Transportation Alternatives Grouping | This grouping will be used to fund greenways, sidewalks, bike/pedestrian amenities, streetscaping, and to fund STBG - Transportation Alternatives projects, which provides funding for programs and projects defined as transportation alternatives, including on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, community improvement activities, and environmental mitigation; recreational trail program projects throughout the Knoxville TPO area. | N/A     | N/A    | Consistent w/ Goal 2 | N/A             | Exempt        |                  | Various     | 2020-2023 | CON   |
| 20-2020-306 | Planning and Studies Grouping   | This grouping will be used to fund planning reports and studies throughout the Knoxville TPO planning area.   | N/A     | N/A    | Consistent w/ Goal 3 | N/A             | Exempt        |                  | Various     | 2020-2023 | Study |
| 20-2020-307 | Maintenance and Repair Grouping                                       | Funds will be used for operation, maintenance, repair, or resurfacing works.  | N/A     | N/A    | Consistent w/ Goal 3 | N/A             | Exempt        |                  | Various     | 2020-2023 | CON   |

**Table D-2 - Orphan Area Project Listing from KRTPO, LAMTPO and TDOT Transportation Improvement Programs**

| TIP ID #                            | Project Name   | Description   | Term(s)   | Length | Mileage<br>Plan #    | MP Horizon<br>Year | Exempt<br>Status | Reg.<br>Significant | Lead Agency    | Year | Work       |
|-------------------------------------|--|---|---|--------|----------------------|--------------------|------------------|---------------------|----------------|------|------------|
| KRTPO<br># 20-2014-<br>009          | Queener Rd. Reconstruction                                       | Reconstruct 2-lane road. Widen from 15.8 feet to 26 feet. Reduce curves.  | SR-72 to River Road   | 0.7    | 13-402               | 2024               | Exempt           |                     | City of Loudon | 2020 | CON        |
| KRTPO<br># 20-2017-<br>041          | I-75 Exit 81 Interchange Lighting Enhancement                    | Interchange lighting on I-75 interchange at SR-73 (US-321), Exit 81   | Exit 81 off I-75  | N/A    | 18-400               | 2024               | Exempt           |                     | Lenoir City    | 2020 | PE-D       |
|                                     |  |   |   |        |                      |                    |                  |                     |                | 2021 | CON        |
| KRTPO<br># 20-2017-<br>043          | SR 61 at SR 62 Intersection at Winter Gap                        | Replace outdated traffic signal equipment (controller, signal heads and detector) with modern equipment and either radar or video detection to avoid the problems with in pavement detection loops that are subject to breaking. It will also upgrade from span wire to full mast arms and upgrade pavement markings to enhance safety. | SR 61 at SR 62 Intersection at Winter Gap   | 0      | 18-100               | 2024               | Exempt           |                     | Oliver Springs | 2020 | CON        |
| KRTPO<br># 20-2017-<br>044          | Boyd's Creek Highway (SR 338) at Old Knoxville Hwy. Intersection | Reconfigure existing intersection to improve safety and operations through geometric layout changes, addition of turn lanes, and installation of a new traffic signal.  | Boyd's Creek Highway (SR 338) at Old Knoxville Hwy. Intersection  | 0      | 18-500               | 2024               | Exempt           |                     | Sevierville    | 2022 | CON        |
| KRTPO<br># 20-2017-<br>052          | Lenoir City CMAQ ITS Phase II                                    | The proposed project is a Phase II to the Lenoir City CMAQ ITS. It includes additional features not included in Phase I to enhance traffic flow and to reduce emissions. DSRC with Advanced Traffic Controller with cellular modems / batteries will be installed along with radar detection devices.                                   | US-321 / SR-73 / SR-2 US-321 at US-70 US-321 at I-40 Ramps. (22 Traffic signals)  | 8.6    | Consistent w/ Goal 1 | 2024               | Exempt           |                     | Lenoir City    | 2020 | PE-D       |
|                                     |  |   |   |        |                      |                    |                  |                     |                | 2020 | CON        |
| KRTPO<br># 20-2017-<br>064          | Oak Ridge Signal Timing Optimization Program: Phase III          | Installation of advanced traffic controllers, wireless interconnect, radar detection and DSRC.  | Project is primarily located along Illinois Ave (SR 62) and Lafayette Dr. The project includes the following (11) signalized intersections: Illinois Ave (SR 62) at Robertsville Rd; Illinois Ave (SR 62) at Ivanhoe Rd/Ivanhoe Lane; Illinois Ave (SR 62) at ORAU Way/Tulsa Rd; Illinois Ave (SR 62) at Tulane Ave/Tuskegee Dr; Illinois Ave (SR 62) at East Tulsa Rd; Illinois Ave (SR 62) at South Rutgers Ave; Illinois Ave (SR 62) at Woodland Terrace; Illinois Ave (SR 62) at Lafayette Dr/Scarboro Rd; Lafayette Dr at Manchester Rd/Hendrix Dr; Lafayette Dr at Emory Valley Rd; Lafayette Dr at Laboratory Rd | 3.44   | Consistent w/ Goal 1 | 2024               | Exempt           |                     | Oak Ridge      | 2020 | PE-D       |
|                                     |  |   |   |        |                      |                    |                  |                     |                | 2021 | CON        |
| STIP #<br>2078032,<br>Sevier County | SR-73 (US-321)   | Widen 2-Ln to 4-Ln Divided  | Buckhorn Road to SR-416   | 1.4    | S-1778032            | 2030               | Non-Exempt       | Yes                 | Sevier County  | 2020 | PE-D       |
|                                     |  |   |   |        |                      |                    |                  |                     |                | 2021 | ROW        |
| STIP #<br>2078080,<br>Sevier County | SR-449 Extension (Veterans Boulevard)                            | Construct New 5-Ln Facility   | SR-35 to Robert Henderson Road  | 0.4    | S-1778080            | 2024               | Non-Exempt       | Yes                 | Sevier County  | 2020 | PE-D       |
|                                     |  |   |   |        |                      |                    |                  |                     |                | 2021 | ROW        |
| STIP #<br>2078085,<br>Sevier County | SR-XXX (Jake Thomas Connector)                                   | Pavement Marking between SR-71(US-321/441) and Teaster Lane. Between Teaster Lane and New Ripkin Experience Ballpark - Widen Existing 2-Lane Road to 4-Lane Median Divided Section from Ballpark to SR-449 (Veterans Blvd) - Construct 5-lane on New Alignment  | SR-71/73(US-321/441) to SR-449 (Veterans Blvd)  | 2      | S-1778085            | 2024               | Non-Exempt       | Yes                 | Sevier County  | 2020 | PE-D       |
|                                     |  |   |   |        |                      |                    |                  |                     |                | 2020 | CON        |
| STIP #<br>2078179,<br>Sevier County | SR-35 (Dolly Parton Parkway)                                     | Capacity and Operational Improvements at the Intersection of SR-35 and SR-449 with Left Turn Lane Restrictions between Project Limits   | SR-448 (North Parkway) to Eastgate Road (Includes SR-449 Intersection) in Sevierville   | 1.13   | S-1778085            | 2024               | Non-Exempt       | Yes                 | Sevier County  | 2020 | PE,ROW,CON |
| STIP #<br>2078205,<br>Sevier County | Sevier County Tourist Corridor ITS                               | Upgrade and Re-time 41 Signalized Intersections Located Along The Sevier County Tourist Corridor  | Multiple Locations  | N/A    | S-1778205            | 2024               | Exempt           |                     | Sevier County  | 2020 | CON        |
| STIP #<br>2078215,<br>Sevier County | Sevierville and Pigeon Forge Traffic Signals                     | Upgrade and Re-time 43 Signalized Intersections in Sevierville and Pigeon Forge   | Various intersections in along Dolly Parton Parkway, Veterans Boulevard and Parkway   | N/A    | S-1778215            | 2024               | Exempt           |                     | Sevier County  | 2020 | CON        |



**Table D-2 - Orphan Area Project Listing from KRTPO, LAMTPO and TDOT Transportation Improvement Programs**

| TIP ID #                           | Project Name                                       | Description   | Terminals  | Length | Mobility Plan # | MP Horizon Year | Exempt Status | Reg. Significant | Lead Agency      | Year | Work |
|------------------------------------|--|---|--|--------|-----------------|-----------------|---------------|------------------|------------------|------|------|
| LAMTPO # 2010, Jefferson County    | Agricultural Park Blvd Resurfacing                 | Resurface Agricultural Park Blvd, including milling, grading, repaving, sidewalk ADA compliant if needed, striping, signage | Witt Boundary Rd to US Hwy 25E   | 0.75   | J-LAMTPO-16     | 2024            | Exempt        |                  | Jefferson County | 2022 | PE-N |
|                                    |  |   |  |        |                 |                 |               |                  |                  | 2022 | PE-D |
|                                    |  |   |  |        |                 |                 |               |                  |                  | 2023 | CON  |
| LAMTPO # 3016, Jefferson County    | Old AJ Hwy Realignment/ SR92/Overlook Rd Extension | Construct New 2-Ln road with curb and gutter, ADA compliant sidewalks, street signs, traffic signalization, striping        | SR-92 at Old Andrew Johnson Hwy to US 11E/ W.Broadway Blvd                                 | 0.46   | J-LAMTPO-17     | 2024            | Non-Exempt    | Yes              | Jefferson County | 2021 | PE-N |
|                                    |  |   |  |        |                 |                 |               |                  |                  | 2021 | PE-D |
|                                    |  |   |  |        |                 |                 |               |                  |                  | 2022 | ROW  |
|                                    |  |   |  |        |                 |                 |               |                  |                  | 2023 | CON  |
| LAMTPO # 3017, Jefferson County    | Russell Ave Resurfacing                            | Resurface Russell Ave, including milling, grading, repaving, sidewalk ADA compliant if needed, striping, signage            | SR-92 to US 11E and from 11E to Ken Sparks Way   | 0.6    | J-LAMTPO-18     | 2024            | Exempt        |                  | Jefferson County | 2020 | PE-N |
|                                    |  |   |  |        |                 |                 |               |                  |                  | 2020 | PE-D |
|                                    |  |   |  |        |                 |                 |               |                  |                  | 2021 | CON  |
| LAMTPO # 3018, Jefferson County    | Branner Ave Resurfacing                            | Resurface Branner Ave, including milling, grading, repaving, sidewalk ADA compliant if needed, striping, signage            | Ken Sparks Way to Old AJ Hwy   | 0.33   | J-LAMTPO-19     | 2024            | Exempt        |                  | Jefferson County | 2020 | PE-N |
|                                    |  |   |  |        |                 |                 |               |                  |                  | 2020 | PE-D |
|                                    |  |   |  |        |                 |                 |               |                  |                  | 2021 | CON  |
| LAMTPO # 3020, Jefferson County    | Municipal Ave Resurfacing                          | Resurface Municipal Ave, including milling, grading, repaving, sidewalk ADA compliant if needed, striping, signage          | Old Andrew Johnson Hwy to Black Oak Road   | 0.59   | J-LAMTPO-20     | 2024            | Exempt        |                  | Jefferson County | 2020 | PE-N |
|                                    |  |   |  |        |                 |                 |               |                  |                  | 2020 | PE-D |
|                                    |  |   |  |        |                 |                 |               |                  |                  | 2021 | CON  |
| LAMTPO # 3021, Jefferson County    | Fate Rankin Rd Resurfacing                         | Resurface Fate Rankin Rd, including milling, grading, repaving, sidewalk ADA compliant if needed, striping, signage         | US 11E towards Night St (to city's corporate boundary) for a distance of 3,000 linear feet | 0.57   | J-LAMTPO-21     | 2024            | Exempt        |                  | Jefferson County | 2020 | PE-N |
|                                    |  |   |  |        |                 |                 |               |                  |                  | 2020 | PE-D |
|                                    |  |   |  |        |                 |                 |               |                  |                  | 2021 | CON  |
| LAMTPO # 3022, Jefferson County    | Old Andrew Johnson Hwy Resurfacing                 | Resurface Old Andrew Johnson Hwy, including milling, grading, repaving, sidewalk ADA compliant if needed, striping, signage | SR 92 to Odyssey Rd/City Corporation Boundary  | 2.43   | J-LAMTPO-22     | 2024            | Exempt        |                  | Jefferson County | 2020 | PE-N |
|                                    |  |   |  |        |                 |                 |               |                  |                  | 2020 | PE-D |
|                                    |  |   |  |        |                 |                 |               |                  |                  | 2021 | CON  |
| LAMTPO # 2045015, Jefferson County | I-81   | Widen 4-lane to 6 lane  | I-40 to SR-341 (Roy Messer Hwy)  | 3.8    | J-IA-02         | 2030            | Non-Exempt    | Yes              | Jefferson County | 2022 | PE-N |
|                                    |  |   |  |        |                 |                 |               |                  |                  | 2022 | PE-D |
|                                    |  |   |  |        |                 |                 |               |                  |                  | 2023 | ROW  |

## APPENDIX I

### Public Comments

There has been a 30-day public comment period, with public comment meetings in Morristown on October 3, 2019, and in White Pine and Jefferson City on October 4, 2019. No comments were received.

#### Advertisement for public comment.

The Lakeway Area Metropolitan Transportation Planning Organization (LAMTPO) has a 30-day public comment review period of the FFY2020-2023 Transportation Improvement Program (TIP) document. The document can be found at [www.lamtpo.com](http://www.lamtpo.com) website under the TIP tab, listed as:

FFY2020-2023 TIP Final chapters 1-7 9-24-2019.pdf  
FFY2020-2023 TIP Final appendix.pdf

Public meetings will be held at:

1. Thursday, October 3, 2019 from 9am to 10am at the Morristown Training Room, City Center Building, 100 W 1<sup>st</sup> N St, Morristown, TN
2. Friday October 4, 2019 at 9:30am to 10:30am at the White Pine Town Hall, 1548 Main St., White Pine, TN.
3. Friday October 4, 2019 from 11 am to 12 pm (noon) in the Jefferson City City Hall Council Chambers, 112 City Center Drive, Jefferson City, TN.

All interested parties are invited to attend the meeting. It is the policy of LAMTPO not to discriminate on the basis of race, color, national origin, age, sex, or disability in operation of its programs, services, and activities.

If there are any questions or comments concerning this document, please submit in writing by October 25, 2019 to:

Rich DesGroseilliers, GISP, MTPO Coordinator  
100 W 1<sup>st</sup> N St  
PO Box 1499  
Morristown, TN 37816-1499  
[richd@mymorristown.com](mailto:richd@mymorristown.com)

La Organización de Planificación Metropolitana de Transporte del área de Lakeway (LAMTPO, por sus siglas en) tiene un período de revisión de comentarios públicos de 30 días del documento

del Programa de Mejoramiento del Transporte (TIP, por sus siglas en) FFY2020-2023. El documento se puede encontrar en [www.lamtpo.com](http://www.lamtpo.com) sitio web en la pestaña TIP, que aparece como:

FFY2020-2023 TIP Capítulos finales 1-7 9-24-2019.pdf

FFY2020-2023 TIP Apéndice final.pdf

Las reuniones públicas se celebrarán en:

1. Jueves, 3 de octubre de 2019 de 9am a 10am en el Morristown Training Room, City Center Building, 100 W 1<sup>st</sup> N St, Morristown, TN
2. Viernes 4 de octubre de 2019 a las 9:30am a 10:30am en el White Pine Town Hall, 1548 Main St., White Pine, TN.
3. Viernes 4 de octubre de 2019 de 11 am a 12 pm (mediodía) en la Jefferson City Salas del Concejo del Ayuntamiento, 112 City Center Drive, Jefferson City, TN.

Se invita a todas las partes interesadas a asistir a la reunión. Es la política de LAMTPO no discriminar por motivos de raza, color, origen nacional, edad, sexo o discapacidad en el funcionamiento de sus programas, servicios y actividades.

Si hay alguna pregunta o comentario sobre este documento, por favor envíe por escrito antes del 25 de octubre de 2019 a:

Rich DesGroseilliers, GISP, Coordinador de MTPO  
100 W 1<sup>st</sup> N St  
PO Box 1499  
Morristown, TN 37816-1499  
[richd@mymorristown.com](mailto:richd@mymorristown.com)