FISCAL YEAR 2020-2023

TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

_

APPENDICES



Knoxville Regional
Transportation Planning Organization

Appendix A: Public Comments

(Pending)

Appendix B: FY 2020-2023 TIP Call for Projects, Project Rollover, and TPO FTA Section 5310 Applications

FY 2020 – 2023 TRANSPORTATION IMPROVEMENT PROGRAM

Call for Projects Application Form

Mobility Plan 2040 Goals

The following goals, developed for the 2040 Mobility Plan, will guide the selection of projects for the FY 2020 – 2023 TIP.

- Maintenance & Efficiency
 - Maintain and enhance our existing infrastructure
- More transportation options
 - Improve access to services and employment with bicycle, pedestrian facilities, and transit projects.
- Congestion reduction
 - Reduce congestion through increased efficiency, increased transportation options, and lastly, increased capacity
- Safety & security
 - Reduce rates of crashes with serious injuries and fatalities; and/or reduce the region's vulnerability to incidents and threats., including extreme weather events
- Health & environment
 - Minimize negative impacts on the environment and people's health, and increase access to active transportation/physical activity for all ages.

- Economy & freight
 - Improve intermodal connections to help move freight, reduce delay on major freight corridors; and/or support business attraction and retention.
- Equitable access
 - Connect communities to services throughout the region, particularly priority populations.
- Preservation of places
 - Preserve the natural and cultural areas that make our region unique.
- Local Support / Consistency with Plans (5 bonus points if local support/ 5 points subtracted if no local support)
 - Ensure the project is consistent with or included in local, state, or other regional plans. If on a state route, the project is endorsed or supported by TDOT.

This application is for new TIP projects only. Eligible current FY 2017-2020 TIP projects are to submit the Call for Projects Rollover Form. Fiscal Year 2020 funds are available no earlier than 10/1/2019. Please read through the entire application prior to filling out any fields.

Please submit this application along with any additional supporting materials via email to the Knoxville Regional TPO.

ATTN: Craig Luebke

By e-mail: craig.luebke@knoxplanning.org (include 2020 TIP Project Application in the subject line)

By mail: City/County Building, Suite 403 | 400 Main Street | Knoxville, TN 37902

DEADLINE: FRIDAY, MARCH 1, 2019

FY 2020 - 2023 TIP

PROJECT APPLICATION FORM

PROJECT NAME:		
LEAD AGENCY:		
New Project Ex	isting Mobility Plan Project - Enter 2040 Mobility Plan ID	# Here:
COUNTIES/MUNICIPALITIES:		
FACILITY NAME:		
TERMINI (If Applicable):	FROM:	LENGTH:
Include a map	TO:	
GENERAL DESCRIPTION:		
PHASES COMPLETED (SELECT	Γ ALL THAT APPLY):	
PE - NEPA PE - Design Partial ROW Acquired	All ROW Acquired Portion of Construction	

PURPOSE & NEED

Utilize the box on the following page to address the purpose and need of the proposed project. Additional sheets can be attached, if necessary.

Purpose:

- The Purpose is analogous to the problem. It is the "what" of the proposal.
- The Purpose should be stated as the positive outcome that is expected.
- It should avoid stating a solution as a purpose—as in—the purpose of the project is to build a bypass. Rather, it should indicate what transportation problem(s) are being addressed.
- Where appropriate, it should be stated broadly enough so that more than one mode can be considered
 and multi-modal solutions are not dismissed prematurely. This should tie back to the "MPO strategy" in
 terms of modal options.

Need:

- Should establish the evidence that the problem exists, or will exist if projected population and planned land use growth are realized.
- Should be factually and numerically based, i.e. performance measures, latest planning assumptions, crash data, VMT, etc.
- Should support the assertion made in the purpose statement. For example, if the purpose statement is based on safety improvements, the need statement should support the assertion that there is or will be a safety problem to be corrected which would be supported by crash data/analysis.

Local Support / Consistency with Plans
Use the box below to answer the following questions.
 Is the project consistent with local, state, or other regional plans for growth and preservation
(economic development, land use, natural features preservation, etc.)?
 Has the project been endorsed locally through the adoption of official instruments such as, but
not limited to, a local major thoroughfare plan, transportation element of a comprehensive
plan?
 If on a state route, is the project endorsed or supported by TDOT?

Please fill out <u>one</u> of the following Scope of Work sections: Roadway, Transit, or Pedestrian and Bicycle.

ROADWAY PROJECT SCOPE OF WORK	
Roadway Widening (Additional Through Lanes) Roadway Widening (No Additional Through Lanes) ITS Improvements and/or Operational Safety/Access improvements Intersection Improvements New Roadway / Roadway Extension Other How are you accommodating bicyclists and pedestrians? Bicycle Lane Sidewalk Ped. Refuge Ped. Indication (Signal) Marked Crosswalks Shared Lane (14' wide)	Land Uses Within ¼ Mile of Facility: Below, check boxes at left to indicate if these land uses are present within ¼ mile of your proposed facility. Check boxes at right to indicate if there will be a direct pedestrian connection between your proposed facility and the land uses. If "Some," please expand on the Notes page. Public park/greenway
Greenway Other Please utilize the box below to provide additional information applicable, provide the proposed cross-section, including curre proposed medians or center turn lanes proposed Improvement	nt number of lanes, proposed number of lanes and
Performance Measures: The TIP must link investment priorities to Mobility Plan targets indicate adopted Performance Measures (PMs) for which the particle PM1 – Safety (# of Fatalities, Fatality Rate, Number of Serious In Serious Injuries) PM2 – Pavement and Infrastructure Condition (While In condition are the national PM2 Measures, please note if the proportion of the	nproject will provide a benefit. njuries, Serious Injury Rate, # of Non-motorized Fatalities & nterstate and NHS pavement condition and NHS bridge posed project will provide improvements outside the
Please utilize the box below to provide additional information measure(s).	

TRANSIT PROJECT SCOPE OF WORK		
Proposed Improvements: Transit Vehicle Purchase Facility Improvements Passenger Amenities Intelligent Transportation Systems (ITS) Other	Vehicle Use: Replacement Vanpool ADA Services TYPE OF VEHICLE: CAPACITY OF VEHICLE:	Expand Vehicle Fleet Express Services Other
Please utilize the box below to provide additional info		project's scope of work.
Performance Measures: The TIP must link investment priorities to Mobility I indicate adopted Transit Asset Management (TAM) Transit Rolling Stock Transit Equipment – Non-Revenue Vehicles Transit Equipment – Over \$50,000/Owned Transit Facilities – All Buildings or Structures Please utilize the box below to provide additional informeasure(s).) Measures for which the pro	ject will provide a benefit.
BICYCLE OR PEDESTRIAN PROJECT SCOPE OF W	ORK	
Proposed Improvements: New Facility Extension/Connector Amenities/Upgrades Safety/ADA Improvements Safe Routes to School program Other		
Type: Bicycle Lanes Sidewalks Shared-Use Trail (Greenway) Education Other		

Proposed Features: Pedestrian Refuge Marked Crosswalks Pedestrian Indication (Signal) Other
Land Uses Within ¼ Mile of Facility: Below, check boxes at left to indicate if these land uses are present within ¼ mile of your proposed facility.
Public Park Yes No Some School Yes No Some Library Yes No Some Transit Stop Yes No Some Retail Yes No Some Office Yes No Some Residential Yes No Some Other Yes No Some Check "Yes, No, or Some" at right to indicate if there will be a direct Bike/Ped connection between your proposed facility and
these land uses. If "Some," please expand on the Notes page. Please utilize the box below to provide additional information about the proposed project's scope of work. Project must serve a transportation purpose.
Performance Measures: The TIP must link investment priorities to Mobility Plan targets and adopted Performance Measures. Check to indicate adopted Performance Measures (PMs) for which the project will provide a benefit. PM1 – Safety (# of Fatalities, Fatality Rate, Number of Serious Injuries, Serious Injury Rate, # of Non-motorized Fatalities & Serious Injuries) PM2 – Pavement and Infrastructure Condition (While Interstate and NHS pavement condition and NHS bridge condition are the national PM2 Measures, please note if the proposed project will provide improvements outside the Interstate/NHS systems) PM3 – System Performance (Non-Interstate NHS Reliability, Freight Reliability, Traffic Congestion, Emissions Reductions)
Please utilize the box below to provide additional information about the project's impact on the selected measure(s).

PROJECT COSTS, FUNDING, & TIMING

BUDGET WORKSHEET: COST BY PHASE					
PHASE OF WORK	FISCAL YEAR	FEDERAL	STATE	LOCAL	TOTAL
PE-NEPA					
PE-Design					
Right-of-Way					
Construction (Incl. CEI/TDOT ES)					
Transit Capital					
TOTAL					

TOTAL PROJECT COST ESTIMATE IN CURRENT YEAR DOI	LARS: \$
Source of Cost Estimate: Rough Planning Est. Planning Report Preliminary Eng. TDOT Estimator Tool Other	
Are Matching Funds Available? YES, Funds are locally programmed YES, Funds will be locally programmed NO Other	
Federal Funding Source Requested: Surface Transportation Block Grant (STBG) Surface Transportation Block Grant Transportati	
ANTICIPATED PROJECT SCHEDULE (ASSUME FUNDI	NG IS AVAILABLE BEGINNING 10/1/2019)
Project Initiation (Month/Year): PE-NEPA Obligated (Month/Year): PE-Design Obligated (Month/Year): ROW Obligated (Month/Year): CONST Obligated (Month/Year): Transit Project Obligated (Month/Year):	
ABOUT YOU	
Name:	E-mail:
Title:	Phone:
Department:	
Agency / Organization:	

AMERICANS WITH DISABILITIES ACT of 1990 (ADA) and SECTION 504 OF THE REHABILITATION ACT of 1973 STATUS

Every city and county with fifty (50) employees or more must have an ADA Transition Plan and Self-Evaluation in order to receive Federal Transportation Funds. By the end of 2019, FHWA will require all Transition Plans be completed. All project sponsors are required to document their Transition Plan status with any application for funding. (See TDOT and FHWA letters included with application packet for more information)			
Exempt from ADA Transition Plan (Fewer than 50 Employees)			
on, including the following: ADA Transition Plan Documentation			
Map of Project (If Applicable) Other:			

PROJECT NAME:	
PROJECT EVALUATION	FY 2020 – 2023 T
WITHIN COMMUNITY AND COMMUNITY TO Based on significant public input gathered for the Mobility Plan 2040 community (i.e. smaller in scale) are scored differently than commun projects). Within Community projects will support local, multimodal resources within a variety of community centers from large urban to projects support strategic, multimodal connections between communicenters. Please provide as much information as you can provide in you meets the following selection criteria. TPO staff will score projects us to the proposed project. 1. Maintenance and efficiency – Within Community 19 points Does the project increase the useful life of an existing for a possible project address a deferred maintenance need. How does the project increase the efficiency of the exist network?	o, projects that are considered within nity to region projects (i.e. larger connections and access to community rural crossroads. Community to region inity centers and regional economic our project scope on how this project sing the scoring system most appropriate ts/ Community to Region 19 points acility?

2. More options – Within Community 18 points/ Community to Region 17 points

- Does the project support bicycling, walking, and/or transit?
- Does the project connect major origins and destinations for walking, biking, and transit?
- Does the project address first mile/last mile connectivity for transit and pedestrians?

 e connectivity for transit and peacetrains.

3.	Safety and security – Within Community 16 points/ Community to Region 13 points Does the project address an identified safety concern? Does the project address security or emergency response (including extreme weather events)? How does the project address safety for all users especially bicyclists, pedestrians and trausers?	nsit
4.	Equitable access – Within Community 13 points/ Community to Region 9 points Does the project improve access and mobility for priority populations, including access to employment centers, community facilities, and retail, grocery, and other services? (See reformation of priority population areas.)	
5.	Health and Environment – Within Community 13 points/ Community to Region 10 points Does the project improve air quality? Does this project maximize energy efficiency? Does this project promote increased bicycling and walking as part of daily activity? Does this project improve water quality and include stormwater best management practi	ices?

PROJECT NAME: _____

	PROJECT NAME:
6. •	Congestion reduction – Within Community 8 points/ Community to Region 12 points Does the project reduce congestion through technology (e.g. traffic signal coordination, realtime traffic info, and emergency response), adding transportation options or increasing capacity?
7. P	 Poes the project have negative impacts on sensitive natural and cultural areas? If so, how are those impacts being mitigated? Does this project support the preferred growth concept? (see attached map)
8.	 Economy and freight – Within Community 4 points/ Community to Region 9 points Does the project create a more attractive environment for business recruitment/retention? Does the project support travel and tourism? Does the project serve an employment center?
,	 Does the project increase the ease and safety of goods delivery and local freight movement, including the first and last mile? Will the project encourage people to spend money locally?

FY 2020 – 2023 TRANSPORTATION IMPROVEMENT PROGRAM

Current TIP Project Rollover Form

This form is for rollover eligible current FY 2017-2020 TIP projects only. Rollover projects must have obligated federal funds for a phase of project development. New TIP projects are to submit the FY 2020 – 2023 Call for Projects Application. Fiscal Year 2020 funds are available no earlier than 10/1/2019. Please read through the entire form prior to filling out any fields.

Please submit this rollover form along with any additional supporting materials via email to the Knoxville Regional TPO.

ATTN: Craig Luebke

By e-mail: craig.luebke@knoxplanning.org (include 2020 TIP Project Rollover in the subject line)

By mail: City/County Building, Suite 403 | 400 Main Street | Knoxville, TN 37902

DEADLINE: FRIDAY, MARCH 1, 2019

FY 2020 – 2023 TIP

CURRENT TIP PROJECT ROLLOVER FORM

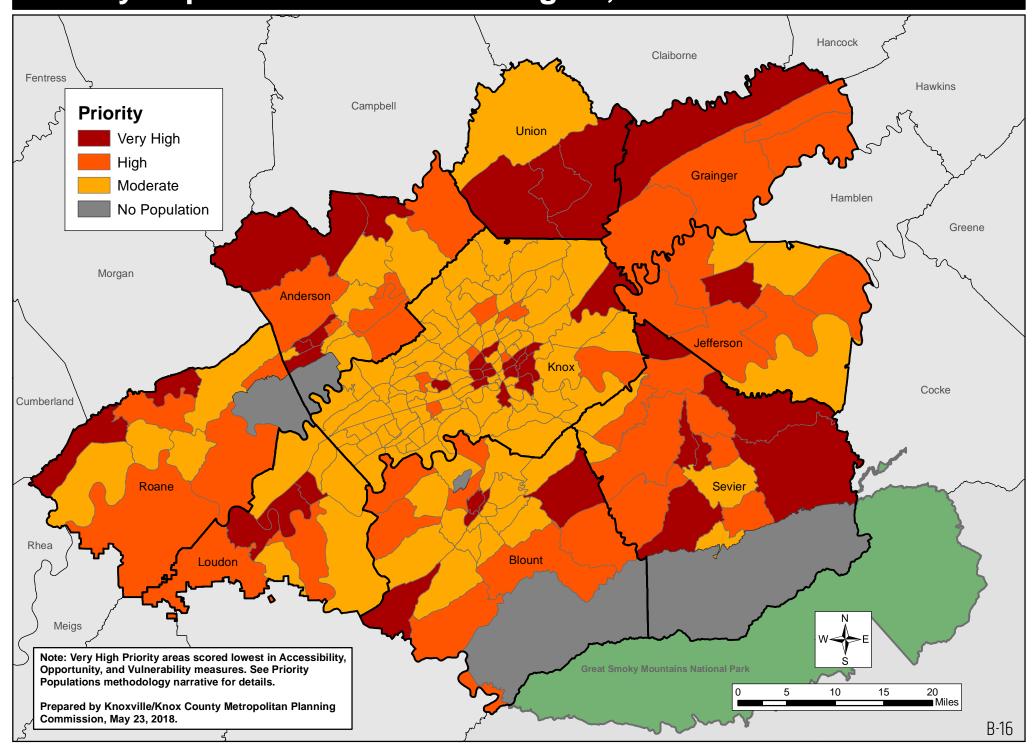
PROJECT NAME:			
LEAD AGENCY:			
Existing TIP Project – Ent	er 2017-2020 TIP # here:		
COUNTIES/MUNICIPALITIES:			
FACILITY NAME:			
TERMINI (If Applicable): Include a map	FROM:		LENGTH:
meiade a map	TO:		
GENERAL DESCRIPTION:			
PHASES COMPLETED (SELEC	T ALL THAT APPLY):		
Serious Injuries) PM2 – Pavement and Incondition are the national Planterstate/NHS systems)	prities to Mobility Plan targe fleasures (PMs)/Transit Asset fles, Fatality Rate, Number of Serior frastructure Condition (Whil M2 Measures, please note if the prance (Non-Interstate NHS Reliability on-Revenue Vehicles for \$50,000/Owned fuildings or Structures	ts and adopted Performance Management Measures for us Injuries, Serious Injury Rate, # of e Interstate and NHS pavement corpoposed project will provide improvility, Freight Reliability, Traffic Conge	Measures. Check to which the project will Non-motorized Fatalities & addition and NHS bridge ements outside the estion, Emissions Reductions)

OTE: Only include unobligate			n in FY 2020-202		
PHASE OF WORK	FISCAL YEAR	FEDERAL	STATE	LOCAL	TOTAL
E-NEPA					
E-Design					
Right-of-Way					
Construction (Incl. CEI/TDOT ES)					
Fransit Capital					
TOTAL					
Current TIP Programmed					
Amount					
Additional Funding					
Requested					
TDOT Estimator Tool Other Are Matching Funds Available YES, Funds are locally processor of the second state of the second	orogrammed lly programmed urce Requested: Block Grant (ST	BG)	ternatives (STB0	G-TA)	
			ANAII ARI E RE	GINNING 10/1/2	2019)
	•				
Project Initiation (Month PE-NEPA Obligated (Mo	n/Year): nth/Year):				
Project Initiation (Month PE-NEPA Obligated (Mo PE-Design Obligated (Mo	n/Year): nth/Year): onth/Year):				
Project Initiation (Month PE-NEPA Obligated (Mo PE-Design Obligated (Month, ROW Obligated (Month,	n/Year): nth/Year): onth/Year): 'Year):				
Project Initiation (Month PE-NEPA Obligated (Mo PE-Design Obligated (Mo ROW Obligated (Month, CONST Obligated (Month	n/Year): nth/Year): onth/Year): /Year): h/Year):				
Project Initiation (Month PE-NEPA Obligated (Mo PE-Design Obligated (Month, ROW Obligated (Month,	n/Year): nth/Year): onth/Year): /Year): h/Year):				
Project Initiation (Month PE-NEPA Obligated (Mo PE-Design Obligated (Mo ROW Obligated (Month, CONST Obligated (Month Transit Project Obligated	n/Year): nth/Year): onth/Year): /Year): h/Year):				
PE-NEPA Obligated (Mo PE-Design Obligated (Mo ROW Obligated (Month, CONST Obligated (Mont Transit Project Obligated	n/Year): nth/Year): onth/Year): /Year): h/Year): d (Month/Year):				
Project Initiation (Month PE-NEPA Obligated (Mo PE-Design Obligated (Mo ROW Obligated (Month, CONST Obligated (Mont Transit Project Obligated	n/Year): nth/Year): onth/Year): /Year): h/Year): d (Month/Year):	E-ma	ail:		

AMERICANS WITH DISABILITIES ACT of 1990 (ADA) and SECTION 504 of THE REHABILITATION ACT of 1973 STATUS

It have an ADA Transition Plan and Self-Evaluation of 2019, FHWA will require all Transition Plans be neir Transition Plan status with any application for nore information)
nployees)
tion, including the following: ADA Transition Plan Documentation
Other:

Priority Populations: Knoxville Region, 2018



KNOXVILLE REGIONAL TRANSPORTATION PLANNING ORGANIZATION FTA – Section 5310

Enhanced Mobility for Seniors & Individuals with Disabilities Grant Funding Application

Introduction

This is an application to receive Federal Transit Administration (FTA) Section 5310 Enhanced Mobility for Seniors & Persons with Disabilities funding. Applications that are incomplete or do not contain adequate supporting documentation will not be considered. This application is for both operating projects and capital projects (vans, mini-buses). However, only certain sections must be completed for each type of application. So, please read the application carefully.

Please refer to the companion set of instructions and the additional information linked on the TPO website. This additional information includes the vehicle list and prices, vehicle options list, Human Services Transportation Coordination Plan, Program Management Plan, and the deadline for submitting applications. Applicants are encouraged to contact the TPO staff if you have any questions.

AGENCY INFORMATION (ALL APPLICANTS)

Agency Name							
Contact Person Name	9						
Title							
Phone Number							
E-mail							
Address							
City, State, Zip Code							
Website							
Is the Agency A	Local Gove	ernment	Public	Transit Operator	Private	Non-Profit	
Agency DUNS Number	er						
Project Type	Capital	Operating	;				
Total Project Cost							
Amount of FTA (Fede	ral) Grant F	unding Nee	ded				

Application Instructions

The application contains eleven sections. Please refer to the table to determine which sections must be completed. Some sections are required by all applicants, while others depend on whether you are applying for capital/vehicle funding or operating funding. If you are submitting both a capital/vehicle project and an operating project you must fill out separate applications. If you are asking for multiple vehicles, you only need to fill out one capital funding application. If you are seeking funding for mobility management activities, you will complete the operating sections of the application (even though FTA considers mobility management activities a capital expense). If you are applying for both operating and mobility management funding you need only to fill out one operating funding application.

SECTION #	WHICH SECTION TO COMPLETE
1 OVERVIEW OF AGENCY	ALL APPLICANTS
2 PROJECT DESCRIPTION	ALL APPLICANTS
3 PROJECT NEED	ALL APPLICANTS
4 SPECIFIC PERFORMANCE & EVALUATION	ALL APPLICANTS
5 IMPLEMENTATION OF CAPITAL PROJECTS	CAPITAL/VEHICLE APPLICANTS ONLY
6 IMPLEMENTATION OF OPERATING PROJECTS	OPERATING & MOBILITY MANAGEMENT
	APPLICANTS ONLY
7 ORGANIZATIONAL PREPAREDNESS & TECHNICAL CAPACITY	ALL APPLICANTS
8 OUTREACH & COORDINATION	ALL APPLICANTS
9 VEHICLE BUDGET (ATTACH SEPERATELY)	CAPITAL/VEHICLE APPLICANTS ONLY
10 OPERATING BUDGET (ATTACH SEPERATELY)	OPERATING PROJECTS ONLY & MOBILITY
	MANAGEMENT APPLICANTS ONLY
11 ADDITIONAL INFORMATION NEEDED	ALL APPLICANTS

SECTION 1 – OVERVIEW OF AGENCY (ALL APPLICANTS)

Please provide a <u>brief</u> overview of the proposing agency, a description of services provided, who is eligible for services, and service area. This is to provide a general picture of the overall proposing agency, its mission, and the services it provides. Project specific information will be included in the next section.

Answer:

SECTION 2 – PROJECT DESCRIPTION (ALL APPLICANTS)

Please provide a detailed description of the proposed project. Please include:

- A description of the type of project: operation of a service, mobility management activities, acquisition of vehicle(s), or other type of project(s).
- Outline who would be eligible for the proposed project.
- Describe the geographic service area, specific to this project.
- Provide the estimated number of people the project will serve annually.
- Provide the estimated number of one way trips that will be provided annually.

<u>Please Note:</u> if you are asking for funding for multiple vehicles, be sure you state the number of vehicles needed and be sure the estimated number of people/trips served/provided annually is a **per vehicle total.**

• State the term of project (if operating services or mobility management activities). You can use general time periods such as: six months, one year, two years, etc.

<u>Please Note:</u> There is no need to provide cost(s), a budget, or funding information in this section as these items will be addressed later in application.

Α	n	S	W	/e	r:	,
_		3	V١	,		

SECTION 3 – PROJECT NEED (ALL APPLICANTS)

Please describe/indicate the following:

- How will this project improve the quality of transportation services for seniors and/or individuals with disabilities? Give examples.
- Reference the stated need or goal this project meets as outlined in the Human Services Transportation Coordination Plan (HSTCP) [Required, see HSTCP link on TPO website].

<u>Please Note:</u> If you cannot find an exact need or goal that fits the proposed project in the HSTCP, then discuss how the project is in-keeping with the types of needs and goals identified in the HSTCP.

- How does the proposed project align with the overarching mission of your organization?
- List any innovative approaches that will be employed for this project.
- If you have received Section 5310 funding from the TPO before and this is a continuation or a similar project, discuss the success of the past project and tell why you need additional funding. If you have received Section 5310 funding for a vehicle(s) before and are asking for more, discuss the need for an additional vehicle(s) and how the previously funded vehicle(s) is/are currently being utilized.

Answer:

SECTION 4 – SPECIFIC PERFORMANCE & EVALUATION (ALL APPLICANTS)

Please describe/indicate the following:

- Outline any specific goals/outcomes you have for the proposed project. Goals/outcomes should be measurable.
- Describe how you plan on monitoring and evaluating the progress in meeting the stated goals/outcomes, including any performance measures.
- If you have received 5310 funding from the TPO before and this is a continuation or a similar project (including the purchase of vehicles), discuss how you evaluated the past success of the project (vehicles).

Answer:

SECTION 5 – IMPLEMENTATION (CAPITAL/VEHICLE PURCHAESE APPLICANTS ONLY)

Please describe/indicate the following:

• What type of vehicle(s) are you seeking to purchase [Select from TDOT MTR Vehicle Bid List link on TPO website]?

<u>Please Note:</u> Do not worry about funding or cost(s) in this section, budget information will be addressed in a later section.

<u>Please Note:</u> Purchasing off of the TDOT MTR Vehicle Bid List is <u>mandatory</u>, unless you can prove you have FTA purchasing expertise.

- Explain why you need this type of vehicle(s). Describe the type of services the vehicle(s) will be used to provide.
- How many vehicles are you seeking to purchase? If you are seeking multiple vehicles explain why they are needed.
- Review the list of vehicle extras or options [See options spreadsheet(s) link on TPO website]. Many applicants just select the base vehicle. However, if there are any extras or options that are critical to the type of vehicle(s) you need, you can select them. If you are selecting extras or options, please justify why they are needed. Remember cost(s) will be shown in a later section.
- Is the vehicle(s) for replacement or expansion?

<u>Please Note:</u> if this is a replacement you <u>must</u> provide information on the vehicle(s) being replaced, including year, model, make, and VIN number. If you have been awarded funding for replacement vehicle(s) before, either through the TPO or the Tennessee Department of Transportation, the replacement vehicle can only be listed once in any FTA grant.

- Who will be managing the initial purchasing/grant management part of the project (give brief bio)?
- From time-to-time, it is permitted to conduct your own bid for vehicles. However, any agency proposing this must: (1) have experience in FTA procurement and (2) have preapproval by the TPO. If you are interested in this option, please contact the TPO <u>before</u> proceeding with this application.
- <u>DO NOT</u> include mobility management activities type projects in this capital section.
 Mobility management activity projects should be listed in the operating sections of this application.

Δ	n	C	A	0	r.

Answer Continued:

SECTION 6 – IMPLEMENTATION (OPERATING & MOBILITY MANAGEMENT PROJECTS ONLY)

Please describe the following:

• A work plan delineating the tasks (or milestones) to be conducted and a timeline for completing those tasks (use generic months, i.e. Month 1, Month 2).

<u>Please Note:</u> Do not worry about cost(s) or funding at this question, budget information will be addressed later in the application.

- Who will be managing the project (give <u>brief</u> bio stating experience)?
- Provide a staffing plan listing who will perform each task, include a <u>brief</u> bio for each
 person. Estimate what <u>percent</u> of each staff (listed) time will be charged to project budget.
- If you are apply for both operating and mobility management funding, be sure you show
 that you have a clear understanding of the types of activities that are eligible for mobility
 management funding. Also, be sure the two different types of work activities (Operating,
 Mobility Management) are clearly broken-out (or hours allocated) in the proposed work
 plan.

Α	n	S	W	/e	r	
---	---	---	---	----	---	--

SECTION 7 – ORGANIZATIONAL PREPAREDNESS & TECHNICAL CAPACITY (ALL APPLICANTS)

Please describe/indicate the following:

- Describe how your agency has the necessary operational and technical capacity to carry out the tasks as outlined in the project?
- Provide a statement of the agency's ability to implement and sustain the proposed project.
- How will your agency guarantee that the vehicle(s) purchased will continued to be used for this specific project?
- Describe your agency's ability to be sure the vehicle(s) are properly maintained.
- Describe your agency's ability to meet deadlines for submitting quarterly reports to TPO (this includes invoicing (if applicable), status reports, ridership, or usage data reports).

Answer	
--------	--

SECTION 8 – OUTREACH & COORDINATION (ALL APPLICANTS)

Please describe/indicate the following:

- Describe any external outreach efforts to promote awareness of the proposed project. If the project is strictly for your agency's clients, describe how the program will be promoted internally. If the project is open to the public, describe how you will notify potential users.
- If funding is being used for mobility management activities, describe how your management functions will work with regards to outside and/or internal clients (to your organization).
- If any coordination can occur with other social service agencies or public transit agencies, describe how this might happen.
- Is this project new or does it supplement an existing program/service?

Ans	SW	er
-----	----	----

SECTION 9 – VEHICLE BUDGET (CAPITAL/VEHICLE APPLICANTS ONLY)

<u>Develop separately and attach with application submission</u> a detailed budget outlining costs and funding. The budget can be constructed in Word or Excel, but be sure it is formatted so it can be easily printed. An example budget is provided [See link on TPO website]. Be sure to include:

- From the TDOT MTR Vehicle Bid List [See list link on TPO website] select the vehicle you
 want. On the budget sheet, list the name or type of vehicle and provide a line item titled –
 Vehicle Base Cost (show cost).
- Review the list of extras or options [See spreadsheet link on TPO website]. Many applicants just select the base vehicle. However, if there are any extras or options that are critical to the type of vehicle(s) your agency needs, you can select them. On the budget sheet, list <u>each</u> option(s) or extra(s) selected and the corresponding cost(s). Then, sum all the cost(s) associated with the option(s) selected into one sub-total line item (called Vehicle Options Cost).
- Sum the Vehicle Base Cost and the Vehicle Options Cost line items together for a Total Cost per Vehicle line item.
- Multiply the Total Cost per Vehicle by the number of vehicles you are proposing to purchase and put that amount in a – Total Cost – line item.
- If you are selecting more than one type of vehicle, repeat the steps above for each vehicle type. Be sure to keep each vehicle type and any options selected separate from any other vehicle type you have selected. You may want to differentiate the vehicles in the budget sheet by labeling them Vehicle(s) Type #1 and Vehicle(s) Type #2, etc. And, be sure each type of vehicle's Total Cost is listed separately on the budget sheet (so the reviewer can easily identify that there are more than one type of vehicle being selected). Then, sum up the Total Cost(s) associated with each vehicle into one Total Project Cost line item.
- Break out the Total Project Cost by federal (80%) and local match (20%) dollars.
- If you are proposing another type of capital project besides the purchase of a vehicle(s), outline project details with line item costs. Break out the Total Project Cost by federal (80%) and local match (20%) dollars. Be sure, at the end, there is this final breakdown that clearly shows federal funding needed and the required local match funding needed.
- Attach a letter that (1) certifies matching funding is available and (2) commits the agency to
 providing the entire purchase amount up front (grant funds portion will be reimbursed).
 Please be sure the letter includes the amount of and source(s) for the local the match. If
 you cannot pay for the entire purchase up front please contact the TPO to explore if there
 are other funding options. Review the local match section, including the potential for
 other grant dollars, in the additional instructions provided [See link on TPO website].
- From time-to-time it is permitted to bid your own vehicle(s). However, any agency
 proposing this must: (1) have experience in FTA procurement and (2) have pre-approval by
 the TPO. If you are interested in this option, please contact the TPO <u>before</u> proceeding
 with this application.
- **DO NOT** include any mobility management costs in this section. Mobility management costs should be included in the operating budget section of the application.

SECTION 10 – OPERATING BUDGET (OPERATING & MOBILITY MANAGEMENT PROJECTS ONLY) Develop separately and attach with application submission a detailed budget outlining costs and funding. The budget can be constructed in Word or Excel, but be sure it is formatted so it can be easily printed. Be sure to include:

- A budget with separate line items for labor cost(s), fringe-benefit cost(s), other direct cost(s), indirect cost(s), and travel cost(s), etc. (if applicable).
- Cost allocation Plan (if applicable).
- If you are applying an Indirect Cost Rate, has it been approved by an official cognizant agency?
- If you are utilizing funding for <u>mobility management activities</u>, you may fund those at either the Operating (50%/50%) or Capital (80%/20%) reimbursement funding rate. This provision is only for mobility management activities and what rate they are reimbursed at is up to the applicant. General operating activities must be funded at the 50%/50% rate. If you have any questions please see the FTA Section 5310 Circular [see Circular linked on TPO website] or call the TPO staff.
- Sum all the various line items for a Total Project Cost line item. If the project utilizes both operating funding (50%/50% rate) and mobility management activities funding (80%/20% rate), those costs should total into two separate line items (i.e. Operations Total Cost line item, Mobility Management Total Cost line item). As these two activities can be reimbursed at different federal rates, it is *extremely important* that the budget (charges and invoicing) clearly defines each eligible work item/task and associated cost(s) and reflects those in the correct budget line item (Operations or Mobility Management). If you are showing mobility management activities but only seeking the 50%/50% reimbursement rate, you should still show those costs broken out in the budget, but they can be as a subtotal to the Operation Total Cost line item.
- If you are utilizing funding for *operations*, break out the Operations Total Cost line item by federal (50%) and local match (50%) dollars.
- If you are utilizing funding for *mobility management activities*, break out the Mobility Management Total Cost line item by federal (80%) and local match (20%).
- If the project utilizes both operating funding and mobility management activities funding, add the two totals together for a Project Total Cost line item.
- Be sure, at the end of the budget sheet, there is a final statement that clearly shows federal funding needed and the required local match funding needed.
- A letter that (1) certifies matching funding is available and (2) states the agency can provide the services up front, being reimbursed upon submission and processing of quarterly invoices per the contract. Please be sure the letter includes the amount of and source(s) for the local the match. Review the local match section, including the potential for other grant dollars, in the additional instructions provided [See link on TPO website].

SECTION 11 – ADDITIONAL INFORMATION TO BE SUBMITTED (ALL APPLICANTS)

The TPO reserves the right to request additional information about each applicant's proposal or to allow a brief presentation on the proposal. Please be sure you submit the following information.

Please Note: If you have received funding from the TPO before these documents may already be on file. Please check with the TPO staff to see which items you may need to update.

- Certification/letter stating agency's status as a private nonprofit organization, a human resource agency, or an eligible local government (public transit agency)
- Most recent agency audit (must be within 3 years)
- Letter (from Cognizant Agency) approving Indirect Cost Rate (only required from those using an Indirect Cost Rate in operating or mobility management activities projects)
- List of members of the governing body (Board) and contact information (if not in the audit)
- Policy and Procedures, Employee Handbook, excerpts of separate documents that demonstrate compliance with the following federal requirements:
 - o Title VI Civil Rights policies/practices, Written Complaint Process
 - o Equal Employment Opportunity (EEO) Program or policies/practices
 - Americans with Disabilities Program or policies/practices
 - o Drug Free Workplace and Drug and Alcohol Testing Program/policies
- Certification of equivalent services (only required from public transit providers)
- Safety and security plan/practices (only required from public transit providers)

Additional requirements for vehicles:

- Written Vehicle Maintenance Plan (VMP). The FTA requires a separate VMP. The VMP does
 not have to be overly complicated and long. It may simply reflect the manufacturer suggested
 maintenance schedule that comes with the vehicle. If this is the first vehicle, you may submit a
 VMP after you receive the manufacturer suggested maintenance schedule to use as a
 resource. But, a separate VMP must be submitted.
- Any written transportation policies
- Vehicle inventory of all vehicles (make, model, year, accessible vs. non-accessible)

Contact Information:

Doug Burton
Knoxville Knox County Metropolitan Planning Commission
Knoxville Regional Transportation Planning Organization
400 Main Street, Suite 403
Knoxville, TN 37902
865-215-3824
doug.burton@knoxtrans.org
www.knoxtrans.org

Please review the additional instructions and all the other supporting documents that are linked with this application on the TPO website.

Appendix C: FY 2017-2020 TIP Projects Status

2017-2020 TIP Project Status

TIP ID	Project Name/Route	Description	Lead Agency	Project Status
17-2011-082	Montvale Rd. (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.	TDOT	Carried Forward
17-2014-001	I-275 Business/Industrial Park Access Improvements	Roadway and intersection improvements to enhance access to I-275 Business Park. Blackstock Ave: extend from Fifth Ave. to Bernard Ave.; Marion St: realign; University Ave: intersections with W Fifth Ave. and Bernard Ave.	City of Knoxville	Ready for Construction
17-2014-002	Lovell Rd. (SR-131) Widening	Widen 2-lane to 4-lane, including pedestrian and bicycle facilities.	Knox County	Carried Forward
17-2014-003	Alcoa Hwy. (SR-115 / US- 129)	Reconstruct from 4 to 6 lanes with 2 auxiliary lanes between Singleton Station Rd and Topside Rd (SR 333).	TDOT	Carried Forward
17-2014-004	Alcoa Hwy. (SR-115 / US- 129)	Widen from 4 to 6 lanes, including pedestrian and bicycle facilities.	TDOT	Not Carried Forward
17-2014-005	,	Widen SR-115 from a four lane divided facility to a six lane divided facility, extend Tyson Blvd under SR-115 and reconstruct Hunt Rd overpass.	TDOT	Under Construction
17-2014-006	Schaad Rd. Widening	Widen 2-lane to 4-lane	Knox County	Carried Forward
17-2014-007	Foothills Mall Dr. Extension	Extend Foothills Mall Dr. from US 129 Bypass to Foch St. with 2 to 3 lanes with curb and gutter.	City of Maryville	Ready for Construction
17-2014-009	Queener Rd. Reconstruction	Reconstruct 2-lane roadway - widen from 15.8 feet to 26 feet, reduce curves.	Loudon County	Carried Forward
17-2014-010	Kingston Pk. Sidewalk in Farragut	Construction of 2,050 linear feet of sidewalk along south side of Kingston Pike (SR-1) between Old Stage Road and Virtue Road	Town of Farragut	Complete
17-2014-015	Simpson Rd. Reconstruction	Reconstruct 2-lane roadway from 18 feet to 26 feet; constructing left turn lanes at selected locations and include sidewalk on one side.	Loudon County	Ready for Construction
17-2014-019	Tellico Pkwy. / Hwy. 72 Intersection Lighting	Construction of 5 to 7 light standards along 1500 feet. Installation of aluminum poles, conduit, wiring, transformer and luminaries.	Loudon County	Ready for Construction
17-2014-024	Old Stage Rd. / Kingston Pk. Greenway Connector	Construction of an 8 foot asphalt greenway from the north side of Kingston Pk. near Everett Rd., under the existing Kingston Pk. bridge over Little Turkey Creek to Way Station Trail, just north of its terminus near Old Stage Rd.	Town of Farragut	Removed from TIP
17-2014-025	Pellissippi Pkwy. (SR-162) Extension	HPP #TN053 (Section 1602-TEA21). Construct new 4 lane.	TDOT	Carried Forward
17-2014-028	Pistol Creek Greenway - Phase IV	Construction of 10 foot wide greenway trail and amenities consisting of approximately 11,716 linear feet of asphaltic trail and 200 feet of wood boardwalk generally paralleling Pistol Creek.	City of Alcoa	Ready for Construction
17-2014-031	N.Central St. Road Diet and Streetscape Project	Road diet and streetscape project, reduce from 4-lanes to 2-lanes with center turn lane. Remainder of public ROW used for bike lanes and street parking.	City of Knoxville	Under Construction
17-2014-032	South Knoxville Waterfront Roadway Improvements	The project consists of roadway streetscape improvements to Sevier Ave. consisting of new/improved curbs and sidewalks, bike lanes, planters, pavement marking for on-street parallel parking, utility placement, and handicap access improvements. No addition	City of Knoxville	Carried Forward
17-2014-033	Chapman Hwy. (SR-71) Improvements	HPP #1004 (TN123). Widen 4 lane to 5 lane with curb and gutter.	TDOT	Under Construction
17-2014-034	SR-73 / US-321 at SR-2 / US-11	Intersection improvements	TDOT	Under Construction
17-2014-035	SR 115 / US 129 (Relocated Alcoa Hwy.)	New alignment, four lane divided facility, construct an interchange at Pellissippi Parkway (SR-162)	TDOT	Carried Forward
17-2014-037	Pleasant Ridge Rd.	Add Center Turn Lane	City of Knoxville	Carried Forward
17-2014-038	Washington Pk.	Widen from 2-lanes to 4-lanes including pedestrian and bicycle facilities.	City of Knoxville	Carried Forward
17-2014-040	Kingston Pk./Campbell Station Rd. Intersection Improvements	Widen to allow an additional left turn lane for eastbound motorists turning onto northbound Campbell Station Rd.	Town of Farragut	Removed from TIP
17-2014-042	Traffic Control Equipment Upgrade - Knoxville	Purchase of signal controllers, signal monitors, closed loop equipment and software.	City of Knoxville	Carried Forward
17-2014-044	Knox/Blount Greenway - Phase II	Construction of an off-road trail that will connect Phase I of the Knox Blount Greenway to existing pedestrian and bicycle facilities on Alcoa Highway Bridge.	Knox County	Ready for Construction

2017-2020 TIP Project Status

TIP ID	Project Name/Route	Description	Lead Agency	Project Status
17-2014-047	East Knoxville Sidewalk Improvements	Complete a sidewalk network between a high school and nearby neighborhoods along S. Castle St. Approximately 1,400 linear feet of sidewalk.	City of Knoxville	Complete
17-2014-057	Blount County Streetscape Improvements	Improve streetscape and repair pavement. HPP #2005, TN-154	Blount County	Removed from TIP
17-2014-058	Concord Rd.	Widen 2-lanes to 4-lanes including pedestrian and bicycle improvements	Town of Farragut	Under Construction
17-2014-059	Sevierville Rd.	Reconstruct Sevierville Rd. (SR-35) from two lanes to three lanes, curb and gutter, and sidewalks with intersection improvements.	City of Maryville	Carried Forward
17-2014-060	Morganton Rd. Roadway Improvement	Reconstruct two lane section of Morganton Rd. with shoulders, totaling 2.3 miles in length. HPP, TN-280.	Blount County	Carried Forward
17-2014-064	Harrison Road	Reconstruct two lane road and intersection improvements (add turn lanes and replace traffic signal) at Kingston St. Project also includes drainage improvements, sidewalks, and lighting.	Lenoir City	Complete
17-2014-065	Boyd Station Rd., McFee Rd., and Harvey Rd. Underpass	Construct and widen underpass at intersection of Boyd Station, Harvey, and McFee Roads. ID# 2385 TN167.	City of Lenoir City	Removed from TIP
17-2014-066	Railroad Crossing Improvements - Knoxville	Railroad crossing improvements for various railroad crossing to improve circuitry on vehicle protection devices installed. HPP# 1837 TN147.	Town of Farragut	Removed from TIP
17-2014-067	Railroad Crossing Improvements - Lenoir City	Improve vehicle efficiences by installing signal lights at at-grade highway railroad crossings in Lenoir City. HPP# 1065 TN129.	City of Lenoir City	Removed from TIP
17-2014-068	Railroad Crossing Improvements - Knoxville	Railroad crossing improvements on vehicle protection devices installed at highway railroad crossings in Knoxville. HPP# 1875 TN149.	City of Knoxville	Removed from TIP
17-2014-069	Alcoa Hwy. (SR-115 / US- 129)	Widen 4-lane to 6-lane including pedestrian and bicycle facilities from Woodson Dr. to Cherokee Trail interchange.	TDOT	Carried Forward
17-2014-070	Lenoir City Downtown Streetscapes - Ph. 2	Streetscape improvements along Hwy. 11/S.R. 2 (Broadway) between Grand Street and C Street.	City of Lenoir City	Under Construction
17-2014-072	Alcoa Sidewalk/Greenway Extension	Construction of 1.6 miles of multi-modal asphalt trail for the extension of the existing greenway along N. Wright Rd.	City of Alcoa	Removed from TIP - Partially completed with local funds
17-2014-073	Tennessee River Pedestrian Bridge and Path	Connect the south waterfront to University of Tennessee and the north waterfront trails.	City of Knoxville	Carried Forward
17-2014-074	US-321 (SR-73) Widening	Widen to 6-lanes from Simpson Rd east to north of SR-2 (US-11) in Lenoir City	TDOT	Under Construction
17-2014-076	Buttermilk Road Resurfacing	Resurface existing roadway to eliminate hazardous pavement surface conditions, worn travel lane markings, and reflective pavement markings to improve safety.	Loudon County	Complete
17-2014-077	Maryville Alcoa Advanced Traffic Management System Phase II	Upgrade signal system communications and equipment along US411 / US321, US129 and SR33.	City of Maryville	Ready for Construction
17-2014-078	Chapman Highway Advanced Traffic Management System	Expand the City of Knoxville's Advanced Traffic Management System along Chapman Highway.	City of Knoxville	Carried Forward
17-2014-079	City of Loudon Traffic Flow Improvement Project	Replace outdated infrastructure at four signalized intersections, including updating vehicle detection, signal system communication and coordination.	City of Loudon	Ready for Construction
17-2014-080	Liberty Street Multimodal Project	Addition of sidewalks and bicycle facilities along Liberty and Division Streets.	City of Knoxville	Carried Forward
17-2014-081	Oak Ridge Turnpike Intersection Pedestrian Safety Improvements	Pedestrian safety improvements, including marked crosswalks, ramps and pedestrian indications, at two intersections. Includes mast arm replacement, to be funded by L-STP funds.	City of Oak Ridge	Complete
17-2014-082	Union Road/N. Hobbs Road Improvements	Reconstruct 2-lane roadways including accommodations for pedestrians and bicycles. Proposed cross section is two 12' lanes with turn lanes as needed at major intersections, bicycle lanes, curb & gutter, sidewalk and/or greenway.	Town of Farragut	Carried Forward
17-2014-083	Blair Bend Road/Williamson Drive Resurfacing	Resurface existing roadway to eliminate hazardous pavement surface conditions and worn travel lane markings to improve safety.	City of Loudon	Under Construction

2017-2020 TIP Project Status

TIP ID	Project Name/Route	Description	Lead Agency	Project Status
17-2014-084	SR 115 / US 129 (Relocated Alcoa Hwy.)	Construct New 4-Lane from SR -162 (Pellissippe Pkwy.) to South Singleton Station Rd.	TDOT	Carried Forward
17-2014-085	Western Avenue (SR-62)	Widen from 2 Lanes to 5 Lanes from Texas Ave. to Major Ave.	TDOT	Under Construction
17-2014-204	CAC Transit Vehicle Replacement	CAC will purchase up to four para-transit vehicles each year to continue providing Demand Response transportation to the residents of Knoxville and Knox County.	CAC	Carried Forward
17-2014-205	CAC Volunteer Assisted Transit Vehicle Replacement	CAC's Volunteer Assisted Transportation program will purchase two hybrid sedans each year for 2014, 2015, 2016, and 2017 to continue its service to Knox County seniors and people with disabilities.	CAC	Complete
17-2014-207	Smart Trips - Comprehensive Program	Coordinator works with businesses to assist them in developing or expanding worksite commute options, programs, and other incentives.	TPO/MPC	Carried Forward
17-2014-225	Bike Parking Program	Provide convenient and secure bike parking destinations by reducing cost for businesses and agencies to provide bike parking for employees and customers.	TPO/MPC	Carried Forward
17-2014-229	Knox County Advanced Traffic Management System - Phase 1	The project is to design and implement advanced traffic management system on two priority road - Maynardville Pk and Cedar Bluff Rd.	Knox County	Carried Forward
17-2014-230	Oak Ridge Signal Timing Optimization	The project is to coordinate traffic signal operations for 27 intersections on three corridors - Illinois Ave, Oak Ridge Turnpike, and Lafayette Dr.	City of Oak Ridge	Complete
17-2014-231	Farragut Traffic Signal Improvement Project	The project will provide signal system hardware and infrastructure improvements to facilitate signal coordination of all 26 traffic signals in town.	Town of Farragut	Complete
17-2014-232	Lenoir City ITS: Signal System Design	The project is to design and implement ITS signal system for 20 coordinated signals along US-321/SR-73 and US-11/SR-2.	City of Lenoir City	Ready for Construction
17-2014-300	PM 2.5 Diesel Emissions Reduction Strategies Grouping	See Appendix E: TDOT Metropolitan Groupings Definitions for a more comprehensive list of activities included but not limited for eligibility.	TDOT	Carried Forward
17-2014-304	HELP Truck Expansion Program	To expand the existing TDOT Freeway Service Patrol Program by acquiring three new HELP trucks and three operators and by expanding routes to provide coverage and services during peak hours in the Knoxville air quality nonattainment and maintenance area.	TDOT	Complete
17-2017-001	Jackson Avenue, Bridges over ramp to Gay St.	Bridge replacement or possible rehab (no additional lanes) of two ramp structures (one east and one west) leading from Jackson Ave to Gay St. The ramps abut historic structures	City of Knoxville	Under Construction
17-2017-003	Pellissippi Pkwy/Hardin Valley Interchange	Modify existing interchange to improve capacity, safety and operations. Add new northbound on-ramp in northeast quadrant.	TDOT	Carried Forward
17-2017-004	J. Carmichael Greer Pedestrian Bridge	Conversion of existing 2-lane vehicle bridge and approaches at Fort Loudoun Dam to a pedestrian and bicycle shared use path	Loudon County	Removed from TIP
17-2017-005	SR-115 (US 129 Widening	Widen from 4 to 6 lanes within existing right-of-way. Hall Rd (SR-35) to US 321.	TDOT	Carried Forward
17-2017-006	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.	City of Maryville	Carried Forward
17-2017-007	Amerine Rd Improvements	Reconstruct 2-lane road with addition of turn lanes and sidewalk from Fielding Dr. to Sevierville Rd.	City of Maryville	Removed from TIP
17-2017-009	First Creek Greenway - Broadway Streetscape	Construct a new shared use path extending First Creek Greenway from near Cecil Ave to near Woodland Ave	City of Knoxville	Carried Forward
17-2017-011	East Knox Greenway - Phase 1	Construct a new shared use path connecting First Creek Greenway to Knoxville Botanical Gardens and Arboretum	City of Knoxville	Carried Forward
17-2017-015		Reconstruct 2-lane road with addition of turn lanes and bicycle/pedestrian facilities from Weisgarber Rd. to Kingston Pike.	City of Knoxville	Carried Forward
17-2017-017	Magnolia Ave Streetscape - Phase 3 & 4	Construct 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.	City of Knoxville	Carried Forward
17-2017-023	Tesla Blvd.	Construct new 2 lane boulevard extension from the local interstate connector project to Springbrook Road. The connection will include a multiuse path, sidewalks, and stormwater quality intrinsic with the drainage system.	City of Alcoa	Ready for Construction

TIP ID	Project Name/Route	Description	Lead Agency	Project Status
17-2017-024	Town of Farragut Advanced Traffic Management System Phase 1	Upgrade Farragut's closed loop signal system to a centrally controlled signal system. The limits of the project includes all 26 signals in Farragut's signal system on Kingston Pike, Campbell Station Road, Concord Road, and Parkside Drive. The upgrades include new central traffic signal control software, new signal series controllers, ethernet communication upgrades, bringing pedestrian infrastructure up to current PROWAG standards, cabinet upgrades, detection upgrades, and replacing span wire signals at five intersections with mast arms.	Town of Farragut	Carried Forward
17-2017-025	Cleaner Operations Vehicles with Propane	Replace two gasoline-powered transportation trucks with Chevrolet trucks converted to propane autogas.	Anderson County	Removed from TIP
17-2017-026	Cleaner EMS Vehicles with Propane	Replace four gasoline-powered EMS trucks with Chevrolet trucks converted to propane autogas.	Anderson County	Removed from TIP
17-2017-027	Advancing Highway Maintenance Vehicles with Propane	Replace 13 gasoline-powered maintenance trucks with Ford vehicles converted to propane autogas.	Anderson County	Removed from TIP
17-2017-028	Bus Rapid Transit Bus Stops/Passenger Information Systems Install	The project will consist of six BRT bus stops (one for each direction totaling 12 stations), Passenger Information Systems (PIS) at each station, TSP software integrated into the City's ATMS central software, and a number of queue jump locations, which will be determined during preliminary design efforts.	City of Knoxville	Carried Forward
17-2017-030	Schaad Rd. Extension	Construct new 4-lane roadway with sidewalks from Middlebrook Pk (SR 169) to W of Oak Ridge Hwy (SR 62)	Knox County	Ready for Construction
17-2017-031	Robert C. Jackson Drive Extension	Lamar Alexander Pkwy (US -321/SR-73) to Morganton Rd	City of Maryville	Under Construction
17-2017-032	Duck Pond Walking and Bike Path Phase 2	Construction and renovation of bicycle and pedestrian approaches, connectors and bridges in association with Phase 1 of the walking and biking path throughout Alcoa, linking schools with the existing greenway. Project also includes ADA upgrades and access.	City of Alcoa	Ready for Construction
17-2017-033	Alcoa Hwy (SR-115/US- 129) ITS Expansion	Smartway Geographic Expansion	TDOT	Carried Forward
17-2017-034	I-75 ITS Expansion	MM 109.6 to just before SR-61 (Exit 122).	TDOT	Carried Forward
17-2017-035	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. Strawberry Plains Pike (Exit 398) Interchange to SR-66 (Sevierville, Exit 407) Interchange	TDOT	Carried Forward
17-2017-036	Emory Rd (SR-131)	Widen from 2-lanes to 4-lanes with median and/or center turn lane, and including bicycle/pedestrian facilities. From SR-331 to SR-33	TDOT	Carried Forward
17-2017-037	Edgemoor Road (SR-170)	Widen from 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. SR-62 (Oak Ridge Hwy) TO SR-9/US-25W (Clinton Hwy).	TDOT	Carried Forward
17-2017-038	I-640/ I-275/ I-75 Interchange	Interchange reconstruction along with the addition of auxilary lanes in each direction on I-75. Interchange at I-640/I-275 (Sharps Gap).	TDOT	Carried Forward
17-2017-039	Northshore Drive (SR- 332) at Kingston Pike (SR- 1) Intersection Improvements	Access management improvements, raised median, improved signal timing, and various intersection improvements.	TDOT	Carried Forward
17-2017-040	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. Blount Avenue to SR-338 (Boyds Creek Highway) in Seymour	TDOT	Carried Forward
17-2017-041	I-75 Exit 81 Interchange Lighting Enhancement	Add high mast lighting to Interstate 75 at Exit 81 to improve safety conditions at night and during fog events.	City of Lenoir City	Carried Forward
17-2017-042	Carpenters Grade Road Widening and Intersection Improvements	Reconstruct 2-lane road with addition of turn lanes and sidewalk. Construct roundabout at Peterson Ln, Cochran Rd and Raulston Rd intersection.	City of Maryville	Carried Forward

TIP ID	Project Name/Route	Description	Lead Agency	Project Status
17-2017-043	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 spa	City of Oliver Springs	Carried Forward
17-2017-044	Boyds Creek Highway (SR 338) at Old Knoxville Highway Intersection Improvements	Reconfigure existing intersection to improve safety and operations through geometric layout changes, addition of turn lanes, and installation of a new traffic signal.	City of Sevierville	Carried Forward
17-2017-045	Kingston Pike at Watt Road Intersection Improvements	Intersection improvements at the intersection of Kingston Pike (US 11/70 (SR-1) at Watt Road.	Town of Farragut	Ready for Construction
17-2017-046	Oak Ridge Rails to Trails	Construct new shared use "rails-to-trails" path along an abandoned rail line through the City of Oak Ridge.	City of Oak Ridge	Carried Forward
17-2017-047	Tazewell Pike Sidewalk	Construct sidewalk along Tazewell Pike from Old Broadway to Jacksboro Pike.	City of Knoxville	Carried Forward
17-2017-048	Blount County Greenway Trail - Phase 1	Greenway trail contained completely within US Highway 321 right-of-way from Heritage High School to Perry's Mill Parking area. It will also include additional bike access link to Old Walland Highway across Melrose Station Bridge.	Blount County	Carried Forward
17-2017-049	South Waterfront Greenway - East of Suttree	Construct riverwalk trail connecting the 0.10 mile section of cantilevered riverwalk along Island Home Avenue, to Suttree Landing Park riverwalk that is just east of Foggy Bottom Street along the Tennessee River.	City of Knoxville	Carried Forward
17-2017-050	I-140 ITS Expansion	ITS Expansion Project - includes the installation of a power and communication network and its devices such as CCTV cameras, DMS and RDS.	TDOT	Carried Forward
17-2017-051	Middlebrook Pike (SR- 169) ATMS Expansion	Expand the City of Knoxville's Advanced Traffic Management System along Middlebrook Pike/University Ave.	City of Knoxville	Carried Forward
17-2017-052	Clinton Traffic Signalization Improvements: Ph. 1	Signal Timing Update for each of the City's 15 traffic signals	City of Clinton	Ready for Construction
17-2017-053	Oak Ridge Signal Timing Optimization Program Ph. 2	Installation of advanced traffic controllers at eleven (11) intersections, the installation fiber optic cable to connect all fourteen (14) signals within the City's existing fiber network, upgrade vehicle detection, and the establishment of a traffic oper	City of Oak Ridge	Carried Forward
17-2017-054	Knoxville Renewable Fueling Station	Upgrade fueling terminal for use with biodiesel	TDOT	Project canceled
17-2017-055	Knoxville and Holston River Railroad Locomotive Repower	Repower 5 Tier 2 locomotives to Tier 4 Emissions Standards at Near Zero Emissions	TDOT	Ready for Contract
17-2017-056	I-75	Widen from 4 to 6 lanes From near SR-131 (Emory Road) to near SR-170 (Raccoon Valley Road)	TDOT	Carried Forward
17-2017-057	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.	TDOT	Carried Forward
17-2017-058	Broadway DSRC and Enhanced Detection Traffic Signal Improvements	Signal upgrades at existing installations including DSRC, data probing hardware, enhanced vehicle detection, battery backup, etc.	City of Knoxville	Carried Forward
17-2017-059	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.	City of Knoxville	Carried Forward
17-2017-060	Kingston Pike DSRC and Enhanced Detection Traffic Signal Improvements	Signal upgrades at existing installations including DSRC, data probing hardware, enhanced vehicle detection, battery backup, etc.	City of Knoxville	Carried Forward
17-2017-061	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.	City of Knoxville	Carried Forward

TIP ID	Project Name/Route	Description	Lead Agency	Project Status
17-2017-062	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.	City of Lenoir City	Carried Forward
17-2017-063	Knox County Advanced Traffic Management System - Phase II	Phase II includes installation of new traffic signal controllers, DSRC units, non-intrusive detection, wireless interconnect, malfunction management units (MMU), battery backups and the development of coordinated timings at twenty-three (23) intersections. Phase I overruns included for 11 signal controllers and MMUs, central signal software and DSRC.	Knox County	Carried Forward
17-2017-064	Oak Ridge Signal Timing Optimization Program: Phase III	Primary elements of include the installation of advanced traffic controllers (ATC) at ten (10) intersections, the installation/replacement of wireless interconnect at eleven (11) intersections, the replacement of loop detectors with non-intrusive radar vehicle detection at ten (10) intersections, installation of dedicated short-range communications (DSRC) equipment at eleven (11) intersections and the installation of flashing yellow arrow signal heads at ten (10) intersections. Additional improvements include replacing signal heads with more efficient LED signal heads, installing accessible pedestrian signals at all intersections, signing and marking upgrades, and the reconstruction of curb ramps that are not ADA compliant.	City of Oak Ridge	Carried Forward
17-2017-200	Section 5307 Funds	5307 formula transit funding is for public transportation capital, planning, job access and reverse commute projects, as well as operating expenses in certain circumstances.	City of Knoxville	Program Continues
17-2017-201	Section 5310 Funds	5310 formula transit funding is 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	TPO/MPC	Program Continues
17-2017-202	Section 5339 Funds	5339 formula or discretionary transit funding is to provide capital funding to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities.	City of Knoxville	Program Continues
17-2017-203	ETHRA Transit Vehicle Replacement Project	Purchase of demand response transit vehicles for fleet replacement	ETHRA	Carried Forward (partial)
17-2017-204	Purchase KAT Vehicles - Fixed Route Buses	Purchase of fixed-route buses for fleet replacement or minor expansion.	KAT	Carrried Forward (partial)
17-2017-205	KAT Implementation of ITS Technologies	Technology upgrades including improved automated vehicle location (AVL), electronic passenger information systems, onboard WiFi, automated passenger counters, mobile fare payment, bus diagnostics, safety systems, traffic management and communication syste	КАТ	Ready for Contract
17-2017-206	Purchase KAT Vehicles - Fixed Route Trolley Buses	Purchase of fixed-route trolley buses for fleet replacement or minor expansion	KAT	Carried Forward (partial)
17-2017-207	Purchase KAT Vehicles - Neighborhood Service Buses	Purchase of neighborhood service buses for fleet replacement or minor expansion	KAT	Ready for Contract
17-2017-208	KAT Purchase of ADA Paratransit Vans	Purchase of ADA Paratransit Vans for fleet replacement or minor expansion	KAT	Ready for Contract
17-2017-209	Smart Trips - Ridesharing Program	Continuation of Smart Trips program that encourages alternatives to driving alone through an online ridematching and logging database, incentives, marketing and outreach. Operations funds are used for rideshare operations.	TPO/MPC	Program Continues - Carrried Forward
17-2017-210	KAT Bus Engine Overhauls	Mid-life engine overhauls on 10 transit buses. An engine "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.	КАТ	Project Complete - Overhaul Program included in next TIP
17-2017-211	Purchase Transit Passenger Amenities	Purchase and install passenger amenities (e.g., bus shelters, shelter pads, lighting, etc.) along transit routes.	KAT	Complete
17-2017-212	Knox CAC Transit Capital (Radio) Project	Replace existing two-way radio communication system. The current system is over 30 years old and at the end of its useful life.	CAC	Complete
17-2017-213	Transit Vehicles: Electric Bus Procurement	Puchase of up to 8 35-foot electric transit buses and charging equipment for fleet replacement or minor expansion	КАТ	Ready for Contract

TIP ID	Project Name/Route	Description	Lead Agency	Project Status
17-2017-301	Highway Safety Improvement Program (HSIP) Grouping	See Appendix E: TDOT Metropolitan Groupings Definitions for a more comprehensive list of activities included but not limited for eligibility.	TDOT	Carried Forward
17-2017-302	Surface Transportation Block Grant Program (STBG) Grouping	See Appendix E: TDOT Metropolitan Groupings Definitions for a more comprehensive list of activities included but not limited for eligibility.	TDOT	Carried Forward
17-2017-303	National Highway Performance Program (NHPP) Grouping	See Appendix E: TDOT Metropolitan Groupings Definitions for a more comprehensive list of activities included but not limited for eligibility.	TDOT	Carried Forward
17-2017-304	PHSIP Grouping	See Appendix E: TDOT Metropolitan Groupings Definitions for a more comprehensive list of activities included but not limited for eligibility.	TDOT	Carried Forward (Combined with HSIP)
17-2017-305	STBG Transportation Alternatives (STBG-TA) Grouping	This grouping will be used to fund the 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 proje	Various	Carried Forward
17-2017-306	Planning and Studies Grouping	This grouping will be used to fund planning reports and studies throughout the Knoxville TPO planning area.	Various	Carried Forward
17-2017-307	Maintenance and Repair Grouping	Funds will be used for operation, maintenance, repair, or resufacing works.	Various	Carried Forward
17-2017-308	Bike and Pedestrian Grouping	This grouping will be used to fund greenways, sidewalks, bicycle facilities and amenities, streetscaping, etc. throughout the Knoxville TPO area.	Various	Grouping Combined with STBG-TA Grouping

Appendix D: Air Quality Conformity Determination

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 (PM2.5) 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 PM2.5 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 PM2.5 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.

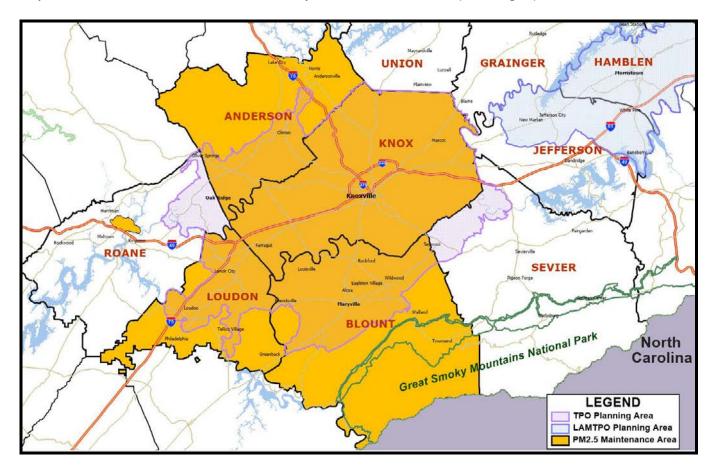
• 1997 Annual PM2.5 Standard – the Knoxville Region was considered a Maintenance Area for this Standard and it covered the identical geography as with the 2006 Daily PM2.5 Standard. The Knoxville Region is meeting the current (2012) Annual PM2.5 Standard of 12 micrograms per cubic meter and the 1997 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 PM2.5. 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.

GRAINGER UNION ANDERSON KNOX JEFFERSON OCKE ROANE SEVIER LOUDON North BLOUNT Great Smoky Mountains National Park Carolina LEGEND **TPO Planning Area LAMTPO Planning Area** 1997 Ozone Maintenance Area 2008 Ozone Maintenance Area

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 PM2.5 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 an 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 an 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 newpapers 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:



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 PM2.5 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 NAAOS.

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 17th 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 23rd 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 19th. 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.

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	(Montvale Rd) Montvale Station Road to SR-73(Lamar Alexander Parkway) (IA)	0.6	09-262	2024	Non-Exempt	No	TDOT	2021	ROW
		Path.	Alexander Farkway (IA)							2022	CON PE-D
20-2014-002	Lovell Rd. (SR-131) Widening	Widen 2-lane to 4-lane, including pedestrian and bicycle facilities.	Cedardale Ln. to Middlebrook Pk. (SR-169)	1.7	09-637	2024	Non-Exempt	Yes	Knox County	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 2021	ROW CON
20-2014-009	Queener Rd. Reconstruction	Reconstruct 2-lane road. Widen from 15.8 feet to 26 feet. Reduce	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 2020 2023	PE-D ROW 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 2022	ROW
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 Boling 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		Farragut	2020 2021	ROW 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

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		TDOT/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 2020	PE-D 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 2021 2022	PE-D ROW 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 CON
20-2017-017	Magnolia Ave Streetscape - Phase 3 & 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 2047 222	Accelerated Bus Corridor		Broadway Ave. at Colonial to Summit Hill (Knoxville		47.4005	2024				2020	PE-D
	Stops/Passenger Information Systems Install	Accelerated Bus Corridor Stops/Passenger Information Systems Install	Transit Center)	6.5	17-1006	2024	Exempt		Knoxville	2021	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 2020	PE-N 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 2022	PE-N PE-D

New TIP #	Project Name	Description	Termini	Length	Mobility Plan #	MP Horizon Year	Exempt Status	Reg. Significant	Lead Agency	Year	Work
20-2017-039	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 (Boyds 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 2021	PE-D 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 2021 2023	PE-D ROW 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	Boyds 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.	Boyds Creek Highway (SR 338) at Old Knoxville Hwy. Intersection	0	18-500	2024	Exempt		Sevierville	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
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 2021 2021 2022	PE-N PE-D ROW 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 Suttree	Construct greenway trail along the Tennessee River connecting the cantilevered riverwalk section along Island Home Avenue to Suttree Landing Park riverwalk.	Suttree Landing Park to Island Home Ave.	0.6	17-850	2024	Exempt		Knoxville	2020 2021 2022	PE-D ROW 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 RDS.	From near MM 2 to near MM 11 (SR-115/US- 129/Alcoa Hwy)	9.2	18-201	2024	Exempt		TDOT	2020	PE-D 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	Western Ave. to Joe Hinton Rd.	6.5	18-603	2024	Exempt		Knoxville	2020	PE-D
		new signal timing plans for the new equipment and software.								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 Geogia 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 2020 2022 2023	PE-N PE-D ROW CON

New TIP #	Project Name	Description	Termini	Length	Mobility Plan #	MP Horizon Year	Exempt Status	Reg. Significant	Lead Agency	Year	Work
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 2020 2020	PE-N PE-D 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 2020 2020 2020	PE-N PE-D 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 2020 2020	PE-N PE-D 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 2020 2021	PE-D 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 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; retime 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/US4 441) at Sam Walton Way, Watt RdI -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 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 TORAU Way/Tulsa Rd; Illinois Ave (SR 62) at Tulane Av/Tuskegee Dr; Illinois Ave (SR 62) at East Tulsa Rd;	3.44	Consistent w/ Goal 1	2024	Exempt		Oak Ridge	2020	PE-D
			Illinois Ave (SR 62) at South Rutger's 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		,					2021	CON
20-2017-209	Smart Trips - Ride Share Program	Continuation of Smart Trips program that encourages alternatives to driving alone through an online ridematching 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

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 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 2021 2022	PE-N PE-D 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	Maryville	2021 2022	PE-N 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	Maryville	2022 2023	PE-N 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 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	5.2?	18-200	2024	Exempt		TDOT	2021 2021	PE-D CON
20-2020-010	SR-115/US-129	Smartway Geographic Expansion	ITS expansion from I-140 to south of Topside Road	2.2?	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 it's 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

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-TA 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 Grouning	This grouping will be used to fund planning reports and studies throughout the Knoxville TPO planning area.	N/A	N/A	Consistent w/ Goal 1	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 1	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	Termini	Length	Mobility Plan #	MP Horizon Year	Exempt Status	Reg. Significant	Lead Agency	Year	Work
KRTPO # 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
KRTPO # 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 2021	PE-D CON
KRTPO # 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
KRTPO # 20-2017- 044	Boyds 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.	Boyds Creek Highway (SR 338) at Old Knoxville Hwy. Intersection	0	18-500	2024	Exempt		Sevierville	2022	CON
KRTPO # 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 CON
KRTPO # 20-2017-	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;	3.44	Consistent w/ Goal 1	2024	Exempt		Oak Ridge	2020	PE-D
064			My/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						2021	CON	
STIP # 2078032, 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 ROW
STIP#	SR-449 Extension (Veterans								Sevier	2020	PE-D
2078080, Sevier County	Boulevard)	Construct New 5-Ln Facility	SR-35 to Robert Henderson Road	0.4	S-1778080	2024	Non-Exempt	Yes	County	2021	ROW
STIP # 2078085,	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	SR-71/73(US-321/441) to SR-449 (Veterans Blvd.)	2	S-1778085	2024	Non-Exempt	Yes	Sevier	2020	PE-D
Sevier County	,	Existing 2-Lane Road to 4-Lane Median Divided Section from Ballpark to SR-449 (Veterans Blvd.) - Construct 5-lane on New Alignment							County	2020	CON
STIP # 2078179, 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 # 2078205, 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 # 2078215, 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	Termini	Length	Mobility Plan #	MP Horizon Year	Exempt Status	Reg. Significant	Lead Agency	Year	Work
LAMTPO # 2010, Jefferson	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-R	2024	Exempt		Jefferson County	2022 2022	PE-N PE-D
County		sidewaik ADA compilant ii needed, striping, signage							County	2023	CON
LAMTPO # 3016,	Old AJ Hwy Realignment/	Construct New 2-Ln road with curb and gutter, ADA compliant	SR-92 at Old Andrew Johnson Hwy to US 11E/		J-LAMTPO-				Jefferson	2021 2021	PE-N PE-D
Jefferson County	SR92/Overlook Rd Extension	sidewalks, street signs, traffic signalization, striping	W.Broadway Blvd	0.46	17	2024	Non-Exempt	Yes	County	2022	ROW CON
LAMTPO #										2020	PE-N
3017, Jefferson	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-R	2024	Exempt		Jefferson County	2020	PE-D
County										2021	CON
LAMTPO # 3018,		Resurface Branner Ave, including milling, grading, repaying, sidewalk							Jefferson	2020	PE-N
Jefferson	Branner Ave Resurfacing	ADA compliant if needed, striping, signage	Ken Sparks Way to Old Al Hwy I 0.33 II-I AMTPO-RI 2024 I Evempt I		County	2020	PE-D				
County										2021	CON
1020,	Municipal Ave Resurfacing	Resurface Municipal Ave, including milling, grading, repaving,	Old Andrew Johnson Hwy to Black Oak Road	0.59	J-LAMTPO-R	2024	Exempt		Jefferson	2020	PE-N PF-D
Jefferson County	widniepar Ave Resurracing	sidewalk ADA compliant if needed, striping, signage	old Allalew Johnson Hwy to black out houd	0.55	J LAWIN O K	2024	Exempt		County	2021	CON
LAMTPO #										2020	PE-N
3021, Jefferson	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-R	2024	Exempt		Jefferson County	2020	PE-D
County		, , , , , ,							,	2021	CON
LAMTPO #	Old Andrew Inherent Here	Described Old Andrew Islands House Islands and History							1.66	2020	PE-N
3022, Jefferson	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-R	2024	Exempt		Jefferson County	2020	PE-D
County										2021	CON
LAMTPO # 2045015,								.,	Jefferson	2022	PE-N
Jefferson County	I-81	Widen 4-lane to 6-lane	I-40 to SR-341 (Roy Messer Hwy) 3.8	3.8 J-IA-0	3.8 J-IA-02	2030	Non-Exempt	Yes	County	2022	PE-D ROW
,										2023	NOW

Appendix E: TDOT Grouping Definitions

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 Category	Function of Grouping Activities	Allowable Work Types
		Allowable Work Types Intersection safety improvements Pavement and shoulder widening (including a passing lane to remedy an unsafecondition) Installation of rumble strips or another warning devices, if they do not adversely affect the safety or mobility of bicyclists and pedestrians Installation of skid-resistant surface at intersections or locations with high crash frequencies Improvements for pedestrian or bicyclist safety Construction and improvement of a railway-highway grade crossing safety feature, including installation of protective devices The conduct of a model traffic enforcement activity at a railway-highway crossing Construction of a traffic calming feature Elimination of a roadside hazard Installation, replacement, and other improvements of highway signage and pavement markings, or a project to maintain minimum levels of retro-reflectivity that addressesa highway safety problem consistent with the SHSP Installation of emergency vehicle priority control systems at signalized intersections Installation of traffic control or other warning devices at locations with high crash potential Transportation safety planning Collection, analysis, and improvement of safety data Planning integrated interoperable emergency communications equipment or operational or traffic enforcement activities (including police assistance) related to work zone safety Installation of guardrails, barriers (including barriers between construction work zones and traffic lanes), and crash attenuators The addition or retrofitting of structures or other measures to eliminate or reduce crashes involving vehicles and wildlife installation of yellow-green signs and signals at pedestrian and bicycle crossings and in school zones Construction and operational improvements on high risk rural roads Geometric improvements to a road for safety purposes that improve safety Road safety audits Roadway safety infrastructure improvements consistent with FHWA's "HighwayDesign Handbook for Older Drivers and Pedestrians" (FHWA-RD-
		 Roadway improvements that provide separation between pedestrians and motor vehicles, including medians and pedestrian crossing islands. Other physical infrastructure projects not specifically enumerated in the list of eligible projects. Workforce development, training, and education activities



Grouping Category	Function of Grouping Activities	Allowable Work Types
Highway Safety Improvement Program(HSIP) Grouping		Activities included as part of the Highway Railroad Grade Crossing program: Elimination of hazards of railway-highway crossings, including the separation or protection of grades at crossings Reconstruction of existing railroad grade crossing structures Relocation of highways to eliminate grade crossings
(continued) Knox MPO STIP # 2047130		 Installation of protective devices Projects authorized from this grouping may be authorized with a different Federal percentage than shown in the grid based on one or more of the following: 90% for certain Interstate projects under <u>23 U.S.C. 120(a)</u>; 100% for certain safety items under <u>23 U.S.C. 120(c)</u>; or
TIP # 20-2020-301		o 100% for Appalachian Development Highway System (ADHS) projects under <u>FAST Act § 1435</u> and <u>40 U.S.C. 14501</u> .



Grouping Category	Function of Grouping Activities	Allowable Work Types
National Highway Performance	Projects for the preservation and improvement of the conditions and performance of the National	 Minor rehabilitation, pavement resurfacing, preventative maintenance, restoration, and pavement preservation treatments to extend the service life of highwayinfrastructure, including pavement markings and improvements to roadside hardware or sight distance
Program (NHPP) Grouping	Highway System (NHS), including	 Highway improvement work including slide repair, rock fall mitigation, drainage repairs, or other preventative work necessary to maintain or extend the service life of theexisting infrastructure in a good operational condition
	 Rehabilitation, resurfacing, restoration, preservation, and 	 Minor operational and safety improvements to intersections and interchanges such as adding turn lanes, addressing existing geometric deficiencies, and extending on/off ramps
Knox MPO	operational improvements,	 Capital and operating costs for intelligent transportation systems (ITS) and traffic monitoring, management, and control facilities and programs:
STIP#	Traffic operations,	O Infrastructure-based intelligent transportation systems (ITS) capital improvements
2047100	,	O Traffic Management Center (TMC) operations and utilities
TIP#	Bridge and tunnel	O Freeway service patrols
20-2020-303	improvements,	O Traveler information
	Safety improvements,	 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
	Bicycle and pedestrian improvements, and	 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
	Environmental mitigation.	Rail-highway grade crossing improvements
	Environmental mitigation.	Highway safety improvements:
		O Installation of new or improvement of existing guardrail
		O Installation of traffic signs and signals/lights
		O Spot safety improvements
		Sidewalk improvements
		Pedestrian and/or bicycle facilities
		Traffic calming and traffic diversion improvements
		Noise walls
		Wetland and/or stream mitigation
		Environmental restoration and pollution abatement
		Control of noxious weeds and establishment of native species
		Projects authorized from this grouping may be authorized with a different Federal percentage than
		shown in the grid based on one or more of the following:
		o 90% for certain Interstate projects under 23 U.S.C. 120(a);
		o 100% for certain safety items under <u>23 U.S.C. 120(c)</u> ; or
		o 100% for Appalachian Development Highway System (ADHS) projects under FAST Act § 1435
		and <u>40 U.S.C. 14501</u> .



Grouping Category	Function of Grouping Activities	Allowable Work Types
Surface Transportation Block Grant Program (STBG) Grouping Knox MPO STIP # 2047105 TIP# 20-2020-302	Projects and programs for the preservation and improvement of the conditions and performance of Federal-aid highways and public roads, including: 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, Traffic operations on Federal-aid highways, Bridge and tunnel improvements on public roads, Safety improvements on public roads, Environmental mitigation Scenic and historic highway programs, Landscaping and scenic beautification,	Activities previously authorized under the Surface Transportation Program (STP): Minor rehabilitation, pavement resurfacing, preventative maintenance, restoration, and pavement preservation treatments to extend the service life of highwayinfrastructure, including pavement markings and improvements to roadside hardware or sight distance Highway improvement work including slide repair, rock fall mitigation, drainage repairs, or other preventative work necessary to maintain or extend the service life of theexisting infrastructure in a good operational condition Minor operational and safety improvements to intersections and interchanges such as adding turn lanes, addressing existing geometric deficiencies, and extending on/off ramps Capital and operating costs for intelligent transportation systems (ITS) and traffic monitoring, management, and control facilities and programs: Infrastructure-based intelligent transportation systems (ITS) capital improvements Traffic Management Center (TMC) operations and utilities Freeway service patrols Traveler information 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 Development and implementation of a State Asset Management Plan including data collection, maintenance and integration, software costs, and equipment costs thatsupport the development of performance-based management systems for infrastructure Rail-highway grade crossing improvements Highway safety improvements Installation of new or improvement of existing guardrail Installation of higher facilities Traffic calming and traffic diversion improvements Transportation Alternatives as defined by 23 USC 213(B), 23 USC. 101(A)(29), and Section 1122 of MAP-21 Noise walls Wetland and/or stream mitigation Environmental restoration and pollution abatement Control of noxious weeds and est
		Activities previously authorized under the Transportation Enhancement Program:



Surface **Transportation Block Grant** Program (STBG) Grouping

(continued)

Knox MPO STIP# 2047105 TIP# 20-2020-302

- Historic preservation,
- On- and off-road pedestrian and bicycle facilities,
- Infrastructure projects for improving non-driver access to public transportation and enhanced mobility,
- Community improvement activities,
- Recreational Trail Program projects,
- Safe Routes to School (SRTS) projects,
- Transportation Enhancement projects,
- **Transportation Alternatives** projects,
- Projects for the creation, rehabilitation, and maintenance of multi-use recreational trails.

- 0 Pedestrian and bicycle facilities, safety, and educational activities
- Acquisition of scenic easements and scenic or historic sites 0
- 0 Scenic or historic highway programs
- 0 Landscaping and other scenic beautification activities
- 0 Historic preservation
- 0 Rehabilitation and operation of historic transportation buildings, structures, or facilities
- Preservation of abandoned railway corridors 0
- 0 Inventory, control, and removal of outdoor advertising
- Archaeological planning and research 0
- Environmental mitigation to address water pollution due to highway runoff or reduce vehicle-caused wildlife mortality while maintaining habitat connectivity
- Establishment of transportation museums
- Activities under the Tennessee Roadscapes grant program, including landscaping, irrigation, benches, trash cans, paths and signage

Activities previously authorized under the Safe Routes to School Program (SRTS):

- Sidewalk improvements
- Traffic calming and speed reduction improvements
- Pedestrian and bicycle crossing improvements
- On-street bicycle facilities
- Off-street bicycle and pedestrian facilities
- Secure bicycle parking facilities
- Traffic diversion improvements approximately within 2 miles of a school location
- Non-infrastructure related activities:
 - Public awareness campaigns and outreach to press and community leaders
 - Traffic education and enforcement in the vicinity of schools
 - Student sessions on bicycle and pedestrian safety, health, and environment
 - Funding for training, volunteers, and managers of safe routes to school program

Activities previously authorized under the Transportation Alternatives Program (TAP):

- Construction, planning, and design of on-road and off-road trail facilities forpedestrians, bicyclists, and other nonmotorized forms of transportation, including:
 - Sidewalk improvements 0
 - Bicycle infrastructure
 - 0 Pedestrian and bicycle signals
 - Traffic calming techniques 0
 - Lighting and other safety-related infrastructure 0



Surface Transportation Block Grant Program (STBG) Grouping

(continued)

Knox MPO STIP# 2047105 TIP# 20-2020-302

Projects for the planning, design or construction of boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways.

- Transportation projects to achieve compliance with the Americans with Disabilities Act of 1990
- Construction, planning, and design of infrastructure-related projects and systems that will provide safe routes for nondrivers, including children, older adults, and individuals with disabilities to access daily needs
- Conversion and use of abandoned railroad corridors for trails for pedestrians, bicyclists, or other non-motorized transportation users
- Construction of turnouts, overlooks, and viewing areas
- Community improvement activities, which include but are not limited to:
 - 0 Inventory, control, or removal of outdoor advertising
 - Historic preservation and rehabilitation of historic transportation facilities
 - Vegetation management in transportation rights-of-way to improve roadwaysafety, prevent invasive species, and provide erosion control
 - Archaeological activities relating to impacts from implementation of atransportation project eligible under Title 23 of the USC
- Any environmental mitigation activity, including pollution prevention and pollution abatement activities and mitigation to:
 - Address stormwater management, control, and water pollution preventionor abatement related to highway construction or due to highway runoff
 - Reduce vehicle-caused wildlife mortality or to restore and maintain connectivity among terrestrial or aquatic habitats
- Recreational Trails Program activities under 23 USC 206
- 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.
- Planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways

Activities previously authorized under the Recreational Trails Program (RTP):

- Maintenance and restoration of existing recreational trails
- Development and rehabilitation of trailside and trailhead facilities and trail linkages for recreational trails
- Purchase and lease of recreational trail construction and maintenance equipment
- Construction of new recreational trails
- Acquisition of easements and fee simple title to property for recreational trails or recreational trail corridors
- Assessment of trail conditions for accessibility and maintenance
- Development and dissemination of publications and operation of educational programs to promote safety and environmental protection
- Payment of costs to the State incurred in administering the program
- Projects authorized from this grouping may be authorized with a different Federal percentage than shown in the grid based on one or more of the following:
 - o 90% for certain Interstate projects under 23 U.S.C. 120(a);
 - o 100% for certain safety items under 23 U.S.C. 120(c); or
 - o 100% for Appalachian Development Highway System (ADHS) projects under MAP-21 §1528
 - and 40 U.S.C. 14501.



Grouping Category	Function of Grouping Activities	Allowable Work Types
Highway Infrastructure Grouping Knox MPO STIP # TBD TIP# TBD	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.



Appendix F: ADA and ADA Transition Plan status of local public agencies

ADA and ADA Transition Plan Status of Local Public Agencies

	ADA	ADA			
	Coordinator	Grievance	ADA Self-	Transition	
Agency	Identified	Procedure	Evaluation	Plan Status	Transition Plan Status Details
Anderson County	Yes	Yes	Yes	Complete	Update completed in 2019
Blount County	Yes	Yes	Yes	Complete	
Blount County IDB					Exempt - Fewer than 50 employees
,					Self-Evaluation and Transition Plan underway with target completion by
City of Alcoa	Yes	Yes	In progress	In progress	end of CY 2019.
					Transition Plan is in final draft form as of 5/31/19. Draft and is being
City of Clinton	Yes	Yes	Yes	In progress	reviewd by city prior to adoption by city council.
					The current transition plan is being update with a target completion date
City of Knoxville	Yes	Yes	Yes	Complete	by the end of CY 2019.
					Self-Evaluation and Transition Plan underway with target completion by
City of Loudon	Yes	Yes	In progress	Underway	end of CY 2019.
					City's consultant is currently in the process of making revisions to the
City of Maryville	Yes	Yes	Yes	Yes	draft Transition Plan. City anticipates a final draft by August 2019.
					Self-Evaluation and Transition Plan underway with target completion by
City of Oak Ridge	Yes	Yes	In progress	In progress	end of CY 2019.
					Self-Evaluation and Transition Plan underway with target completion by
City of Sevierville Knoxville-Knox	Yes	Yes	In progress	In progress	end of summer 2019.
County Community					
Action Committee	Yes	Yes	Vaa	Complete	CAC is covered in Knox County Transition Plan
Action Committee	res	res	Yes	Update in	Anticipate Transition Plan approval at July 2019 County Commission
Knox County	Yes	Yes	Yes	progress	meeting.
Knox county	163	163	163	progress	meeting.
Knoxville Area Transit	Yes	Yes	Yes	Complete	KAT is covered in City of Knoxville Transition Plan
					Self-Evaluation and Transition Plan underway with target completion by
Lenoir City	Yes	Yes	In progress	In progress	end of 2019.
					County is seeking consultant assistance to complete Self-Evaluation and
Loudon County	Yes	Yes	In progress	In progress	Transition Plan by end of CY 2019.
,					Self-Evaluation and Transition Plan underway with target completion by
Sevier County	Yes	Yes	In progress	In progress	end of CY 2019.
Town of Farragut	Yes	Yes	Yes	Complete	
Louisville*					Exempt - Fewer than 50 employees
Rockford*					Exempt - Fewer than 50 employees
Oliver Springs*	İ				Exempt - Fewer than 50 employees

Appendix G: Performance Based Planning and Programming – Performance Targets

ADOPTED PERFORMANCE TARGETS

The following tables document the Knoxville TPO's adopted performance targets for PM1, PM2, PM3 and TAM performance measures. The targets are periodically updated as required under 23 CFR part 490, and 49 U.S.C 5326(c).

Safety Targets (PM1)

PM1 targets are required to be updated annually. Table G-1 reflects the first annual update, reported by TDOT on August 31, 2018 and adopted by the TPO Executive Board on February 27, 2019.

Table G-1: (PM1) TDOT and TPO Safety Targets

	5 Year Rolling Averages			
Performance Measures	Baseline	Target		
	2013-2017	2015-2019		
Number Fatalities	1,000.6	1,022.0		
Fatality Rate	1.329	1.291		
Number of Serious Injuries	7,227.6	7,374.6		
Serious Injury Rate	9.594	9.324		
Number of Non-motorized Fatalities and Serious Injuries	467.4	546.8		

Pavement and Bridge Infrastructure Condition Performance Measures (PM2)

TDOT established statewide pavement and bridge condition targets by the May 20, 2018 deadline. The TPO adopted the required 4-year targets at the October 24, 2018 Executive Board meeting.

Table G-2: (PM2) TDOT and TPO Pavement and Bridge Condition Targets

Performance Measures	Baseline	2-Year Target	4-Year Target
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%
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) Targets

The Tennessee Department of Transportation (TDOT) established System Performance targets by the May 20, 2018 deadline. The TPO adopted the required 4-year targets at the October 24, 2018 Executive Board meeting.

Table G-2: (PM3) TDOT and TPO System Performance Targets

Performance Measures	Baseline	2-Year Target	4-Year Target
Subpart E - Interstate Reliability (Percent of person- miles traveled on the Interstate System that are reliable)	87.7%	85.3%	83.0%
Subpart E - Non-Interstate NHS Reliability (Percent of person-miles traveled on the non-Interstate NHS that are reliable)	89.7%	N/A	87.5%
Subpart F – Freight Reliability (Truck Travel Time Reliability Index)	1.35	1.35	1.33
Subpart G – Traffic Congestion (Peak Hour Excessive Delay per Capita)	8.54	N/A	N/A
Subpart G – Traffic Congestion (Percent of Non-Single Occupancy Vehicle Travel)	16.6%	16.5%	16.5%
Total emissions reductions	VOC = 230.025 CO = 530.282 NO _x = 363.399 PM2.5 = 2.897	VOC = 30.698 CO = 75.000 NO _x = 62.840 PM2.5 = 0.120	VOC = 61.396 CO = 150.000 NO _x = 125.680 PM2.5 = 0.240

Note: Knoxville Regional TPO is only required to adopt 4-year targets and is only subject to Performance Measures under Subpart E, F and H for the first performance period, and only subject to emissions reductions targets for the pollutants of VOC, NOx and PM2.5 as indicated by the shading above.

Transit Asset Management (TAM) and Transit Safety

Local transit agencies have adopted TAM targets and submitted TAM Plans to the TPO. The TPO adopted Urban Area TAM performance targets at the June 26, 2018 Executive Board meeting.

Table G-3: TPO 2018/2019 TAM Targets

Asset Class/Definition	Agency	Total Assets	2018 # Assets In Good Repair	2018 # Assets In SGR Backlog	2018 % Assets In SGR Backlog	2019 Target % Assets In SGR Backlog
Rolling Stock - All Revenue Vehicles						
% of revenue vehicles that have met or						
exceeded their Useful Life Benchmark (ULB)						
Bus & Rubber Tire Vintage Trolley – 14 Years	KAT	58	58	0	0.00%	< 10%
Cutaway – 10 Years	KAT, CAC,	90	187	3	3.33%	< 10%
Cutaway – Light Duty – 5 Years	ETHRA, NP	20	13	7	35.00%	< 10%
Minivan – 8 Years	CAC, VAT, NP	23	20	3	13.04%	< 10%
Automobile – 8 Years	CAC, VAT	15	13	2	13.33%	< 10%
Equipment - Non-Revenue Vehicles						

% of non-revenue vehicles that have met or						
exceeded their Useful Life Benchmark (ULB)						
Support Vehicle – 8 Years	KAT, CAC	18	10	8	44.44%	< 10%
Equipment – Over \$50,000/Owned						
% of equipment with a condition rating						
below 3.0 on FTA's Transit Economic						
Requirements Model (TERM) Scale						
Equipment	KAT	16	10	6	37.50%	< 10%
Facilities - All Buildings or Structures						
% of facilities with a condition rating below						
3.0 on FTA's Transit Economic Requirements						
Model (TERM) Scale						
Facilities	KAT	5	5	0	0.00%	0.00%

KAT = Knoxville Area Transit, CAC = Knox County CAC Transit, VAT = Knoxville Knox County CAC Volunteer Assisted Transportation Program, ETHRA = East Tennessee Human Resource Agency, NP = Non-Profit agencies that purchased vehicles through Section 5310 – Enhanced Mobility for Seniors & Individuals with Disabilities

Transit Agency Deadline to establish Public Transit Agency Safety Plans (includes safety targets): Final Rule + 1 year

TPO Deadline to establish Transit Safety Performance targets: Final Rule + 1 year + 180 days