

Mobility Plan 2040

October 2018 Amendments Summary

INTRODUCTION AND BACKGROUND

The 2040 Mobility Plan was originally adopted by the Knoxville Regional Transportation Planning Organization (TPO) Executive Board on April 26, 2017. The Plan is proposed to be amended with the amendments scheduled to be heard at the October 24, 2018 TPO Executive Board meeting. These amendments are being heard in conjunction with a new requirement for demonstrating conformity to the 1997 8-hour Ozone Standard as discussed in the accompanying updated “Air Quality Conformity Determination for the Mobility Plan 2040 and FY 2017-2020 Transportation Improvement Program”. The Plan amendments are somewhat minor in nature with no new regional significant projects being added to the Mobility Plan and can be summarized into four categories, with additional explanation in subsequent sections of this document:

- Change of Horizon Year
- Add Projects from TIP to Mobility Plan
- Revise Project Descriptions/Termini/Length for Consistency with TIP
- Delete Projects

CHANGE OF HORIZON YEAR

The Mobility Plan utilizes five horizon years between the base year 2017 and the future year of 2040 to indicate priorities and time frames for implementation of programmed projects. The horizon years are: 2022, 2026, 2030, 2034 and 2040. Since the original adoption of the Mobility Plan some of the project priorities have changed which has resulted in moving some projects forward while also pushing some projects back. One of the projects that is being moved forward is due to the passage of the TDOT IMPROVE Act, which was signed into law shortly after the Mobility Plan was adopted. The IMPROVE Act included the passage of increased motor fuel taxes that are dedicated towards certain identified transportation projects in the Act. Table 1 below shows the projects with change of horizon year and whether it’s due to a delay or moving up.

Table 1:

KRMP ID	Project Name/Route	Termini	Jurisdiction	Lead Agency	Length (miles)	Project Description/Type of Improvement	Old Horizon Year	New Horizon Year
Delayed Projects								
09-248a	Topside Road (SR-333) Improvements - Phase 1	Wrights Ferry Rd to TVA Lab Rd	Alcoa	TDOT	1.0	Add continuous center turn lane	2022	2030
17-201	Amerine Road Improvements	Fielding Drive to Sevierville Rd	Maryville	Maryville	0.5	Reconstruct 2-lane road with addition of turn lanes and sidewalk	2022	2030
Projects Moving To Nearer Term Horizon Year								
09-223	Carpenters Grade Rd Reconstruction and Intersection Improvements	Raulston Rd/Peterson Ln to Cochran Rd	Maryville	Maryville	0.89	Reconstruct 2-lane road with addition of turn lanes and sidewalk. Construct roundabout at Peterson Ln, Cochran Rd and Raulston Rd intersection.	2040	2022
09-615	Washington Pike	North of I-640 to Murphy Rd	Knoxville	Knoxville	1.7	Widen from 2 to 4 lanes	2040	2026
09-692	I-75 Widening	Emory Rd (SR-131) to Raccoon Valley Rd (SR-170)	Knox County	TDOT	5.3	Widen from 4 to 6 lanes	2040	2030

ADD PROJECTS FROM TIP TO MOBILITY PLAN

There have been a few smaller-scale, i.e. “non-regionally significant” projects amended to the FY 2017-2020 TIP since the adoption of the Mobility Plan that were determined to be “consistent” with the Mobility Plan goal areas. Each time a Mobility Plan update is conducted it has been the practice of the TPO to assign these projects a Mobility Plan ID number and formally include them in the updated project list for easier identification and public information. Table 2 below summarizes these added projects:

Table 2:

KRMP ID	Project Name/Route	Termini	Jurisdiction	Length (miles)	Description	FY17-20 TIP ID	Analysis Year
18-100	SR 61 at SR 62 Intersection at Winter Gap	SR-61 at SR-62	Oliver Springs	0	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 mast arms	17-2017-043	2022
18-101	Clinton Traffic Signalization Improvements: Ph. 1	Citywide	Clinton	0	Signal Timing Update for each of the City's 15 traffic signals	17-2017-052	2022
18-200	Alcoa Hwy (SR-115/US-129) ITS Expansion	I-140 in Blount County to Cherokee Trail in Knox County	Blount/Knox County	7.4	ITS Smartway Geographic Expansion	17-2017-033	2022
18-201	I-140 ITS Expansion	Near MM 2 to Near MM 11 (SR-115/US-129/Alcoa Hwy)	Blount/Knox County	9.2	I-140 ITS Expansion to include the installation of a power and communication network and ITS Devices such as CCTV cameras, DMS, and RDS	Pending	2022
18-202	Blount County Greenway Trail - Phase 1	Heritage High School to Perry's Mill Parking area	Blount County	2.27	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.	17-2017-048	2022
18-600	I-75 ITS Expansion	MM 109.6 to just before SR-61 (Exit 122)	Knox/Anderson County	13.03	ITS Expansion	17-2017-034	2022
18-601	I-40 ITS Expansion	West of Exit 398 to East of Exit 407	Knox/Sevier County	11.4	ITS Expansion to include the installation of a power and communication network and ITS Devices such as CCTV Cameras, DMS and RDS	17-2017-035	2022
18-602	Kingston Pike at Watt Road Intersection Improvements	Kingston Pike (US 11/70 (SR-1) at Watt Road	Farragut	0	Intersection improvements at the intersection of Kingston Pike (US 11/70 (SR-1) at Watt Road.	17-2017-045	2022
18-603	Middlebrook Pike (SR-169) ATMS Expansion	Middlebrook Pike (SR-169)/University Ave. from College St. to Joe Hinton Rd	Knoxville	6.5	Expand the City of Knoxville's Advanced Traffic Management System along Middlebrook Pike/Univesity Ave.	17-2017-051	2022
18-604	Knoxville Renewable Fueling Station	1206 Proctor St.	Knoxville	n/a	Upgrade fueling terminal for use with biodiesel	17-2017-054	2022
18-605	Knoxville and Holston River Railroad Locomotive Repower	n/a	Knoxville	n/a	Repower 5 unregulated locomotives to Tier 4 Emissions Standards	17-2017-055	2022
18-400	I-75 Exit 81 Interchange Lighting	I-75 at Exit 81 (SR-73/US-321)	Lenoir City	0	Add high mast lighting to Interstate 75 at Exit 81 to improve safety conditions at night and during fog events.	17-2017-041	2022
18-500	Boyd's Creek Highway (SR 338) at Old Knoxville Highway Intersection Improvements	Boyd's Creek Hwy (SR 338) at Old Knoxville Hwy Intersection	Sevierville	0	Reconfigure existing intersection to improve safety and operations through geometric layout changes, addition of turn lanes, and installation of a new traffic signal.	17-2017-044	2026

REVISE PROJECT DESCRIPTIONS/TERMINI/LENGTH FOR CONSISTENCY WITH TIP

As projects progress through the project development process of preliminary engineering and design there are often minor adjustments to the scope and description. This update provides an opportunity to make these minor adjustments and clarify project description consistency between the Mobility Plan and the Transportation Improvement Program (TIP). These changes are not significant enough to affect the overall manner in which the project was modeled for conformity, i.e. no change in the number of through lanes or other major model attribute that affects capacity. Table 3 on the following page summarizes the minor changes to descriptions:

Table 3:

KRMP ID	Project Name/Route	Termini	New Termini	Jurisdiction	Length (miles)	Project Description/Type of Improvement	New Description
13-802	Oak Ridge Traffic Control & Communication System Upgrades	Citywide		Oak Ridge		Replace traffic control and communication system, adding pedestrian safety and bicycle friendly elements, including emergency vehicle accommodation.	Replace traffic control and communication system. Installation of fiber network, vehicle detection, accessible pedestrian signals, traffic operations center and other components in a phased implementation period
09-101	Edgemoor Road (SR-170) - Combine previously segmented project	Oak Ridge Hwy (SR-62) to Melton Lake Dr	SR-62 (Oak Ridge Hwy) TO SR-9/US-25W (Clinton Hwy).	Oak Ridge	6.2	Widen from 2 to 4 lanes with addition of bicycle/pedestrian facilities	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.
09-214	Sevierville Rd (SR-35/US-411) Widening	Washington St (SR-35) to Walnut St		Maryville	0.4	Reconstruct 2-lane road with addition of continuous center turn lane and bicycle/pedestrian facilities	Reconstruct Sevierville Rd. (SR-35) from two lanes to three lanes, curb and gutter, and sidewalks with intersection improvements.
13-206	Tesla Boulevard / Associates Boulevard Extended	Intersection of Future LIC road & Associates Blvd to Intersection of Springbrook Rd and E. Edison St	Local Interstate Connector/Associate Blvd to East Edison/Springbrook Rd	Alcoa	0.8	Construct new 2-lane and 3-lane boulevard with bicycle/pedestrian facilities	Construct new 2 lane boulevard extension from the local interstate connector project to Springbrook Road. The connection will include a multi-use path, sidewalks, and stormwater quality intrinsic with the drainage system.
13-211	Foothills Mall Drive Extension Phase 1	US-129 Bypass (SR-115) to Foch St.		Maryville	0.5	Construct new 2-lane road with center turn lane and sidewalks	Extend Foothills Mall Dr. from US 129 Bypass to Foch St. with 2 to 3 lanes with curb and gutter which includes improvements at US 129 Bypass, Foch Street, Dunlap Street, and Watkins Road intersections
09-262	Montvale Rd (SR-336) Widening	Montvale Station Rd to Lamar Alexander Pkwy (US-321/SR-73)		Maryville	0.6	Reconstruct 2-lane road with addition of continuous center turn lane and bicycle/pedestrian facilities	Widen existing roadway to 2-12 foot travel lanes with a 12 foot center turn lane including curb and gutter, sidewalk and a multi-use path
09-257	Relocated Alcoa Hwy (SR-115/US-129)	Proposed interchange at Tyson Blvd. to Pellissippi Pkwy (SR-162)		Alcoa	2.9	Construct new 4-lane divided highway with auxiliary lanes and new interchanges at McGhee Tyson Airport access, Wright Rd and Pellissippi Pkwy (SR-162)	New alignment, four lane divided facility, construct an interchange at Pellissippi Parkway (SR-162)
09-216	Alcoa Hwy (SR-115/US-129) Widening	Pellissippi Pwy (SR-162) to Little River (Knox/Blount C.L.)	Pellissippi Parkway in Blount County to Little River south of Topside Road in Knox County	Alcoa	2.4	Widen 4-lane to 6-lane with frontage road system and new interchange at Topside Rd (SR-333). Reconfigure existing interchange at Pellissippi Pkwy (SR-162) and signalize ramps	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 multi-use path.
09-223	Carpenters Grade Rd Reconstruction and Intersection Improvements	Raulston Rd to Kirkland Estates Blvd	Raulston Rd/Peterson Ln to Cochran Rd	Maryville	0.89	Reconstruct 2-lane road with addition of turn lanes and sidewalk. Construct roundabout at Peterson Ln, Cochran Rd and Raulston Rd intersection.	
13-863	Knox/Blount Greenway - Phase II	Connect Phase I to Alcoa Highway Bridge over the Little River at the Blount County Line to connect to I.C. King Park.	From U.T. Farm Entrance to Maloney Park on Ginn Drive	Knox County	0.65	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.	Construction of a multi-use trail that will connect Maloney Road Park on Ginn Drive to Alcoa Highway south of Maloney Road at the UT Farm Entrance where future pedestrian and bicycle facilities are slated for construction as part of the ongoing Alcoa Hwy
09-626	Chapman Hwy (SR-71/US-441) Operational and Safety Improvements	Mountain Grove Dr to Knox/Blount County Line	Blount Avenue to SR-338 (Boyd's Creek Highway) in Seymour	Knox County	10.3	Operational and safety improvements including turn lanes at various locations along the corridor.	Intersection improvements and/or driveway improvements and/or left turn lanes at various locations throughout the project area.
09-632	Concord Road (SR-332) Widening	Turkey Creek Rd. to Northshore Dr. (SR-332)	Concord Rd (SR-332) from north of Turkey Creek Rd. to Northshore Dr.	Farragut	0.93	Widen roadway to 4-lanes with median/center turn lane and new bicycle/pedestrian facilities	Widen 2-lanes to 4-lanes including pedestrian and bicycle improvements including a southbound right turn lane at Turkey Creek Rd.
09-628	Alcoa Hwy (SR-115/US-129) Widening	North of Little River (Knox/Blount C.L.) to Maloney Rd	South of Topside Road to North of Maloney Road	Knoxville	2.2	Widen from 4 to 6 lanes including pedestrian and bicycle facilities.	
17-850	South Waterfront Greenway - East of Suttree	Suttree Landing Park to Riverside Landing Park	Suttree Landing Park to Island Home Avenue Riverwalk	Knoxville	0.6	Construct a new shared use path along the Tennessee River connecting South Waterfront Greenway to Will Skelton Greenway and across the river to James White Greenway/Neyland Greenway/Morningside Greenway	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.
09-643	Emory Rd (SR-131)	Maynardville Hwy (SR-33) to Tazewell Pk (SR-331)		Knox County	4.9	Widen from 2 to 4 lanes	Widen from 2-lanes to 4-lanes with median and/or center turn lane, and including bicycle/pedestrian facilities.

DELETE PROJECTS

There are a few projects that have been determined to no longer be feasible, which will be formally dropped from the Mobility Plan at this time.

Table 4:

KRMP ID	Project Name/Route	Termini	Jurisdiction	Lead Agency	Length (miles)	Project Description/Type of Improvement	Old Horizon Year
17-417	J. Carmichael Greer Bike/Pedestrian Conversion Project	City Park Drive to Tellico Parkway/Highway 444	Loudon County	Loudon County	1.4	Conversion of existing 2-lane vehicle bridge and approaches at Fort Loudoun Dam to a pedestrian and bicycle shared use path	2022
13-1001	Old Stage Rd/Kingston Pk Greenway Connector	Old Stage Rd.to near Everett Rd.	Farragut	Farragut	0.4	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.	2022

AIR QUALITY CONFORMITY SUMMARY

A separate Air Quality Conformity Determination report was prepared to demonstrate conformity of all above amendments to the Mobility Plan. The Knoxville Region is subject to conformity for three separate National Ambient Air Quality Standards (NAAQS) that are set by the Environmental Protection Agency (EPA). The conformity analysis demonstrated that the Knoxville Region can continue to meet conformity requirements with the implementation of the transportation projects as proposed by this Plan.

FINANCIAL CONSTRAINT SUMMARY

Federal regulations require that the Mobility Plan be financially constrained such that the expected costs of projects that are programmed for the life of the Plan do not exceed the expected revenues. A full discussion of the financial constraint process is included within the main Mobility Plan 2040 document, which summarizes the expected revenues from the various federal, state and local funding programs and compares that against the expected costs of projects by horizon year. The financial tables were updated based on the project horizon year and other changes from these amendments and demonstrate that financial constraint is still met. One significant addition of revenue that occurred since the adoption of the original Mobility Plan was the passage of the increased fuel taxes in Tennessee as part of the IMPROVE Act. The IMPROVE Act included funding for both pre-existing projects as well as “new starts” in the Knoxville Region although the vast majority of projects were already included in the Mobility Plan. One effect of the IMPROVE Act was to move certain projects forward, i.e. into a sooner horizon year since more revenue is now available.

CONCLUSION

This amendment will be incorporated into the Mobility Plan 2040 document that is posted to the Knoxville TPO website (www.knoxtrans.org) and the project tables and county maps included in Appendix E have been updated to reflect all changes to projects noted in previous sections. In addition, the interactive online project map located at: <https://maps.knoxmpc.org/app/mobility> has been updated to reflect the modified project information.