

DRAFT 6-24-2019 for Public Review

Short Conformity Report for July 2019 Knoxville Regional TPO TIP Amendment

Project ID:

- 1. TIP ID# 17-2017-057 / KRMP ID# 09-649 – Pellissippi Parkway (SR-162) at Oak Ridge Highway (SR-62) (Solway) Interchange**

Introduction

This report constitutes a conformity determination being made on an air quality non-exempt project amendment to the FY 2017 – 2020 Knoxville Regional TPO Transportation Improvement Program (TIP). The TIP is the federally required short-range document that is a subset of, and implements the Regional Long-Range Transportation Plan of the TPO – currently known as Mobility Plan 2040.

Transportation Air Quality Conformity Background

Transportation conformity is a mechanism to ensure that federal funding is not used on transportation programs or projects that are not consistent with the air quality goals of the Tennessee State Implementation Plan for maintaining the attainment status of the Knoxville Region with respect to the National Ambient Air Quality Standards (NAAQS) established by the Clean Air Act. The Knoxville Region is currently designated as an Air Quality Maintenance Area for the criteria pollutants of Fine Particulate Matter (PM2.5) and Ozone.

Current Conformity Status

The current Mobility Plan 2040 was adopted by the TPO Executive Board on April 26, 2017 and the Air Quality Conformity Determination was approved by the U.S. Department of Transportation (U.S. DOT) on May 31, 2017. The FY 2017-2020 TIP was originally adopted by the TPO Executive Board on October 26, 2016. Air Quality Conformity for the 2017-2020 TIP was approved by the U.S. DOT on December 1, 2016. The FY 2017-2020 TIP was subsequently amended along with adoption of the Mobility Plan 2040 to maintain consistency between the two Plans in terms of the project lists included therein and to ensure both Plans meet air quality conformity requirements. Most recently, a set of TIP and Mobility Plan amendments were adopted by the TPO Executive Board on October 24, 2018 and a conformity finding was issued by the U.S. DOT on November 19, 2018

A copy of the most recent full Air Quality Conformity Determination Report can be found at:
<https://knoxtpo.org/wp-content/uploads/2019/05/Mobility-Plan-2040-Appendix-L.pdf>

Project Amendment Details

Periodically, as needs and conditions change, it becomes necessary to modify the Plans described above. The current action involves amending a project into the FY 2017-2020 TIP since project development funding has been established to initiate the Preliminary Engineering phases. Since this project is already included in the existing Mobility Plan 2040, it has therefore been previously accounted for in the regional emissions analysis used to determine transportation conformity. The TPO staff believes that the previously programmed horizon years for this project is still appropriate based on the current expected project development timeline as described in more detail below.

Following is additional information regarding the proposed amendment and the TIP profile page is included as Attachment 1:

1. TIP Project #17-2017-057 (New), KRMP Project #09-649 – Pellissippi Parkway (SR-162) at Oak Ridge Highway (SR-62) (Solway) Interchange – Interchange modification to include additional (new) ramp for westbound to southbound movement. Amend the project by adding it to the TIP with \$700,000 NHPP (\$560,000 federal/\$140,000 state) for FY19 PE-N and \$1,000,000 NHPP (\$800,000 federal/\$200,000 state) for FY19 PE-D. The total project cost is \$21,400,000.

This project is included in the Mobility Plan in the 2024 Conformity Horizon Year.

Below is an excerpt from the Mobility Plan Conformity Determination Project List showing this project:

Table D-1: Projects from 2040 Mobility Plan and Regional Area Subject to Conformity

KRMP ID	ProjectName/Route	Termini	Jurisdiction	Lead Agency	Length (miles)	Project Description/Type of Improvement	FY17-20 TIP ID	Conformity Analysis Year	Exempt Status	Regional Significance
09-637	Lovell Rd Widening (SR-131)	Cedardale Ln. to Middlebrook Pk. (SR-169)	Knox County	Knox County	1.7	Widen 2-lane to 4-lane, including pedestrian and bicycle facilities.	17-2014-002	2024	Non-Exempt	Regionally Significant
09-649	Pellissippi Pkwy (SR-162)/Oak Ridge Hwy Interchange	Interchange at Oak Ridge Hwy (SR-62)	Knox County	TDOT		Reconstruct interchange to provide ramp for westbound to southbound movement		2024	Non-Exempt	Regionally Significant
09-653	Alcoa Hwy (SR-115/US-129) Widening	Woodson Dr. to Cherokee Trail Interchange	Knoxville	TDOT	1.6	Widen 4-lane to 6-lane including pedestrian and bicycle facilities.	17-2014-069	2024	Non-Exempt	Regionally Significant

Statement of Conformity

The Knoxville Regional TPO reaffirms the applicable conformity findings with the above described amendment based on the ability to rely on a previous emissions analysis under federal Transportation Conformity Rule found at: 40 CFR 93.122(g). The TPO is relying on the most recent completed regional emissions analyses for:

- 1997 Annual and 2006 Daily PM2.5 Standards – The regional emissions analysis completed for Mobility Plan 2040 and FY 2017-2020 TIP amendments adopted in October 2018 and conformity finding by U.S. DOT on November 19, 2018. The geographic coverage includes all of Anderson, Blount, Knox and Loudon counties and a small portion of Roane County.
- 2008 8-Hour Ozone Standard – The regional emissions analysis completed for Mobility Plan 2040 and FY 2017-2020 TIP amendments adopted in October 2018 and conformity finding by U.S. DOT on November 19, 2018. The geographic coverage includes all of Blount and Knox counties plus a portion of Anderson County.

Following are the requirements from 40 CFR 93.122(g) for relying on a previous regional emissions analysis and findings for how such have been met for these amendments:

- i.) The new plan and/or TIP contains all projects which must be started in the plan and TIP’s timeframes in order to achieve the highway and transit system envisioned in the transportation plan.

Finding: This project is already included in the existing Mobility Plan with the KRMP Project ID #'s and horizon years noted above. The required air quality horizon years analyzed for the Mobility Plan were:

- 2024 – First Horizon Year within 10 years from base year used to validate transportation demand planning model (2014)
- 2030 – Year such that there are no more than 10 years between analysis years
- 2040 – Final Year of Mobility Plan 2040

In addition to the required horizon years noted above, there were additional analysis years of 2026 and 2028 based on the final years of the Maintenance Plans for the ozone and PM2.5 standards respectively. These analysis years were not modeled directly for on-road mobile source emissions and used linear interpolation between year 2024 and 2030 outputs instead.

The Mobility Plan identified other interim horizon years that were used to better inform the public of potential project timeframes and to also indicate a priority measure between projects rather than lumping all of them into one of just three horizon year periods. Following were the “Mobility Plan Horizon Years”:

- 2022
- 2026
- 2030 – coincides with Conformity Horizon Year
- 2034
- 2040 – coincides with Conformity Horizon Year

Following is a discussion of the project’s conformity/mobility plan horizon year and its continued relevance based on the proposed TIP amendment:

1. TIP Project #17-2017-057, KRMP Project #09-649 – Pellissippi Parkway (SR-162) at Oak Ridge Highway (SR-62) (Solway) Interchange. This project is in both the Conformity 2024 Horizon Year, which is appropriate given the current projection for the construction phase to be funded in fiscal year 2023.

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.

Finding: This project has been adequately described in order to determine its contribution to the regional emissions through the use of the Knoxville Regional TPO's travel demand forecasting model. This project was determined to be non-exempt with respect to air quality conformity since it will involve the construction of an additional ramp movement that does not exist currently, specifically the westbound SR-62 to southbound SR-162 movement. Motorists that desire to make that movement at the current time must travel beyond the interchange and make a U-turn at one of the median openings, which creates a safety and crash risk. The improvement was included in the travel demand model to determine impacts on motor vehicle emissions for the appropriate Conformity Horizon Year.

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.

Finding: This project amendment does not result in significant modifications to the design concept and scope from how it was described in the Mobility Plan 2040 project list. It should be recognized; however, that since the project is beginning the preliminary engineering phase that minor scope modifications may occur as well as specific details of the design may change from what is described at this early stage of project development once further evaluations occur in the NEPA process. If any significant scope changes occur then another amendment may become necessary.

iv.) The previous regional emissions analysis is consistent with the requirements of 40 CFR 93.118 (including that conformity to all currently applicable budgets is demonstrated) and/or 40 CFR 93.119, as applicable.

Finding: The previous regional emissions analyses followed the requirements of 40 CFR 93.118 by demonstrating conformity to all currently applicable motor vehicle emissions budgets (MVEB). The current MVEB in effect for the 2008 Ozone Standard was made effective on July 13, 2015 and the current MVEBs in effect for both the 2006 Daily and 1997 Annual PM2.5 standards were made effective on August 28 and 29, 2017 respectively as noted in the conformity determination report.

Timely Implementation of TCMs

The applicable State Implementation Plans for the Knoxville Region do not contain any Transportation Control Measures; therefore, nothing in the amended TIP would interfere with their implementation.

Fiscal Constraint Analysis

The “before and after” TIP financial tables are included in Attachment 1 and demonstrate that the FY 2017 – 2020 TIP still meets financial constraint for all fiscal years.

Interagency Consultation and Public Involvement Analysis

The prior regional emissions analyses leading to U.S. DOT’s approval on November 18, 2018 complied with all federal and state requirements for interagency consultation and public involvement. This amendment underwent a 30-day public comment period from June 24, 2019 to July 23, 2019 as per the Knoxville Regional TPO Public Involvement Plan and X comments were received (TBD). The amendments were also reviewed by the Knoxville Area Air Quality Interagency Consultation (IAC) Group for a 30-day period from May 23, 2019 to June 21, 2019. No formal comments were received from the IAC Group.

**ATTACHMENT 1 –
FY 2017 – 2020 TIP Profile Pages**

Knoxville Regional Transportation Planning Organization

TRANSPORTATION IMPROVEMENT PROGRAM FY 2017-2020

TIP No.	17-2017-057	Revision No.	0	Mobility Plan No.	09-649
TDOT PIN	123073.00	STIP No.	2047093		
Project Name	Pellissippi Parkway (SR-162) at Oak Ridge Highway (SR-62) (Solway) Interchange				
Lead Agency	TDOT				
Total Project Cost	\$21,400,000				

Project Description	Interchange modification to include additional (new) ramp for westbound to southbound movement.				
Termini/Intersection	SR-162 at SR-62 (Solway) Interchange				
Counties	Knox				
City/Agency					
Length	0.45	(miles)	Conformity Status	Non-Exempt	

Additional Details

Programmed Funds

FY	Phase	Funding Type	Total Funds	Federal	State	Local	Other
2019	PE-D	NHPP	\$1,000,000	\$800,000	\$200,000	\$0	\$0
2019	PE-N	NHPP	\$700,000	\$560,000	\$140,000	\$0	\$0
Total			\$1,700,000	\$1,360,000	\$340,000	\$0	\$0

Revision Date	7/24/2019
Revision Details	Amend the TIP by adding this project. The project programs \$1,700,000 (\$1,360,000 federal/\$340,000 state) NHPP funding in FY 2019.
Previous TIP No.	<input style="width: 500px; height: 15px;" type="text"/>



**ATTACHMENT 2 –
Financial Constraint Summary Tables**

Table 1. Summary of Programmed Revenues

Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	Total	Share (%)
ACPHSIP	\$450,000	\$1,110,000	\$1,000,000	\$0	\$2,560,000	0.28
CMAQ	\$17,481,944	\$1,264,269	\$28,769,000	\$4,957,400	\$52,472,613	5.84
EN	\$0	\$326,000	\$0	\$0	\$326,000	0.04
HIP	\$0	\$2,479,974	\$0	\$0	\$2,479,974	0.28
HPP	\$5,067,350	\$1,000,000	\$9,090,162	\$0	\$15,157,512	1.69
HSIP	\$4,585,888	\$11,592,360	\$8,000,000	\$3,467,360	\$27,645,608	3.07
LIC	\$602,500	\$0	\$0	\$0	\$602,500	0.07
LOCAL	\$36,500,000	\$8,165,000	\$199,738	\$0	\$44,864,738	4.99
L-STBG	\$30,994,115	\$19,596,992	\$26,318,911	\$17,042,309	\$93,952,327	10.45
L-STBG-TA	\$1,357,623	\$1,431,612	\$3,157,168	\$997,500	\$6,943,903	0.77
NHPP	\$182,596,884	\$101,179,693	\$174,427,000	\$43,976,577	\$502,180,154	55.85
PHSIP	\$3,101,500	\$6,636,500	\$1,101,500	\$601,500	\$11,441,000	1.27
PRIVATE	\$0	\$1,800,000	\$36,000	\$0	\$1,836,000	0.20
RNHPP	\$11,566,043	\$0	\$4,236,062	\$0	\$15,802,105	1.76
RPHSIP	\$1,200,000	\$3,324,800	\$0	\$0	\$4,524,800	0.50
SECTION 5307	\$16,940,427	\$8,584,499	\$8,592,575	\$8,592,575	\$42,710,076	4.75
SECTION 5310	\$2,127,004	\$805,389	\$805,389	\$805,389	\$4,543,171	0.51
SECTION 5339	\$1,514,698	\$1,013,641	\$762,616	\$762,616	\$4,053,571	0.45
SECTION 5339b	\$0	\$4,500,000	\$0	\$0	\$4,500,000	0.50
S-STBG	\$20,995,697	\$15,599,521	\$12,650,021	\$3,399,521	\$52,644,760	5.86
S-STBG-TA	\$0	\$1,263,681	\$4,569,097	\$890,565	\$6,723,343	0.75
STA	\$0	\$359,770	\$762,500	\$0	\$1,122,270	0.12
Total	\$337,081,673	\$192,033,701	\$284,477,739	\$85,493,312	\$899,086,424	100.00
Federal	\$240,959,498	\$146,942,065	\$226,483,495	\$69,080,256	\$683,465,314	76.02
State	\$46,311,570	\$31,442,916	\$44,728,990	\$12,266,468	\$134,749,944	14.99
Local	\$49,810,604	\$11,848,720	\$7,798,253	\$4,146,588	\$73,604,165	8.19
Other	\$0	\$1,800,000	\$5,467,000	\$0	\$7,267,000	0.81

Table 2. Summary of Programmed Expenditures

Funding Source	FY 2017	FY 2018	FY 2019	FY 2020	Total	Share (%)
ACPHSIP	\$450,000	\$1,110,000	\$1,000,000	\$0	\$2,560,000	0.28
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L-STBG	\$30,994,115	\$19,596,992	\$26,318,911	\$17,042,309	\$93,952,327	10.43
L-STBG-TA	\$1,357,623	\$1,431,612	\$3,157,168	\$997,500	\$6,943,903	0.77
NHPP	\$182,596,884	\$101,179,693	\$176,127,000	\$43,976,577	\$503,880,154	55.94
PHSIP	\$3,101,500	\$6,636,500	\$1,101,500	\$601,500	\$11,441,000	1.27
PRIVATE	\$0	\$1,800,000	\$36,000	\$0	\$1,836,000	0.20
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Other	\$0	\$1,800,000	\$5,467,000	\$0	\$7,267,000	0.81

NOTE: Financial tables run on 05/21/2019 and reflect:
 FY 2019 - NHPP: +\$1,700,000 (Federal +\$1,360,000/State +\$340,000)