

Scope of Work – Kingsport MTPO 2050 Long Range Transportation Plan

Project Summary

The Kingsport Metropolitan Transportation Planning Organization (MTPO) is updating the Long-Range Transportation Plan (LRTP) to the horizon year 2050. AECOM will build on the 2045 LRTP by developing a comprehensive, performance based 2050 plan that meets federal and state requirements and reflects the region's vision.

AECOM will coordinate closely with the Kingsport MTPO, Tennessee Department of Transportation (TDOT), Virginia Department of Transportation (VDOT), Federal Highway Administration (FHWA), Federal Transit Administration (FTA), stakeholders and the public on all aspects of plan development. This includes coordination on data collection and analysis, public and stakeholder engagement, travel demand model update, project identification, fiscal constraint analysis, draft and final plan review, and overall compliance with federal and state planning requirements.

The plan will be available for adoption by the MTPO Executive Board no later than May 12, 2027, with a Notice to Proceed anticipated in late October 2025, or early November 2025. The tasks summarized below constitute the scope of work (SOW). All deliverables will be submitted in print ready and digital formats.

Task 1 – Project Management

Upon Notice to Proceed, AECOM will work with MTPO staff to schedule a project kick-off meeting. This meeting will include a review of the SOW, schedule, and initial data requests. The meeting will establish study team points of contact, key project team members, plan deliverable milestones, and invoice/progress report requirements. AECOM will also work with MTPO staff to determine the appropriate frequency of the progress/coordination meetings.

Key Activities / Deliverables

- Develop a Project Management Plan (PMP) describing roles, responsibilities, communication protocols, master schedule and quality review procedures.
- Establish and maintain a shared project folder (e.g., SharePoint or Teams) for data transfer and collaborative document development. Appropriate permissions will be coordinated with MTPO staff.
- Conduct a project kickoff meeting with MTPO staff and hold regular progress/coordination meetings throughout the project. Additional meetings will be scheduled to address specific tasks. Key activities and action steps will be summarized in meeting notes.
- Maintain a project schedule aligned with the MTPO adoption timeline. The schedule will include task milestones and sufficient time for MTPO, TDOT/VDOT, and FHWA/FTA review. Schedule updates will be made, as needed, in coordination with MTPO staff.
- Submit monthly invoices and progress reports. Progress reports will briefly summarize completed work, anticipated upcoming activities and overall budget status.

Task 2 – Public & Stakeholder Engagement

AECOM will develop a Public Engagement Plan (PEP) that will summarize the planned public involvement activities for the 2050 LRTP update. These activities will be consistent with the Kingsport MTPO's Public Participation Plan (PPP). The team will utilize TDOT's Social Pinpoint (SPP) subscription to develop a 2050 LRTP project webpage (the SPP platform includes built-in survey and mapping tools that will be utilized during the project). As such, there is no direct expense cost anticipated with the development of the project webpage. AECOM will develop a draft project webpage for MTPO staff review and approval.

To reach a broad audience, AECOM will utilize the MTPO's email distribution list of interested parties to distribute notices of upcoming opportunities for public involvement. Additionally, AECOM will support the MTPO in developing messaging that can be used to distribute meeting and survey notices via existing social media channels run by various MTPO members and other regional and local planning partners.

AECOM will engage local and regional agencies at key points throughout the project. It is envisioned that these meetings/workshops would be conducted virtually using either Microsoft Teams or Zoom virtual meeting platforms; however, some of these meetings could be potentially in-person if coordinated with other public engagement activities.

AECOM will coordinate with the MTPO staff to engage the Kingsport MTPO Executive Board and Technical Coordinating Committee (TCC) throughout the plan development process. This will be done primarily through presentations during regularly scheduled MPO meetings. It is anticipated that this will consist of a mix of in-person and virtual presentations, which will be determined in coordination with MTPO staff.

Key Activities / Deliverables

- **Public Engagement Plan (PEP):** Within two weeks of Notice to Proceed, AECOM will develop a PEP linking engagement activities to technical milestones. The team will coordinate with MTPO staff on lessons learned from the 2045 LRTP and refine strategies to maximize participation for the 2050 LRTP update. A draft and final version of the PEP will be submitted to the MTPO in electronic format.
- **Project website:** AECOM will develop and maintain a project webpage using Social Pinpoint. The use of SPP will be made available through the TDOT SPP subscription at no additional cost to the project team. The webpage will contain an overview of the study, host public surveys, host project materials and presentations, and provide information regarding public meetings and participation opportunities. AECOM will conduct on-going updates at key project milestones to update the project webpage throughout the duration of the study.
- **Surveys:** AECOM will develop two online surveys. The first survey will gather input on multimodal issues/needs; a second survey will inform project identification and evaluation. The surveys will be built using the SPP tools. AECOM will develop survey summary documents in a brief PowerPoint presentation slide deck. The survey datasets and opened end responses will be provided to the MTPO in Excel. All survey related documents will be in electronic format.

- Stakeholder outreach: AECOM will conduct up to eight (8) virtual focus groups with local and regional planning partners. This could include local governments, transit providers, freight operators, social service agencies, law enforcement and emergency responders, etc. AECOM will work with MTPO staff to identify and arrange these meetings. Additionally, we will discuss the timing of these interviews as they could be spread out to cover both existing conditions and future year conditions, or plan recommendations.
- Public meetings: AECOM will work with MTPO staff to hold three open houses – one to support the identification of vision and existing conditions, one to review project needs/preliminary projects, and one to present the recommended plan, including the proposed fiscally constrained projects. It is envisioned the last public meeting will be held during the 30-day public review period of the draft plan. It is anticipated that the first two public meetings will be virtual open houses, while the third meeting for the plan approval, will be in-person.
- Media and communications: AECOM will coordinate with MTPO to provide content for social media, local media releases and meeting notifications. There are no direct expenses included for media/advertising purchases, it is anticipated that communications will be distributed through existing accounts, such as the MTPO and local/regional planning partners.
- MTPO Executive Board and Technical Coordinating Committee: AECOM will coordinate with MTPO to develop presentations that will provide updates on the 2050 LRTP update. Additionally, we will leverage feedback from the Board and TCC to guide the plan development process.
- Documentation: AECOM will prepare a summary of engagement activities highlighting key themes, feedback received, and how input influenced the development of the 2050 LRTP.

Task 3 – Vision, Goals & Performance Measures

AECOM will facilitate a collaborative process to review the current LRTP vision, goals, and objectives. This will include a review of the goals from the 2045 LRTP and identifying areas for refinement based on federal guidance, stakeholder input, and regional needs and priorities. A visioning workshop with the MTPO Board and TCC, or discussion during a regular MTPO meeting, will be held to confirm the regional vision and key themes.

Key Activities / Deliverables

- AECOM will facilitate a workshop (or Executive Board approval process) to confirm the regional vision and key themes. The appropriate action (workshop/regular meeting/etc.) will be discussed with MTPO staff.
- Align the updated 2050 MTPO goals and objectives with the most current federal law, regulations, and planning factors, which is currently the Infrastructure Investment and Jobs Act (IIJA). Additionally, the goals and objectives should align with the TDOT/VDOT statewide plans.

- Review performance measures for each goal area to support project evaluation and performance-based planning. This will be aligned with the project evaluation task that will occur later in the process.
- AECOM will develop draft and final vision, goals and objectives document, which will be presented in table format. This will be submitted in electronic format.
- AECOM will develop a draft and final Systems Performance Report, like the report prepared for the 2045 LRTP. This will be submitted in electronic format.

Task 4 – Socioeconomic Data & Land Use Analysis

AECOM will coordinate with local jurisdictions, TDOT, and VDOT to review the base and future year socioeconomic (SE) data and land use assumptions. This process will begin with a review of existing demographic data sources, including the U.S. Census, American Community Survey (ACS), and regional economic forecasts. If readily available, we may incorporate local development data, such as building permits, zoning changes, and comprehensive plans, to reflect current trends and planned growth. Only data available at the time of the analysis will be incorporated into the SE data update.

Key Activities / Deliverables

- Coordinate with local jurisdictions, TDOT and VDOT to update base and future year socioeconomic data and verify data availability. Ideally, this will be done in a manner that is consistent with the on-going development of the Tri-Cities Regional Travel Demand Model.
- If necessary, work with MTPO staff and local planning departments to validate and refine Traffic Analysis Zone (TAZ) boundaries and allocate projected growth based on land use capacity, infrastructure and development policies. The 2045 SE data projections would be used as a baseline for this update.
- Modify the 2045 SE growth scenario to develop a 2050 growth scenario for use in travel demand modeling and scenario analysis. Ideally, this will be done in a manner that is consistent with the on-going development of the Tri-Cities Regional Travel Demand Model.
- Develop a draft and final Socioeconomic and Land Use Technical Memorandum. The memo will document sources, assumptions and methodologies and will be submitted in electronic format. Relevant data will be provided in Excel and any associated GIS layers will be provided to the MTPO.

Task 5 – Travel Demand Model Update & Application

AECOM will work closely with MTPO and TDOT to determine the appropriate level of model calibration and validation that will be needed for the 2050 LRTP update. As much as possible, we will be consistent with the on-going development of the Tri-Cities Regional Travel Demand Model as to avoid any duplication of work, or to conduct unnecessary work. It is anticipated that the 2023 baseline SE model data, and corresponding TAZ boundaries, from the Tri-Cities model development will be provided to AECOM in Excel and GIS format. The SE data and TAZs will be compared to the current Kingsport model to determine the appropriate next steps to complete the modeling task.

This SOW assumes a limited number of hours to update and validate the current Travel Demand Model. As such, we see the limited model update consisting of a review of AADT's, network connections, and link capacity (have there been any roadway widening projects, or new roadways that need to be added to the model).

The validated model (assumed to a 2023 base year), as approved by the MTPO and TDOT, will be used to evaluate up to three (3) future year scenarios and project alternatives. The future year model runs will consist of a 2035EC (existing + committed), 2050EC, and 2050 fiscally constrained scenarios. Model outputs will consist of volume-to-capacity ratios, travel times, and system-level performance metrics. These outputs will inform the needs assessment and project evaluation tasks. As the new Tri-City Model is under development, this SOW does not include any model training.

Key Activities / Deliverables

- Coordinate with the Tri-Cities Regional Model development consultant to obtain the 2023 baseline SE data and updated TAZ boundaries for the Kingsport MPA.
- Review the existing TransCAD model roadway network and calibration using recent traffic counts and travel time data. AECOM will coordinate with TDOT's modeling division to review and approve the model updates.
- If necessary, update the roadway network by incorporating new links, updated speed limits, lane configurations, special generators (schools, hospitals, freight terminals) and ITS improvements. If available at the time of the update, the team might use third-party travel data (Replica or StreetLight) to support the validation process; however, no data will be purchased as part of this agreement. Again, the appropriate level of model update/validation will be coordinated with the on-going Tri-Cities model development process as this SOW assumes a limited model update
- AECOM will run the updated model and produce results that will be used to inform the 2050 LRTP technical analysis. The model runs will include a base year (2023), a 2035EC, a 2050EC, and a 2050 fiscally constrained scenario.
- AECOM will develop a draft and final Model Update Technical Memorandum. The memo will document sources, assumptions and methodologies and will be submitted in electronic format. We will also provide updated TransCAD model files and associated GIS SE data.

Task 6 – Multimodal Needs Assessment

AECOM will conduct a comprehensive needs assessment of the existing transportation system, including roadways, transit, freight, bicycle, pedestrian, rail, aviation, and ITS infrastructure. This multimodal assessment will focus on identifying system deficiencies, safety concerns, capacity constraints, and opportunities for improvement. The analysis will be supported by a range of available data sources, including traffic volumes, crash data, pavement conditions, ridership trends, and GIS-based spatial analysis. The results of the needs assessment will be summarized in a technical memorandum that includes maps, charts, and key findings. Similar to the 2045 LRTP,

we will present the findings in a graphical format to clearly communicate priority needs across the Kingsport planning area.

Key Activities / Deliverables

Evaluate existing and future (2050) transportation system performance across roadways, transit, freight, bicycle, pedestrian, rail, aviation and intelligent transportation systems to identify priority needs.

- Compile readily available data including, but not limited to: traffic volumes, crash history, pavement conditions, ridership trends and other multimodal indicators.
- Review TDOT/VDOT statewide plans and other regional initiatives to promote alignment with the 2050 MTPO LRTP.
- Assess system deficiencies, safety issues, capacity constraints and opportunities for improvement across all modes.
- Summarize findings in a graphical technical memorandum with maps and charts to clearly communicate priority needs.
- AECOM will develop a draft and final Multimodal Needs Assessment technical memorandum summarizing existing and future year conditions, with particular emphasis on multimodal needs and opportunities. The memo will document sources, assumptions and methodologies and will be submitted in electronic format.

Task 7 – Project Evaluation & Fiscal Constraint

AECOM will work with MTPO staff and stakeholders to identify candidate projects across all modes. We will compile a list of projects from previous plans, local capital improvement programs, stakeholder input, and public feedback. Projects will be categorized by mode, timeframe, and implementation status. We will apply a transparent, data-driven evaluation framework to assess project benefits, costs, and alignment with LRTP goals. The evaluation criteria will use the framework AECOM developed for the 2045 LRTP and will incorporate one round of changes to the performance metrics. Each project will be scored and ranked based on its performance across the evaluation criteria. The results will be used to develop a prioritized project list and to support the development of the fiscally constrained plan.

AECOM will develop a financial plan that includes revenue projections, cost estimates, and a fiscally constrained project list, as required by federal law. We will review historical revenue and expenditure data from TDOT, VDOT, and local agencies. This information will be used to develop revenue forecasts for the planning horizon 2050, including federal, state, and local sources. We will estimate planning-level costs for candidate projects using high-level unit cost assumptions and input from local agencies. Projects will be grouped into short-, mid-, and long-term timeframes based on readiness, priority, and funding availability. We use costs prepared for the 2045 LRTP and will update accordingly. Coordination with TDOT and VDOT will be critical to align project assumptions with their respective funding programs and selection processes. We will build in sufficient time for review and feedback from both agencies to support a smooth plan adoption process. Projects will be categorized into fiscally constrained and illustrative tiers.

Key Activities / Deliverables

- Compile candidate projects from previous plans, capital improvement programs, stakeholder input and public feedback.
- Develop an evaluation framework incorporating criteria such as safety, mobility, environmental impact and cost-effectiveness. Apply the framework to score and rank projects and produce a prioritized list. It is anticipated that the team will build off the evaluation methodology used for the 2045 LRTP.
- Coordinate with TDOT and VDOT to align assumptions with their funding programs and anticipated timeframe(s).
- AECOM will develop a draft and final Project Evaluation Technical Memorandum. This will include documenting the evaluation process and results.
- AECOM will develop a draft and final Financial Analysis and Fiscal Constraint Technical Memorandum. The financial plan will include revenue projections (federal, state, local), planning level cost estimates, and a fiscally constrained project list. A prioritized project list and fiscally constrained plan summary will be reviewed and approved by the MTPO.

Task 8 – Draft & Final Plan Development and Review

AECOM will prepare a draft LRTP for public and agency review. The draft LRTP will address federally required elements, including a multimodal needs assessment, performance measures, financial plan, and fiscally constrained project list. Following the public comment period, we will incorporate feedback and prepare the final plan for adoption by the MTPO Executive Board.

We will also prepare presentation materials and assist with the final open house/public meeting. Final deliverables will be provided in print-ready and digital formats, including Word, PDF, and GIS files. No hard copies of LRTP, including the draft and final plan, are included. AECOM will also provide a plan compliance checklist to support TDOT and FHWA review. All deliverables will be submitted in accordance with the agreed-upon schedule and format. Final deliverables will be provided in print-ready and digital formats, including Word, PDF, and GIS files. No hard copies of LRTP, including the draft and final plan, are included.

Key Activities / Deliverables

- AECOM will prepare a draft LRTP document incorporating all federally required elements: multimodal needs assessment, performance measures, evaluation framework, financial plan and fiscally constrained project list. We will submit draft chapters for MTPO staff review, followed by 20-business-day reviews by TDOT/VDOT and FHWA/FTA. AECOM will revise documents accordingly based on feedback received from the MTPO, TDOT/VDOT, and FHWA/FTA.
- AECOM will prepare a final draft for a 30-day public comment period. The team will compile public comments and report findings back to the MTPO. If appropriate, the team will incorporate feedback and prepare the final LRTP for adoption by the MTPO Executive Board.

September 25, 2025 – FINAL Scope of Work

- AECOM will develop presentation materials to support the final open house and board meeting. The final plan will be presented for MTPO adoption no later than May 12, 2027.
- Final deliverables will be provided in print-ready and digital formats, including Word, PDF, and GIS files. No hard copies of the LRTP, including the draft and final plan, are included.

Project Schedule Overview

The project schedule anticipates Notice to Proceed around November 2025 and final adoption by May 12, 2027. AECOM will develop, and maintain, an overall project schedule. This schedule will be discussed during the project kickoff and will be refined as needed. The current timeline assumes the same review timeframe as the 2045 LRTP, which included 20-business days for TDOT/VDOT and 20-business days for FHWA/FTA. Major milestones include the following:

Milestone	Tentative Timing
Kickoff and PMP development	Nov – Dec 2025
Public Engagement Plan & initial survey	Dec 2025 – Feb 2026
Vision/goals/performance measures	Early 2026; finalized after stakeholder input
Socioeconomic & land use data update	Winter – Spring 2026
Model update and calibration	Spring – Summer 2026
Multimodal needs assessment	Summer – Fall 2026
Project identification & evaluation	Fall 2026 – Winter 2027
Draft LRTP development	Fall 2026 – Winter 2027
Reviews by MTPO, TDOT/VDOT, FHWA/FTA	Fall 2026 – Winter 2027 (20-business-day cycles)
30-day public comment period	Spring 2027
Final plan adoption	By May 12, 2027

Project Budget

Based on the SOW, the cost of the services is \$247,702.12. The cost breakdown by task and other direct costs is listed below. The project will be invoiced as a lump sum project.

	Hours	Total Cost	FBLR
Task 1 - Project Management	113	\$ 25,457.60	\$ 225.29
Task 2 - Public and Stakeholder Engagement	360	\$ 53,036.87	\$ 147.32
Task 3 - Vision, Goals, and Performance Measures	52	\$ 7,657.12	\$ 147.25
Task 4 - Socioeconomic Data and Land Use	104	\$ 13,866.38	\$ 133.33
Task 5 - Multimodal Needs Assessment	311	\$ 37,109.71	\$ 119.32
Task 6 - Travel Demand Model Update/Application	112	\$ 29,822.71	\$ 266.27
Task 7 - Project Evaluation / Fiscal Constraint	208	\$ 37,326.50	\$ 179.45
Task 8 - Plan Development/Review Process	271	\$ 35,925.24	\$ 132.57
Total Labor	1,531	\$ 240,202.12	\$ 156.89
Other Direct Costs			
Travel		\$ 5,000.00	
Public Engagement Materials		\$ 2,500.00	
Total Project Cost		\$ 247,702.12	