2040 TRANSPORTATION POLICY PLAN AMENDMENT #1

Overview

Purpose

This 2040 Transportation Policy Plan amendment addresses changes to arterial bus rapid transit projects in both the Current Revenue Scenario and the Increased Revenue Scenario.

This amendment also adds six freight projects selected as part of Minnesota’s Highway Freight Program to the Current Revenue Scenario.

Policy Basis

BRT Projects

The 2040 Transportation Policy Plan presents policies and plans to guide development of the region’s transportation system. The Plan includes strategies in Chapter 2 that are organized by the Plan’s six transportation system goals, including several strategies that relate to investment in the transitway system, shown in Table 1. These strategies guide the planned investments in transitways that are detailed in Chapter 6: Transit Investment Direction and Plan.

This amendment includes important additions and extensions to the region’s arterial bus rapid transit network, namely as part of implementing Metro Transit’s Network Next 20-year transit improvement plan. Included in Network Next's vision of an improved transit system by 2040 are new arterial bus rapid transit priorities that alter the planned network in the Transportation Policy Plan. Expansion of the network advances equity and reduces regional racial disparities, builds on successful existing routes to grow transit ridership, creates a network that supports a transit-oriented lifestyle, and ensures long-term sustainable growth of the bus network. This amendment incorporates the selected F, G, and H lines named in 2021 and the remaining 2040 arterial bus rapid transit candidate corridors resulting from Network Next. This amendment also incorporates an extension of the B Line to downtown Saint Paul included in that project’s final corridor plan, as well incorporating the E Line which was adopted by the Metropolitan Council in January 2020.

B Line Corridor Plan Process

The corridor planning process for the B Line began in 2018. During this phase, stakeholders including the City of Saint Paul requested that the B Line be extended from its original termini at University Ave and Snelling Ave to downtown Saint Paul. Metro Transit staff developed plans for a corridor to downtown Saint Paul from 2019 to 2021 with feedback from community engagement as well as a Technical Advisory Committee. Metro Transit received over 2,500 comments on the plan throughout the planning process.
<table>
<thead>
<tr>
<th>Goal</th>
<th>Strategy Number</th>
<th>Strategy Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to Destinations</td>
<td>C4</td>
<td>“Regional transportation partners will promote multimodal travel options and alternatives to single occupant vehicle travel and highway congestion through a variety of travel demand management initiatives, with a focus on major job, activity, and industrial and manufacturing concentrations on congested highway corridors and corridors served by regional transit service.”</td>
</tr>
<tr>
<td>Access to Destinations</td>
<td>C5</td>
<td>“The Metropolitan Council will work with MnDOT and local governments to implement a system of MnPASS lanes and transit advantages that support fast, reliable alternatives to single-occupant vehicle travel in congested highway corridors and in local corridors.”</td>
</tr>
<tr>
<td>Access to Destinations</td>
<td>C11</td>
<td>“The Metropolitan Council and regional transit providers will expand and modernize transit service, facilities, systems, and technology, to meet growing demand, improve the customer experience, improve access to destinations, and maximize the efficiency of investments.”</td>
</tr>
<tr>
<td>Access to Destinations</td>
<td>C12</td>
<td>“Regional transportation partners will invest in an expanded network of transitways that includes but is not limited to bus rapid transit, light rail, and commuter rail. Transitway investments will be prioritized based on factors that measure a project’s expected contributions to achieving the outcomes, goals, and objectives identified in Thrive MSP 2040 and the Transportation Policy Plan.”</td>
</tr>
<tr>
<td>Competitive Economy</td>
<td>D3</td>
<td>“The Metropolitan Council and its partners will invest in regional transit and bicycle and pedestrian facilities that improve connections to jobs and opportunity, promote economic development, and attract and retain businesses and workers in the region on the established transit corridors.”</td>
</tr>
<tr>
<td>Healthy and Equitable Communities</td>
<td>E3</td>
<td>“Regional transportation partners will plan and implement a transportation system that considers the needs of all potential users, including children, senior citizens, and persons with disabilities, and that promotes active lifestyles and cohesive communities. A special emphasis should be placed on</td>
</tr>
</tbody>
</table>
promoting the environmental and health benefits of alternatives to single-occupant vehicle travel.”

| Leveraging Transportation Investments to Guide Land Use | F3 | “Local governments will identify opportunities for and adopt guiding land use policies that support future growth around transit stations and near high-frequency transit service. The Metropolitan Council will work with local governments in this effort by providing technical assistance and coordinating the implementation of transit-oriented development. The Metropolitan Council will also prioritize investments in transit expansion in areas where infrastructure and development patterns support a successful transit system and are either in place or committed to in the planning or development process.” |

| Leveraging Transportation Investments to Guide Land Use | F5 | “Local governments should adopt policies, develop partnerships, identify resources, and apply regulatory tools to support and specifically address the opportunities and challenges of creating walkable, bikeable, and transit-friendly places.” |

Throughout 2019, Metro Transit received feedback through open houses, dozens of community events, meetings with local businesses, customer surveys, rider engagement on Route 21 buses, pop-ups in community spaces, direct mail to corridor residents, and online project information.

In 2021, Metro Transit engaged with the community for feedback on the B Line Corridor Plan. Due to COVID-19 guidelines, feedback was received through surveys and a website containing station concepts, the full corridor plan document, and other key information. Following feedback, the document was updated with revisions to several stations. The final B Line Corridor Plan was adopted by the Council in October 2021, including a B Line alignment from the West Lake Station in Minneapolis to Union Depot in downtown Saint Paul, primarily along Lake Street in Minneapolis and Marshall Ave and Selby Ave in Saint Paul.

**E Line Corridor Plan Process**

This E Line will connect Minneapolis and Edina along the Hennepin Ave/France Ave corridors. This project was partially funded through the Regional Solicitation and is now considered fully funded with the remaining funding being provided by the State of Minnesota. E Line will start at the Southdale Transit Center in Edina and terminate at the METRO Green Line Westgate Station in Minneapolis.

The corridor planning process for the E Line began in 2018 with the E Line Corridor Study. This process consisted of a variety of outreach and engagement activities. Feedback from the community received during these engagements helped inform concept station locations and alignment.
recommendations. The study evaluated the corridor alignment and terminal location alternatives and selected the final E Line alignment, which was adopted by the Metropolitan Council in January 2020.

**METRO F, G, and H Line Project Selection**

As part of Network Next, the METRO F Line (Central), G Line (Rice/Robert), and H Line (Como/Maryland) projects were prioritized as additions to the region’s planned transitway system. These projects were selected through a four-step process with public input throughout, beginning with engagement efforts to understand community transit needs and priorities in late 2019. This engagement helped to define principles used to guide bus rapid transit planning throughout the four steps of the Network Next process.

- **Step 1 (Spring 2020)** Metro Transit began the arterial bus rapid transit selection process by identifying 19 candidate corridors based on the existing High-Frequency network, ridership, network balance, and prior studies. Metro Transit worked with local government partners to review and refine the list of candidate corridors based on initial analysis.

- **Step 2 (Summer 2020)** Metro Transit screened the 19 candidate corridors to identify and further evaluate the most promising corridors. Screening criteria included measures of equity, existing ridership, market potential, community plans and priorities, and existing service levels, together creating a final score for each corridor. An additional qualitative review supplemented final scores. The screening process advanced 10 arterial BRT candidate corridors for further evaluation. In September 2020, Metro Transit publicly presented the refined list of 10 corridors and solicited public feedback on determining which principles were most important in evaluating them to determine the final list of prioritized corridors.

- **Step 3 (Fall 2020)** Metro Transit developed and evaluated corridor concepts for each of the remaining corridors. Concepts included alignments, station locations, termini, and service plans. Each candidate corridor received a score based on several evaluation criterion including proximity to jobs and people, nearby land uses, and costs. Using these scores as well as qualitative measures, Metro Transit grouped the candidate corridors into three tiers based on priority for implementation.

- **Step 4 (Winter 2020/2021)** Metro Transit prioritized near-term candidate corridors along Central Avenue, Como/Maryland, Johnson/Lyndale, and Rice/Robert. In December 2020 and January 2021, Metro Transit engaged the public to help identify METRO F, G, and H lines from the corridors identified for near-term implementation. Over 4,000 people engaged with a survey to prioritize the corridors. Based on critical dimensions of ridership and costs, Metro Transit designated the Central Avenue corridor as the future F Line. Based on corridors strengths in expanding the reach of the METRO network and integrating with the existing and planned bus network, Metro Transit designated the Rice/Robert corridor as the G Line and the Como/Maryland corridor as the H Line.

Metro Transit engaged the Transportation Advisory Board and local affected communities throughout this process and ultimately the Council adopted the F, G, and H lines as priorities in March 2021.
**Future Arterial Bus Rapid Transit Candidate Corridors**

In addition to the F, G, and H lines, this amendment includes seven new or updated corridors as expansion priorities for the arterial bus rapid transit network. These corridors are identified as the region’s expansion priorities for 2040, replacing the arterial bus rapid transit expansion priorities in the current TPP’s Increased Revenue Scenario. These seven corridors, along with the METRO F, G, and H lines, were identified as the most promising corridors for arterial BRT through Network Next. Using evaluation criteria accounting for cost, equity, ridership, and other benefits, these corridors were evaluated among 19 candidate corridors and determined to have the most potential for arterial bus rapid transit improvements to be implemented by 2040. The seven corridors are:

- 63rd / Zane
- Grand
- Johnson / Lyndale
- Lowry
- Nicollet
- Randolph / East 7th
- West Broadway / Cedar

There is no defined implementation order among the corridors identified as 2040 expansion priorities. Corridors beyond the H Line (Como/Maryland) will be prioritized for implementation in a future update to BRT plans by Metro Transit scheduled for 2025.

Corridors previously studied for arterial BRT, including all corridors in the current Increased Revenue Scenario, were among the initial 19 candidate corridors considered for arterial BRT in Network Next. Three corridors currently included in the Increased Revenue Scenario did not advance beyond the initial screening step and were not carried forward as priorities for 2040 BRT expansion. As a result, these corridors are removed from the Increased Revenue Scenario as identified arterial BRT transitways:

- American Boulevard
- East 7th/White Bear Avenue
- North Snelling/Lexington (A Line Extension)

These corridors are good candidates for exploring improved local bus service prior to consideration for transitway implementation, particularly as targeted redevelopment occurs and key connections to other transitways are implemented. For example, the American Blvd corridor has significant development plans and development activity, and it would connect to six other transitways in the Current Revenue Scenario, but existing service in the corridor has not yet demonstrated a proven market for high-frequency service. The BRT planning update scheduled for 2025 could reconsider these corridors and other corridors that may emerge.

**The American Boulevard corridor is being retained in the Increased Revenue Scenario as a corridor to be studied for all transitway modes in response to comments and a commitment to initiate a study made by the City of Bloomington.**
**Freight Projects**

The Plan includes strategies that are organized by the Plan’s six transportation system goals, including a number of strategies that relate to investment in the freight highway system and this proposed amendment (see Table 2). These strategies and others guide planned investments that are detailed in Chapter 5: Highway Investment Direction and Plan and Chapter 8: Freight Investment Direction.

**Table 2 – Transportation Policy Plan Strategies related to this Highway Investment**

<table>
<thead>
<tr>
<th>Goal</th>
<th>Strategy Number</th>
<th>Strategy Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation System Stewardship</td>
<td>A2</td>
<td>“Regional transportation partners should regularly review planned maintenance preservation and reconstruction projects to identify cost-effective opportunities to incorporate improvements for safety, lower-cost congestion management and mitigation, E-ZPass, strategic capacity, transit, bicycle, and pedestrian facilities.”</td>
</tr>
<tr>
<td>Safety and Security</td>
<td>B1</td>
<td>“Regional transportation partners will incorporate safety and security considerations for all modes and users throughout the processes of planning, funding, construction, and operation.”</td>
</tr>
<tr>
<td>Safety and Security</td>
<td>B4</td>
<td>“Regional transportation partners will support the state’s vision of moving toward zero traffic fatalities and serious injuries, which includes supporting educational and enforcement programs to increase awareness of regional safety issues, shared responsibility, and safe behavior.”</td>
</tr>
<tr>
<td>Access to Destinations</td>
<td>C9</td>
<td>“The Metropolitan Council will support investments in A-minor arterials that build, manage, or improve the system’s ability to supplement the capacity of the Principal Arterial system and support access to the region’s job, activity, and industrial and manufacturing concentrations.”</td>
</tr>
<tr>
<td>Access to Destinations</td>
<td>C10</td>
<td>“Regional transportation partners will manage access to Principal and A-minor arterials to preserve and enhance their safety and capacity. The Metropolitan Council will work with MnDOT to review interchange requests for the Principal Arterial system. The Metropolitan Council, MnDOT and regional partners will invest in prioritized non-freeway Principal arterial intersections in accordance with the Principal Arterial Intersection Conversion Study.”</td>
</tr>
</tbody>
</table>
The six projects were selected as part MnDOT’s Minnesota Highway Freight Program. The competitive statewide process allocates between $20M and $25M per year to the highest freight needs in the state. The process was guided by the Statewide Freight Investment Committee, which included a broad range of stakeholders from agencies across the state. Projects were scored based on heavy commercial annual average daily traffic (HCAADT), crash reduction, truck travel time reliability, number of trucks entering/existing nearby facilities, cost effectiveness, and project readiness. As part of the 2020 funding cycle, a new scoring measure for environmental justice and equity was added within the project readiness area. The process and project selections were also informed by the Minnesota Freight Advisory Committee (MFAC), which is a long-standing partnership between MnDOT and the business community to exchange ideas and recommend policies that promote a safe, reliable, and efficient freight transportation system.

The Council, in its role as the metropolitan planning organization (MPO), was involved in this freight solicitation process in numerous ways:

- MPO representation on the Statewide Freight Investment Committee
- Project submittals required MPO letters of support
- Review period for MPOs after the project application deadline
- Interchange projects in the metro were required to go through the TPP’s Appendix F, Preliminary Interchange Approval Process
- Metro projects were required to be a Tier 1, 2, or 3 corridor in the Transportation Policy Plan Regional Truck Freight Corridors in order to apply
- The MPO and MnDOT worked in cooperation to identify Urban and Rural Critical Freight Corridors in the project areas and were subsequently approved by the Federal Highway Administration (FHWA)

Highway projects are added to the fiscally constrained Transportation Policy Plan when the following criteria are met.

- The proposal is consistent with the goals, objectives and strategies of the region’s 2040 Transportation Policy Plan
• Documentation is submitted showing how the project can be built with revenues in the fiscally constrained plan (or reasonable proposed additional revenues)
• Air Quality Conformity is maintained
• Public Involvement is conducted

The 2040 Transportation Policy Plan (TPP) includes a fiscally constrained list of regionally significant projects for investment in the region by 2040, known as the Current Revenue Scenario. All projects that add new lanes or add new interchanges to a Principal Arterial Highway, or a lane of one mile or greater to an A-minor arterial, are considered regionally significant projects. These projects must be identified as funded in a region's long-range transportation plan (i.e., 2040 Transportation Policy Plan) in order to be included in the Transportation Improvement Program (TIP) and begin construction. The six projects are shown in the adopted TPP in a variety of ways with some already in the Plan, others with portions of the project in the Plan, others identified in the Increased Revenue scenario, and others not in the Plan at all. Given this complexity, Council staff is adding all six freight projects as part of this amendment to make sure the TPP shows an accurate record of the projects.
**Project Details**

**Transit Projects**

The following project descriptions have been added or updated in the Transit Investment Direction and Plan. Projects added to the Current Revenue Scenario include the METRO B Line, E Line, F Line, and G Line. Additional corridor changes only affect the Increased Revenue Scenario.

**METRO B Line (Arterial BRT)** This approximately 12.6-mile project along the Lake Street/Marshall Ave/Selby Ave corridor will connect Minneapolis and Saint Paul. This proposed project is defined as arterial BRT, operating primarily along Lake Street, Marshall Avenue, and Selby Avenue from West Lake Street Station on the METRO Green Line Extension in Minneapolis to Union Depot in downtown Saint Paul. The proposed project would serve 33 stations. The project will conduct environmental review and early design and engineering in 2021 continuing into 2022. The project is anticipated to begin construction in 2023 and open for operations in 2024.

**METRO E Line (Arterial BRT)** This approximately 13.3-mile project along the Hennepin Ave/France Ave corridor will connect Minneapolis and Edina. This proposed project is defined as arterial BRT, starting at the Southdale Transit Center in Edina and terminating at the METRO Green Line Westgate Station in Minneapolis. The proposed project would serve approximately 34 stations. The project will conduct engineering beginning in 2022 and continuing into fall 2023. The project is anticipated to begin construction in 2024 and open for operations in 2025.

**METRO F Line (Arterial BRT)** This approximately 13-mile project along the Central Ave corridor will connect Minneapolis, Columbia Heights, Hilltop, Fridley, Spring Lake Park, and Blaine. This proposed project is defined as arterial BRT, starting in downtown Minneapolis and terminating at the Northtown Transit Center. The proposed project would serve approximately 30 stations. The project will conduct environmental review and early design and engineering in 2023. The project is anticipated to begin planning in early 2022, construction in 2025, and open for operations in 2026.

**METRO G Line (Arterial BRT)** This approximately 11.5-mile project along the Rice/Robert corridor will connect Saint Paul, Little Canada, Roseville, and West Saint Paul. This proposed project is defined as arterial BRT, starting at the Dakota County Northern Service Center and terminating at the Little Canada Transit Center. The proposed project would serve approximately 30 stations. Project is anticipated to begin planning in 2023 with construction prior to 2030.

**METRO H Line (Arterial BRT)** This approximately 16.6-mile project along the Como/Maryland corridor will connect Minneapolis, Falcon Heights, and Saint Paul. This proposed project is defined as arterial BRT, starting in downtown Minneapolis and terminating at Sun Ray Transit Center in Saint Paul. The proposed project would serve approximately 40 stations. As this project is not assumed to be fully funded as of the time of this amendment, the H Line will be included in the TPP’s Increased Revenue Scenario. Implementation of the H Line, including engineering, design and construction, is scheduled to occur between 2025 and 2030.
Metro Transit Network Next 2040 Expansion Corridors (Arterial BRT) Based on evaluation results of Network Next, seven additional arterial bus rapid transit corridors were included for prioritization in the Plan by 2040. These corridors are likely to be considered for the 2030-2040 timeframe and their prioritization will be evaluated in a future bus rapid transit planning by Metro Transit scheduled for 2025. A number of these corridors overlap with corridors in the existing Transportation Policy Plan, but their alignments have changed or been expanded with this update. All of these corridors are being included in the Increased Revenue Scenario until further prioritization and funding have occurred.

The following corridors are candidates for arterial bus rapid transit for implementation by 2040:

- 63rd / Zane
- Grand
- Johnson / Lyndale
- Lowry
- Nicollet
- Randolph / East 7th
- West Broadway / Cedar

Previous Arterial Bus Rapid Transit Corridors not Advanced by Metro Transit Network Next The following arterial bus rapid transit corridors are no longer planned for implementation by 2040 and are being removed from consideration in the 2040 Transportation Policy Plan, though they may be reconsidered for bus rapid transit in future BRT planning efforts and will continue to be candidates for regular route service improvements.

- American Boulevard
- East 7th
- A Line Extension

American Boulevard The American Boulevard corridor was previously in the Increased Revenue Scenario as a future arterial BRT corridor but was not advanced by Metro Transit through their Network Next planning effort. The American Boulevard corridor has many unique characteristics that distinguish it from the other Network Next corridors:

- It would connect the Blue, Red, Orange, Green, Riverview and D lines to the employment centers along I-494
- The City of Bloomington implemented numerous local plans, zoning, and ordinances in support of transit-oriented development along the corridor, which are already being realized with 22 multifamily developments built or in development as of Feb 2022, many near or above 100 units per acre
- The I-494 corridor is rapidly diversifying, making this corridor an important equity investment

As a result, the American Boulevard transitway will be retained in the TPP Increased Revenue Scenario, but as a corridor to be studied for mode and alignment.
Figures 1 and 2 are updated transitway system maps for the Current Revenue Scenario and Increased Revenue Scenario reflecting the changes described above.

**Figure 1 – Updated Map of Existing Transitways and Current Revenue Scenario Expansion Transitways**

- **Current Revenue Scenario**
  - Existing Transitways
    1. Blue Line Light Rail
    2. Northstar Commuter Rail
    3. Red Line Highway BRT
    4. Green Line Light Rail
    5. A Line Arterial BRT
    6. C Line Arterial BRT
    7. Orange Line Highway BRT

- **Funded Expansion Transitways**
  8. Green Line Extension Light Rail
  9. Blue Line Extension Light Rail
  10. Gold Line Dedicated BRT
  11. Purple Line Dedicated BRT
  12. Riverview Modern Streetcar
  25. B Line Arterial BRT
  26. D Line Arterial BRT
  27. E Line Arterial BRT
  28. F Line Arterial BRT
  29. G Line Arterial BRT

*Numbers are for map reference only and do not indicate any planning purpose or priority.*
Figure 2 – Updated Map of Transitway System in an Increased Revenue Scenario
Table 3 includes project details for arterial bus rapid transit corridors added to the Current Revenue Scenario and the long-range capital project list (Appendix C).

### Table 3 – Projects added to the Appendix C: Long-Range Capital Project List

<table>
<thead>
<tr>
<th>Transit Investment Category</th>
<th>Route</th>
<th>Project Description</th>
<th>Estimated Cost (Year of Expenditure)</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitway System</td>
<td>Hennepin / France (E Line)</td>
<td>13.3-mile arterial bus rapid transit line with 34 planned stations operating primarily along France Avenue, Hennepin Avenue, 4th Street and University Avenue from Southdale Transit Center in Edina to the METRO Green Line Westgate Station in Minneapolis</td>
<td>$60.0M</td>
<td>2020-2029</td>
</tr>
<tr>
<td>Transitway System</td>
<td>Lake / Marshall/ Selby (B Line)</td>
<td>12.6-mile arterial bus rapid transit line with 33 planned stations operating primarily along Lake Street, Marshall Avenue, and Selby Avenue from METRO Green Line Extension West Lake Station in Minneapolis to Union Depot in downtown Saint Paul.</td>
<td>$62.2M</td>
<td>2020-2029</td>
</tr>
<tr>
<td>Transitway System</td>
<td>Central Avenue (F Line)</td>
<td>13-mile arterial bus rapid transit with 30 planned stations along Central Ave from downtown Minneapolis to Northtown Transit Center in Blaine.</td>
<td>$79.8M</td>
<td>2020-2029</td>
</tr>
<tr>
<td>Transitway System</td>
<td>Rice / Robert (G Line)</td>
<td>11.5-mile arterial bus rapid transit with 30 planned stations along Rice and Robert St from the Northern Dakota County Service Center in West Saint Paul in the south to Little Canada Transit Center in the north.</td>
<td>$83.6M</td>
<td>2020-2029</td>
</tr>
</tbody>
</table>

### Freight Projects

The following project descriptions and maps identify the six freight projects and how they will be included in the TPP.

**117th Ave Reconstruction and Modernization (Inver Grove Heights)** This first-last mile freight project will reconstruct 117th Avenue in Dakota County to improve freight movements from Rich Valley Road to Highway 52. This corridor has heavy freight movements due to Flint Hills Resources and
aggregate mining operations in area. The project is not currently in the TPP, but it is also not required to be given the project type (i.e., roadway reconstruction).

**I-35W/I-494 Interchange Improvements (Bloomington)** This freight project constructs a flyover ramp for northbound I-35W to westbound I-494 in Hennepin County to help alleviate one of the nation’s worst freight bottlenecks. This regionally significant project is already shown in the Current Revenue Scenario of the TPP as it was funded through the state’s Corridors of Commerce program.

**Highway 212 Rural Freight Safety Project (Carver County)** This regionally significant freight safety project will transition the corridor from a two-lane roadway to a four-lane roadway from Norwood Young America to Cologne. This project will fill the last remaining two-lane gap along Highway 212 from Glencoe to the Twin Cities. The project will also include reduced-conflict intersections, wider shoulders, and other measures to improve safety. This project is currently in the Increased Revenue Scenario and will now be added to the Current Revenue Scenario with this amendment. In addition, one intersection within the project area, Highway 212 and County State-Aid Highway (CSAH) 51 was funded as part of the 2020 Regional Solicitation funding cycle.

**I-94 Eastbound Lane Improvement Project (MnDOT, Woodbury/Oakdale)** This regionally significant project in Washington County was the top overall scoring freight project in the entire state as part of the 2020 funding cycle. It will add scope to an existing I-94 pavement project currently identified in Appendix C of the TPP. This approach of adding mobility elements to a preservation project is consistent with the highway system investment principles laid out in the TPP. The lane improvement project adds a lane in the eastbound direction of I-94 from the system interchange at I-94/494/694 to Woodbury Drive. The stretch of I-94 is uphill and thus creates freight mobility issues given the speed differentials between passenger vehicles and the semi-trucks heading eastbound out of the system interchange and up the hill. This cost-effective alternative is a part of a larger long-term project at this location.

**Highway 10/169 Ramsey Gateway Project (City of Ramsey)** This regionally significant project in Anoka County was awarded a $40M Infrastructure for Rebuilding America (INFRA) grant by the US DOT in 2020. The project converts two traffic signals (at Ramsey Boulevard and Sunfish Lake Boulevard) to interchanges and also bridges over the BNSF mainline at both intersections. The interchange and railroad grade separation at Highway 10/Ramsey Boulevard is identified in the Current Revenue Scenario by virtue of the project being awarded Regional Solicitation funding in the 2020 funding cycle.

**CSAH 33 Reconstruction and Realignment (Elk River)** This Sherburne County project is located within the Twin Cities metropolitan area’s urbanized area. While selected as a Greater Minnesota project by MnDOT, its location within the MPO Planning area is the reason for its inclusion in the amendment. The first-last mile freight project improves the CSAH 33 connection to Highway 169. The realignment will also improve freight safety in the area and provides a critical linkage to the larger transportation system. The project is not considered regionally significant.

The following project description are added to Chapter 5, Table 5-12: National Highway Freight Program Projects, 2021-2025.
### Table 4 – Freight Projects added to the Highway Chapter

<table>
<thead>
<tr>
<th>Amendment Language</th>
<th>Project</th>
<th>County Location</th>
<th>Grant Amount</th>
</tr>
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<tr>
<td>Added</td>
<td>117th Ave Reconstruction</td>
<td>Dakota</td>
<td>$8,000,000</td>
</tr>
<tr>
<td>Added</td>
<td>I-35W/I-494 Interchange Improvements</td>
<td>Hennepin</td>
<td>$11,100,000</td>
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<tr>
<td>Added</td>
<td>US 212 Rural Freight Safety Project</td>
<td>Carver</td>
<td>$7,500,000</td>
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<tr>
<td>Added</td>
<td>I-94 Eastbound Lane Improvements</td>
<td>Washington</td>
<td>$8,000,000</td>
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<tr>
<td>Added</td>
<td>US 10/169 Ramsey Gateway Project</td>
<td>Anoka</td>
<td>$10,000,000</td>
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<td>Added</td>
<td>Sherburne Co 33 Reconstruction</td>
<td>Sherburne</td>
<td>$2,500,000</td>
</tr>
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</table>

Figure 3 will add the six freight projects and replace Figure 5-16 of the TPP.
Figure 3 – National Highway Freight Program Projects

The region’s MPO and MnDOT are responsible for identifying Critical Urban Freight Corridors and Critical Rural Freight Corridors. Projects selected with the federal freight funds must be on one of these two corridor designations. These corridors have also been approved by FHWA and are also identified
within MnDOT’s Statewide Freight System and Investment Plan. As such, the following additions are proposed for Table 8-2 of the TPP.

**Table 5 – Critical Urban Freight Corridors**

<table>
<thead>
<tr>
<th>Agency</th>
<th>Highway</th>
<th>From</th>
<th>To</th>
<th>Length (MI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MnDOT Metro District</td>
<td>US Highway 10</td>
<td>0.6 miles W of Ramsey Blvd</td>
<td>0.5 Miles west of Thurston Ave</td>
<td>3.00</td>
</tr>
<tr>
<td>City of Inver Grove Heights</td>
<td>117th Street</td>
<td>CR 71 (Rich Valley Blvd)</td>
<td>US52 Interchange</td>
<td>1.20</td>
</tr>
<tr>
<td>Sherburne County</td>
<td>CSAH 33</td>
<td>Auburn St</td>
<td>CSAH 13/CR 34/Twin Lake Rd NW</td>
<td>1.70</td>
</tr>
</tbody>
</table>

**Table 6 – Critical Rural Freight Corridors**

<table>
<thead>
<tr>
<th>Agency</th>
<th>Highway</th>
<th>From</th>
<th>To</th>
<th>Length (MI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MnDOT Metro District</td>
<td>US Highway 169</td>
<td>Chestnut Boulevard</td>
<td>South Meridian Street</td>
<td>15.2</td>
</tr>
</tbody>
</table>
Figure 8-3 is also proposed to be updated to reflect both the revised Critical Urban and Rural Freight Corridors, along with the six new freight projects:

**Figure 4 – National Highway Freight Network in the Twin Cities Region**
Table 7 includes project details for highway investments added to the Current Revenue Scenario and the long-range capital project list (Appendix C).

**Table 7 – Projects added to the Appendix C: Long-Range Highway Project List**

<table>
<thead>
<tr>
<th>Highway Investment Category</th>
<th>Route</th>
<th>Project Description</th>
<th>Estimated Cost (Year of Expenditure)</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Capacity</td>
<td>MN 212</td>
<td>Converts MN 212 from a two-lane roadway to a four-lane roadway from Norwood Young America to Cologne.</td>
<td>$60 million</td>
<td>2024</td>
</tr>
<tr>
<td>Strategic Capacity</td>
<td>I-94</td>
<td>The improvement adds a lane in the eastbound direction of I-94 from the system interchange at I-94/494/694 to Woodbury Drive.</td>
<td>$8 million</td>
<td>2023</td>
</tr>
<tr>
<td>Strategic Capacity</td>
<td>MN 10 / US 169</td>
<td>The project converts two traffic signals (at Ramsey Boulevard and Sunfish Lake Boulevard) to interchanges and bridges over the BNSF mainline at both intersections.</td>
<td>$138 million</td>
<td>2023</td>
</tr>
</tbody>
</table>

I-94 Rondo Lid: There is discussion (copied below) on page 5.41 of the Highway Investment Plan related to the I-94 corridor between downtown Minneapolis and downtown Saint Paul. Since the 2020 adoption of the TPP, design funding was provided by the state to further analyze a potential land bridge over I-94. If construction funding would be realized, then this would be a major investment in the I-94 corridor. The TPP will be updated in the future as master planning work continues and if funding is secured.

“The first Tier 1 priority corridor is the addition of E-ZPass lanes on I-94 between downtown Minneapolis and downtown Saint Paul. As of the date of this publication, $100 million has been allocated to the project. This corridor is also scheduled for major preservation work. The current Rethinking I-94 Study will evaluate mobility options along I-94 from MN 55 (Hiawatha Avenue) to Marion Street, although developed solutions may extend beyond these limits. Alternatives beyond E-ZPass are still being considered.”

The following addition should occur to the paragraph shown above:

“During the 2021 Minnesota State Legislation session, the state appropriated $6.2M to create a master plan for a potential Rondo land bridge over I-94. The land bridge is being considered near Victoria Street in Saint Paul. Once the master planning process concludes, preliminary and final project engineering will occur.”
Impacts to the Plan

Transportation Finance

The adoption of the arterial bus rapid transit projects impacts the Current Revenue Scenario capital and operations portions of the “Transit – Transitway System” section in Chapter 4: Transportation Finance.

Beginning with the 2020 Regional Solicitation, the Metropolitan Council has set aside $25 million per cycle to help fund one arterial bus rapid transit line per cycle (every two years). Under the previous Regional Solicitation structure, arterial bus rapid transit projects were the top-scoring projects in the Transit Expansion and Transit Modernization categories. To ensure a more consistent funding source for these projects, the $25 million set aside of Regional Solicitation funds was adopted by the Transportation Advisory Board and the Council. The funding of the METRO G Line assumes that this $25 million set aside from the Regional Solicitation for arterial bus rapid transit projects will continue into the future.

This amendment also assumes that the METRO G Line will receive capital funding through state general obligation bonds based on experience with previous arterial bus rapid transit lines. The last two legislative budget cycles have seen the Legislature authorizing bonding measures to complete funding for arterial bus rapid transit lines; in 2020 the Legislature authorized $55 million to complete funding for METRO B and D lines and in 2021 the Legislature authorized $57.5 million for the arterial bus rapid transit program, namely the E and F lines. With this support shown for previous arterial bus rapid transit lines, it is assumed that the state would contribute a similar level of support to complete the funding of the METRO G Line.

Table 8 – Current Revenue Scenario Arterial BRT Capital Funding Sources through 2040 (in Millions)

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>B Line</th>
<th>E Line</th>
<th>F Line</th>
<th>G Line</th>
<th>Relationship to Funding Assumed in Existing TPP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal - Regional Solicitation</td>
<td>$14.00</td>
<td>$13.00</td>
<td>$25.00</td>
<td>$25.00</td>
<td>Allocated from existing source</td>
</tr>
<tr>
<td>Federal Transit</td>
<td>$14.80</td>
<td>$1.20</td>
<td>$4.96</td>
<td></td>
<td>Allocated from existing source</td>
</tr>
<tr>
<td>Regional Transit Capital – Property Tax</td>
<td>$1.30</td>
<td>$5.10</td>
<td>$0.30</td>
<td>$1.44</td>
<td>Allocated from existing source</td>
</tr>
<tr>
<td>State General Fund Appropriation</td>
<td>-</td>
<td>$40.70</td>
<td>$17.50</td>
<td>-</td>
<td>New funding assumed</td>
</tr>
<tr>
<td>State General Obligation Bonds</td>
<td>$35.00</td>
<td>-</td>
<td>$37.00</td>
<td>$52.50</td>
<td>New funding assumed</td>
</tr>
<tr>
<td>Total Capital Costs</td>
<td>$65.10</td>
<td>$60.00</td>
<td>$79.80</td>
<td>$83.60</td>
<td></td>
</tr>
</tbody>
</table>
Table 9 – Current Revenue Scenario Arterial BRT Operating Funding Sources through 2040 (in Millions)

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>B Line</th>
<th>E Line</th>
<th>F Line</th>
<th>G Line</th>
<th>Relationship to Funding Assumed in Existing TPP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fare Revenue – Existing Service</td>
<td>$62.55</td>
<td>$62.45</td>
<td>$48.40</td>
<td>$51.45</td>
<td>Allocated from existing source</td>
</tr>
<tr>
<td>Fare Revenue – Expanded Service</td>
<td>$19.65</td>
<td>$29.65</td>
<td>$31.45</td>
<td>$63.90</td>
<td>New funding assumed</td>
</tr>
<tr>
<td>Existing Motor Vehicle Sales Tax</td>
<td>$187.75</td>
<td>$187.50</td>
<td>$144.85</td>
<td>$153.90</td>
<td>Allocated from existing source</td>
</tr>
<tr>
<td>State General Fund Appropriation</td>
<td>$58.95</td>
<td>$89.05</td>
<td>$94.40</td>
<td>$191.70</td>
<td>New funding assumed</td>
</tr>
<tr>
<td>Total Operating Costs</td>
<td>$328.90</td>
<td>$368.65</td>
<td>$319.10</td>
<td>$460.95</td>
<td></td>
</tr>
</tbody>
</table>

The freight project additions do not reflect a change in overall regional revenues since the TPP already assumed that the federal freight funding would continue into the future. These assumptions are documented in Chapter 4: Transportation Finance on Page 4.6.

Environment and Air Quality

Three of the six freight projects should be added to the list of regionally significant projects described in Appendix E: Additional Air Quality Information. These projects are the Carver Highway 212 Rural Freight Safety Project, Highway 10/169 Ramsey Gateway Project, and I-94 Eastbound Lane Improvement Project. They should be included under Horizon Year 2030: Strategic Capacity Enhancements project. The projects are not located with the Particulate Material (PM10) maintenance area. The Plan is subject to Clean Air Act Conformity determination.

Clean Air Act Conformity Determination

The Minneapolis-Saint Paul region is within an Environmental Protection Agency (EPA)-designated limited maintenance area for carbon monoxide (CO). A map of this area, which for air quality conformity analysis purposes includes the seven-county Metropolitan Council jurisdiction plus Wright County and the City of New Prague, is included in Appendix E of the 2040 Transportation Policy Plan. The term "maintenance" reflects the fact that regional CO emissions were unacceptably high in the 1970s when the National Ambient Air Quality Standards (NAAQS) were introduced but were subsequently brought under control. A second 10-year maintenance plan was approved by EPA on November 8, 2010, as a “limited-maintenance plan.” Every Transportation Policy Plan or Transportation Improvement Program (TIP) approved by the Council must be analyzed using specific criteria and procedures defined in the Federal Transportation Conformity Rule to verify that it does not result in emissions exceeding this current regional CO budget.
The analysis described in Appendix E has resulted in a Conformity Determination that the projects included in the 2040 Transportation Policy Plan, as amended, meet all relevant regional emissions analysis and budget tests. The 2040 Transportation Policy Plan, as amended, conforms to the relevant sections of the Federal Conformity Rule and to the applicable sections of Minnesota State Implementation Plan for air quality.

**Emission Test**

On December 5, 2019, EPA provided guidance to FHWA, MnDOT, and the Council on transportation conformity determinations for PM10. In this guidance, EPA determined that there is no requirement to project emissions over the maintenance period and that no regional modeling analysis is required; however, federally funded projects are still subject to “hot spot” analysis requirements. The maintenance plan adopted in 2002 determines that the level of PM10 emissions and resulting ambient concentrations continue to demonstrate attainment of the PM10 NAAQS in the maintenance area.

**Transportation Control Measures**

Pursuant to the Conformity Rule, the Council certifies that the 2040 Transportation Policy Plan as amended conforms to the State Improvement Plan and does not conflict with its implementation. All Transportation System Management (TSM) strategies that were the adopted Transportation Control Measures (TCM) for the region have been implemented or are ongoing and funded. There are no TSM projects remaining to be completed. There are no fully adopted regulatory new TCMs, nor any fully funded non-regulatory TCMs that will be implemented during the programming period of the TIP. There are no prior TCMs that were adopted since November 15, 1990, nor any prior TCMs that have been amended since that date. Details on the status of adopted Transportation Control Measures can be found in Appendix E of the 2040 TPP.

See the attached letter describing the Minnesota Pollution Control Agency’s review of the amendment’s Air Quality Conformity determination.

**Equity and Environmental Justice**

To quantify the effects of amending these projects into the Current Revenue Scenario of the Transportation Policy Plan, the highway and transit accessibility analysis was redone using the regional model for employment and community resources.

The number of jobs reachable within 20 minutes from home by each household in the region was calculated by the regional model, and this was aggregated across the region for the general population and for people of color. While the overall population of color is projected to increase from 24% to 39% by 2040 and the distribution will change as well, data limitations required that this analysis be performed assuming existing distributions of population by race/ethnicity. Low-income households will be included in future analysis due to current technical challenges with the model.

To examine accessibility to jobs and other community amenities, such as colleges and universities, hospitals, shopping centers, and libraries, the number of each type of destination within 20-minute
access by driving or by riding transit was totaled. The total number was multiplied by the number of people of color within each Transportation Analysis Zone (TAZ) and totaled for all TAZs, then divided by the total number of people of color within the region. This provides a weighted average across the region of the number of amenities that can be reached within 20 minutes. The same methodology was used for total population within the region as a comparison. Accessibility was compared between the no build scenario, which is the existing transportation system with future populations, and the current revenue scenario, which is fiscally constrained.

**Table 10 – Updated Accessibility Changes with 2040 Highway and Transit Investments (Current Revenue Scenario Compared to No Build)**

<table>
<thead>
<tr>
<th>Services</th>
<th>People of Color</th>
<th>Total Population</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Jobs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drive</td>
<td>2.4%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Transit</td>
<td>2.8%</td>
<td>2.2%</td>
</tr>
<tr>
<td><strong>Retail Jobs/Shopping Opportunities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drive</td>
<td>2.4%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Transit</td>
<td>3.6%</td>
<td>3.4%</td>
</tr>
<tr>
<td><strong>Colleges &amp; Universities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drive</td>
<td>3.5%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Transit</td>
<td>-0.4%</td>
<td>-2.6%</td>
</tr>
<tr>
<td><strong>Hospitals</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drive</td>
<td>4.5%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Transit</td>
<td>7.2%</td>
<td>8.2%</td>
</tr>
<tr>
<td><strong>Shopping Centers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drive</td>
<td>3.6%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Transit</td>
<td>83.8%</td>
<td>68.3%</td>
</tr>
<tr>
<td><strong>Libraries</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drive</td>
<td>3.2%</td>
<td>3.5%</td>
</tr>
<tr>
<td>Transit</td>
<td>-10.8%</td>
<td>-10.0%</td>
</tr>
</tbody>
</table>

This analysis shows that the highway and transit investments in the current revenue scenario increase accessibility to jobs and most other community amenities by both automobile and transit for both people of color and the total population. The decreases seen for libraries, colleges and universities with transit
are from a combination of changes in underlying local bus service to the affected locations and how that is modeled.

The Accessibility Observatory of the Center for Transportation Studies at the University of Minnesota did accessibility analysis for transitways in 2021 with a focus on equity and access to grocery stores, healthcare facilities, and high schools. This analysis included the B and E Lines that are incorporated into this amendment, in addition to the D Line. Their work found that with these three lines as a group added to the funded baseline transit network, “low socio-economic status workers maintain the shortest travel times” and benefitted the most from the frequency and speed improvements of these arterial BRT lines.

The following two updated figures identify the Census tracts with populations of color and low-income residents above regional averages in the Twin Cities region along with the highway and transit projects in the Current Revenue Scenario. Analysis of the location of projects relative to historically underrepresented communities, as well as the location of their positive benefits and negative impacts is also recommended at the local and project level.
Figure 5 – Population and 2040 Highway Investments (Current Revenue Scenario)

Current Revenue Highway Projects
see Figure 5-8
- Mobility Projects
- Preservation Projects
- MnDOT Tier 1 MnPASS
- Pavement
- Safety
- Freight
- Amended Freight Projects 2021

People in Poverty
- Areas of Concentrated Poverty (40% or more in poverty)

Regional Percentage by Tract
- Both Poverty + Pop. of Color Below Regional %
- Both Poverty + Pop. of Color Above Regional %
- Pop. of Color Above Regional %
- Individual Poverty Above Regional %

People in Poverty
The census defines individual poverty at two levels, 100% of poverty and 185% of poverty. This map highlights census tracts with higher than regional percentages at either level.

100% poverty regional percentage is 9.3%
185% poverty regional percentage is 20.0%

Population of Color
Population of Color is defined as all persons not classified as White, Non-Latino

Regional percentage is 26.3% People of Color

Tracts are marked above (higher than 26.3%) or below (less than 26.3%) the regional percentage

Data Source: 2014-2018 ACS by Tract
Figure 6 – Population and 2040 Transit Investments (Current Revenue Scenario)

People in Poverty

The census defines individual poverty at two levels, 100% of poverty and 185% of poverty. This map highlights census tracts with higher than regional percentages at either level.

- 100% poverty regional percentage is 9.3%
- 185% poverty regional percentage is 20.0%

Population of Color

Population of Color is defined as all persons not classified as White, Non-Latino

- Regional percentage is 26.3% People of Color
  - Tracts are marked above (higher than 28.3%) or below (less than 26.3%) the regional percentage

Data Source: 2014-2018 ACS by Tract
The following updated figures identify the Census tracts with populations of color and low-income residents above regional averages in relation to the existing highway and transit systems and bicycle system investments in the plan.

**Figure 7 – Population and Existing Highway System**

![Map showing population and existing highway system](image)

**People in Poverty**

The census defines individual poverty at two levels, 100% of poverty and 185% of poverty. This map highlights census tracts with higher than regional percentages at either level.

- 100% poverty regional percentage is 9.3%
- 185% poverty regional percentage is 20.0%

**Population of Color**

Population of Color is defined as all persons not classified as White, Non-Latino.

Regional percentage is 26.3% People of Color

Tracts are marked above (higher than 26.3%) or below (less than 26.3%) the regional percentage.

Data Source: 2014-2018 ACS by Tract
Figure 8 – Population and Existing Transit System

People in Poverty
The census defines individual poverty at two levels, 100% of poverty and 185% of poverty. This map highlights census tracts with higher than regional percentages at either level.

- 100% poverty regional percentage is 9.3%
- 185% poverty regional percentage is 20.0%

Population of Color
Population of Color is defined as all persons not classified as White, Non-Latino

- Regional percentage is 26.3% People of Color

Tracts are marked above (higher than 26.3%) or below (less than 26.3%) the regional percentage

Data Source: 2014-2018 ACS by Tract
Figure 9 – Population and Regional Priority Corridors for Bicycle Infrastructure

Regional Bicycle Transportation Network (RBTN)

- Tier 1: Priority Alignments & Corridors
- Tier 2: Alignments & Corridors

People in Poverty

- Areas of Concentrated Poverty (40% or more in poverty)

Regional Percentage by Tract

- Both Poverty + Pop. of Color Below Regional %
- Both Poverty + Pop. of Color Above Regional %
- Pop. of Color Above Regional %
- Individual Poverty Above Regional %

People in Poverty

The census defines individual poverty at two levels, 100% of poverty and 185% of poverty. This map highlights census tracts with higher than regional percentages at either level.

100% poverty regional percentage is 9.3%
185% poverty regional percentage is 20.0%

Population of Color

Population of Color is defined as all persons not classified as White, Non-Latino

Regional percentage is 26.3% People of Color

Tracts are marked above (higher than 26.3%) or below (less than 26.3%) the regional percentage

Data Source: 2014-2018 ACS by Tract
Performance Outcomes

The addition of the transit and highway projects to the regional transportation network has a significant effect on several the modeled performance outcomes for the region. Table 11 (below) depicts the updated outcomes of the performance measures that are directly impacted by projects outlined in the amendment. The outcomes in this section do not reflect the change made during the public comment period to include American Boulevard in the Increased Revenue Scenario as a transitway to be studied.

Table 11 - Modeled 2040 Performance Outcomes

<table>
<thead>
<tr>
<th>Description</th>
<th>Existing Performance (2015)</th>
<th>2040 No Build</th>
<th>2040 Current Revenue Scenario</th>
<th>2040 Increased Revenue Scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average daily number of people in MnPASS lanes</td>
<td>93,068</td>
<td>109,771</td>
<td>321,414</td>
<td>675,169</td>
</tr>
<tr>
<td>Increase in daily transit ridership</td>
<td>315,000</td>
<td>68,500</td>
<td>158,500</td>
<td>165,000</td>
</tr>
<tr>
<td>Population that lives within 1/2 mile to high-frequency transit corridors</td>
<td>557,000 (16%)</td>
<td>682,000 (16%)</td>
<td>1,014,300 (23%)</td>
<td>1,291,000 (29%)</td>
</tr>
<tr>
<td>Daily average vehicle miles travelled for a metro area resident</td>
<td>25.2</td>
<td>24.5</td>
<td>24.6</td>
<td>24.7</td>
</tr>
<tr>
<td>Population (and projected growth) near high-frequency transit (1/2 mile)</td>
<td>557,000</td>
<td>682,000</td>
<td>1,014,300</td>
<td>1,291,000</td>
</tr>
<tr>
<td>Percent of forecasted growth projected to occur within 1/2 mile of high-frequency transit corridors</td>
<td>N/A</td>
<td>15% (population) 23% (jobs)</td>
<td>22% (population) 35% (jobs)</td>
<td>28% (population) 44% (jobs)</td>
</tr>
<tr>
<td>Total Population and percent that lives within 1/2 mile of high-frequency transit</td>
<td>557,000 (16%)</td>
<td>682,000 (16%)</td>
<td>1,104,300 (23%)</td>
<td>1,291,000 (29%)</td>
</tr>
</tbody>
</table>

Due to refinements and overall improvements to the model, the existing performance, which shows the modeled performance as of the base year of 2015, has changed from those depicted in the 2020 TPP.
amendment. It is important to note that this is due to more accurate demographic and employment estimates at the traffic analysis zone (TAZ) level, which impacts the transportation outcomes.

Under both the current and increased revenue scenarios, the total population that lives within a half of a mile to high frequency transit corridors increases significantly over both the existing and no build scenarios. This illustrates the significant effect the construction of bus-rapid transit lines will have on the ability of residents to access destinations via transit. Under the increased revenue scenario, approximately 28 percent of all new population growth and 44 percent of all new jobs will be located near a high-frequency transit corridor. The modeled outcomes illustrate the substantial impact of the new transitways on where growth in both jobs and population may occur under both the current and increased revenue scenarios.

Table 12 – On-Road Mobile Source Emissions

<table>
<thead>
<tr>
<th>On-Road Mobile Source Emission</th>
<th>Existing Performance (2015)</th>
<th>2040 No Build</th>
<th>2040 Current Revenue Scenario</th>
<th>2040 Increased Revenue Scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO (Pounds)</td>
<td>811,900</td>
<td>333,200</td>
<td>335,600</td>
<td>339,100</td>
</tr>
<tr>
<td>Oxides of Nitrogen (Pounds)</td>
<td>109,600</td>
<td>19,000</td>
<td>19,200</td>
<td>19,400</td>
</tr>
<tr>
<td>Sulfur Dioxide (Pounds)</td>
<td>1,380</td>
<td>380</td>
<td>380</td>
<td>380</td>
</tr>
<tr>
<td>VOC (Pounds)</td>
<td>22,800</td>
<td>6,460</td>
<td>6,460</td>
<td>6,500</td>
</tr>
<tr>
<td>CO2 Equivalent (Pounds)</td>
<td>72,920,100</td>
<td>54,768,400</td>
<td>54,864,000</td>
<td>55,212,100</td>
</tr>
</tbody>
</table>

As shown on Table 12, on-road mobile source emissions are projected to be significantly lower than 2015 performance under each scenario. This is due to an increase in electric vehicle adoption, and a vehicle fleet featuring automobiles that pollute far less than existing automobiles.