MEETING OF THE FUNDING & PROGRAMMING COMMITTEE

Thursday | February 20, 2020 Room 1A | 1:30 PM

AGENDA

- I. CALL TO ORDER
- II. APPROVAL OF AGENDA
- III. APPROVAL OF MINUTES

 January 16, 2020, meeting of the Funding & Programming Committee*
- IV TAB REPORT
- V. BUSINESS
 - 1. 2020-11: Scope Change Request: Metro Transit Route 63 Service Improvement*
 - 2. 2020-12: TIP Amendment Request: Metro Transit Route 63 Service Improvement*
- VI. INFORMATION
 - 1. Regional Studies Update Cycle*
 - 2. TPP Work Program*
- VII. OTHER BUSINESS
- IX. ADJOURNMENT



^{*} Additional materials included for items on published agenda.

Minutes of the REGULAR MEETING OF THE TAC FUNDING & PROGRAMING COMMITTEE

Thursday, January 16, 2020

Committee Members Present: Paul Oehme (Chair, Lakeville), Jerry Auge (Anoka County), Angie Stenson (Carver County), John Sass (Dakota County), Jason Pieper (Hennepin County), Joe Lux (Ramsey County), Craig Jenson (Scott County), Emily Jorgensen (Washington County), Elaine Koutsoukos (TAB), Cole Hiniker (Metropolitan Council), Anna Flintoft (Metro Transit), Jody Carr (MnDOT Metro District), Dan Erickson (MnDOT Metro District State Aid), Mehjabeen Rahman, Mackenzie Turner Bargen (MnDOT Bike & Ped), Aaron Bartling (MVTA), Jim Kosluchar (Fridley), Ken Ashfeld (Maple Grove), Michael Thompson (Plymouth), Nathan Koster (Minneapolis), Anne Weber (St. Paul)

Committee Members Absent: Nancy Spooner-Mueller (DNR), Karl Keel (Bloomington), Robert Ellis (Eden Prairie)

I. CALL TO ORDER

A quorum being present, Acting Committee Chair Keel called the regular meeting of the Funding & Programming Committee to order at 1:31 p.m. on Thursday, January 16, 2020. Chair Oheme introduced Jerry Auge, Anoka County's new member.

II. APPROVAL OF AGENDA

MOTION: It was move by Koutsoukos and seconded by Thompson to approve the agenda with the addition of Item VIII, Other Business. **Motion carried unanimously**.

III. APPROVAL OF MINUTES

MOTION: It was moved by Lux and seconded by Jorgensen to approve the minutes of the November 21, 2019, regular meeting of the Funding & Programming Committee. **Motion carried unanimously**.

IV. TAB REPORT

Koutsoukos reported on the January 15, 2020, TAB meeting.

V. BUSINESS

1. 2020-06: Program Year Extension Request: St. Louis Park CSAH 25/Beltline Improvements

Barbeau said that the City of St. Louis park was awarded \$560,000 from the 2016 Regional Solicitation to fund Beltline Boulevard pedestrian improvements and that the city is requesting a program year extension from 2020 to 2021 due to delays in the Southwest Light Rail Extension. For this and the next two action items, MnDOT Metro District State Aid has determined via scoresheet that the projects will be viable in 2021. Each applicant understands that their projects must be delivered in 2021, though federal reimbursement is scheduled for 2024.

Jack Sullivan from the City of St. Louis Park said that the project will enable the city to move forward with the public process and project development.

Erickson said that there is enough capacity to absorb the federal funds from all three projects by paying back advanced construction.

MOTION: It was moved by Thompson and seconded by Ashfeld to recommend approval of this program year extension. **Motion carried unanimously**.

2. 2020-07: Program Year Extension Request: Richfield 77th Street Extension/MN 77 Bridge

Barbeau said that the City of Richfield was awarded \$7,000,000 from the 2016 Regional Solicitation to fund the 77th Street extension project and that the city is requesting a program year extension from 2020 to 2021 in order to close a funding gap.

Kristin Asher from the City of Richfield said that MnDOT wanted this project to be postponed due to the schedule its Highway 5 project, which increased costs for the city.

Jenson asked whether completing the project is contingent on the bonding request, to which Asher said that it is. She added that if bonding falls through the city will try to get the funding through other means. Pieper said that this project is related to MnDOT's modification of interchanges in the area of Interstate-494.

Thompson asked what happens if the funding is not secured, to which Barbeau said that the project would be withdrawn.

MOTION: It was moved by Thompson and Seconded by Koutsoukos, to recommend approval of this program year extension. **Motion carried unanimously**.

3. 2020-08: Program Year Extension Request: Dakota County

Barbeau said that Dakota County was awarded \$4,200,000 from the 2016 Regional Solicitation to reconstruct CSAH 86 and that the county is requesting a program year extension from 2020 to 2021, following scheduling delays in working with the railroad.

Jake Chapek said that work with the railroads should be completed soon.

MOTION: It was moved by Lux and Seconded by Pieper to recommend approval of this program year extension. **Motion carried unanimously**.

4. 2020-05: Streamlined TIP Amendment Policy

Barbeau said that the Streamlined TIP amendment policy was established in 2014. A revision is being considered because:

- It has not been reviewed since it was established.
- Included in the qualifying criteria, is the provision that "project changes do not relate to solicitation scoring based on cost effectiveness." Starting in 2016, the Regional Solicitation has a cost-effectiveness score determined after all other scores are calculated, rendering this criterion outdated.
- The Twin Cities area recently became an attainment area for carbon monoxide. While a small area continues its role as a maintenance area for particulate Matter 10 (PM₁₀), few projects will be subject to air quality review. Therefore, an updated definition of "regionally significant" is likely to be written and it makes sense to remove the definition from the policy and simply reference the definition in the Transportation Policy Plan.
- There has been feedback from TAB members that it does not make sense for TAB to hear the details of routine amendment requests and that it might be better for these to be included on the consent agenda.

A proposed updated policy addresses these concerns. Included in the policy is "the project is not a regionally-significant project." Barbeau suggested that language could be added allowing for streamlining if a change does not impact regional significance. Lux suggested that such language should be added.

Kosluchar asked what TAC Executive Committee's role is. Barbeau replied that the committee currently determines whether a request can be streamlined, though the proposed policy would take the committee out of that role.

Hiniker asked who determines whether a request can be streamlined to which Barbeau replied that this would entail staff moving items to TAC, which would have the decision.

MOTION: It was moved by Koutsoukos and Seconded by Lux, to recommend approval of the updated policy with inclusion of allowing for streamlining if a change does not impact regional significance. **Motion carried unanimously**.

VI. INFORMATION

1. ADA Small Business Opportunity Pilot

Mary Schmidt from MnDOT presented on MnDOT's ADA Small Business Opportunity Pilot, which trains small businesses to be able to contract on small Americans with Disabilities Act (ADA) projects.

Hiniker suggesting exploring separating work for outreach and education as a way to provide more opportunities to small businesses. Koster asked how MnDOT's list of participants can be provided to cities and counties, to which Schmidt said that the list can be shared and added that firms completing projects for other agencies is good for MnDOT's program.

2. 2020 Meeting Schedule – October Meeting

Barbeau said that the October meeting would be scheduled for the 15th, six days before TAB. Koutsoukos added that in October, the committees may be working through Regional Solicitation funding scenarios, so it is probably best to move the meeting back a week. Members agreed to move the meeting back to October 22.

VII. OTHER BUSINESS

Steve Peterson from Met Council said that the Council is soon going to update the Transportation Policy Plan (TPP).

Peterson provided an update on the Regional Solicitation Before/After Study, Phase 2, which is tentatively slated for the following tasks:

- 1. Analyze results from funded Reg Sol and HSIP projects for safety, delay, and other benefits.
- 2. Identify what happened to unfunded projects?
- 3. Use Streetlight data to identify bicycle/ped volumes on completed projects. Is "potential usage" being measured in the best manner?
- 4. Develop a list of 20 Crash Modification Factors that can help applicants fill out safety measure.
- 5. Use aerial photography to capture before and after project conditions.
- 6. Identify ways to simplify the application and process.

Ashford suggested looking at crashes per vehicle mile. Hiniker suggested finding a way to rate impacts on people, as opposed to traffic, providing the example of considering re-weighting peak vs. off-peak traffic. Jenson suggested identifying projects with regional benefit. Pieper suggested exploring actual cost versus cost submitted. Kosluchar asked whether unique projects are going to be a part of the study, to which Peterson replied that this is not the plan, but it could be considered. Erickson suggested exploring the rationales for program year extensions as they relate to project readiness.

Koutsoukos said that workshops will be held for Regional Solicitation applicants on January 28 and 31.

VIII. ADJOURNMENT

MOTION: It was moved by McCartney and seconded by Ashfeld to adjourn the meeting. **Motion carried unanimously** and the meeting was adjourned.

Joe Barbeau Recording Secretary

of the Metropolitan Council of the Twin Cities

ACTION TRANSMITTAL No. 2020-11

DATE: February 13, 2020

TO: TAC Funding & Programming Committee

PREPARED BY: Joe Barbeau, Senior Planner (651-602-1705)

SUBJECT: Scope Change Request for Metro Transit's Route 63 Service

Improvement Project

REQUESTED ACTION:

Metro Transit requests a scope change for its Route 63 service improvement project (SP # TRS-TCMT-21B) to reduce the number of buses purchased and add Route 323, which replaces a portion of Route 63 and extends new service into Maplewood and

Woodbury.

RECOMMENDED ACTION:

That the TAC Funding & Programming Committee recommend to TAC:

- 1. Approval of Metro Transit's Route 63 service improvement project's (SP # TRS-TCMT-21B) scope change request to reduce the number of buses purchased and add Route 323, which replaces a portion of Route 63 and also extends new service into Maplewood and Woodbury.
- 2. A reduction in the federal award of \$776,844 (from \$6,122,444 to \$5,345,600) to reflect a lower total project cost.

BACKGROUND AND PURPOSE OF ACTION: Metro Transit was awarded \$6,122,444 in Congestion Management Air Quality (CMAQ) Program funds to improve Route 63 (See Map 1) for the 2021 fiscal year in the Transit Expansion category as part of the 2016 Regional Solicitation. The project's primary purpose is to improve the frequency of service to every 15 minutes for most of the day on weekdays and Saturdays. Currently, the route operates at 20-minute intervals on weekdays and every 20 to 30 minutes on Saturdays and Sundays.

In anticipation of the new service, Metro Transit completed public outreach in the summer of 2019. Feedback received from residents included a desire to extend the service through Maplewood and Woodbury into many areas not currently served by a suburban local route. The extension of service would connect new residents to several new destinations, including a hospital, commercial/retail area, express service to downtown St. Paul, and the future Gold Line.

Based on public input, Metro Transit is requesting a scope change that would reflect the following changes:

- End Route 63 at Sun Ray Transit Center, removing the easternmost 2.8 miles from the 16.9-mile route. See Maps 2 and 3.
- Establish a suburban-local route, Route 323, from Sun Ray Transit Center, along the removed portion of Route 63and then extend service into Maplewood and Woodbury. This would run every 30 minutes. The route would be seven miles, including 4.2 miles of new coverage. See Maps 2 and 3.

- Reduce the number of buses purchased from five to three. The shortened Route 63 will be able to run improved service with no new buses. New buses are only needed for Route 323. See Table 2.
- Use \$526,551 of CMAQ funding available in 2020 due to a project completed under budget, enabling service to start in the summer of 2020.

Table 1: Weekday/Saturday Service Frequency comparison (minutes)

Segment	Current	Original Application	Scope Change
West of Sun Ray	20, 20-30	15	15
East of Sun Ray	20, 20-30	15	30
Maplewood/Woodbury	N/A	N/A	30

The original cost estimate in the funding application, including local match, was \$7,653,055. It is currently in the 2020-2023 TIP at this amount. The proposed update would bring the cost to \$6,682,000 and reduce the federal allotment by \$776,844.

Table 2: Cost Estimates

	Original Application	Scope Change
Operating Route 63 Route 323	\$4,163,000 N/A	\$2,028,000 \$3,139,000
Vehicles Route 63 Route 323	\$3,490,000 N/A	\$- \$1,515,000
TOTAL Federal	\$7,653,000 \$6,122,444	\$6,682,000 \$5,345,600

RELATIONSHIP TO REGIONAL POLICY: Projects that receive funding through the Regional Solicitation process are subject to the Scope Change Policy. The purpose of this policy is to ensure that the project is designed and constructed according to the plans and intent described in the original application. The scope change policy allows project sponsors to adjust their projects as needed while still providing substantially the same benefits described in their original project applications.

A TIP amendment accommodates this request.

STAFF ANALYSIS:

<u>Approval/Denial of the Scope Change</u>: Staff recommends approval of the scope change and has provided the following analysis of the impact of the proposed changes in Table 3.

Five projects were funded in the Transit Expansion category. This project ranked third with 568 points, 130 points higher than the highest un-funded project. Therefore, it is probable that the project would have been funded.

Table 3: Scoring Analysis

#	Measure	Original Score	Scope Change	Notes
1A	Job/Manu/Education Connect	50	++	323 connects with a hospital, and several major retail and commercial centers
1B	Transit connectivity	34	++	323 connects with three express routes and the future Gold Line
2	New Annual Riders	76	+	
3A	Socio/Economic (Benefits/Impacts)	126	-	
3B	Housing	70	-	323 includes suburbs, which brings the average housing score down from the route only going through St. Paul
4A	Emissions reduction	153	+	
5A	Multimodal Connections/Elements	0	0	
6	Risk Assessment Form	50	0	
SUBT	TOTAL	559		
7	Cost Effectiveness	9	N/A	
TOT	AL	568	+++	

^{*0 =} no change

The request is most likely an improvement to the project overall, as it covers more length and connects to more routes and destinations, including a hospital, major retail and commercial centers, and the future Gold Line. Note, however, that service will be diminished on the 2.8 miles being shifted from route 63 to 323. This service will be reduced from 20- to 30-minute service and will require a transfer to get to the remaining Route 63.

<u>Funding</u>: Staff recommends reducing the original federal award of \$6,122,444 by \$776,844, (the new federal award amount is recommended to be \$5,345,600). This reduction reflects 80% of the new, lower total project cost of \$6,682,000. Given that the other changes to the project scope resulted in a "large improvement" of the project's score and value to the region, it is difficult to justify an additional reduction in award amount due to these changes, some of which were positive (i.e., extending the service into Maplewood and Woodbury with many new destinations) and some of which were not (i.e., reducing frequency on a portion of the route relative to the original application).

ROUTING

ТО	ACTION REQUESTED	COMPLETION DATE
TAC Funding & Programming Committee	Review & Recommend	
Technical Advisory Committee	Review & Recommend	
Transportation Advisory Board	Review & Approve	

⁺⁼ small improvement, ++ = moderate improvement, +++ = large improvement

^{- =} small diminishment, -- = moderate diminishment, --- = large diminishment



February 3, 2020

Mr. Paul Oehme Chair, TAC Funding and Programming Committee Metropolitan Council 230 East 5th Street St. Paul, MN 55101

Re: Scope Change Request

05190 TE - Route 63 Service Improvement Cities of St. Paul, Maplewood and Woodbury

Ramsey and Washington Counties

Dear Mr. Oehme:

Metro Transit respectfully requests that the Metropolitan Council TAC Funding and Programming Committee consider the attached Scope Change Request for the above reference project at its February 20 meeting. This request includes project scope modifications to Route 63 operating and vehicle requirements. Additionally, we plan to advance implementation of these improvements to 2020.

Metro Transit applied for federal funding through the 2016 Regional Solicitation and was selected to receive \$6.1 million in federal funds to improve service on streets currently served by Route 63. Specifically, the project scope was to increase weekday and Saturday frequency up to every 15 minutes, along with five additional buses to operate the new service along University Ave, Cretin Ave, Grand Ave, 5th/6th St, 3rd St East, and McKnight Rd in St. Paul.

Better Bus Routes

Since that application Metro Transit initiated the Better Bus Routes program and selected Route 63 as its second project. The goal of the program is to improve local bus routes by reducing stops, improving accessibility and providing more shelters. These changes, both on and off the bus, are done to make service better, faster and more reliable.

Beginning in 2019 project staff from Metro Transit and City of St. Paul reviewed Route 63 and identified several areas for improvement. Among other items, project staff recommended changes to Route 63 east of the Sun Ray Transit Center. The existing route structure is confusing for both operators and customers. Service levels exceed demand, while there was no service at all to major destinations just east of McKnight Rd.

Instead, Route 63 will end at the Sun Ray Transit Center, with coverage east of Sun Ray provided by a new suburban local route, Route 323. Route 323 would then be extended to serve new markets in Maplewood and Woodbury. Rider outreach showed strong support for these changes.

Key benefits of the project as amended:

 Provides new access to employment and retail destinations, including Woodwinds Hospital and Woodbury Village

A service of the Metropolitan Council



- Improves connections at Sun Ray Transit Center with other local bus routes
- Provides reliable restroom facility for operators at Sun Ray Transit Center
- Simplifies Route 63's alignment and schedule
- Serves all the same streets as indicated in Regional Solicitation application
- Maintains frequency improvements along the core segments of Route 63 (Transit Market Areas I & II)
 as originally proposed
- Provides appropriate level of service east of Sun Ray (largely Transit Market Area III)

Other considerations:

- Riders on new Route 323 will require a transfer for destinations west of Sun Ray Transit Center (can be mitigated by timed connections)
- Reduced frequency on Route 323 relative to existing Route 63 service

These improvements will provide better service for our customers, but necessitate a change to the original project scope. The enclosed information provides more detail on our request. If you have any questions or require additional information, please contact me at 612-349-7797 or adam.harrington@metrotransit.org.

Sincerely,

Adam Harrington
Director, Service Development
Metro Transit



Scope Change Request 05190 TE – Route 63 Service Improvements

Project Location

See enclosed maps.

Project Scope – Original

Improve the frequency of Route 63 up to every 15 minutes for most of the day on weekdays and Saturdays. The request included five additional buses to operate the increased service.

<u>Project Scope – Amended</u>

Improve the frequency of Route 63 up to every 15 minutes for most of the day on weekdays and Saturdays. End Route 63 at Sun Ray Transit Center, with coverage east of Sun Ray provided by a new suburban local route, Route 323. Route 323 would then be extended to serve new markets in Maplewood and Woodbury.

Table 1: Comparison of Weekday/Saturday Frequencies by Segment

	Original	Amended
West of Sun Ray	15	15
East of Sun Ray	15	30
Maplewood/Woodbury	-	30

Table 2: Revised Cost Estimates

	Original	Amended
Operating		
Route 63	\$4,163,000	\$2,028,000
Route 323	\$-	\$3,139,000
Vehicles		
Route 63	\$3,490,000	\$-
Route 323	\$-	\$1,515,000
Total	\$7,653,000	\$6,682,000

Figures include 20% local match

Operating Changes

- Service on Route 63 will be improved per the original project scope, but the route will be shortened to end at Sun Ray Transit Center.
- Route 323 was not included in the original project scope. Approximately 47 percent of Route 323 will
 be replacement service of Route 63, while the other 53 percent is new all-day local service east of
 McKnight Rd.

Vehicle Changes

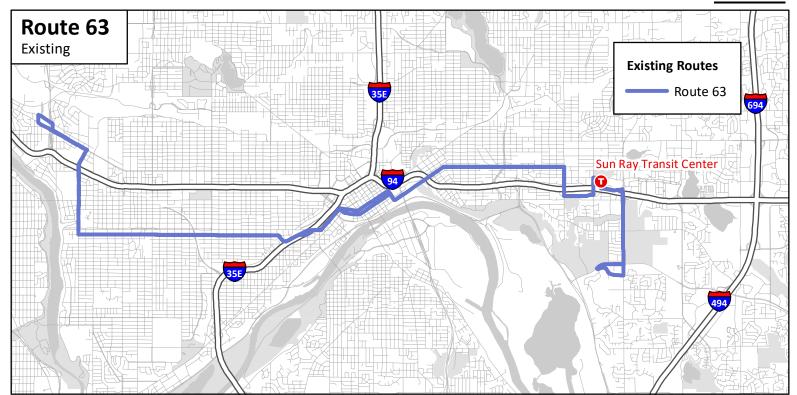


- The original project scope included (5) 40' hybrid-electric buses. Through a combination of shorting the route and improving the speed of service we can increase the frequency without the need for additional vehicles.
- Route 323 will require (2) 30' buses, plus one additional spare.

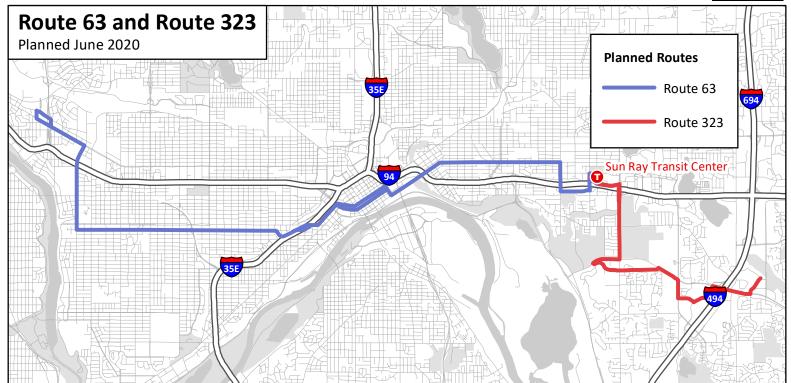
Scope Change Request

05190 TE - Route 63 Service Improvements Comparison of Project Locations

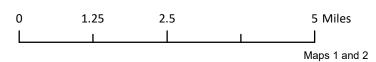
MAP 1



MAP 2





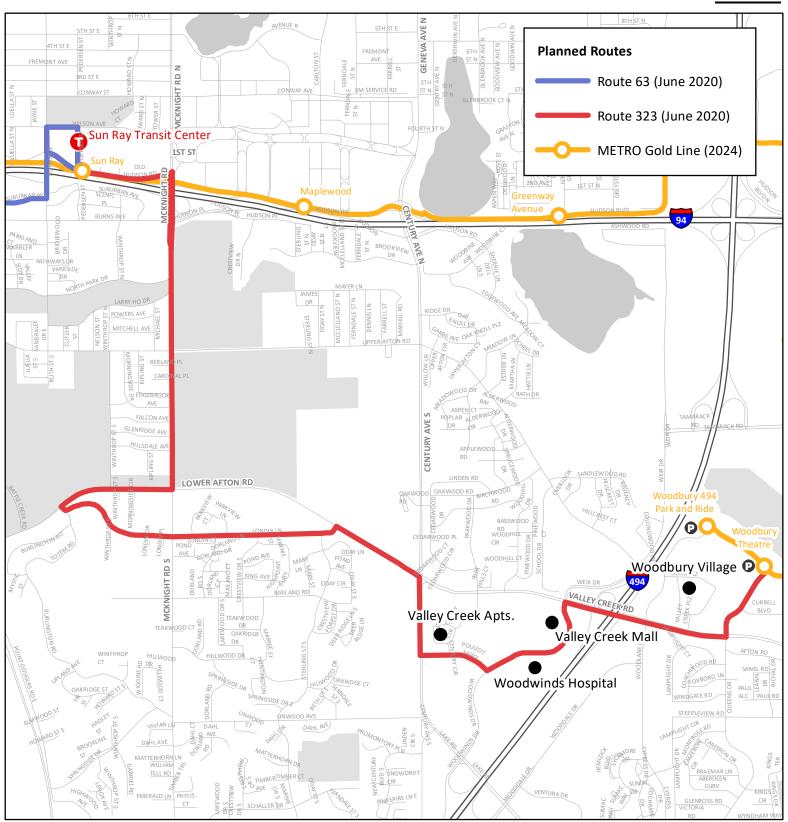




Scope Change Request

05190 TE - Route 63 Service Improvements Route 323 Key Destinations and Connections

MAP 3









Scope Change Policy

Projects awarded federal funds by the Transportation Advisory Board (TAB) as part of the Regional Solicitation or Highway Safety Improvement Program (HSIP) are often concepts that are further developed in the period from project application to implementation. Project sponsors work on activities after funds are awarded such as preliminary and final design, environmental studies, and public involvement. Sometimes during this project development process, the project sponsor wants to make changes to the scope of the project. Changes to a project's scope could affect its benefits to the region. It is important to the TAB that any change in a project's scope does not substantially reduce these benefits.

Scope Changes

A scope change is any revision that changes the physical characteristics of the project and has the potential to add to or detract from the project's benefits to the region. The project description in the original funding application serves as the project's scope for the purpose of determining whether a scope change is needed.

Three Levels of Scope Changes

There are three types of scope changes described below. The TAB Coordinator, the MnDOT Metro District Federal Aid Program Coordinator (for Federal Highway Administration-administered projects), and the Transit Federal Grants Manager (for Federal Transit Administration-administered projects) will determine the type of scope change.

Administrative scope changes:

Minor changes that typically occur when projects move into detailed design or minor additions such as project amenities or aesthetic items do not need TAB Coordinator/Metropolitan Council staff review. The MnDOT Metro District Federal Aid Program Coordinator or Metropolitan Council Transit Federal Grants Manager can review and approve minor changes including, but not limited to:

- Removing or adding of minor items, such as benches, waste receptacles, signage, etc.
- Changing the design of aesthetic items, such as lighting, railings, benches, etc.
- Adding items due to normal detailed design of a project such as noise walls, retaining walls, storm sewers, bike racks, wi-fi, etc.
- Adding new project elements/improvements funded through another source (e.g., a change
 to a more fuel-efficient bus) or combining a TAB-funded project with one or more separate
 non-TAB funded projects to improve efficiency and reduce construction impacts (e.g.,
 combining a roadway project with an adjacent mill and overlay project). These changes
 should not detract from the original scope.
- Changing the width of a bike path (must still meet standards).

Informal scope changes:

Scope changes that exceed the standards of administrative scope changes are brought for a consultation between the TAB Coordinator; the MnDOT Metro District Federal Aid Program Coordinator or Metropolitan Council Transit Federal Grants Manager; and Council staff. The consultation will determine if the scope change can be approved through an informal process or if a formal scope change request is needed due to the potential negative impacts of the changes. An informal scope change may include, but is not limited to:

 Slightly changing a bike or pedestrian trail route alignment while still making the major connections.

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- Combining two separate TAB-funded projects, provided this does not threaten to negatively impact either project.
- Changing the termini of a project, provided this does not threaten to negatively impact the project.
- Changing a pedestrian overpass to an underpass; or an underpass to an overpass.
- Changing an intersection treatment (e.g., a traffic signal to a roundabout) or an interchange design.
- Changing bus length, fuel source, type, or number, provided there is no resulting decrease in transit service.
- Reversion to the original scope (or a previously approved scope change). Note that any federal funds taken away in a previous scope change cannot be returned; the entire scope would need to be completed with the reduced federal contribution.

Formal scope changes:

Any change that may significantly alter the estimated benefits to the region (particularly if altered to the degree where the revised scope may not have justified its original selection) must go through the formal committee process and be approved by TAB. A formal scope change request process is likely to be needed in instances including, but not limited to:

- Removing significant elements such as a trail, sidewalk, pedestrian bridge, traffic signal, transit stop, transit vehicle, etc.
- Adding elements that detract from the value or intent of the original application.
- Removing proposed access closures, if the closures are described in the project description and used to score points in the application.
- Reducing the frequency or hours of transit service.
- Reducing the number of parking spaces in a park-and-ride facility.
- Changing the number of travel lanes.
- Shifting from a bridge replacement project to a bridge rehabilitation project.
- Changing designs from an off-road trail to on-road bicycle route.

Ineligible Requests

The TAB Coordinator may inform the project sponsor that the proposed revisions exceed the limits of a scope change and that the proposed change constitutes a new project. Such requests will not be processed through the TAC and TAB and that the original project should either be completed or withdrawn. If the project is to be withdrawn, the project sponsor should submit a formal letter to the TAB Coordinator stating that the project is being withdrawn and federal funds are being returned to the region for reallocation. A proposed change will be considered a new project and therefore not eligible for a scope change if it is:

- Relocating the project away from the defined problem, need, or location, such as switching transit start-up service from one market area to another
- Moving funding from one project to another, such as moving funds awarded to a project on County Road A to the same, similar, or different work on County Road Z.
- Eliminating the primary improvement proposed in the project description (e.g., a bridge will not be improved for a project submitted in the bridge application category or a trail will not be improved in the multiuse trails application category).

Steps and Requirements to Determine Scope Change Type and Request a Formal Scope Change

The following steps must be followed to determine a scope change type and whether the proposed change needs to go through the formal scope change request process. It should be noted that once a MnDOT Metro District State Aid project has been authorized, the project scope cannot change.

- 1. The project sponsor informs the TAB Coordinator and the MnDOT Metro District Federal Aid Program Coordinator or the Metropolitan Council Transit Grants Manager that it wants to change a project. At this time, the MnDOT Metro District Federal Aid Program Coordinator or the Metropolitan Council Transit Federal Grants Manager may determine that the change is minor in scope and no further action is needed. If the requested change is more substantial, the project sponsor will be asked to provide a written description of the proposed scope change and a map or schematics showing how the proposed scope change affects the project.
- 2. Upon this submittal, the TAB Coordinator will consult with the MnDOT Metro District Federal Aid Program Coordinator or the Metropolitan Council Grants Manager to discuss the extent of the changes and whether the scope change will require a formal scope change request. The TAB Coordinator will contact the project sponsor and inform them whether the proposed modification can be accomplished administratively or whether it will trigger a formal scope change request and/or TIP amendment 1 request.
- 3. For a formal scope change request, the project sponsor must provide data on the revised project scope to the TAB Coordinator, including a complete project description; location map; project layout, sketches, or schematics; and a discussion of project benefits being retained, gained, or lost. Applicants must provide a cost breakdown of the TAB-eligible items proposed for removal and addition (in the year of costs used in the original application) using the attached project cost worksheet. Failure to do so can result in the request not being included on the TAC Funding & Programming Committee's agenda.
- 4. Council staff and will conduct an analysis of the requested change, including the background information provided by the project sponsor for consideration by the TAC Funding & Programming Committee. The Committee will discuss the staff analysis and recommend one the following to TAC and TAB (see detailed sections below and on the following page about determining scope change and federal funding amount recommendations):
 - Approval of the scope change as requested;
 - Approval of the scope change request with modifications to the scope and/or a recommended reduction of federal funds; or
 - Denial of the requested change

Determining the Scope Change Approval Recommendation

To determine whether the scope change request should be approved, the TAC Funding & Programming Committee will discuss the merits of the proposed changes and weigh the overall

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¹ A TIP amendment request is only required to accompany a scope change request if the project is in the current fiscal year and either the project description changes in the TIP, the project termini change by 0.3-mile or greater, or the funding amount changes enough to meet federal TIP amendment thresholds.

benefits or reduction of benefits to the region. Council staff will provide a written analysis regarding the potential impacts of the proposed changes. The affected scoring measures, except for cost-effectiveness (any cost increases are paid for by the local agency and not federal funds), will be analyzed by Council staff to determine if each sub-score would have likely increased, decreased, or stayed the same with the scope change (a precise rescoring of the application is not possible since applications were scored against each other at a specific moment in time). Council staff will then evaluate whether the total score would have likely increased, decreased, or stayed roughly the same based on the summation of the sub-score changes. This relative change in the total score will be compared to the scoring gap between the project's original score and the highest unfunded project in the same application category. The TAC Funding & Programming Committee may consider recommending denial of the scope change request if it is clear that the project would have scored fewer points than the highest-scoring unfunded project (i.e., the project would have been undoubtedly below the funding line). Council staff may confirm their findings with the original scorer of the measure and/or request additional information of the applicant, if necessary. Project sponsor must attend TAC Funding & Programming, TAC, and TAB meetings, where the item is on the agenda.

Determining the Federal Funding Amount Recommendation

To determine whether federal funds should be recommended to be removed from a project, Council staff will assess the project elements being reduced or removed and provide this information to the TAC Funding & Programming Committee. While adding eligible project elements is permitted, federal funds cannot be shifted away from any removed elements to new project elements unless the removed elements are being done as part of some other programmed project. Federal funds cannot be added to a project beyond the original award.

Applicants must provide a revised cost estimate including a cost breakdown of the items proposed for removal using the attached project cost worksheet. Any removed or added items should use the costs in the year requested in the original application instead of the year of construction costs. Regional Solicitation projects must continue to maintain at least a 20% non-federal match, while HSIP projects must continue to maintain at least a 10% non-federal match.

Staff may recommend funding reduction options, if applicable, based on the federal share of the cost of the project elements being removed or the proportionate reduction of project benefits in cases in which that is discernable (e.g., number of parking spaces or length of sidewalk) and/or another method developed by staff or the TAC Funding & Programming Committee. A recommendation will move from TAC Funding & Programming Committee to the TAC and TAB for approval. If applicable, a TIP amendment request will also be moved for approval through the Metropolitan Council.

ATTACHMENT 1: FUNDING DATA FOR SCOPE CHANGE REQUEST

Original Application:		
Regional Solicitation Year		
Application Funding Category		
HSIP Solicitation?	Yes	No
Application Total Project Cost		
Federal Award		
Application Federal Percentage of Total Project Cost		
Project Elements Being Removed:		
	Original Cost	Application
New Project Elements:		
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ACTION TRANSMITTAL – 2020-12

DATE: February 12, 2020

TO: TAC Funding & Programming Committee

PREPARED BY: Joe Barbeau, Senior Planner (651-602-1705)

2020-2023 TIP Amendment for Metro Transit: Route 63 Service SUBJECT:

Improvement

REQUESTED Metro Transit requests an amendment to the 2020-2023

ACTION: Transportation Improvement Program to reduce the length of Route

63, reduce the number of buses purchased, add Route 323, and split into two project years its Route 63 Service Improvement project

(SP # TRS-TCMT-21B).

MOTION:

RECOMMENDED That the TAC Funding & Programming Committee recommend approval of an amendment into the 2020-2023 Transportation Improvement Program to reduce the length of Route 63, reduce the number of buses purchased, add Route 323, and split into two project years Metro Transit's Route 63 Service Improvement project

(SP # TRS-TCMT-21B).

BACKGROUND AND PURPOSE OF ACTION: This amendment is needed to reflect changes in project scope and cost for Metro Transit's CMAQ/TAB-funded Route 63 service improvement project. The project is currently programmed to improve the frequency of service on Route 63 (St. Paul) to every 15 minutes for most of the day on weekdays and Saturdays. The requested amendment would reflect Action Transmittal 2020-11, a scope change to:

- End Route 63 at Sun Ray Transit Center, removing the easternmost 2.8 miles from the 16.9-mile route.
- Establish a suburban-local route, Route 323, from Sun Ray Transit Center, to Woodburv.
- Reduce the number of buses purchased from five to three. The shortened Route 63 will not need new buses. New buses are only needed for Route 323.
- Increase operating cost.
- Use \$526,551 of CMAQ available in 2020 due to a project completed under budget. enabling service to start in the summer of 2020. The rest would remain in 2021.
- Reduce the total project cost from \$7,653,055 to \$6,682,000, which would reflect a federal reduction from \$6,122,444 to \$5,345,600

RELATIONSHIP TO REGIONAL POLICY: Federal law requires that all transportation projects that will be funded with federal funds must be in an approved TIP and meet the following four tests: fiscal constraint; consistency with the adopted regional transportation Plan; air quality conformity; and opportunity for public input. It is the TAB's responsibility to adopt and amend the TIP per these requirements.

STAFF ANALYSIS: This TIP amendment meets fiscal constraint because the federal and local funds are sufficient to fully fund the project. The amendment is consistent with the Transportation Policy Plan, adopted by the Metropolitan Council on April 24, 2019, and with FHWA/FTA conformity determination established on May 9, 2019. The Minnesota Interagency Air Quality and Transportation Planning Committee determined that the project is exempt from air quality conformity analysis. Public input opportunity for this amendment is provided through the TAB's and Council's regular meetings.

ROUTING				
ТО	ACTION REQUESTED	DATE COMPLETED		
TAC Funding & Programming Committee	Review & Recommend			
Technical Advisory Committee	Review & Recommend			
Transportation Advisory Board	Review & Recommend			
Metropolitan Council Transportation Committee	Review & Recommend			
Metropolitan Council	Review & Adopt			

Please amend the 2020-2023 Transportation Improvement Program (TIP) to amend this 2021 project as two projects. This project is being submitted with the following information:

PROJECT IDENTIFICATION:

	Current Project	Proposed Project 1	Proposed Project 2
Fiscal Year	2021	2020	2021
ATP/Dist	Metro	Metro	Metro
Route System	BB	BB	BB
Project Number	TRS-TCMT-21B	To be assigned	TRS-TCMT-21B
Agency	Metro Transit	Metro Transit	Metro Transit
Description	Purchase five buses and operate service for transit improvement on University Ave, Cretin Ave, Grand Ave, 5th/6th St, 3rd St East, and McKnight Rd in St Paul	Operate service for transit improvement on University Ave, Cretin Ave, Grand Ave, 5th/6th St, and 3rd St East in St Paul. New suburban local route to replace existing service on Old Hudson Rd and McKnight Rd, extended along Lower Afton Rd, Century Ave, and Valley Creek Rd in St. Paul, Maplewood and Woodbury	Purchase three buses for new suburban local service on Old Hudson Rd, McKnight Road, Lower Afton Rd, Century Ave, and Valley Creek Rd in St. Paul, Maplewood and Woodbury and operate service for transit improvement on University Ave, Cretin Ave, Grand Ave, 5th/6th St, and 3rd St East
Prog	TR	TR	TR
Type of Work	Transit	Transit	Transit
Prop Funds	STBGP	STBGP	STBGP
Total \$	7,653,055	658,189	6,023,811
FTA\$	6,122,444	526,551	4,819,049
Other \$	1,530,611	131,638	1,204,762

PROJECT BACKGROUND:

1. Briefly describe why amendment is needed (e.g., project in previous TIP but not completed; illustrative project and funds now available; discretionary funds received; inadvertently not included in TIP).

This amendment is needed to add suburban local Route 323 (service along Old Hudson Rd, McKnight Road, Lower Afton Rd, Century Av, and Valley Creek Rd in St. Paul, Maplewood and Woodbury) to the Transportation Improvement Program and to reduce the number of buses needed and the length of existing local Route 63 by moving the terminus from the intersection of McKnight Road and Londin Lane to the intersection of Old Hudson Road and Pedersen Street (Sun Ray Transit Center). The current project includes an improvement in service to 15-minute headways on weekdays and Saturdays on Route 63. This will now only occur on the reduced route. New buses will be used for Route 323, while the reduced Route 63 no longer needs additional buses.

- 2. How is Fiscal Constraint Maintained as required by 23 CFR 450.216 (check all that apply)?
 - New Money
 - Anticipated Advance Construction
 - ATP or MPO or MnDOT Adjustment by deferral of other projects
 - Earmark or HPP not affecting fiscal constraint
 - Other X

Total project cost, and federal funding, is reduced. Therefore, fiscal constraint is maintained.

CONSISTENCY WITH MPO LONG RANGE PLAN:

This amendment is consistent with the Metropolitan Council Transportation Policy Plan, adopted by the Metropolitan Council on April 24, 2019, with FHWA/FTA conformity determination established on May 9, 2019.

AIR QUALITY CONFORMITY:

- Subject to conformity determination
- Exempt from regional level analysis



• N/A (not in a nonattainment or maintenance area) X

Exempt Project Category T-10. Purchase of new buses and rail cars to replace existing vehicles or for minor expansions to the fleet.

REGIONAL SOLICIATION: DRAFT SCHEDULE FOR REGIONAL STUDY & PLAN CHANGE OPPORTUNITIES

Table 1: Specific Location/Corridor Changes

#	System/Network	Priorities First Established	Future Opportunities for Change
1	Regional Bicycle Transportation Network (RBTN)	2015	Applicants will be able to propose changes before each Reg Sol cycle.
2	Regional Bicycle Barrier Crossing Improvement Areas	2019	Applicants will be able to propose changes before each Reg Sol cycle.
3	Regional Truck Freight Corridors	2017	Applicants will be able to propose changes before each Reg Sol cycle.

Table 2: System Changes

#	System/Network	Priorities First Established	Future Opportunities for Change
3	Principal Arterial Intersection Conversion Priority Tiers	2017	An update of this study is planned to begin in 2021/2022. After this update, the study results will be planned to be updated with new data before each Reg Sol cycle.
4	Congestion Management Safety Plan (CMSP) Opportunity Areas	2017	The CMSP Plan will be updated every five or more years as projects on the list are constructed or as conditions change.
5	Congestion Management Process (CMP) Speed Data	2018/2019	The roadway network will be updated with new data before each Reg Sol cycle. The CMP Committee is working on additional congestion measures that could be considered by TAB for 2022.



CHAPTER 14 WORK PROGRAM

The Metropolitan Council will carry out or participate in many studies and plans over the next three years. This is not an exhaustive list of all work to be completed by the Metropolitan Council, but rather a list of projects that will contribute to the work of the Metropolitan Council and will likely require coordination among agencies. Several ongoing work items that are regularly conducted by the Metropolitan Council are not included here. The studies listed here will be used to gather additional information and perform further analysis to inform future revisions to this policy plan and to the next update of the Regional Development Guide to occur in 2023-2024.

Highway Related Studies

Congestion Management Process (CMP) Plan

The Congestion Management Process (CMP) is a cooperative, cohesive, data-driven, and regionally agreed upon process to identify and mitigate congestion along the transportation network. To assist in strengthening the regional congestion management process, the Metropolitan Council has an item in the work program specifically addressing CMP-related items.

In 2018-2019 the Council, with assistance and input from a CMP Technical Advisory Committee, developed a broad plan to determine the extent of the CMP network; developed methodologies for analyzing and measuring both recurring and non-recurring congestion; established a comprehensive data collection program for regional coordination and monitoring; and assessed the effectiveness of previous CMP strategies in mitigating congestion within the region. One result of this effort is a plan that is organized around the federal eight-action step process and will serve to guide the regionally coordinated Congestion Management Process. This plan will continue to be refined with a new methodology using speed and congestion data to determine the extent and duration of congestion on regional corridors.

The Metropolitan Council will also assess the thresholds for determining if a roadway is congested, particularly on the minor arterial network. Means in which to disseminate this information to the public and effectively communicate to policymakers will continue to be developed. This includes the development of a performance dashboard and an evaluation of the region's transportation system in relation to peer regions. In addition, the Council will develop a detailed handbook of the corridor analysis methodology, which will contain sufficient detail to allow stakeholders such as MnDOT, the cities, and counties to conduct CMP corridor analyses in a consistent manner.

Highways Performance Measures and Funding Decisions

As highway assets degrade, more and more of the transportation revenues are needed to preserve the existing system. This effort will look at existing pavement and bridge performance targets. It will also

analyze the assumptions used in the pavement and bridge models to allocate resources to see if they adequately account for the high amount of traffic and freight in the region.

The study will also examine and develop performance measures for regional mobility to see how they might play a role in MnDOT funding decisions. The goal is to identify a mobility need monetary value based upon performance measures and targets that can then be incorporated into the next Minnesota State Highway Investment Plan (MnSHIP) Update. This task would be a joint effort between MnDOT and the Metropolitan Council.

Assessment of Regional Congestion Mitigation Philosophy

This effort will include a public conversation about the region's current approach to highway congestion mitigation and building understanding, agreement and refinement as to how the region invests in congestion mitigation. The review will focus on policymaker input but will also include other technical stakeholders and the general public. Context on the issue will be provided through data on existing and future congestion, funding availability, and the trade-offs of pursuing different approaches moving forward. As part of the discussion, technology solutions, spot improvements, strategic capacity investments and the trade-offs between MnPASS and other lane expansion will be discussed. The results of this pubic discussion will refine or change the regional highway investment direction for inclusion in the 2050 TPP.

Regional Solicitation Projects Before and After Analyses

This project will assist the Council in evaluating the impact the Regional Solicitation has had on the region by evaluating actual project outcomes against the outcomes (criteria) evaluated through scoring measures during the project application and scoring process. It will examine the anticipated benefits of projects to the region in comparison to the actual benefits of the funded, constructed projects. This will assist in determining if the measures used in the Regional Solicitation are successful in garnering the desired outcomes or if the measures need to be modified to attain the desired outcomes.

Connected and Autonomous Vehicles

The advent of more connected vehicles, the rapid development of autonomous vehicles, and the evolution of new models of new transportation ownership/provision will have profound impacts on the region's transportation use, economics, and infrastructure. The Metropolitan Council is well positioned to convene regional stakeholders to formulate policy responses to technology change and to study impacts to all transportation modes and systems.

Collaboration among state, regional, local, and corporate stakeholders will be necessary to address the myriad of issues in how legislation, regulation, policy, and planning tools address issues across all transportation modes resulting from connected and autonomous vehicle adoption. The Metropolitan Council, with MnDOT, will work together on developing regional collaboration among all transportation stakeholders on connected and autonomous vehicle technology, deployment, policy, and planning. The collaboration may take the form of a new committee, a set of workshops, and dedication of staff resources.

Metropolitan Council staff will continue to participate in national conversations regarding connected and autonomous vehicles and will become local experts on planning efforts, integrating work being done by USDOT, the Association of Metropolitan Planning Organizations, the Transportation Research Board, researchers, other peer regions and states into regional planning work.

The following list of Work Program items are related to the topic of connected and autonomous vehicles. The field of vehicle automation continues to evolve rapidly. It is expected that any specific work plan will quickly become out-of-date, and these items will be revisited and potentially amended annually.

Scenario Development and Performance Measurement

Connected and autonomous vehicle development will be integrated into a performance-based planning framework. Measures will be developed to track the trajectory for various potential scenarios that the region, or parts of it, may be experiencing. Scenarios may include adoption rate of autonomous and/or connected technology, public acceptance of a particular technology, and the degree to which public and private shared mobility technologies exist and affect travel behavior. How and at what rate connected and autonomous vehicles will exist in the market in the planning horizon is uncertain, and planners and policymakers need to begin to plan for the possibility of multiple futures.

Integration into Congestion Management Process

Connected and autonomous vehicles scenarios will be integrated into potential Transportation System Management and Operations planning.

Emerging Truck Technologies

A review will be conducted of new and emerging technologies related to freight transportation. Among other issues, this review will include a planning and implementation assessment of automation technology for the commercial trucking industry. This effort will document current and planned deployment of autonomous trucks, the implications for street/highway planning, and the potential impacts to the freight transportation workforce.

Regional Transportation Research and Modeling

Travel Behavior Inventory Program

The Metropolitan Council has historically, in coordination with MnDOT and regional partners, conducted a battery of data collection to learn about where, how, when, how often, and why people in the region travel. The Travel Behavior Inventory (TBI) is used to provide policymakers and researchers current data about travel in the region and to develop updates to the region's travel demand forecasting models. During the last four years, the region has transitioned the TBI program from a decennial project to a continuing program of data collection and travel model improvement activities. The centerpiece of the TBI program will continue to be the biennial household travel survey, which began in 2018 with a second round of household travel surveys beginning in 2020. The travel data collected through these

household surveys will be analyzed and incorporated into the regional travel model. A transit on-board survey will be conducted every five years, with the next occurring in 2021 and a special generator travel survey of the airport will also be conducted in 2021. Other data collection activities may be done as custom surveys or as third-party data purchases.

Regional Travel Demand Model

Work will continue on implementing and enhancing the Activity Based Model that has been implemented over the past couple of years. Several projects to add analytical components to the model, in coordination with planning needs and to update the model in light of new survey data, will occur over the next five years including: implementing ActivitySim an open-sourced activity-based modeling software; implementing the federal STOPS modeling software for transitway corridor modeling; and improving the current Tourcast modeling software which serves as the backbone of the current activity-based travel demand model.

Transit Related Studies

Comprehensive Transit Financial Report

Minnesota Statute requires the Metropolitan Council to work with regional transit providers and funders to prepare a comprehensive report on metropolitan area transit finance every two years, starting with the first report submitted in 2018. The report will provide a catalog of all funding sources and expenditures related to transit in the metropolitan area. The report will include a section summarizing the status of "guideway" and "busway" projects (referred to as transitways in this plan) in the metropolitan area, including past and projected expenditures for each project and updates on project status. The report also includes an analysis of the performance of the transit network at the route and line level, along with reporting on performance standards including for farebox recovery.

Network Next

Metro Transit, the region's largest transit provider, is working on a multifaceted effort to develop a vision for their bus network for 2040. This effort will address a number of areas of potential investment in transit including transit service, bus rapid transit investment, customer facilities (e.g. bus stop shelters and transit centers), transit information, and possible relationships between transit and shared mobility. The outcome of these topics may have implications for regional planning, given the size and extent of Metro Transit's network, but two areas are of particular interest for future updates of the Transportation Policy Plan:

Local Bus Speed and Reliability Improvements The plan's strategies address the need to
work collaboratively as a region to build transit advantages that provide fast and reliability
transit as an alternative to single-occupant vehicles. Chapter 6, "Transit Investment Direction
and Plan," describes the extensive network of highway transitway advantages and
transitways, but there is not a significant discussion of transit advantages or other strategies
for providing faster, more reliable service on the local bus network. This component of

Network Next will assess the performance of routes and implement improvements to the local bus network (excluding corridors already examined, such as the arterial bus rapid transit corridors) to address reliability and speed issues. The results of this initiative, particularly the evaluation of implemented strategies on select local routes, will provide a better understanding of the impact of specific strategies that could be implemented on additional routes. This initiative may inform strategies in the Plan and Regional Transit Design Guidelines in Appendix G. The initiative will include collaborations with local municipalities and other stakeholders for implementation, since many options may involve changes to roadway design or operations. As the region's transit network continues to grow, the Metropolitan Council can also use this information to help local governments plan for effective transit service in their community.

• Arterial Bus Rapid Transit Network Update Successful implementation and operation of the A and C Lines has created significant interest in identifying and selecting new arterial bus rapid transit corridors. Metro Transit plans to include an evaluation of arterial BRT corridors in Network Next that will go beyond the five lines currently in development. The study will reevaluate corridors previously studied and will identify and evaluate new corridors for potential arterial BRT service. In partnership with agencies and local communities, an evaluation framework will include technical performance and corridor readiness factors. Study results are anticipated to guide prioritization and selection of the region's next arterial BRT lines. This study will advance in coordination with Metro Transit's Service Improvement Plan update that is also part of Network Next. The Metropolitan Council will work closely with local communities, transit riders, and the public to conduct this corridor evaluation.

Bus Service Allocation Study

The plan stresses the importance of transit investments in making progress toward the transportation goals for the region. However, there are different roles for transit that require different types of service with conflicting priorities with limited resources. One role transit can play is serving a limited number of the highest demand corridors, where land use and development can support strong ridership. Another role transit can play is providing access to a large number of people and jobs across the region to provide an alternative to driving, regardless of the ridership potential. The transit system can be designed to address these two roles on opposing ends of a spectrum, maximizing efficiency or maximizing coverage. The Metropolitan Council will work with regional transit providers to conduct a study that will analyze how current transit service is allocated between service meant to maximize efficiency and service meant to increase transit coverage. The study will explore the trade-offs of the different approaches, identify a target balance of investment, and identify possible transit solutions to serve areas of the region that can't be effectively served with fixed-route service.

Microtransit and Shared Mobility Access to Transit

One of the major challenges facing the Twin Cities is improving accessibility to underserved employment opportunities; areas that are difficult to serve cost effectively with fixed-route transit. The plan states that new advances in mobility technology should be used to complement the fixed-route

transit network. Emerging transportation technology has created new forms of "shared mobility", modes of transportation characterized by dynamic routing and the integration of improved user interaction with services. Examples of shared mobility modes include transportation network companies, bikeshare, and microtransit. The Metropolitan Council will work with regional transit providers, local governments, and regional employers to explore studies that fill in gaps in our knowledge of access to the regional transit system through emerging technologies and modes. Potential study areas include defining a role for shared mobility in the transportation system and how it can contribute to the plan's goals and objectives. The specifics of these studies will likely react to emerging technologies in shared mobility and will be identified as needs come up.

Mobility Hub Planning Guide

This project will develop a planning guide for regional stakeholders involved in the development of mobility hubs -- places where travelers can easily access and connect among multiple transportation options (including public transit, shared vehicles, and other modes). The project will document the various mobility hub design and implementation options and provide specific guidance for both regional and local stakeholders as they plan, design, implement, and manage mobility hubs within the different contexts they are being considered. The planning guide is needed to ensure a consistent and successful customer experience for mobility hubs across different jurisdictions and in different contexts. The project will also deliver an analysis of local land use and transportation contexts where mobility hubs are best supported. The guide will also include an analysis of existing transportation services, land use, demographics and other factors in order to highlight areas with the highest need for and the most benefit from mobility hubs.

Downtown Transit Capacity and Transit Advantages Analysis

One of the goals in Chapter 6, "Transit Investment Direction and Plan," is to improve access to destinations. Consequently, the strategies to do so include expanding the transitway and bus network that connects in downtown Minneapolis and downtown Saint Paul. There are 16 local bus routes that travel through downtown Minneapolis or Saint Paul and 16 local bus routes that terminate in either downtown along with the substantial number of peak period express bus routes. The Blue Line and Green Line will travel through downtown Minneapolis when the light rail extensions open. There are also several other transitways planned to serve downtown Minneapolis or downtown Saint Paul. The Marquette and 2nd Avenue express bus lanes provide a good example of adding transit advantages in downtown to address capacity, reliability, or travel time concerns. This analysis will consider strategies for maximizing transit capacity in downtown Minneapolis and potentially downtown Saint Paul, as well as strategies to increase reliability and speed of transit in or passing through the downtowns. The cities of Minneapolis and Saint Paul will be partners on this work and these efforts may be integrated into local planning efforts as opposed to a Metropolitan Council-led project.

Bicycle and Pedestrian Related Studies

RBTN Bikeway Facility Guidelines and Measures

The previous 2040 TPP describes a range of appropriate bikeway facility types for the Regional Bicycle Transportation Network (RBTN), but stops short of offering guidance as to where in the region, or along which roadway categories, specific treatment types may be preferred. In addition, requests for adding new corridors or alignments to the RBTN have been evaluated using a set of mostly qualitative regional bikeway guiding principles. Reviews have also looked conceptually at how new alignments would alter the existing spacing and route directness of RBTN alignments and corridors. As the RBTN is expected to expand to serve regional growth, formalized measures for evaluating corridor spacing and route directness are needed to improve regional network planning and to supplement the review process for future RBTN additions. This study will be conducted to fulfill two primary purposes:

- 1. Provide recommendations for preferred facility treatments on RBTN alignments in urban, suburban, and rural areas hosting the RBTN, and
- 2. Develop recommended guidelines for applying quantifiable measures when evaluating potential RBTN corridors and alignments

Regional Bicycle System Inventory Update

The Regional Bicycle System Inventory was first compiled by the seven metro counties in collaboration with Met Council in 2016; the purpose of the inventory is to assist local planning agencies when developing local bike plans or reviewing adjacent jurisdiction plans. Building on current activities by the Metro GIS Collaborative in regional facilities data aggregation, the regional bicycle system inventory will be updated to include agencies with newly adopted bicycle plans and to expand the list of facility types implemented in city plans. A process will be developed for coordinating regular system inventory updates.

Pedestrian Safety Action Plan

The Twin Cities area has almost 55% of Minnesota's pedestrian fatalities from 2013-2015 compared to 26 percent of all traffic fatalities in the state. While walking trips are 6 percent of all trips made within the region, almost 17% of all traffic fatalities involve pedestrians. This project will include systemic crash data analysis to identify crash characteristics and risk factors for pedestrians, as well as working with regional stakeholders on identifying countermeasures and program recommendations, including inclusion in the regional solicitation. This analysis would also include looking at crashes in areas with higher percentages of people of color or people with low incomes; other studies done throughout the nation show disproportionate numbers of high-severity crashes in neighborhoods with environmental justice populations.

Bicycle and Pedestrian Count Program

Metropolitan Council will seek consulting assistance to identify requirements and locations for a regional count program for use in regional pedestrian and bicycle planning. MnDOT's Bicycle and Pedestrian Counting Initiative started to institutionalize bicycle and pedestrian counts by providing

annual training for local partners in how to conduct counts; the installation of permanent monitoring stations throughout the state, including the Twin Cities region; and a MnDOT district-based portable counting equipment loan program to support local partners in conducting bicycle and pedestrian counts. Metropolitan Council will work with MnDOT to maximize the use of their portable counting equipment within the region and identify any needs for additional counting capacity.

Review of Best Practices for Walkable Neighborhoods and Connections to Transit

Metropolitan Council staff will review best practices for infrastructure treatments supporting walkable neighborhoods and enabling better pedestrian connections to transit in different types of communities. For the majority of transit trips, riders reach their stops by walking. Identifying best practices can help to address gaps in the pedestrian system and its connection to transit.

Regional Sidewalk Inventory Development

The lack of consistently available sidewalk data hinders planning for walking, including in relation to transit in the region. In 2018, Metropolitan Council's GIS department initiated discussions about collecting this data and found that data is inconsistently available and in varied formats that create additional work to convert for regional network use. Based on this research, creating the network data was the preferred option. Other large MPOs in regions such as Philadelphia, Chicago, and Houston have created regional sidewalk datasets and could serve as models for this work. The Council would work in partnership with local communities in identifying the needed characteristics for routable network data.

Freight Related Studies

Regional Truck Data Collection Framework

In collaboration with MnDOT, the Metropolitan Council will develop a framework for collecting truck classification data on regional truck freight corridors that responds to short-term and long-term data needs. Development of the framework will include:

- Coordination with MnDOT and County highway departments to review existing and planned data collection efforts for the Twin Cities metro area relevant to truck volumes and regional trip patterns on principal and minor arterials.
- Contacting staff from peer state DOTs and regional MPOs to determine the most promising truck data collection methods and technologies to employ in this region.

Industrial Land Atlas Mapping Tool

In 2017 the Industrial Land Inventory was assembled in response to the Thrive MSP 2040 Plan commitment to developing a region-wide inventory of industrial land, thus enabling analysis of industrial land with freight access; it also addressed the region's interest in how industrial sites relate to the freight transportation system. As a continuation of that effort, an Industrial Land Atlas will be developed

as an interactive on-line mapping tool for accessing the Industrial Land Inventory database. The inventory and interactive on-line tool will allow economic developers and private sector planners to assess industrial land options and to prioritize sites for future development. These will also enable local governments to better understand the region's supply of industrial land and to identify where industrial land preservation may need to be prioritized.

Aviation Related Studies

Regional Aviation System Study

The 2009 aviation system technical report, (Regional Aviation System Plan) will be updated before the adoption of the next Transportation Policy Plan. The update will include an analysis of the system changes and improvements since 2009, system performance evaluation, and local and national system forecasts and trends. This study will also look at the impacts of the recent Long-Term Comprehensive Plans that will have been adopted by the Metropolitan Council for the regional aviation system. This study will also look at the impacts of the Unmanned Aerial Systems (UAS) on the regional system as well as the effects of the evolution of Light Sport Aircraft. This study could be financed in part through a planning grant from the Federal Aviation Administration.

General System Planning

Safety Planning and Priorities in the Region

Significant safety planning has been done in the region through MnDOT's Toward Zero Deaths initiative and development of an updated statewide Strategic Highway Safety Plan expected in early 2021. MnDOT also partnered with each county in the state to develop County Road Safety Plans and has piloted plans for cities. To assist with the goal of improving safety for all users of the system in the region, the Metropolitan Council will review statewide and local safety plans, crash data, and other safety planning efforts to identify safety needs and priorities for all modes within the region, in coordination with other local partners.

Equity Analysis for Transportation

The Metropolitan Council's *Choice, Place and Opportunity: An Equity Assessment of the Twin Cities Region* (2014) analyzed the region and its investments to understand patterns of need and opportunities. To fully integrate equity into the transportation planning process, the Metropolitan Council will conduct additional analysis on transportation-related issues. Two potential areas for study are safety outcomes by race and income and spending on preservation and maintenance and condition of transportation facilities by race and income. Putting an equity lens into operation throughout transportation planning decision making is another step in ensuring that transportation policies, practices, and procedures advance equity rather than create barriers to equity. The use of such a lens should be done in combination with using disaggregated data when possible and leveraging existing assets to make any necessary changes to transportation policies, practices, and procedures.

Electric Vehicle Planning Study

As metropolitan regions begin to shift to connected and autonomous vehicles and implement shared mobility options, there is a general consensus that both public and private vehicle fleets will become electrified. Electric vehicles in fact widely exist on the market. Although few in numbers, widespread use may proceed what is often thought of as a connected and autonomous future. Fleet electrification can have many positive environmental benefits but may also require substantial changes in the regional electric grid and where and how vehicles are charged. This study on vehicle electrification is to plan a network of charging stations to support and encourage electric vehicle (EV) purchase and use in the Twin Cities. This study would summarize the role EVs can play in local climate mitigation, the hurdles to widespread EV adoption, current and planned energy production capacity and greenhouse gas mix, the capital and operating costs of EVs as compared to internal combustion engine vehicles and, national and local best practices and resources.

Planning Scenarios for Greenhouse Gas Emissions

Metropolitan Council Community Development is creating web-based tools for the region, counties, cities and townships to help build land use and transportation planning scenarios for mitigating greenhouse gas emissions. Transportation is one of Minnesota's largest sources of greenhouse gas emissions.

Research shows that compact, mixed-use neighborhoods make it easier to reduce these emissions. People living in compact neighborhoods drive less and the buildings, like duplexes and small apartments, have higher energy efficiency. Electric vehicles will also play a large role in mitigating climate change. What remains uncertain is how emerging trends like telecommuting, automated vehicles, ridehailing apps, and micromobility, like bikeshare and scooters, will impact transportation and land use scenarios. These scenarios are built around adopting a specific policy and will look at both the economic and equity impacts in the area. The intent of these tools is to support local governments as they consider how to mitigate the effects of climate change.