



# Transitway Advancement Policy

## *Draft TPP Modification and Procedure*

Feb. 15<sup>th</sup> 2023 Committee of the Whole



December 2022

# Transitway advancement



## Topics

- Update on Draft TPP Modification
- Risk Process
  - Project and Enterprise Risks
  - Example of Risk Process using Purple Line
- Draft Transitway Advancement Procedure
- Policy and Procedure in Action: Blue Line Extension

# Policy Adopted November 30, 2022

## Summary of Adopted Policy 1-7:

As the region's Metropolitan Planning Organization (MPO), the Council requires and compares information on critical aspects of a proposed transitway with standards established by the *2040 Transportation Policy Plan*. Required information will be detailed in a subsequent Plan modification.

At the point that Metro Transit is implementing the transitway, the policy would require the Council and local project sponsors to develop a risk register, establish roles and responsibilities that address project risks, and reflect these in agreements.

# Transitway project issues and risks

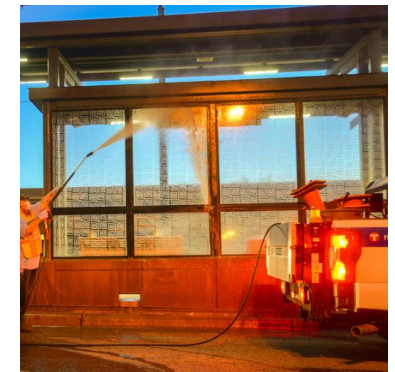
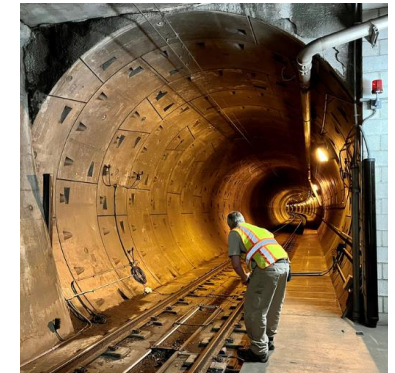
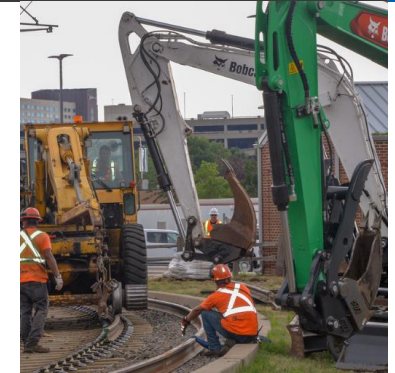
## Project setbacks and unresolved issues pose enterprise risks during and after project implementation

### Individual projects have faced **implementation challenges**

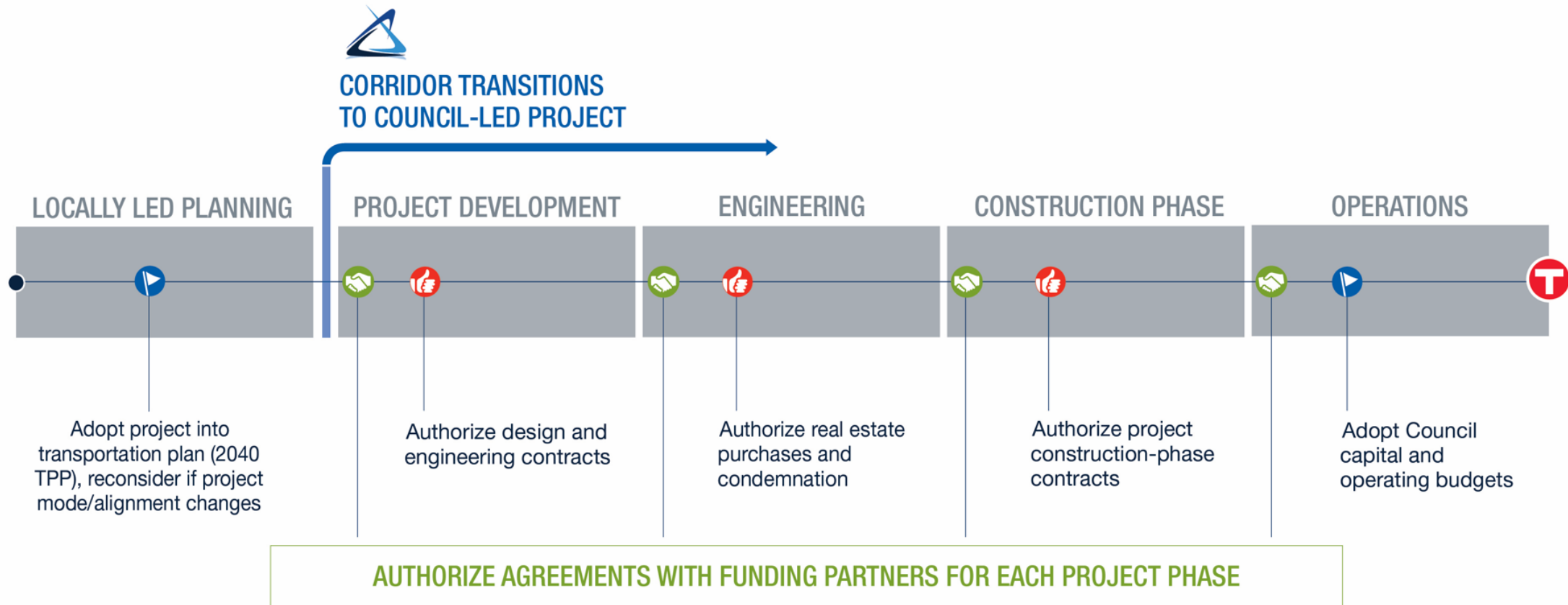
- Local community support
- Construction challenges
- Cost increases beyond project budgets and contingency plans
- Undefined roles or expectations for local partners in issue resolution

### Cumulative system-level **operations and capital maintenance risks**

- Undefined roles for operations and maintenance of project assets
- Capital maintenance has emerged as a significant financial issue for the region, particularly for rail lines.
  - Long-term needs are not currently defined during projects' planning and design phases
- Transitway operations require significant staffing additions

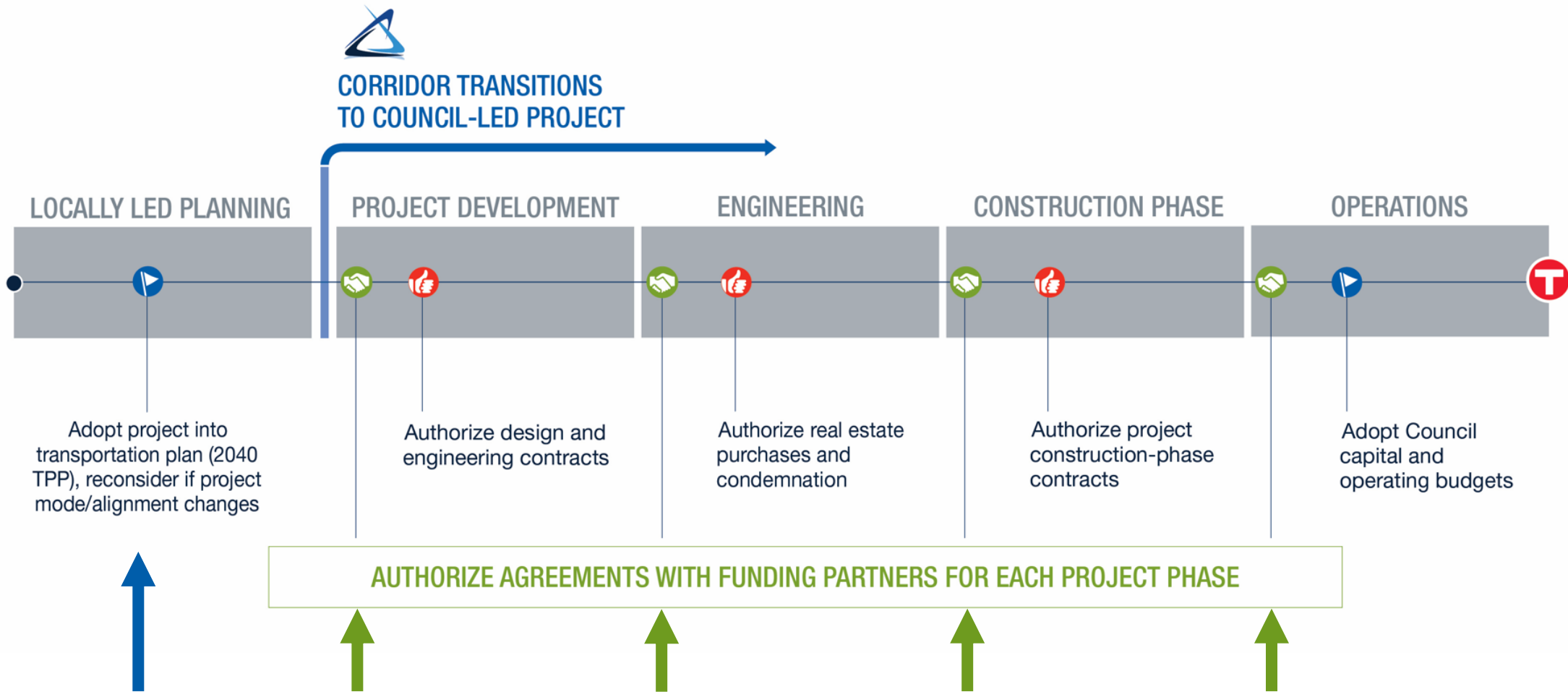


# Metropolitan Council decision points



**Policy challenge:** Decisions are *individually incremental* and *cumulatively significant*. Interest to avoid project delays can lead to deferral of important risks and issues as projects develop.

# Application of new policy



Application of proposed new policy occurs **at plan amendment/adoption** and **at each project phase agreement**  
Each phase's risk assessment will consider all subsequent phases of implementation and operation/maintenance

# 2040 TPP Modification Draft

## Clarifies Information Required of Project Sponsors

Documentation of the transitway corridor selection process

Resolutions of support from affected local governments and agencies

Documentation of fiscal constraint- including (new) lifecycle cost estimation

Documentation of public engagement and feedback

# 2040 TPP Modification Schedule

## Mid-2023 Approval Anticipated

**January 25-** Shared TPP Modification draft for partner staff input

**February-** Feedback, input, and partner discussion of TPP Modification

**March-** Invite public input (not a formal public hearing process)

**April-** Finalize modification, TAC Planning information item

**May-** Technical Advisory Committee and Transit Advisory Board (info)

**Late May-** Transportation Committee approval

**June-** Council approval

Purple Line and Blue Line Extension are the first two existing projects that are likely subject to the change from this TPP Modification



# Risk Management at the Council

## What is a Risk?

Anything that can prevent an organization from meeting its objectives

Example objectives:

Successful transit project implementation

Success in operating and maintaining the system

Orderly and economical development of the region

## Categories of Risk

Project-level risks

- Requirements
- Design
- Market
- Construction

Enterprise-level

- Procurement
- Operational
- Legal/contractual
- Financial

## Risk Management

- Discipline that seeks to resolve or mitigate risks
- Strategies entail
  - Evaluation of risks
  - Development and management of risk registers to quantify
  - Executing strategies to reduce exposure
  - Assignment of risk to responsible parties
- **Required by FTA**

# DRAFT Transitway Advancement Procedure



## Key Elements of Procedure

- Points to TPP for details on steps for planning process (MPO role)
- Specifies Metro Transit procedure for projects it is managing
- Procedure elements include:
  - Requirement to develop project and enterprise risks
  - Defines risk horizon for project and enterprise risks
    - Project level: risks from current day through revenue service
    - Enterprise: risks from current day through TPP time horizon
  - Defines elements of risk (type, probability, impacts, mitigation, owner)
  - Defines frequency of updates/reporting
    - Risks refreshed at least quarterly
    - Risks presented to Council on a defined cycle
  - Procedure applied until project is closed out by FTA

# Risk Process – Enterprise Risks

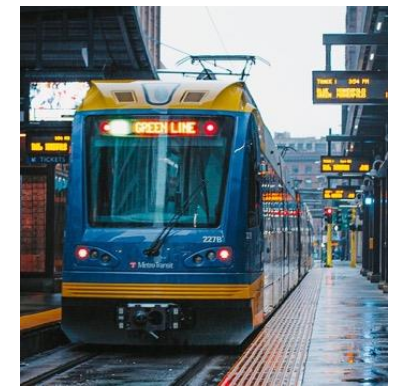
## Development of Enterprise Risks and Rating

### Interim Enterprise Risk Process

- Project and Leadership identify top enterprise risks based on feedback, also identify initial assessment
- Risks presented to Transportation Committee or Council
- Enterprise risks are similar for all projects, but risk assessment may vary

### Evolving long-term process

- Consultant hired (AON)
- Phase 1: Creating Risk Maturity Index
- Phase 2: Enterprise Risk Identification and Assessment
- Creation of process to continually update and report risks
- Timeframe: Underway, first enterprise risks identified and assessed by June



# Risk Process Project Example

## Purple Line

### Creation of Project Risk Register

- Process must meet FTA requirements and new Council Policy
- Risks developed through process that reviews project, develops and assigns, and establishes mitigation steps
- Members include project staff, funding agencies, regional administration and Metro Transit experts by discipline, project consultants.
- Risk register is created and actively maintained. All risks are tracked until retired
- Process format
  - Multi-day workshops
  - Walk through of project from end to end by category
  - Risks by every area of project (design, construction, market conditions, real estate, procurement, environment, utilities, agreements)
  - Consensus rating by participants
- Outcome is comprehensive list of risks with rating for each risk
- Risk owners are tasked with developing mitigation strategy for their assigned risks
- Purple Line example: 132 active risks, 18 retired risks

# Risk Process Project Example Purple Line

## Scale

Rating	Very Low (1)	Low (2)	Medium (3)	High (4)	Very High (5)
Probability	≤ 10%	11-35%	36-64%	65-89%	> 90%
Cost	< \$0.25M	\$.25M> <\$1M	\$1M> <\$2M	\$2M> <\$3M	>\$3M
Schedule	≤ 1 mth	2 - 3 mths.	4 - 5 mths.	6 - 7 mths.	> 7 mths.

## Strategy

### Risk Response Strategy

Avoid	Action(s) is taken to eliminate the threat
Mitigate	Action(s) is taken to reduce the threat
Transfer	Find another party willing to bear the liability of the risk should it occur
Accept	Acknowledge that the threat exists and establish a contingency
Optimize	Seek to increase the probability of an event to maximize potential benefits
Monitor	Track the threat/opportunity

# Risk Process Project Example

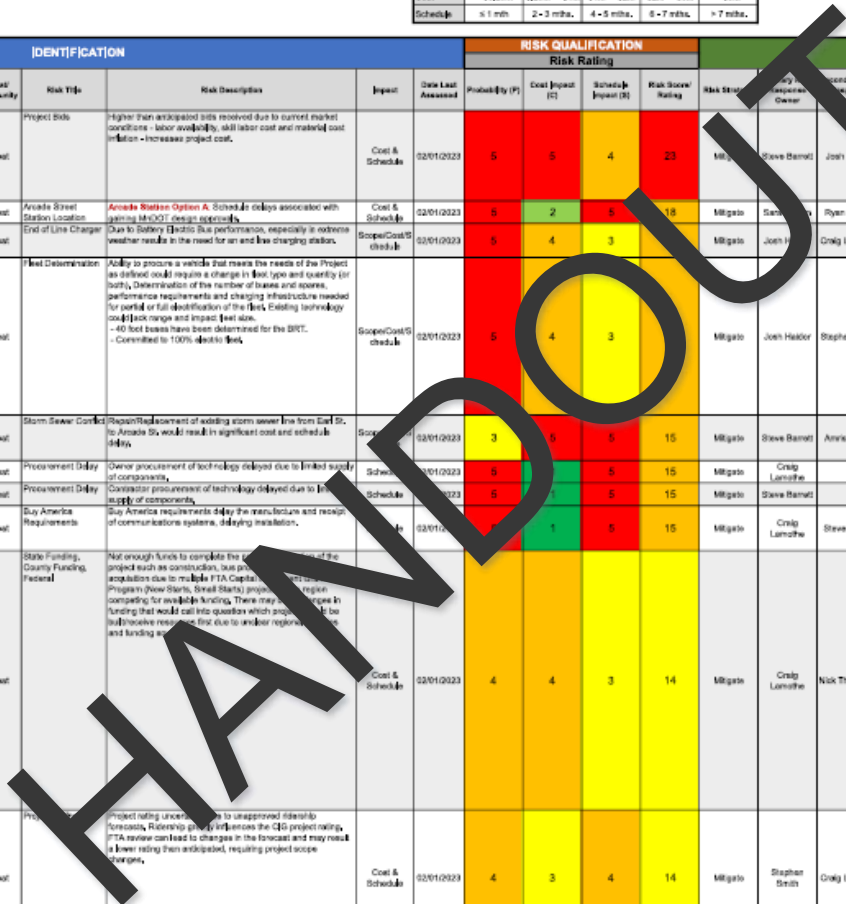
## Purple Line

**Metropolitan Council  
Purple Line Bus Rapid Transit Project**

PROJECT RISK REGISTER - DRAFT  
As of: February 01, 2023

Rating	Very Low (1)	Low (2)	Medium (3)	High (4)	Very High (5)
Probability	< 10%	11-30%	30-45%	45-60%	> 60%
Cost	< \$0.25M	\$0.25M - \$1M	\$1M - \$2M	\$2M - \$3M	> \$3M
Schedule	≤ 1 mth	2 - 3 mth	4 - 5 mth	6 - 7 mth	> 7 mth

IDENTIFICATION										RISK QUALIFICATION					RISK RESPONSE / MITIGATION					
Number	Risk ID	Date Assigned	FTA SCC	FTA Risk Type	Secondary Risk Category	Threat Opportunity	Risk Title	Risk Description	Impact	Date Last Assessed	Probability (P)	Cost Impact (C)	Schedule Impact (S)	Risk Score Rating	Risk Status	FTA Response Owner	Secondary Risk Response Owner	Risk Response/Action Plan	Risk Response/Action Due Date	February 2023 Status
001	M08	01/28/2022	91,00	Market	Procurement	Threat	Project Side	Higher than anticipated bids received due to current market conditions - labor availability, skill labor cost and material cost inflation - increases project cost.	Cost & Schedule	02/01/2023	5	5	4	23	Mitigate	Steve Barrett	Josh Heald	(1) Continue to monitor industry costs and overall economic activity rates within the region. (2) Conduct escalation analysis and adjust project estimate accordingly as design advances. (3) Review undistributed contingency to account for potential market with higher bids		
002	D-28	01/21/2023	10,04	Design	Guideway Agreement	Threat	Annieke Street Station Location	Annieke Station Option A. Schedule delays associated with gaining MPOOT design approval.	Cost & Schedule	02/01/2023	5	2	5	18	Mitigate	Samuel	Ryan Rohrer			
003	R-23	01/21/2023	10,04	Requirements	Vehicles	Threat	End of Line Charger	Due to battery electric bus performance, especially in adverse weather results in the need for an end line charging station.	Scope/Cost/Schedule	02/01/2023	5	4	3		Mitigate	Josh H	Craig Larnoff	(1) Monitor performance of existing BEB fleet. (2) Consider end of line charging options.		
004	R-22	01/09/2023	10,04	Requirements	Procurement	Threat	Best Determination	Ability to procure a vehicle that meets the needs of the Project as defined could require a change in fleet type and quantity for both. Determination of the number of buses and spares, performance requirements and charging infrastructure needed for overall full identification of the fleet. Existing technology could lack range and impact fleet size. - 40 foot buses have been determined for the BRT. - Committed to 100% electric fleet.	Scope/Cost/Schedule	02/01/2023	5	4	3		Mitigate	Josh Heald	Stephen Seale	(1) Implement fleet management plan (bus population, quantity and fleet performance requirements). (2) Determine charging infrastructure (currently assumed at Union Depot and at East Metro Garage). (3) Contingency SCC 79 added to account for the risk \$15M. (4) Project procurement schedule to determine critical milestones dates for making fleet decisions for fleet type, details, procurement. Fleet was added change if fleet type changed - decision needs to be made in 2023. (5) Evaluate costs for three electric buses compare to two traditional buses. Contingency and contingency should be included in fleet to determine total costs and budget impacts. (6) Schedule impacts could be mitigated through procurement on another contract.		
005	C-22	01/21/2023	94,02	Construction	Utilities	Threat	Storm Sewer Corridor	Replacement of existing storm sewer line from East St. to Annieke St. would result in significant cost and schedule delay.	Scope	02/01/2023	3	5	5	15	Mitigate	Steve Barrett	Amrik Patel	(1) Provide existing storm line to obtain accurate surveyed location. (2) Advise to determine existing condition. (3) consider design elements near the pipe that minimize disruption.		
006	M-12	01/21/2023	95,05	Market	Procurement	Threat	Procurement Delay	Owner procurement of technology delayed due to limited supply of components.	Schedule	02/01/2023	5	5	5	15	Mitigate	Craig Larnoff				
007	M-13	01/09/2023	95,05	Market	Procurement	Threat	Procurement Delay	Contractor procurement of technology delayed due to limited supply of components.	Schedule	02/01/2023	5	5	5	15	Mitigate	Steve Barrett				
007	M-14	01/21/2023	95,05	Market	Procurement	Threat	Buy America Requirements	Buy America requirements delay the manufacture and receipt of communications systems, delaying installation.	Schedule	02/01/2023	5	5	5	15	Mitigate	Craig Larnoff	Steve Barrett			
008	R-26	01/28/2022	91,00	Requirements	Funding	Threat	State Funding, County Funding, Federal	Not enough funds to complete the project such as construction, bus procurement, etc. due to the expiration due to the FTA Capital Program (New Starts, Small Starts) program. The region is competing for available funding. There may be a change in funding that would call into question which projects may be authorized and funded. Due to the regional funding and funding sources.	Cost & Schedule	02/01/2023	4	4	3	14	Mitigate	Craig Larnoff	Nick Thompson	(1) Clarify risk design impact funding availability and separate market risk components. (2) Ongoing coordination with FTA to communicate regional priorities for review. (3) Investigate Value Engineering opportunities during design to maintain project competitiveness in the Capital Improvement Grants (CIG) Program. (4) County is monitoring revenue streams for new state projects. (5) Need to consider overlapping projects in financial modeling. Confirm Blue Line is included in financial modeling. (6) Be aware of FTA regional funding caps as additional projects enter the program. (7) Monitor project timing and funding analysis relative to ongoing transit projects (i.e. SWLRT (in FFCA) and future) longer term projects like Blue Line. (8) Project long term horizon for competitiveness. (9) Include Riverview Project schedule and funding needs. (10) Revised SWLRT approach to graphically monitoring regional activity understanding the potential for FTA to distribute funding regionally and cap contributions by region for annual/new state funding.		
009	R-26	01/28/2022	91,00	Requirements	Ridership	Threat	Project Rating	Project rating uncertainty due to unapproved ridership forecasts. Ridership growth influences the CIG project rating. FTA review call back to changes in the forecast and may result in lower rating than anticipated, requiring project scope changes.	Cost & Schedule	02/01/2023	4	3	4	14	Mitigate	Stephen Smith	Craig Larnoff	(1) Monitor FTA refresh of the project evaluation process (FTA RPT finalized Q4 2021) and potential changes to project evaluation by FTA rules. (2) Monitor any changes to STOPS (values and thresholds). (3) An engagement with FTA's Ridership Forecasting Team is anticipated before mid-July 2023 in part to seek concurrence on the project's level of the synthetic and incremental modeling approaches used to date. (4) Explore options to boost project rating if necessary as project develops and FTA inputs are received. (5) Evaluate rating impacts as scope changes are considered.		The Project's anticipated Project Rating was refreshed in June 2021 to reflect the Project's Capital Cost Estimate Refresh (based on 25% Design) and the Project's Spring 2021 Ridership Refresh (pursuant with FTA's decision to the Gold Line Project).



# Enterprise Risks

# EXAMPLE

ID	Category	Risk Description	Mitigation Needed
1	Financial	Insufficient new funding provided by funding partners to cover state and local share of operating costs (Annual operating costs: \$15M to \$20M new State per year)	2024-2025
2	Operational	Metro Transit is unable to hire sufficient staffing to operate service and perform maintenance specified in the Full Funding Grant Agreement (estimated over 200 new FTEs)	2028-2030
3	Operational	Metro Transit is unable to meet hiring needs for safety and security strategies (#TBD new Police Officers and CSOs)	2029-2031
4	Operational	Transitway ridership does not meet regional performance thresholds for ridership due to post-pandemic changes in travel patterns	2029-2034
5	Financial	Insufficient non-federal capital funding available for the Council to maintain the transitway in a state of good repair	2040-2050
6	Operational	Delays or inability to deliver the Blue Line Extension means regional equity and climate change goals and needs are not met	2023-2025

Very Low
Low
Moderate
High
Very High

# Comments from Local Partners



## Local input process

We presented drafts of TPP Modification and Procedure to staff from Cities and Counties in January

- Requested comments by February 15<sup>th</sup>
- Additional comments will be received on TPP Modification

### Comments to date:

1. Request that partners are informed of risk information before it is public
2. More detail steps needed to require collaboration on risk development
3. Several comments seeking clarification on draft text
4. Enterprise risks should include risk to region of not completing project.

### Questions received:

1. Who will decide the enterprise risks?
2. How will local partners (funders) be involved in establishing risks and ratings?
3. Can projects that meet their purpose and need and local funding be prevented from advancing based on risk levels?



# Procedure Implementation Schedule

<b>Timing</b>	<b>Metro Transit Key Business or Info Items</b>
February	Blue Line Extension - Engineering Contracts
April/May	Green Line Extension - Business items (Funding/Legal)
April/May	Gold Line - Award of construction contract (Park and Ride)
April/May	Purple Line Route Modification Study – Info Item
April/May	Orange Line – Master Operating Funding Agreements
June	ABRT Program Update (B, E, F, G Line) – Info Item
Q4 2023	Purple Line - TPP Amendment
2024 (TPP 2)	Blue line Extension - 2050 TPP