



# ***CEDAR AVENUE TRANSITWAY***

## ***Implementation Plan Update***



### **EXECUTIVE SUMMARY**

### **DECEMBER 2015**



## Executive Summary

In 2013, the Twin Cities metropolitan area's first bus rapid transit (BRT) line, the METRO Red Line, began station-to-station bus service between the Mall of America Station and the Apple Valley Transit Station on the Cedar Avenue Transitway. The service operates every 15 minutes throughout weekdays and every 30 minutes on weekends. The implementation of the METRO Red Line was the outcome of years of planning led by the Dakota County Regional Railroad Authority (DCRRA) and partners to

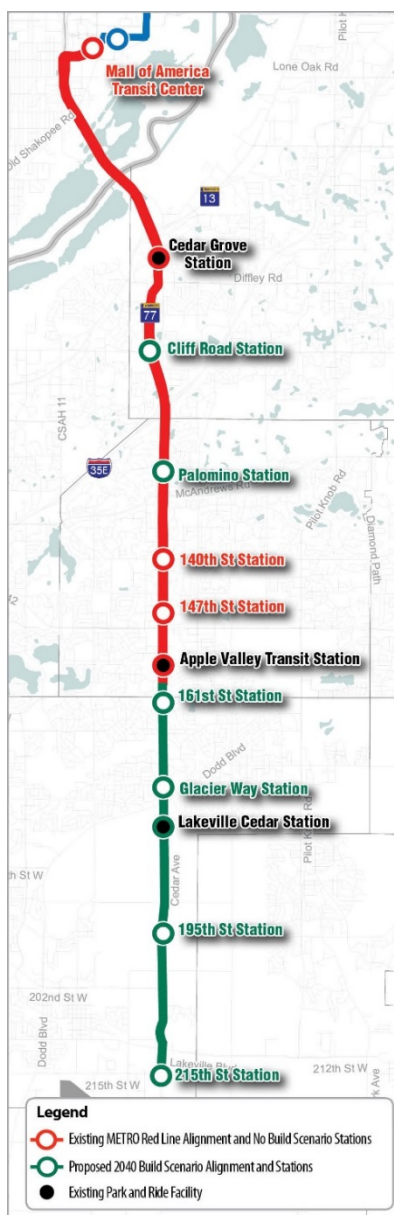
identify the best transit alternative to serve the needs of the growing south metro communities of Burnsville, Eagan, Apple Valley, and Lakeville in Dakota County.

The purpose of this 2015 Implementation Plan Update (IPU) is to identify service and facility improvements that address the many changing conditions in the corridor, community, and in the region. These changes include recent updates to forecasted employment growth, population growth, and land uses, which provide an opportunity to reassess the demand for transit service around the Cedar Avenue Transitway. Regionally, Counties Transit Improvement Board (CTIB) project funding eligibility and Metropolitan Council Regional Solicitation project prioritization and selection have also changed, which modifies the availability of these funds for the Cedar Avenue Transitway.

As part of the current IPU, goals for the Cedar Avenue Transitway were revised based on feedback from policymakers to better reflect changing conditions in the corridor and in the region, including recent updates to forecasted employment growth, population growth, and land uses. Each goal was developed in tandem with evaluation measures, thresholds, and other progress indicators to help establish priorities and meet performance goals. The revised goals are:

### What is Bus Rapid Transit?

Bus rapid transit (BRT) provides fast, frequent, all-day transit service. BRT stations include premium customer amenities similar to light rail transit (LRT) stations, including radiant on-demand heat, ticket vending machines, and real-time NexTrip customer information signage.





**Goal 1:** Provide a variety of safe, reliable, and attractive bus transit services in the corridor.

**Goal 2:** Improve mobility and accessibility within the Cedar Avenue Transitway.

**Goal 3:** Identify improvements that are cost-effective and well-positioned for implementation.

**Goal 4:** Enhance and promote transit oriented development that is compatible with community goals and helps increase ridership.

The 2010 IPU identified capital investments in the Cedar Avenue Transitway by stage and an associated year. ***The 2015 IPU establishes priorities based on when projects meet investment thresholds developed as part of the IPU process.*** As part of revising the goals for the Cedar Avenue Transitway, evaluation measures were developed to establish priorities and meet performance goals. The evaluation measures and thresholds identified are based on industry best practices along with some that are identified in regional planning documents. In particular, 2040 METRO Red Line station boardings and cost-effectiveness were used to prioritize and identify which stages each investment is recommended.

The following table identifies future capital investments for the Cedar Avenue Transitway. The capital investments are grouped into various stages; the first stage represents previously completed projects on the Cedar Avenue Transitway. Stage 2 includes currently programmed projects, and projects identified in Stages 3 through 5 are the outcome of the technical evaluation completed for this IPU. Estimated timeframes were developed for the various stages. These actual timeframes will be dependent on when thresholds are met for the identified evaluation measures.

Capital Investments	Stages					Cost Estimates
	1	2	3	4	5	
Stage 1: Existing Cedar Avenue Transitway Elements						
Mall of America Station	X					\$110,000,000
Cedar Grove Station	X					
140th Street Station	X					
147th Street Station	X					
Apple Valley Transit Station	X					
Runningway: Bus Shoulder and Highway Improvements	X					
Vehicle Purchase (7 40-foot, low-floor buses - 2013)	X					
STAGE 1 TOTAL:						\$110,000,000
Stage 2: Currently Programmed Improvements (2015 to 2020)						

Capital Investments	Stages					Cost Estimates
	1	2	3	4	5	
Mall of America Station Improvements		X				\$6,700,000 <sup>1</sup>
Cedar Grove Online Station <sup>2</sup>		X				\$13,300,000
Apple Valley Transit Station Expansion		X				\$8,200,000
Bicycle and Pedestrian Improvements		X				\$100,000
Corridor-wide Station Area Planning (11 Stations – All existing and proposed stations, excluding MOA Station)		X				\$100,000 per station
Study of Palomino and Cliff Road Stations Concepts, TH 77 Managed Lane Concept, and Northern Park and Ride Needs Analysis		X				\$500,000
STAGE 2 TOTAL:						\$29,900,000
<b>Stage 3 (2020 to 2025)</b>						
Cliff Road Inline Station • Includes METRO Red Line Station			X			\$2,600,000
Palomino Online Station and Park and Ride • Includes METRO Red Line Station • Includes new park and ride facility with capacity for 700 vehicles			X			\$29,600,000
Bicycle and Pedestrian Improvements			X			\$100,000
METRO Red Line Vehicle Replacement (7 vehicles in 2025)			X			\$4,100,000
Update Cedar Avenue Transitway IPU			X			\$400,000
STAGE 3 TOTAL:						\$36,800,000
<b>Stage 4 (By 2040)</b>						

<sup>1</sup> METRO Red Line portion of Mall of America Station cost, based on Metro Transit cost allocation methodology used in the 2015 TIGER Grant application. Total project cost is estimated at \$24.9 million.

<sup>2</sup> Investments are also being made to support and not preclude future MnPASS investment on the Cedar Avenue Transitway.

Capital Investments	Stages					Cost Estimates
	1	2	3	4	5	
Lakeville Cedar Station Improvements <ul style="list-style-type: none"> <li>Includes interim terminal station and potential layover facility with offline station METRO Red Line and local/express platforms in existing Park and Ride</li> </ul>				X		<b>\$2,800,000</b>
Park and ride capacity expansion in Northern Apple Valley or Eagan <ul style="list-style-type: none"> <li>Location to be determined as part of stage 2: Study of Palomino and Cliff Road Stations Concepts, TH 77 Managed Lane Concept, and Northern Park and Ride Needs Analysis</li> </ul>				X		<b>\$8,500,000</b>
Technology and Restriping (TSP, Fiber) [South of AVTS to Lakeville Cedar]				X		<b>\$2,900,000</b>
Bicycle and Pedestrian Improvements				X		<b>\$100,000</b>
<b>STAGE 4 TOTAL:</b>						<b>\$14,300,000</b>
<b>Stage 5 (By 2040)</b>						
215th Street Station <ul style="list-style-type: none"> <li>Includes new terminal station offline platform, dedicated bus turnaround, layover bays, and a 500 sq. ft. driver support facility</li> <li>Current park and pool is converted to park and ride. No expansion of existing parking lot is included.</li> </ul>					X	<b>\$3,200,000</b>
147th Street Station Pedestrian Bridge					X	<b>\$3,100,000</b>
METRO Red Line BRT Vehicle Purchase (2)					X	<b>\$1,200,000</b>
Storage and Maintenance Facility Allowance (METRO Red Line)					X	<b>\$500,000</b>
Technology and Restriping (TSP, Fiber) [Lakeville Cedar to 215 <sup>th</sup> Street]					X	<b>\$3,500,000</b>
Bicycle and Pedestrian Improvements					X	<b>\$100,000</b>
<b>STAGE 5 TOTAL:</b>						<b>\$11,600,000</b>
<b>STAGE 2 -5 TOTAL:</b>						<b>\$92,600,000</b>

As a result of the technical evaluation, there were several projects that did not meet the threshold criteria for implementation within 2040 time horizon. While these projects were not assigned a stage within the 2015 IPU, the priority of these projects could shift to another stage if conditions change during future planning processes, including the next update of the IPU after 2020. These projects include:

- 161st Street Station
- Glacier Way Station
- 195th Street Station
- Bicycle and Pedestrian Improvements associated with 161<sup>st</sup> Street, Glacier Way, and 195<sup>th</sup> Street stations
- Additional local and express vehicle purchase (up to 12 vehicles)
- TH 77 MnPASS Investment

## Funding Sources

### Capital Funding

Future stages of the Cedar Avenue Transitway are anticipated to be funded by a mix of federal, state, CTIB, Dakota County Regional Railroad Authority, regional, and municipal sources, continuing the general structure of partnership between multiple levels of government from Stage 1. Project sponsors will seek to maintain the split of 30 percent federal, 30 percent state, 30 percent CTIB, and 10 percent county/local funding for future Cedar Avenue Transitway projects. For local/express project costs, a split of 45 percent federal, 45 percent state, and 10 percent county/local funding will be targeted.

### Operating Funding

CTIB adopted a resolution in 2008 committing to fund 50 percent of transitway net operating subsidies for five transitways, including new and expanded Cedar Avenue BRT. The funding plan considers one-half of Red Line operations and maintenance costs and limited BRT express service already implemented, excluding fares and other system-generated revenues, to be committed funding from CTIB for Stage 1 and beyond. 46 percent of operations and maintenance costs are paid for through a Congestion Mitigation Air Quality (CMAQ) grant awarded to MVTA by the Federal Transit Administration (FTA). The remainder of net operations and maintenance expenses for Stage 1 are considered to be committed by the Metropolitan Council and MVTA from each agency's motor vehicle sales tax and other revenues for ongoing operation of existing services.

#### What is the Counties Transit Improvement Board?

The Counties Transit Improvement Board (CTIB) was established in 2008, and includes five counties – Anoka, Dakota, Hennepin, Ramsey, and Washington – that have used a quarter-cent sales tax and a \$20 motor vehicle sales tax to invest in and advance transit projects by awarding annual grants. CTIB works in collaboration with the Metropolitan Council and Carver and Scott Counties.

The annual operating cost of the full extension of METRO Red Line service in 2040 to the 215<sup>th</sup> Street Station is estimated at an additional \$1.98 million annually (2015 dollars). New funding sources need to be identified for METRO Red Line and local/express net operating subsidies in Stage 2 and beyond that are not covered by CTIB or MVTA.

## Next Steps

### Near Term Next Steps

Planned capital investments and additional study to be completed in Stage 2 (2015-2020) include the following:

- Mall of America Station Improvements
- Cedar Grove Online Station
- Apple Valley Transit Station Expansion
- Study of Palomino and Cliff Road Stations Concepts, TH 77 Managed Lane Concept, and Northern Park and Ride Needs Analysis

### Land Use and Station Area Planning

Stage 2 will also include a Station Area Planning process. As part of this process and the comprehensive plan updates required by the Metropolitan Council, communities along the Cedar Avenue Transitway corridor will be asked to consider changes to land use and economic development plans within a half-mile of the planned and existing stations to encourage increased development density and more transit-friendly development patterns, with the exception of Mall of America Station. This type of change in land use and development patterns can enhance potential Transitway investments by concentrating people, jobs, and activity closer to transit.

### Pedestrian and Bicycle Connections

The construction of local and regional pedestrian and bicycle connections to the existing and planned station areas is included in Stage 2, as well as Stages 3-5. These connections are critical for users to safely access the stations, and will play a major role in increasing the attractiveness of the service and ridership, especially at the walk-up stations. Bicycle and pedestrian facilities connecting to the stations and on Cedar Avenue should be planned and implemented prior to or as the stations are constructed and the runningway is extended. Opportunities for connections into adjacent neighborhoods and on adjacent local and collector roadways should be continuously evaluated as new developments occur, street improvements are designed, or as opportunities to integrate cul-de-sac trail connections or other facilities present themselves.

### Update of the Cedar Avenue Transitway IPU

The next IPU will be completed by 2020 (Stage 3). At that time, investments will be reevaluated and the priority of projects could shift. Investments proposed in Stages 3-5 are dependent on the comprehensive plan updates and results of the next IPU.