April 2019

GOLD LINE BRTOD PLAN SUMMARY

Mounds Boulevard Station

Earl Street Station

Etna Street Station

White Bear Avenue Station

Sun Ray Station

Maplewood Station

Greenway Avenue Station

Helmo Avenue Station

Tamarack Station

Woodbury Theatre Station

Woodbury I-494 Park and Ride Station

GOLD LINE
PARTNERS

Acknowledgements

Gold Line Partners
Stan Karwoski, (Chair)
Washington County Regional Railroad Authority

Rafael Ortega, (Vice-Chair)
Ramsey County Regional Railroad Authority

Tami Fahey, City of Lakeland

Bryan Smith, City of Maplewood

Paul Reinke, City of Oakdale

Jane Prince, City of Saint Paul

Anne Burt, City of Woodbury

Washington County Regional Railroad Authority
Jan Lucke, Planning Division Director

Hally Turner

Sara Allen

Ramsey County
Andy Gitzlaff, Senior Transportation Planner, Public Works Department

Frank Alarcon, Planning Specialist, Public Works Department

Scott Yonke, Director of Planning & Development, Parks and Recreation Department

Josh Olson, Planning Specialist, Community and Economic Development

Consultants
Crandall Arambula, Lead Consultant

Carroll, Franck Associates

Sambatek

Maxfield Research & Consulting

WSB & Associates

Saint Paul City Council
Jane L Prince, Ward 7

City of Saint Paul
Bill Dermody, City Planner, Planning and Economic Development

District 1
Betsy Moss Vowry, Director District Land Use Committee

Paul Sawyer, Chair

Melissa Wenzel

Patty MacDonald

John Slade

District 4
Lissa Jones-Lofgren, Director

Jeanelle Foster

Laura Kidd

Michael Boyd

Yingya Vang

Kirsten Scanlan Madore

Osman Egal

Barry White

Holly Windingstad

Maplewood City Council
Nora Slawik, Mayor

Kathleen Juenemann

Marylee Abrams

Brian Smith

Tou Xiong

City of Maplewood
Melinda Coleman, City Manager

Michael Martin, Economic Development Department Coordinator

Shann Finwall, Environmental Planner

Steve Love, Public Works Director

Oakdale City Council
Paul Reinke, Mayor

Jake Ingebrigtson

Susan Olson

Colleen Swedberg

Kevin Zabel

Mark Landis*

Bill Rasmussen*

Lori Pulkrabek*

*Served through 2018

City of Oakdale
Bob Streetar, Community Development Director

Emily Shively

Jen Hassebroek

Linnea Graffunder-Bartels

Landfall City Council
Stan Suedkamp, Mayor

Sally Eral

Katie McManus

Lori Lengsfeld

Joanne Menz

City of Landfall
Edward J. Shukle, Jr., City Administrator

City of Woodbury
Janelle Schmitz, Assistant Community Development Director

Eric Searles, City Planner

Gina Gore, Planner I

Supported in part by the Statewide Health Partnership (SHIP), Minnesota Department of Health

Table of Contents

List of Figures

INTRODUCTION

The Gold Line Partners (the Partners) brings together local elected officials from the five cities and two counties along the corridor, including business and community leaders, to support the METRO Gold Line Bus Rapid Transit (Gold Line BRT) project. As part of the support for the Gold Line, the Partners commissioned the Metro Gold Line BRTOD Plan project (BRTOD Planning Project) on behalf of the Metropolitan Council and is funded by a grant from the Federal Transit Administration's Pilot Program for Transit-Oriented Development Planning with match from Ramsey and Washington Counties. Washington County Regional Railroad Authority (WCRRA) is the fiscal agent and administrative coordinator for the BRTOD Planning Project and collaborates directly with the cities along the corridor.

Over the coming years, WCRRA will periodically review the BRTOD plans developed for the Gold Line stations with each of the cities to evaluate plan effectiveness, coordinate improvements outside each City's jurisdiction, and partner with Washington County, Ramsey County, and the Metropolitan Council on projects of significant regional benefit. The respective authorities Washington County Community Development Agency (CDA) and Ramsey County will administer housing and economic development programs that support affordable housing opportunities and investment in the station areas along the Gold Line. The WCRRA will monitor and identify transit ridership increases resulting from implementation of the projects.

STATION AREA BRTOD PLANS

The BRTOD Plans provide policy and implementation guidance for each station area and are based on assessments of station area conditions.

Prior to the initiation of the BRTOD Planning Project, the City of Saint Paul completed station area plans for all of the city's stations. The BRTOD Planning Project builds upon these adopted plans.

BRTOD Plans for stations in Saint Paul, Maplewood, Landfall, and Oakdale include full development and circulation plans, which capitalize on all available opportunities to improve transit access and transit-oriented development while creating conditions that ensure that transit-dependent residents will remain in the area.

The Gold Line will connect people across the region to job centers, neighborhoods, shopping, recreation, and other key destinations in the Interstate 94 corridor.

The METRO Gold Line Bus Rapid Transit (Gold Line BRT) project is a separate project dedicated to design and engineering of the Gold Line BRT alignment, guideway, stations, and some access improvements.

The Metro Gold Line BRTOD Plan project (BRTOD Planning Project) plans for transit-oriented development (TOD) around the Gold Line stations.

BRTOD combines BRT with traditional TOD strategies to create walkable and bikeable communities with housing, shopping, and employment uses concentrated within a half mile of a BRT station.

BRTOD Plans for stations in Woodbury are advisory only. Any additional planning will be developed by City of Woodbury Planning staff.

The BRTOD Planning Project includes eleven stations in five cities and two counties.

THE GOLD LINE CORRIDOR

The Gold Line corridor is the mile-wide transit-shed centered along the Gold Line BRT route, generally following Interstate 94 (I-94). The existing potential for creating BRTOD varies in each station area. Planning for a successful Gold Line corridor requires increasing the potential ridership base of the entire corridor while enabling each station area to achieve its transit-oriented, market-driven development potential.

Along the corridor, older areas are concentrated to the west—toward Saint Paul, Maplewood, Landfall and portions of Oakdale—where early 20th century development patterns include a fine-grain street grid with predominantly single-family residences mixed with multi-family housing and commercial uses. These areas are largely fully built-out with few opportunities for new development. Residents come from highly diverse ethnicities, are typically less affluent, and are more transit dependent than in other areas of the corridor.

To the east, in Oakdale and Woodbury, the corridor transitions into newer communities characterized by auto-oriented commercial centers and undeveloped land. These areas present both greater opportunity and greater need for transit-oriented development and walking and biking infrastructure improvements. Residents in these areas tend to be less ethnically diverse, more affluent, and less familiar with transit use.

When planned together these eleven stations assemble into a unified, diverse, and complementary corridor in which transit ridership is maximized, desirable development infrastructure and improvements are built, and vibrant and active station areas are realized.

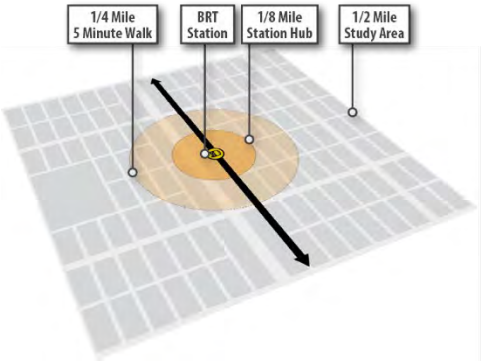
Together, the BRTOD Plans describe a corridor-wide vision that:

- **Establishes a multi-modal transportation corridor** by linking stations with a continuous biking and walking trail parallel to the BRT guideway.
- **Increases potential ridership** by providing direct access to transit-oriented uses along the corridor through strategic biking and walking improvements along existing, planned, or newly identified routes.
- **Enables station areas to achieve their development potential** by identifying substantial new transit-oriented infill or redevelopment opportunities for people to live and businesses to thrive near transit.

Each Gold Line BRTOD station is located within a distinct and unique context that presents both opportunities and constraints for achieving BRTOD.

Figure 1. The Gold Line BRTOD Planning Project Stations

While no single station will result in complete BRTOD, each of the eleven stations plays a role in maximizing transit ridership and achieving the corridor's BRTOD potential.



Land use patterns and intensities should support the day-to-day needs of BRTOD residents. Intensities and diversities are greatest near the station, gradually decreasing away from the station.

WHY PLAN FOR BRTOD?

BRTOD links a mix of trip-generating destinations with multi-modal transportation choices to increase transit ridership, provide economic benefits, support active and healthy lifestyles, and significantly reduce greenhouse gas emissions. A BRTOD Plan establishes an ambitious but realistic vision for transforming the area around the station based on the specific existing character and features of each station.

BRTOD locates trip-generating uses at the station allowing surrounding residents, employees, and visitors to shorten or eliminate auto-based trips and providing a platform for local entrepreneurship and small business development. Walkable and bikeable station areas offer residents access to a variety of services and job opportunities and a diversity of housing and transportation choices.

Development Plans

In BRTOD, the area within an eighth-mile of the station is home to the highest intensity of trip-generating retail and employment uses and dense residential types, such as multi-family apartments, condos, or townhomes.

Within the Gold Line BRTOD Planning Project corridor, the areas within a quarter-mile of the station include the largest concentration of housing and should include a mix of rental and ownership properties to support a mix of income levels.

In developing BRTOD, existing stable and desirable uses should be preserved and strengthened, with new development and redevelopment targeted to vacant and underutilized sites and to sites with long-term redevelopment potential. Targeted development builds the concentration and type of land uses appropriate to addressing market demand, meeting gaps in housing, employment, or commercial uses and supporting an equitable and vital station area.

Circulation Plans

The area within a quarter-mile of the station is typically accessible within a five-minute walk. A five-minute bike ride can typically access the station from the area within one mile of the station. These five-minute areas are the 'rider-shed', the source of 80% of the station's transit riders.

'First- and last-mile trips' are the trips that transit users must take between their starting or ending destination and a BRT station. When transit users have difficulty making the first- or last-mile connection due to distance, unsafe conditions, or other barriers, BRT use may be less practical.

Great station area streets are interesting, livable, and safe places. An interconnected network of streets ensures that all trips to or from a transit station are as short as possible.

First- and last-mile trip connections are particularly important in the Gold Line Corridor where many jobs and residences are along unsafe routes or are outside of a comfortable walking distance from a station.

Station Environment

Conditions in the area directly adjacent to the station play an essential role in establishing BRTOD. The station environment is an opportunity to define the neighborhood character through the creation of a sense of arrival and departure. A focus on establishing a sense of place means that the station environment is designed for commuters to congregate and linger:

- **Safe** stations are highly visible—eyes on the station ensure that transit riders are seen from the street and surrounding buildings, reducing the potential for crime.
- **Comfortable** stations are accessible for people of all ages and abilities, ensuring a pleasant experience at the station.
- **Active** stations are vibrant throughout 18 hours of the day, creating a special place of arrival and departure for transit users.

BRTOD plans provide implementable design strategies for establishing the street-oriented buildings and station access improvements that will result in safer and more vibrant stations. In turn, this will result in more BRT riders and reduce the potential for crime during all times of day and year.

The Gold Line Corridor BRTOD Plans emphasize the creation of safe, comfortable, and active station environments.

GOLD LINE CORRIDOR

To ensure that the BRTOD Plans for each station are integrated and complementary, corridor-wide approaches to development and access have been applied.

Station Typologies

Station typologies provide a common vocabulary for describing the development vision for each station area and the relationships between stations along the corridor.

Station Access Route Hierarchy

A hierarchy of walking and biking routes connect stations along the corridor and provide direct access between the station and destinations within each station area.

STATION TYPOLOGIES

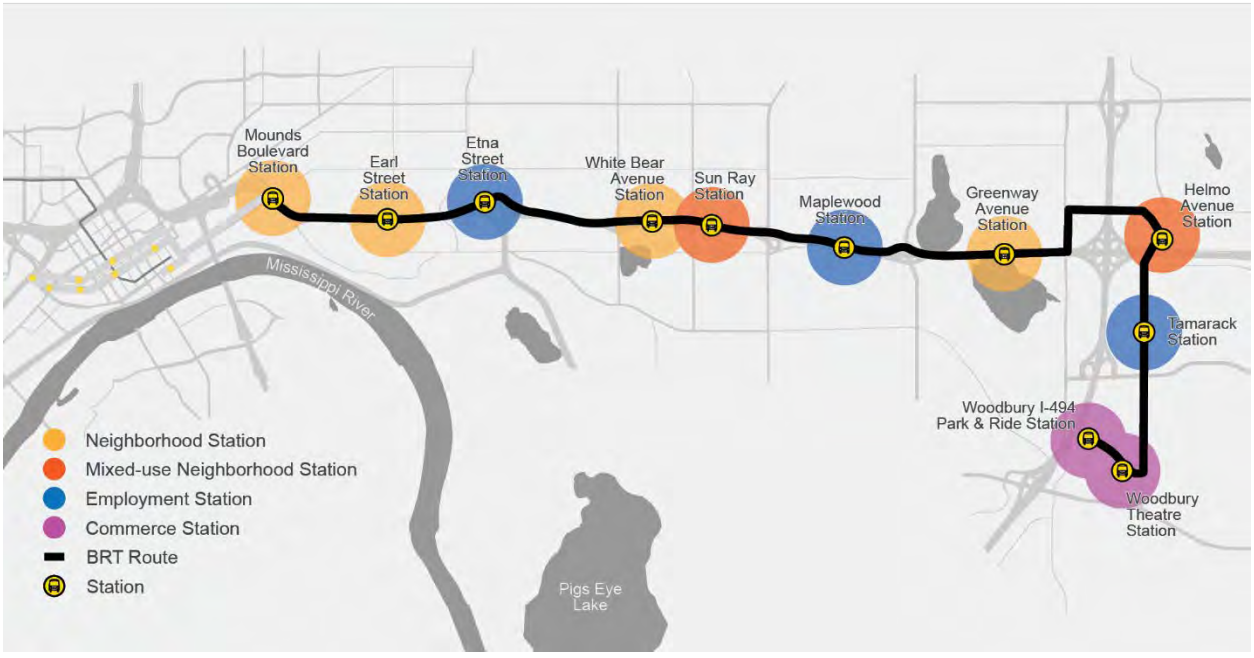
Each of the eleven BRTOD Planning Project stations were assigned a typology:

Neighborhood, Mixed-Use Neighborhood, Employment, or Commerce.

Station typologies reflect the complementary roles of the stations along the corridor and inform the type and intensity of transit-oriented development that is emphasized in each station's development plan.

Station typologies respond to station-specific community desires and adopted policies and plans while being consistent with best practices for transit-oriented development. Site conditions, market conditions, and demographics were considered in assigning typologies to each station.

Figure 2. Station Typologies



NEIGHBORHOOD STATIONS

In Neighborhood Station areas, strategic improvements to key multi-modal transportation routes are emphasized in order to provide safe, direct, and convenient BRT access for current residents. Where development opportunities are present, affordable and market-rate neighborhood-compatible, moderate-density apartment, condominium, and townhome development is appropriate. Policies, programs and strategies that discourage displacement of current residents and businesses ensure that transit-dependent residents receive the benefits of the Gold Line service.

The Neighborhood Stations are Mounds Boulevard Station, Earl Street Station, White Bear Avenue Station, and Greenway Avenue Station.

Neighborhood Stations are predominantly residential areas with few opportunities for transit-oriented infill or redevelopment.

MIXED-USE NEIGHBORHOOD STATIONS

Mixed-Use Neighborhood Station areas most closely resemble ideal transit-oriented development. Higher-density affordable and market-rate apartment, condominium, and townhome development is achievable. Street-oriented retail shops, commercial uses, and neighborhood-scaled employment is fostered to create a complete and balanced station area. Neighborhood-scaled employment includes professional offices and services, which may occupy standalone buildings or the floors above ground-floor retail. These station areas should include a rich mix of urban parks, a connected street grid, and safe, direct and convenient walking and biking connections to the station.

The Mixed-Use Neighborhood Stations are Helmo Avenue Station and Sun Ray Station.

Mixed-Use Neighborhood Stations provide the most opportunity for transit-oriented development.

EMPLOYMENT STATIONS

Employment Stations draw transit riders from within and outside the corridor.

In Employment Station areas, land use policies and plans should maintain and promote existing and new uses that provide family-wage job opportunities for Gold Line corridor residents and for commuters from outside of the corridor study area. Businesses with a high number of jobs per acre, such as medical, financial, technology, and corporate headquarters, should be fostered. These types of businesses require high levels of visibility to succeed and are most successful when located on prominent high-traffic streets, adjacent to other employment uses, and where medium to large parcels are available to accommodate buildings with larger floor areas. Development of new low-intensity uses such as manufacturing, warehousing, or other similar industrial uses should be discouraged. While these station areas have an emphasis on employment uses, residential and employee-serving commercial uses are also appropriate.

The Employment Stations are Etna Street Station, Maplewood Station, and Tamarack Station.

COMMERCE STATIONS

Commerce Stations include BRT-trip-generating destinations used on a daily or weekly basis.

Commerce Station areas include substantial employment, high-density residential, entertainment, and dining uses. This station type is an opportunity to establish or strengthen an activity center that serves as an alternative to downtown Saint Paul for corridor residents' daily and weekly employment and shopping trips. Amenities may include a plaza or other urban gathering place. Locating park-and-ride ramps in this station area is appropriate, though they should be sited and designed for shared use if possible. While this station type may initially have greater auto orientation, long-term planning should identify a framework for a street grid and biking and walking connections to the station and park-and-ride.

The Commerce Stations are Woodbury Theatre Station and Woodbury I-494 Park-and-Ride Station.

STATION ACCESS HIERARCHY

A hierarchy of complementary access route types address the need for connections between stations and within each station area. This complete and connected network serves walkers and bicyclists, along with other users who arrive on wheels—whether by wheelchair or by an emerging transportation option such as electric scooters.

Walking and biking improvements to existing public rights-of-way close gaps in existing routes and provide new routes to complete networks identified in the pedestrian and bicycle planning documents of local jurisdictions.

The Corridor Trail links all of the stations along the Gold Line BRTOD Planning Project Corridor and is supported by a network of access routes within each station area.

Figure 3. Corridor Trail Concept

The Corridor Trail is a continuous walking and biking link between the eleven BRTOD Planning Project stations.

CORRIDOR TRAIL

The Corridor Trail serves as the primary station access route within each station area and:

- Links stations via a car-free safe, direct, and convenient walking and biking route.
- Links numerous existing destinations and proposed new transit-oriented development sites.
- Serves as both a transportation facility and a recreation amenity, connecting existing parks and civic uses to the stations.

The Corridor Trail is an asphalt or concrete walking and biking facility. The trail includes both existing and new trails and runs generally parallel to the BRT guideway from the Woodbury Theatre Station to Ruth Avenue and then adjacent to existing streets south of I- 94 to the Mounds Boulevard Station.

Collector Trails provide access into station areas from neighborhoods and destinations outside the mile-wide study area corridor.

COLLECTOR TRAILS

Collector Trails include existing and planned local, regional, and Minnesota Department of Transportation (MnDOT) facilities that feed into and through each station area. The Collector Trails:

- Are separated from auto traffic to provide a safe car-free walking and biking pathway.
- Link existing destinations and new transit-oriented development sites.
- Serve as a recreation amenity, connecting existing parks and civic uses to the stations.

Collector Trails are designed to meet regional and local jurisdiction design standards and are typically a 10- to 12-foot wide asphalt surface that is separated from the street. Collector Trails generally run perpendicular to the BRT guideway and Corridor Trail. Existing Collector Trails are located on Swede Hollow, Century Avenue, McKnight Avenue, Hadley Avenue, Hudson Boulevard, Tamarack Road, and Valley Creek Road. Planned Collector Trails include the Johnson Parkway Trail.

STATION ACCESS ROUTES

Station Access Routes are the primary walking and biking connections between stations and station area neighborhoods. These routes are typically sidewalk and bike lane improvements that take advantage of limited space. At the Earl Street and White Bear Avenue stations, Station Access Routes:

- Link existing destinations and new transit-oriented development sites.
- Incorporate designated bike lane routes identified in the bicycle plans of local jurisdictions.
- Incorporate existing bike lanes or are upgraded shared-shoulder routes.
- Incorporate existing sidewalks and, in some instances, existing bike lanes.

The design of Station Access Routes is dependent on local right-of-way-conditions. These routes include a combination of both sidewalks and bike lanes and should include, at a minimum:

- Continuous 5-foot-wide sidewalks on both sides of the street.
- 5-foot-wide one-way buffered or protected bike lanes. In some instances, bike lanes are two-way 10-foot-wide buffered facilities. Striped roadway buffer widths should be 18 inches, but with a physical barrier such as a curb can be 12 inches, minimum.

Station Access Routes provide linkages between the Corridor Trail and stations.

NEIGHBORHOOD ACCESS ROUTES

Neighborhood Access Routes provide low-stress connections to station area neighborhoods. In many instances, these routes are preferred by inexperienced riders who are not comfortable riding on busy collector or arterial streets.

Neighborhood Access Routes feed into the station area along streets with existing sidewalks and designated bike routes identified in the pedestrian and bicycle plans of local jurisdictions. These routes are typically located on low traffic streets and link existing lower density residential areas to the stations.

Where Neighborhood Access Routes intersect busy streets, diverters, barriers, or other traffic-control devices may be necessary to provide safe crossings or to discourage through auto traffic. Wayfinding signs or other unifying elements, such as ornamental streetlighting, will help walkers and bikers navigate these routes.

Neighborhood Access Routes complete the station area network by providing connections between Station Access, Collector Trail, and Corridor Trail routes.

The five Cities, two Counties and the Metropolitan Council play a collective role in developing and coordinating policies and programs that stimulate private investment while ensuring retention of transit-dependent communities.

BRTOD CORRIDOR SUMMARY

The BRTOD Plans provide for an integrated circulation and development framework that supports increased transit ridership and capitalizes on the investment in bus rapid transit to achieve each station areas' transit-oriented development potential.

Circulation

Circulation plans support a unifying and connective walk and bike thread between stations, surrounding neighborhoods and transit-supportive uses through enhanced "active transportation" where pedestrian, bicycle and bus rapid transit improvements make it safer, quicker, and more enjoyable to access transit, parks and open spaces, schools, jobs, shopping and other destinations.

Development

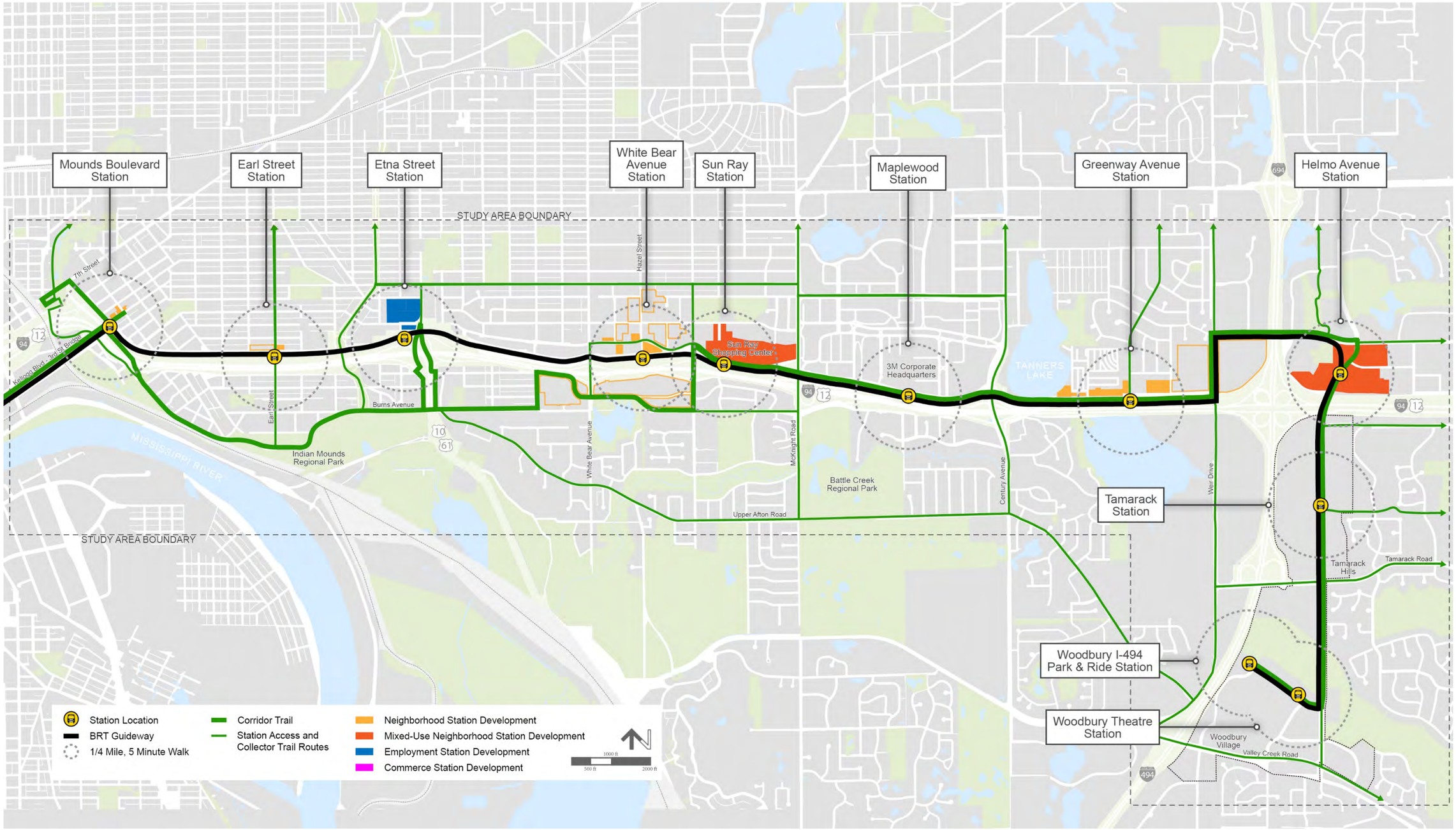
Opportunities for bus rapid transit-oriented development strengthens the stations' complementary roles with a range of transit-supportive housing options, local business development, job creation and in many instances an active station environment.

Implementation

BRTOD Plan implementation is rooted in equitable growth strategies and strategic public investments that enable transit-oriented development and private investment along the corridor. Opportunity sites along the corridor have the potential for $1.3 billion dollars of investment in new housing, employment, and retail and services uses.

Public investments in the Corridor Trail and walk and bike station access improvements, extending a half-mile in each direction of the stations, has the potential to increase ridership. By substituting some work-related auto trips for walking, biking, and transit, an annual economic stimulus could be $37,064,175 million a year, corridor-wide. These are local dollars that circulate again and again throughout the corridor.

Figure 4. Gold Line Stations BRTOD Circulation and Development Vision



ETNA STEET STATION


WHITE BEAR AVENUE STATION

HELMO AVENUE STATION


MAPLEWOOD STATION

SUN RAY STATION

GREENWAY AVENUE STATION

BRTOD CORRIDOR CAPACITY

The development capacity of the corridor is based on development types that support the station typologies within a quarter mile of each station. For the Saint Paul stations, the development intensity reflects the current transit-supportive zoning. For Oakdale and Landfall stations, the development intensity represents Metropolitan Council and national standards for transit-oriented development densities.

Substantial BRTOD Potential

The corridor market assessment identified development potential based on an analysis of the existing supply and market conditions and determined development potential based on market trends within a five- to ten-year forecast.

A comparison of the market assessment and development capacity indicates that the potential for employment area and multi-family units exceeds the market trend's five- to ten-year projection. While national figures for transit-oriented development suggest that, at a minimum, transit is likely to support an additional 10% of development over market trends, the development capacity predicts corridor-wide development 50% higher than the market trend.

Anticipated Outcomes

155 acres
Estimated New Development Capacity

4,628
Multi-Family dwelling units

378,500
Commercial square feet

2,050,000
Employment square feet

$1.4 Billion
Estimated New Private Investment

$926 Million[1]
Multi-Family

$95 Million[1]
Commercial

$410 Million[1]
Employment

3,800
Estimated New Jobs[2]
corridor-wide

$34,065,024 Million
Potential Annual Economic Stimulus[3]
corridor-wide

Additional detail and assumptions used to calculate the Gold Line BRTOD Corridor Capacity are outlined in the Appendix.

Figure 5. Corridor Development Capacity Summary

STATION	SITE AREA	COMMERCIAL BUILDING AREA		MULTI-FAMILY	
		EMPLOYMENT [1]	RETAIL/SERVICES [2]	BUILDING AREA	DWELLING UNITS [3]
Mounds Boulevard Station	50,000 sf (1.1 ac)	--	4,000 sf	42,000 sf	35 du
Earl Street Station	9,800 sf (0.2 ac)	--	3,500 sf	15,500 sf	15 du
Etna Street Station	465,000 sf (10.7 ac)	1,140,000 sf	30,000 sf	--	--
White Bear Avenue Station	196,000 sf (4.5 ac)	--	10,000 sf	300,000 sf	300 du
Sun Ray Station	1,170,000 sf (26.9 ac)	160,000 sf	275,000 sf	2,525,000 sf	2,500 du
Maplewood Station	--	--	--	--	--
Greenway Avenue Station	3,128,000 sf (72 ac)	600,000 sf	26,000 sf	744,000 sf	745 du
Helmo Avenue Station	1,633,500 sf (37.5 ac)	150,000 sf	30,000 sf	1,082,000 sf	1,125 du
Tamarack Station	--	--	--	--	--
Woodbury Theatre Station	--	--	--	--	--
Woodbury I-494 Park & Ride Station	--	--	--	--	--
TOTAL DEVELOPMENT	6,652,300 sf (153 ac)	2,050,000 sf	378,500 sf	4,708,500 sf	4,720 du

[1] Employment area consists of uses such as professional office, education, job training, and medical and dental offices.
[2] Retail and services consists of uses that engage in the sale of goods, merchandise, dining, entertainment, and services such as daycare, financial, and real estate.
[3] Dwelling Unit Assumptions: Multi-family assumes 1-bedroom units range 800 to 1000 sf per unit. Townhome assumes 2-bedroom units at a range of 1,800 to 3,000 sf per unit.
Units of Measure: Acres (ac); Square Feet (sf); Dwelling Units (du)

MOUNDS BOULEVARD STATION

The Mounds Boulevard Station serves a demographically diverse community and acts as a front door to the East Side's historic Dayton Bluff neighborhood.

Station access routes are located to serve the existing transit-dependent residential neighborhood and provide linkages to transit-supportive uses such as the Metropolitan State University and the Dayton's Bluff Recreation Center.

A potential transit-oriented infill site at Third Street and Maria Avenue is envisioned as affordable multi-family apartments and townhomes at a scale appropriate to the historic neighborhood and providing a limited amount of neighborhood-scale commercial uses that serve nearby residents and transit riders to and from the University.

The Mounds Boulevard Station has been identified as a Neighborhood Station.

Figure 6. Mounds Boulevard Station

Figure 7. Intersection of Third St and Maria Ave

Figure 8. Multi-Family Development

Figure 9. Third Street Corridor Trail

BRTOD VISION

The BRTOD vision for the Mounds Boulevard Station supplements the City of Saint Paul's adopted Station Area Plans with additional clarity for BRTOD land uses and access routes between the station and the neighborhood.

Transit-Oriented Uses

The one block corridor along Third Street between Maria Avenue and Mounds Boulevard should consist of mixed-income multi-family housing and street-oriented commercial uses that foster transit use and provide opportunities for new small businesses. These uses should serve both residents of historic Dayton's Bluff neighborhood and Metropolitan State University students and faculty.

Essential Station Access Enhancements

Access enhancements should link Metropolitan State University and the Dayton's Bluff Recreation Center to the station.

A Corridor Trail on Third Street should link the station to access routes on Maria Avenue. The Mounds Boulevard Corridor Trail provides walking and biking access between the station, Indian Mounds Regional Park, and neighborhoods south of I-94. The Kellogg Boulevard-Third Street Bridge should provide station access between the station and the Capital City protected bikeway.

Figure 10. Mounds Boulevard Station BRTOD Vision Concept

CIRCULATION

Corridor Trail

The Corridor Trail includes walking and biking improvements linking Downtown Saint Paul's Capital City Bikeway Trail, Union Depot Transit Center, and Earl Street Station to Mounds Boulevard Station. The Corridor Trail at Mounds Boulevard Station is located along Kellogg Boulevard, along Third Street from Mounds Boulevard to Maria Avenue, and along Mounds Boulevard.

Collector Trails

Collector Trails provide important connections between the stations, the Corridor Trail, and the regional walking and biking transportation network north and south of I-94. Existing Collector Trails include the Bruce Vento Trail, Swede Hollow Park Trail, and the CHS Trail (4th Street).

Station Access Routes

Station Access Routes provide safe and direct pedestrian and bicycle station access from the station area to Mounds Boulevard Station.

Neighborhood Access Routes

Neighborhood Access Routes are walking and biking routes consistent with designated routes and treatments identified in the Saint Paul Bicycle Master Plan and the Saint Paul Pedestrian Plan.

Figure 11. Mounds Boulevard Existing Conditions (Looking East)

Figure 12. Mounds Boulevard Corridor Trail Proposed Condition (Looking East)

DEVELOPMENT

Mounds Boulevard Station Area Development Capacity

Area
1.1 acres

Residential Units
35 dwelling units

Commercial Building Area
4,000 square feet

The Mounds Boulevard Station Development Plan describes the vision for commercial and multi-family mixed-use development on Third Street and Maria Avenue sites near the station. The Development Plan capitalizes on commercial access and storefront visibility for drive-by traffic on Third Street and on the movement of transit riders between the neighborhood, Metropolitan Station University, and the Mounds Boulevard Station.

The Development Plan is consistent with the City's 2040 Comprehensive Plan, which identifies the area at Maria Street and Third Street as a neighborhood node characterized by compact, mixed-use development that includes neighborhood-scale shops and services similar to the development character that existed there during the streetcar era.

Figure 13. Mounds Boulevard Station Existing Conditions

Figure 14. Mounds Boulevard Station Development Character

EARL STREET STATION

The Earl Street Station builds off the historic streetcar-era character present at the intersection of Hudson Road and Earl Street to provide opportunity for infill redevelopment and renovation of existing commercial properties. Redevelopment and renovation of these properties establish activity at the station, benefiting existing land owners, businesses, and building tenants, and encouraging additional local business opportunities.

Station access routes are located to serve the existing transit-dependent residential neighborhood and provide linkages between the station, transit-supportive neighborhood uses, the Indian Mounds Regional Park, and the Indian Magnet School. The Earl Street crossing of I-94 links these two important regional destinations with the most walking- and biking-friendly crossing in the corridor.

The Earl Street Station has been identified as a Neighborhood Station.

Figure 15. Earl Street Station

BRTOD VISION

The BRTOD vision for the Earl Street Station supplements the City of Saint Paul's adopted Station Area Plans with additional clarity for BRTOD land uses and access around the station.

Safe and Active Station Environment

A new mixed-use commercial building and renovation of the Hudson Road commercial storefronts should create an active street, support transit, and provide neighborhood-serving goods, services, and entertainment close to residents.

Station Access Enhancements

Earl Street improvements should link the American Indian Magnet school and the Indian Mounds Regional Park to the station. Mounds Boulevard Corridor Trail improvements in the Indian Mounds Park and Municipal Forest link the Bruce Vento Trail and the Johnson Parkway Trail to the station. Planned Johnson Parkway improvements will provide neighborhood walking and biking access to the Corridor Trail.

Figure 16. Existing Commercial Storefront

Figure 17. Commercial Storefront Renovations

Figure 19. Existing Conditions

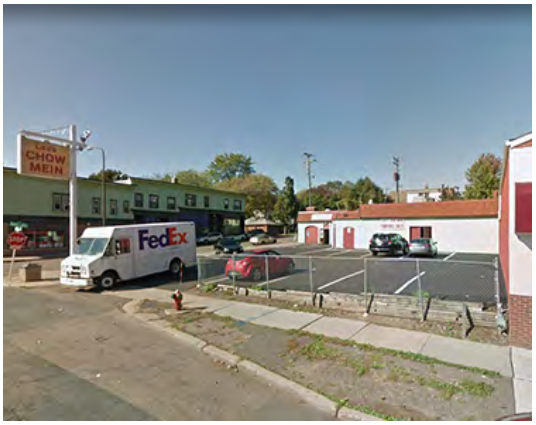


Figure 18. New Transit-Oriented Development

Figure 20. Earl Street Station BRTOD Vision Concept

CIRCULATION

Corridor Trail

The Corridor Trail includes walking and biking improvements linking regional trails, parks, and neighborhoods south of I-94 to the Earl Street Station. The Corridor Trail at Earl Street Station widens and enhances an existing trail along Mounds Boulevard within Indian Mounds Park and Municipal Forest.

Collector Trails

Collector Trails provide important connections between the stations, the Corridor Trail, and the regional walking and biking transportation network north and south of I-94. The Johnson Parkway Collector Trail will include a walking and biking trail and will link the Corridor Trail to the Bruce Vento Regional Trail.

Station Access Routes

Earl Street Station lacks a direct Corridor Trail connection due to space constraints. Bike lane and sidewalk improvements on Earl Street ensure that transit access from the Corridor Trail is direct and safe. Earl Street walking and biking improvements also provide a safe school connection between the Indian Magnet School, Margaret Street, and the Earl Street Station.

Neighborhood Access Routes

Neighborhood Access Routes are walking and biking routes consistent with designated routes and treatments identified in the Saint Paul Bicycle Master Plan and the City's Pedestrian Plan.

Figure 21. Earl Street Bridge Existing Conditions (Looking North)

Figure 22. Earl Street Bridge Station Access Route Proposed Condition (Looking North)

DEVELOPMENT

Earl Street Station Area Development Capacity

Area
0.2 acres

Residential Units
15 dwelling units

Commercial Building Area
3,500 square feet

The Earl Street Station Development plan describes the maximum potential development of a site directly adjacent to the Earl Street eastbound station platform. This Development Plan provides for mixed-use commercial and multi-family uses that support an active station environment.

The Development Plan is consistent with the City's 2040 Comprehensive Plan, which identifies the area at the Earl Street Station as a neighborhood node characterized by neighborhood-scale mixed-use shops and services.

The development capacity summary is based on existing zoning. While permitted development exceeds the identified gap assessment demand, existing zoning ensures that development capacity exists for long-term demand on these sites.

Figure 23. Earl Street Station Existing Conditions

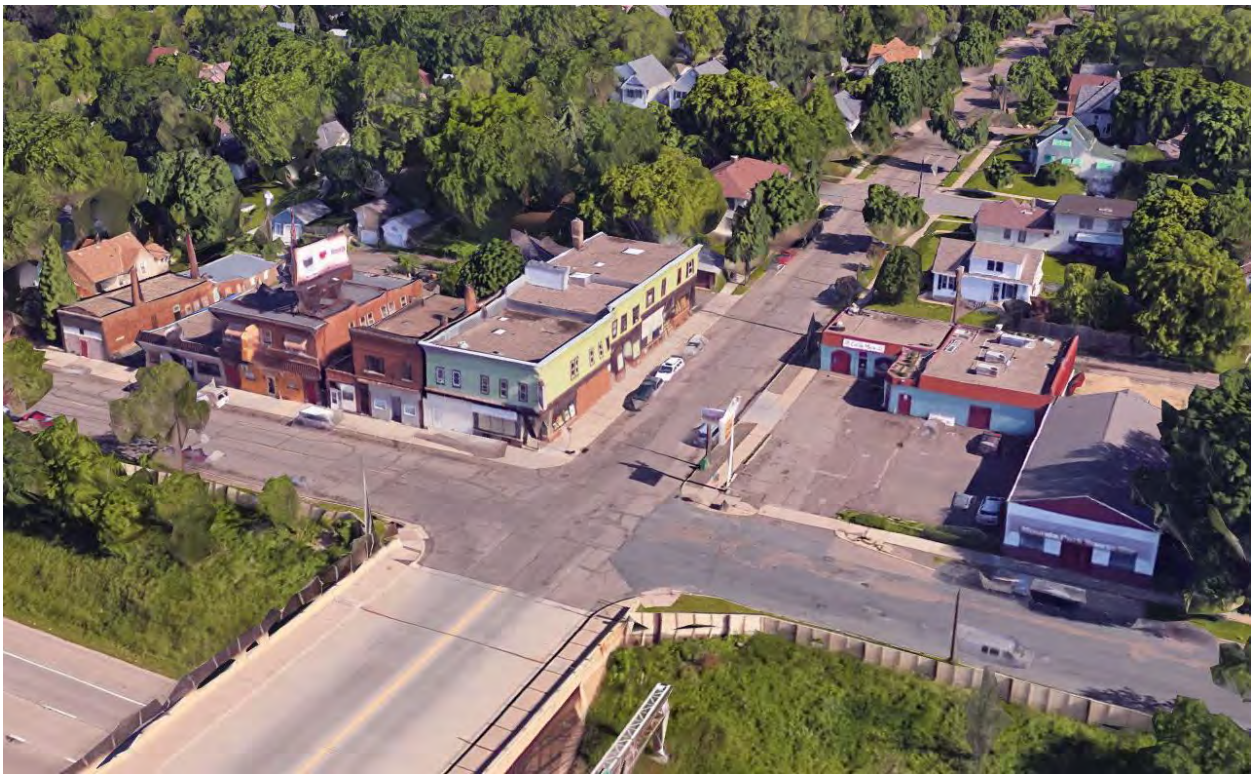


Figure 24. Earl Street Station Development Character

ETNA STREET STATION

The Etna Street Station expands employment uses and fosters workforce development services that benefit existing low-income station area residents as well as the Gold Line corridor communities. The station takes advantage of the strong regional access established by the crossroads of the Gold Line BRT, I-94, and Highway 61 to establish an employment hub that serves both the station area and the region.

Station access routes serve existing higher-density residential and transit-dependent neighborhoods west of the station, connect the Corridor Trail, neighborhoods south of I-94, and destinations north of the station, such as Harding High School, to the station.

At the station, redevelopment of excess MnDOT right-of-way is envisioned to include a mix of employment, education, services, and street-oriented commercial uses.

Long-term redevelopment of the Metro 94 parcel illustrates the possibilities of the City's transit-oriented development zoning for a mix of high-intensity employment, public park blocks, and street-oriented commercial uses.

The Etna Street Station has been identified as an Employment Station.

Figure 25. Etna Street Station

BRTOD VISION

The BRTOD vision for the Etna Street Station supplements the City of Saint Paul's adopted Station Area Plans with additional clarity for BRTOD land uses and access around the station.

Safe and Active Station Environment

Clear sightlines to the station platform from Wilson Avenue should be provided and station-activating commercial uses should be provided adjacent to the station.

Transit-Oriented Infill

On the MnDOT parcel at the station, a new mixed-use building should provide employment, education, and services that will foster transit use, small businesses, and commercial development.

Long Term Transit-Oriented Opportunity Sites

Long-term redevelopment of the Metro 94 Business Park should include high intensity transit-oriented employment uses set within a walkable environment.

Station Access Enhancements and Improvements

Improvements to Third Street should provide safe and direct access between the station and local destinations by filling gaps in sidewalks and adding bike lanes.

Along Burns Avenue and Mounds Boulevard, enhancements to existing Indian Mounds Regional Park and Municipal Forest trail should be provided. The trail should be extended east along Burns Avenue to station area destinations, such as the Target on White Bear Avenue.

Trail connections provided by the Gold Line BRT project along Highway 61 will connect Wilson Avenue enhancements with the Corridor Trail.

Figure 26. Safe and Active Station Environment

Figure 27. Safe and Active Station Environment

Figure 28. Transit-Oriented Infill

Figure 29. Etna Street Station BRTOD Vision Concept

CIRCULATION

Corridor Trail

The Corridor Trail includes walking and biking improvements linking regional trails, parks, and neighborhoods south of I-94 to the Etna Street Station. The Corridor Trail at Etna Street Station includes a walking and biking trail along Burns Avenue, and a walking and biking trail along the east and west sides of Highway 61 (Etna Street).

Collector Trails

Collector Trails provide important connections between the stations, the Corridor Trail, and the regional walking and biking transportation network north and south of I-94. The Johnson Parkway Collector Trail will include a walking and biking trail and will link the Corridor Trail to the Bruce Vento Regional Trail.

Station Access Routes

Station Access Routes at Etna Street Station include sidewalk and bike lane improvements on Etna Street and Third Street. These routes provide an essential linkage to the Corridor Trail and create a safe school connection between the Etna Street Station and Harding High School.

Neighborhood Access Routes

Neighborhood Access Routes are walking and biking routes consistent with designated routes and treatments identified in the Saint Paul Bicycle Master Plan and the City's Pedestrian Plan.

Figure 30. Etna Street Existing Condition (Looking South)

Figure 31. Etna Street Primary Station Access Route Proposed Condition (Looking South)

DEVELOPMENT

Etna Street Station Area Development Capacity

Area
10.7 acres

Commercial Building Area
1,170,000 square feet

A long-term Station Area Plan vision for the Etna Street Station is to increase the number of family-wage jobs and office uses in the station area and an education, job-training and social services center is envisioned for the MnDOT parcel adjacent to the station. The Development Plan envisions the long-term redevelopment of the existing Metro 94 Business Park site, which currently provides transit supportive, stable, and viable employment and service uses.

The development capacity summary is based on the existing zoning for the IBEW/Metro 94 parcels and rezoning the MnDOT parcel from R1 One-family Residential to T4 Traditional Neighborhood. Development totals exceed the gap assessment identified short-term demand.

Figure 32. Etna Street Station Existing Conditions

Figure 33. Etna Street Station Development Character

WHITE BEAR AVENUE STATION

The White Bear Avenue Station provides opportunities for development of mixed-income residential and small business and family-wage employment within an existing low-income neighborhood. Station access routes are located to serve existing transit-dependent residential neighborhoods and provide linkages to transit-supportive uses such as the Aldi Discount Foods store.

Potential transit-oriented infill sites near the station are envisioned as a public park, affordable and market-rate multi-family apartments, and a limited amount of neighborhood-scale commercial uses. Long-term transit-oriented development should include a mix of commercial, housing, and employment uses.

The White Bear Avenue Station has been identified as a Neighborhood Station.

Figure 34. White Bear Avenue Station

BRTOD VISION

The BRTOD vision for the White Bear Avenue Station supplements the City of Saint Paul's adopted Station Area Plans with additional clarity for BRTOD land uses and access around the station.

Figure 35. Safe and Active Station Environment

Safe and Active Station Environment

Mixed-use multi-family residential and possibly a café, are oriented to the station, providing activity throughout the day and evening. A station park provides recreation activity and clear sightlines to the station from Old Hudson Road.

Figure 36. Transit-Oriented Infill

Transit-Oriented Infill

Along Old Hudson Road, mixed-use multi-family housing and development fosters transit use and provides opportunities for small ground-floor businesses.

Long-Term Transit-Oriented Opportunity Sites

Underutilized parcels along Suburban Avenue are opportunities for mixed-income housing, small businesses and family-wage employment uses. Redevelopment of existing apartment complexes north of I-94 are an opportunity to create mixed-income housing. Redevelopment should not decrease existing levels of affordable housing.

Figure 37. Essential Station Access Improvements

Station Access Enhancements and Improvements

Enhancements ensure safe and direct access to the station with lighting and bike lanes or mixed travel lane 'sharrow' markings. New bike lanes along Old Hudson Road, and walk and bike enhancements to the White Bear Avenue and Ruth Street bridges provide residents with safe and direct access between the station, commercial uses along Suburban Avenue, and the Sun Ray Shopping Center.

A Corridor Trail along the Ruth Street Bridge and Suburban Avenue ensures safe walk and bike access to redevelopment areas south of I-94 and connects east to the Sun Ray Station and west to the Etna Street Station.

Figure 38. White Bear Avenue Station BRTOD Vision Concept

CIRCULATION

Corridor Trail

The Corridor Trail includes walking and biking improvements linking Target, Aldi Discount Foods, high-density residential areas, potential redevelopment areas, and shopping destinations located south of I-94 to the White Bear Avenue Station.

Collector Trails

Existing, planned, and enhanced trails connect destinations along the periphery of the station area and provide walking and biking access to the Corridor Trail.

Station Access Routes

Station Access Routes are safe and direct pedestrian and bicycle routes to the station and connect the station across barriers, such as I-94, to nearby shopping and community facilities. Station Access Routes include improvements to Old Hudson Road, White Bear Avenue Bridge, and Third Street.

Neighborhood Access Routes

Neighborhood Access Routes are walking and biking routes consistent with designated routes and treatments identified in the Saint Paul Bicycle Master Plan and the City's Pedestrian Plan.

Figure 39. Suburban Avenue Existing Conditions (Looking East)

Figure 40. Suburban Avenue Corridor Trail Proposed Conditions (Looking East)

DEVELOPMENT

White Bear Avenue Station Area Development Capacity

Area
4.5 acres

Residential Units
300 dwelling units

Commercial Building Area
10,000 square feet

The White Bear Avenue Station Development Plan describes the near-term transit-oriented development vision for multi-family and mixed-use multi-family and commercial uses on sites in proximity to the station. Suburban Avenue sites offer longer-term infill or redevelopment opportunities for multi-family, commercial, and employment uses. The Development Plan does not offer any conceptual design, nor does it suggest specific development yield for these sites. Additional design and development gap analysis should be provided as part of a future Suburban Avenue Corridor Plan led by the District 1 Council.

Additional development sites may present an opportunity to address demand for affordable housing. Policies should be developed to ensure that redevelopment does not result in displacement of current residents while significantly increasing the affordable housing supply on these sites.

Since there is substantial near-term gap capacity that cannot be met through the sites identified in the Development Plan, an opportunity exists to study additional development sites and/or to expedite the Suburban Avenue Corridor Plan to meet this demand.

Figure 41. White Bear Avenue Station Existing Conditions

Figure 42. White Bear Avenue Station Development Character

SUN RAY STATION

The Sun Ray Station serves the existing diverse residential community and the nearby 3M workforce.

Redevelopment of the existing auto-oriented Sun Ray Shopping Center is envisioned as a dense mixed-use community with a grid of walking and biking streets, plazas, and parks. Station access routes link existing high-density housing, Conway Park, the recreation center, and the library. The station will enhance transit access to the corridor and create an opportunity for an East Metro 'hub.'

The Sun Ray Station has been identified as a Mixed-Use Neighborhood Station.

Figure 43. Sun Ray Station

Figure 44. Safe and Active Station Environment

Figure 45. Transit-Oriented Infill

Figure 46. Station Access

BRTOD VISION

The BRTOD vision for the Sun Ray Station supplements the City of Saint Paul's adopted Station Area Plans with additional clarity for BRTOD land uses and access around the station.

Safe and Active Station Environment

The station platform is located adjacent to the back of the Sun Ray shopping center, not visible from retail uses. When the shopping center redevelops, the initial phase should be the replacement of the TJ Maxx building. A new building in this location should include station-activating ground-floor commercial uses oriented toward the station.

Long-Term Transit-Oriented Opportunity

Phased high-density walkable mixed-use redevelopment is envisioned for the Sun Ray Shopping Center. Redevelopment should retain existing transit-supportive uses, such as the Cub Foods and include sites that would be suitable for small businesses, affordable housing, and public gathering spaces.

Transit-Oriented Infill

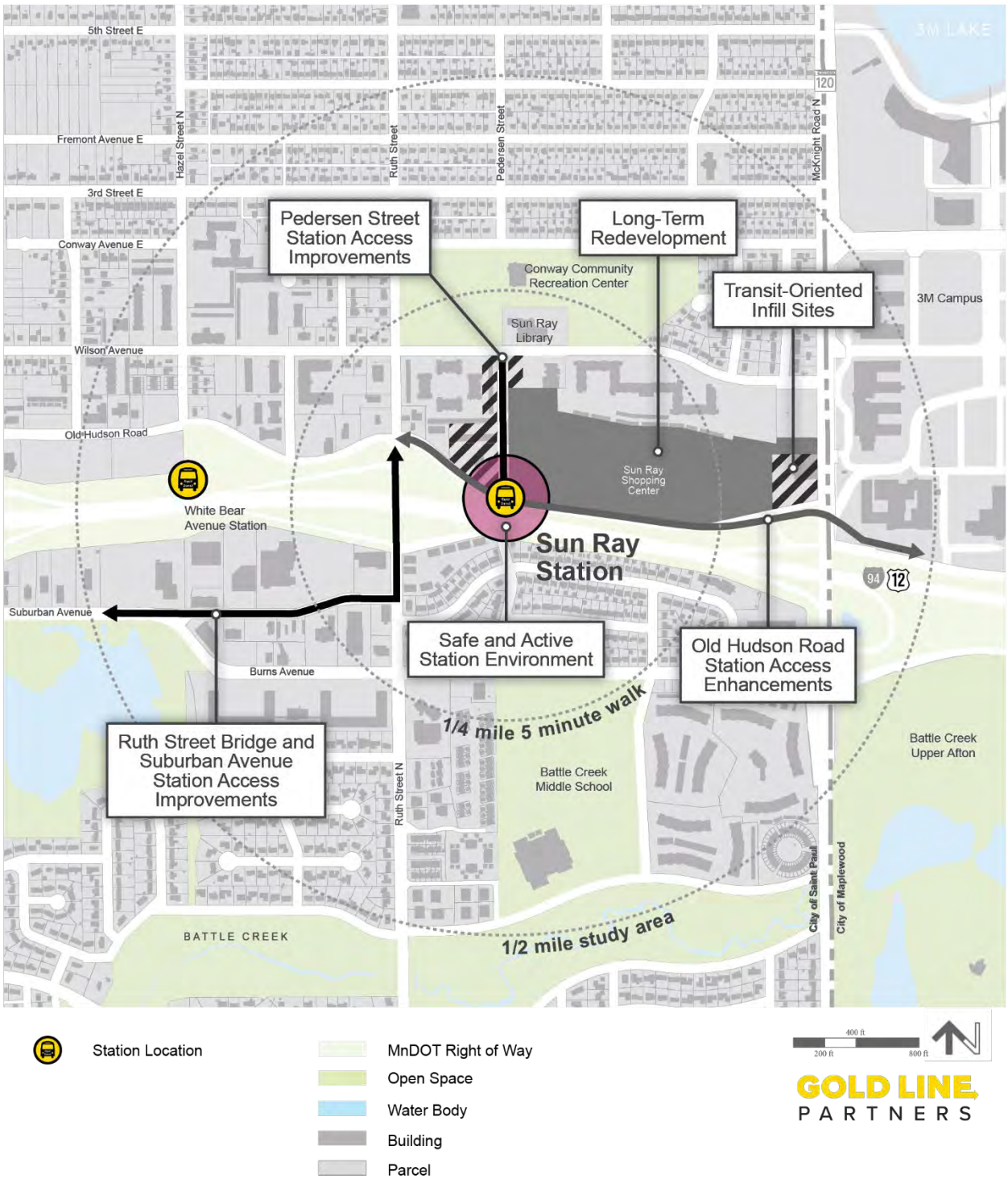
Redevelopment of several under-utilized sites along Pederson Street is envisioned. Redevelopment of the current Transit Center site should include relocation of the Transit Center close to the station. Efforts to retain existing uses, such as Culvers, should be explored. On McKnight Road, uses that are supportive of 3M, such as a hotel, are appropriate.

Station Access Enhancements & Improvements

Corridor Trail enhancements on Ruth Street and Suburban Avenue should link the White Bear Avenue and Sun Ray station areas. A multi-use trail is envisioned along Pedersen Street to improve access to the existing Transit Center, Conway Park, the library, and the recreation center.

Along the Old Hudson Trail corridor, route improvements should include additional pedestrian-scaled lighting, landscaping, and station wayfinding.

Figure 47. Sun Ray Station BRTOD Vision Concept



CIRCULATION

Corridor Trail

The Corridor Trail includes walking and biking improvements linking the Sun Ray Station to the White Bear Avenue Station, potential redevelopment and shopping destinations south of I-94, and the Maplewood Station at the 3M Campus. The Corridor Trail at Sun Ray Station runs parallel to the BRT Guideway along the north side of Old Hudson Road between Ruth Street and McKnight Road.

Collector Trails

Located outside the five-minute walking radius, the McKnight Collector Trail provides important linkages for bicyclists and walkers between the Corridor Trail, the 3M campus, an existing Double Tree Hotel, apartment complexes, and single-family residential neighborhoods. The trail also provides important linkages to station access routes on Third Street and Conway Avenue in Maplewood and connects to the Neighborhood Access Route on Wilson Avenue.

Station Access Routes

Station Access Routes at Sun Ray Station provide essential connections to the neighborhoods north and south I-94. Safe routes are well connected to existing community facilities, including the Sun Ray Transit Center, Conway Park, the recreation center, the Sun Ray Community Library, and Battle Creek Middle School. Station Access Routes include improvements to Pedersen Street and Third Street.

Neighborhood Access Routes

Neighborhood Access Routes are walking and biking routes consistent with designated routes and treatments identified in the Saint Paul Bicycle Master Plan and the City's Pedestrian Plan.

Figure 48. Old Hudson Road Existing Conditions (Looking East)

Figure 49. Old Hudson Road Corridor Trail Proposed Conditions (Looking East)

DEVELOPMENT

The Sun Ray Station Development Plan describes the phased redevelopment of the Sun Ray shopping center and adjacent sites identified in the City's Station Area Plan. This transit-oriented development vision has the long-term potential to create mixed-use housing and commercial uses that take advantage of access and visibility to I-94, the BRT station, proximity to the 3M campus, and community facilities along Wilson Avenue.

The development capacity summary indicates the maximum amount of development based on existing zoning. Substantial near-term capacity for affordable and market-rate housing may be met through strategic early phased redevelopment.

Sun Ray Station Area Development Capacity

Area
26.9 acres

Residential Units
2,500 dwelling units

Commercial Building Area
435,000 square feet

Figure 50. Sun Ray Station Development Plan Phasing

Figure 51. Sun Ray Station Development Concept

MAPLEWOOD STATION

The Maplewood Station primarily serves 3M campus employees and clients. Neighborhoods, parks, and other outlying destinations will be linked to the station by new safe, direct, and convenient walking and biking routes.

Since the station area largely consists of the 3M campus, redevelopment opportunities are limited. Long term possibilities for new neighborhood-compatible housing within the station area should be studied.

The BRT station can provide a multi-modal front door to 3M and act as a trailhead to Battle Creek Regional Park. The bridge over I-94 should connect the park and the station. The bridge should include elements interpretive of the history of Battle Creek Park, 3M, and the City of Maplewood.

The Maplewood Station has been identified as an Employment Station.

Figure 52. Maplewood Station

Figure 53. Safe Station Environment

Figure 54. Walking and Biking Improvements

BRTOD VISION

The Maplewood Station area vision is a synthesis of corridor-wide and station-specific objectives.

Safe Station Environment

A landscaped boulevard buffers the station platform from the freeway traffic. Additional berming and landscaping along the corridor trail provide a separation from the 3M campus for trail users.

Link Retail to the station

The BRT project will provide a walk and bike trail with BRT and trail bridges at McKnight Road and Century Avenue to ensure safe and direct access to the Maplewood Station and connecting the station to the Sun Ray Shopping Center to the west and to Tanner's Lake and the Greenway Avenue station to the east.

Providing walking and biking linkages between 3M and the Sun Ray Shopping Center will ensure that the 3M workforce benefits from nearby shopping.

Direct Neighborhood and Park Access

The Maplewood Bridge concept would provide a walk and bike connection to the Battle Creek neighborhood and Battle Creek Park by way of new trail segments along Hudson Place or Sterling Street.

Figure 55. Maplewood Station BRTOD Vision Concept

CIRCULATION

Corridor Trail

The Corridor Trail runs adjacent to the BRT guideway along the north side of Hudson Road between the McKnight Road and Century Avenue intersections and is linked to the Sun Ray Station and the Greenway Avenue Station by BRT bridges over the intersections.

Collector Trails

Located outside the five-minute walking radius, Collector Trails provide important linkages for bicyclists and walkers between the Corridor Trail, neighborhood destinations, and the regional bicycle transportation network. The Collector Trails for Maplewood Station are Century Avenue Trail and McKnight Road Trail.

Station Access Routes

Station Access Routes provide residents, 3M employees, and parks users access to the station and Battle Creek Regional Park. The City of Maplewood has identified the Conway Avenue, Upper Afton Road, and the Maplewood Bridge pedestrian and bicycle routes in the City's 2040 Comprehensive Plan.

Neighborhood Access Routes

The Burns-Hudson Place route is a low-stress walk and bike connection from Battle Creek Regional Park to the Maplewood Bridge.

Figure 56. Maplewood Station Corridor Trail Existing Conditions (Looking East)

Figure 57. Maplewood Station Corridor Trail Proposed Condition (Looking East)

DEVELOPMENT

Employment

The existing campus was designed and developed for access by car. In the future, building siting and campus pedestrian and bicycle circulation should capitalize on the BRT station and trail access to and from campus. With improved connection between the station and existing and future campus development, BRT offers an opportunity to reduce the amount of employee parking. The type, amount, and location of future development will be determined by 3M.

Parks and Recreation

Planned Battle Creek Regional Park enhancements should consider the needs of those arriving from the Maplewood station. Existing facilities and the siting of new facilities should provide direct and accessible connections to station access routes. Amenities that support park users coming by transit should consider locating additional bike racks, secured bike parking areas, restrooms and other facilities.

Mixed-Use Commercial and Multi-family

The 2040 Comprehensive Plan envisions 50 percent of sites utilized for multi-family and 50 percent of sites utilized for commercial development. The City's Comprehensive Plan projected up to 239 multi-family units by 2040. No commercial development was projected.

Missing Middle Housing Study

To support additional transit riders and increased housing density near the station, the City of Maplewood should initiate a housing study and establish a stakeholder committee to explore infill housing, accessory dwelling units (ADU), duplex, triplex, and townhomes for existing single-family residential neighborhoods within a half-mile of the station.

Figure 58. Maplewood Station

Figure 59. Maplewood Bridge Concept

GREENWAY AVENUE STATION

The Greenway Avenue Station serves the economically and demographically diverse community of Landfall and the adjacent Oakdale single-family residential neighborhood. The station provides both transit access to the corridor and an opportunity for placemaking in the station area community.

While there are long-term transit-oriented development sites on the periphery of the station area, there are few opportunities for transit-oriented infill or redevelopment within a five-minute walk of the Greenway Avenue Station. Where development opportunities exist, station-activating commercial uses and affordable and market-rate apartments, condominiums, townhome development are envisioned.

Strategic enhancements and improvements to key multi-modal transportation routes are intended to provide residents with safe, direct, and convenient BRT access and links to future transit-oriented development sites.

The Greenway Avenue Station has been identified as a Neighborhood Station.

Figure 60. Greenway Avenue Station

Figure 61. 18-Hour Uses Adjacent to the Station

Figure 62. Direct and Safe Trail Access

BRTOD VISION

Safe and Active Station Environment

A mixed-use commercial development adjacent to the station should be active throughout the day and evening, providing eyes on the station and an opportunity not presently available to meet residents' daily commercial needs within the station area.

Transit-Oriented Infill

Infill buildings should be oriented to Hudson Boulevard and Dellwood Lane, providing an opportunity for new development that fosters transit use and serves the community. Along Dellwood Avenue, the siting of these buildings can establish a gateway entry and 'front door' to the city of Landfall.

Long Term Transit-Oriented Opportunity Sites

Vacant and underutilized parcels along Hudson Boulevard and Hadley Avenue provide opportunities for additional multi-family development and employment within a half mile of the station. New housing development should include options for a range of incomes and ages.

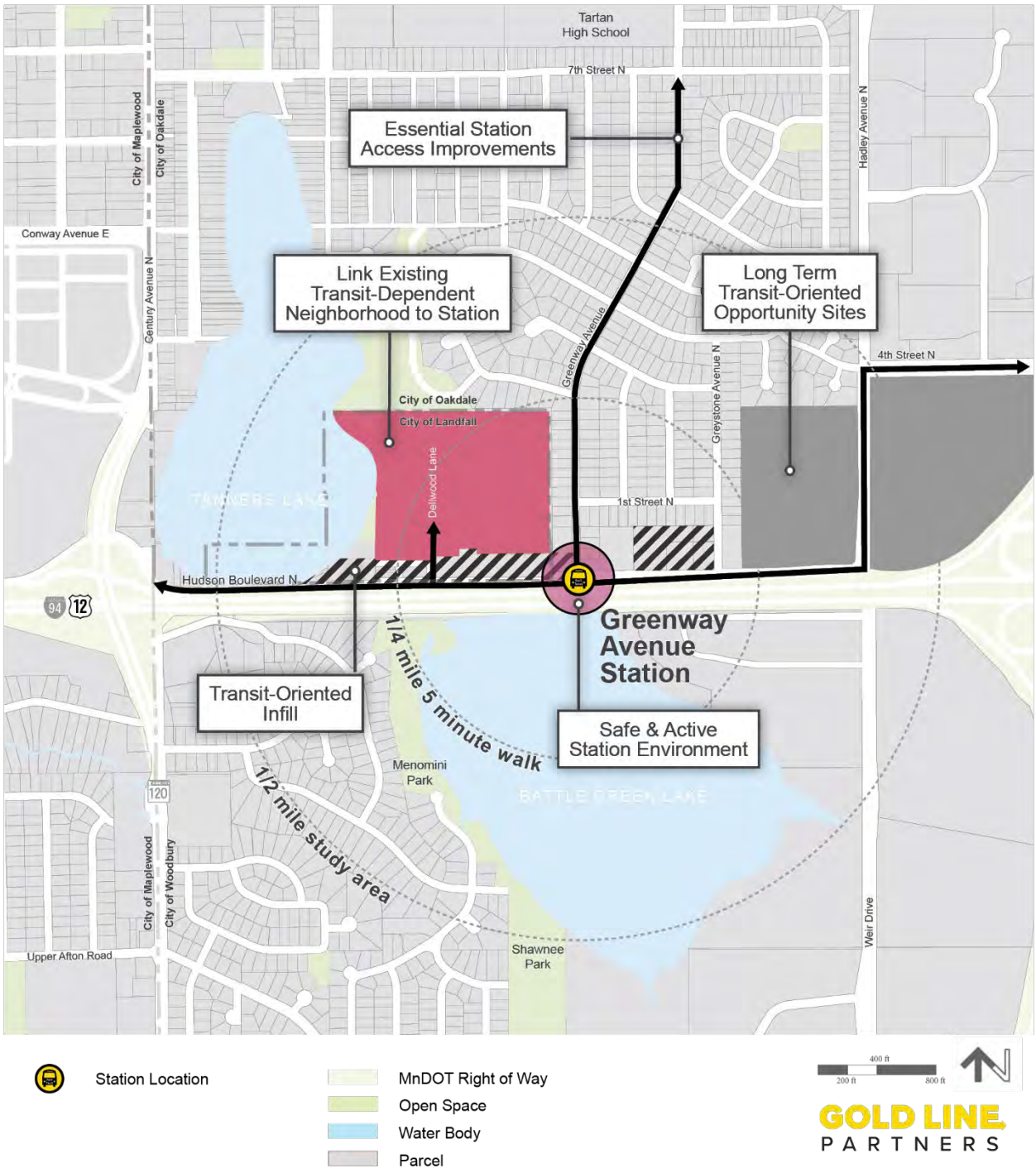
Link Transit-Dependent Neighborhood to Station

Walking and biking improvements are crucial to improving station access for existing residents. These improvements will ensure that Landfall residents benefit from access to corridor-wide job and educational opportunities, health services, and shopping opportunities provided by the Gold Line BRT.

Essential Station Access Improvements

The Gold Line BRT project will provide a continuous bike and walk trail connecting the Greenway Avenue Station to the Maplewood and Helmo stations. Sidewalk and bike improvements on Dellwood Lane provide a direct connection from Landfall to the Greenway Avenue Station. A new trail along Greenway Avenue provides Oakdale residents with safe and direct access between the station and Tartan High School.

Figure 63. Greenway Avenue Station BRTOD Vision Concept



CIRCULATION

Corridor Trail

The Corridor Trail links the Greenway Avenue Station west to the Maplewood Station and the 3M Headquarters Building and east of I-94 to the Helmo Station. The Corridor Trail is parallel to the BRT route along Hudson Boulevard, Hadley Avenue, and 4th Street.

Collector Trails

Collector Trails provide important routes for bicyclists and walkers between the Corridor Trail, neighborhood destinations, and the regional bicycle transportation network. Collector Trails at Greenway Avenue Station include Century Avenue Trail, Hadley Avenue, Weir Drive, and a future I-94 pedestrian and bicycle bridge between Hadley Avenue and Weir Drive.

Station Access Routes

Safe and direct pedestrian and bicycle routes along Dellwood Lane and Greenway Avenue provide a 'front door' for Landfall and access from Oakdale's Tartan High School to the station. Since neither Landfall nor Oakdale has a viable alternative for safe, direct, and comfortable walking and biking routes to the station, it is especially important to ensure that routes are well designed. In addition to providing access, both streets are opportunities for 'placemaking' elements that signal the importance of the street, the character of the neighborhood, and the function of adjacent land uses.

Neighborhood Access Routes

Neighborhood Access Routes are low-stress routes linking existing and planned trails and are consistent with routes designated in Oakdale's Comprehensive Plan. Seventh Street and Granada Avenue serve as Greenway Avenue's Neighborhood Access Routes.

Figure 64. Corridor Trail Existing Condition (Looking East)

Figure 65. Corridor Trail Enhanced Condition (Looking East)

DEVELOPMENT

Greenway Avenue Station Area Development Capacity

Area
66.8 acres

Residential Units
545 dwelling units

Commercial Building Area
125,000 square feet

City of Landfall

Landfall's auto-oriented commercial properties provide an opportunity for infill development on large underutilized parking lots. Transit-oriented development on these lots could include commercial infill along Dellwood Lane that preserves and maintains the function of existing uses while creating opportunities for BRTOD.

Current Landfall zoning restricts commercial uses that might overwise be attracted to the city to provide goods and services for residents.

City of Oakdale

Oakdale's commercial properties at the Greenway Avenue Station and along Hudson Boulevard are ripe for redevelopment. Further east of the station, approximately 60 acres of underutilized and vacant properties along both sides of Hadley Avenue offer longer-term transit-oriented development opportunities. In Oakdale, transit-oriented development infill opportunities for multi-family housing in conjunction with commercial uses (retail, services and office) take advantage of existing roadway access, the BRT station, and visibility from I-94.

Current Oakdale zoning and comprehensive plans do not allow for multi-family development on identified BRTOD sites.

Figure 66. Dellwood Lane Development Character

Figure 67. Greenway Avenue Station Development Character

HELMO AVENUE STATION

The Helmo Avenue Station serves single-family residential neighborhoods and the Crossroads and Oaks Business parks within the community of Oakdale.

The station platform is located at the intersection of the planned Helmo Avenue Bridge and a realigned Hudson Boulevard. Infill development on vacant sites around the station is envisioned as a dense mix of apartments, townhomes and condominiums; employment and street-oriented retail and commercial uses; a station plaza and parks set within a grid of walking- and biking-friendly streets.

Station access routes link existing employment uses, neighborhoods, and adjacent parks and open spaces Strategic enhancements and improvements to key multi-modal routes provide residents with safe, direct, and convenient connections between the station and future transit-oriented development.

The Helmo Avenue Station has been identified as a Mixed-Use Neighborhood Station.

Figure 68. Helmo Avenue Station

BRTOD VISION

Safe and Active Station Environment

At the station, street-oriented retail within or adjacent to high-density multi-family buildings will create a station environment with activity at all times of the day.

Transit-Oriented Infill Sites

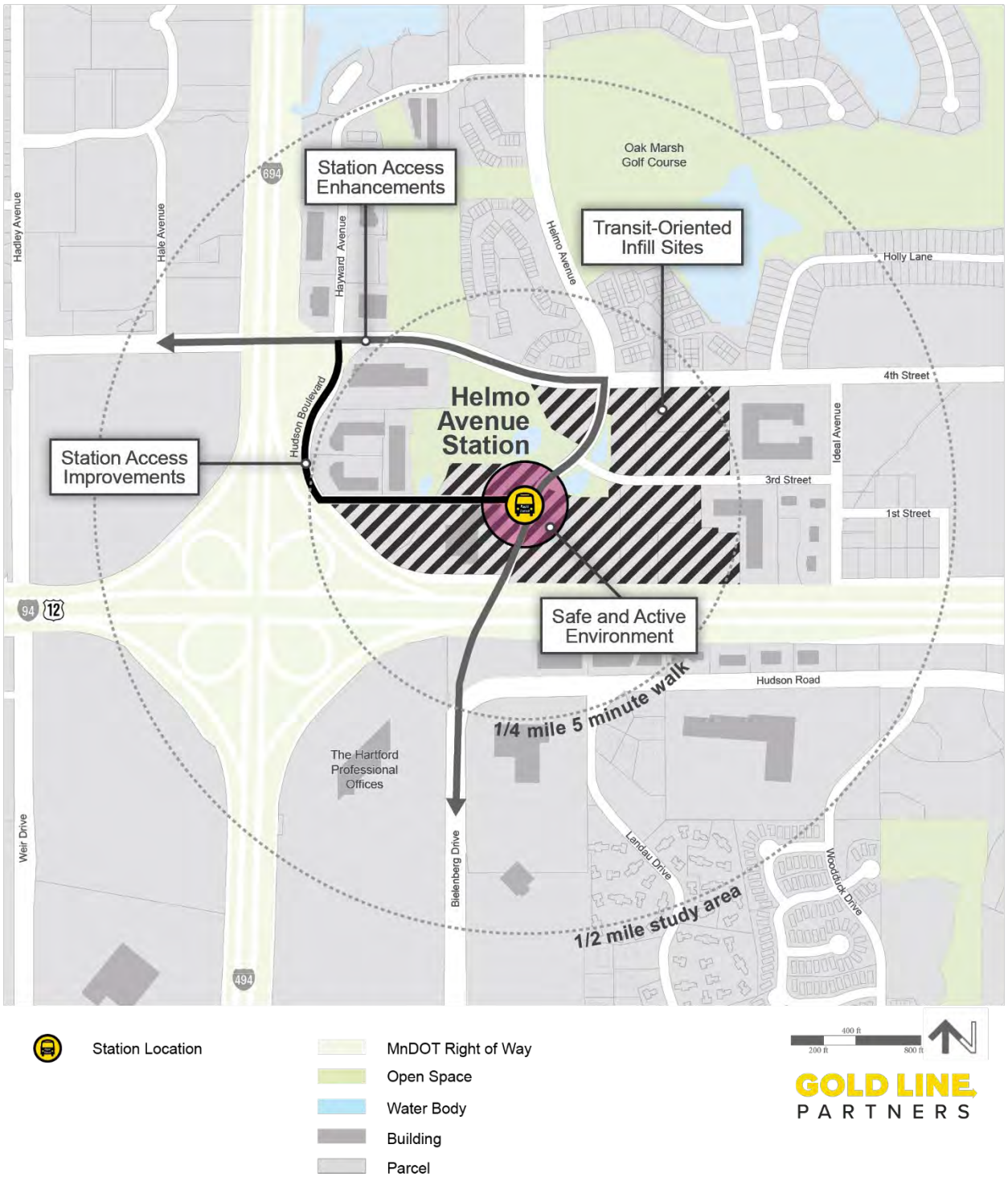
Infill sites provide for a mix of densities and types of multi-family housing surrounding a new neighborhood park, ponds, and open space. Professional and flexible office employment uses are located adjacent to the existing Oaks Business Park and are oriented to the I-94 freeway.

Station Access Enhancements & Improvements

Corridor Trail enhancements along Fourth Street and Helmo Avenue and a new I-94 bridge crossing improve access for transit, walking, biking, and auto traffic between the Helmo Station and the Tamarack Road Station to the south.

A walking and biking trail envisioned along a proposed Hudson Boulevard realignment west of Helmo Avenue improves access to jobs east of I-694 and links to existing parks and neighborhoods. A new street grid east of Helmo Avenue improves walking and biking access between the station and transit-oriented development.

Figure 69. Helmo Avenue Station BRTOD Vision Concept



CIRCULATION

Corridor Trail

The Corridor Trail links the Greenway Avenue Station east of I-694 to the Tamarack Road Station south of I-94 in Woodbury. The Corridor Trails runs adjacent to the BRT guideway along Fourth Street from Hadley Avenue to Helmo Avenue and extends south along Helmo Avenue to the station. At I-94, the trail continues over a new auto, bus, bike, and walk bridge to the Tamarack Road Station on Bielenberg Road.

Collector Trail

Collector Trails provide important walking and biking connections between the Corridor Trail, neighborhoods, jobs, and shopping destinations. Collector trails are on Helmo Avenue from Fourth Street to Tenth Street, and Fourth Street from Helmo Avenue to Inwood Avenue.

Station Access Routes

A new trail on the realigned Hudson Boulevard extends from Fourth Street to the station at Helmo Avenue, filling gaps in walking and biking access between existing transit-supportive uses and the station.

Neighborhood Access Routes

Within a half-mile of the station, the existing Third Street and a new walking and biking street grid links transit-oriented development sites to the Helmo Avenue Corridor Trail.

Helmo Avenue Station Area Development Capacity

Area
38.2 acres

Residential Units
1,125 dwelling units

Commercial Building Area
180,000 square feet

Plaza, Parks & Open Space
4.75 acres

Street Grid
53,000 square feet

DEVELOPMENT

The Development Plan describes the ten-year BRTOD vision for mixed-use multi-family and employment, street-oriented retail and services, a station plaza, and a neighborhood park on vacant and underutilized sites within a five-minute walk of the station. The Plan provides for a safe and active station environment, accommodates a planned Park-and-Ride, and capitalizes on the area's existing open space, trail amenities, and visibility to I-94.

The Plan informed policy and regulatory updates that define the types of uses, permitted density, parking and building heights in the station area. As a result of BRTOD planning, the City has prepared and adopted transit-oriented development Comprehensive Plan and Zoning amendments.

Figure 70. Helmo Avenue Station

Figure 71. Corridor Trail Proposed Condition (Looking North)

TAMARACK STATION

The City of Woodbury's adopted 2040 Comprehensive Plan envisions the station areas as "places to work" and as "places to shop." The Tamarack Station area should foster high-quality professional office development and include opportunities for office-supporting retail and service uses. Access improvements to existing and future roadways will foster walking and biking. Trails will be designed on all major roadways to increase walking and biking mobility and safety.

The Tamarack Station provides opportunities for transit-supportive employment uses along Bielenberg Drive. Improvements to walking and biking routes strengthen connections between the station and existing residential neighborhoods and provide linkages to transit-supportive uses such as the 500 Bielenberg Office Building, Tamarack Hills I, and the Tamarack Hills II commercial center.

The Tamarack Station has been identified as an Employment Station.

CIRCULATION

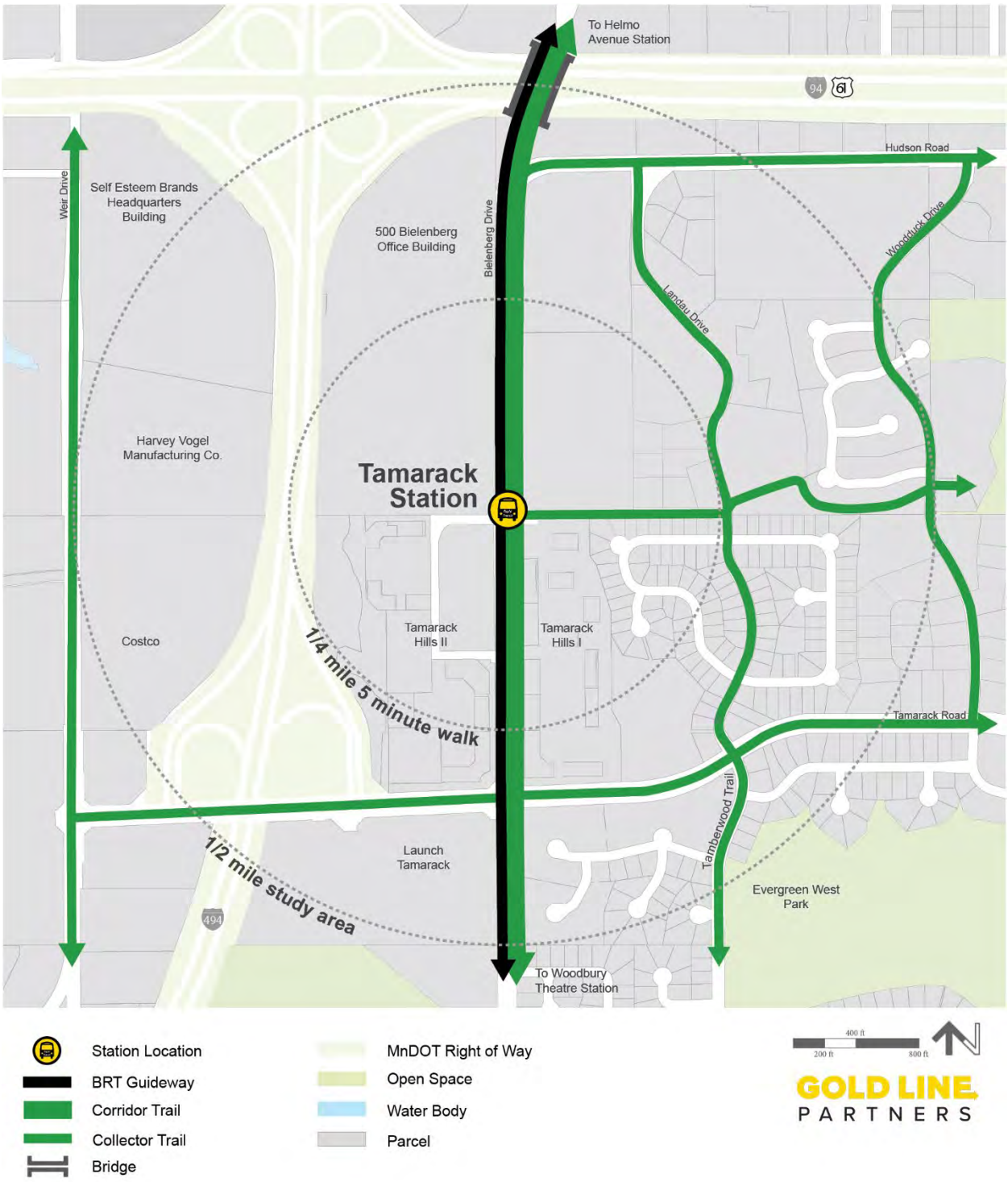
Corridor Trail

The Gold Line BRT project will construct the Corridor Trail parallel to the BRT guideway along the east side of Bielenberg Drive, providing direct access to the Tamarack Station.

Collector Trail Routes

Collector Trail Routes include existing and planned City of Woodbury trail connections within the half mile study area.

Figure 72. Tamarack Station Area Circulation Plan

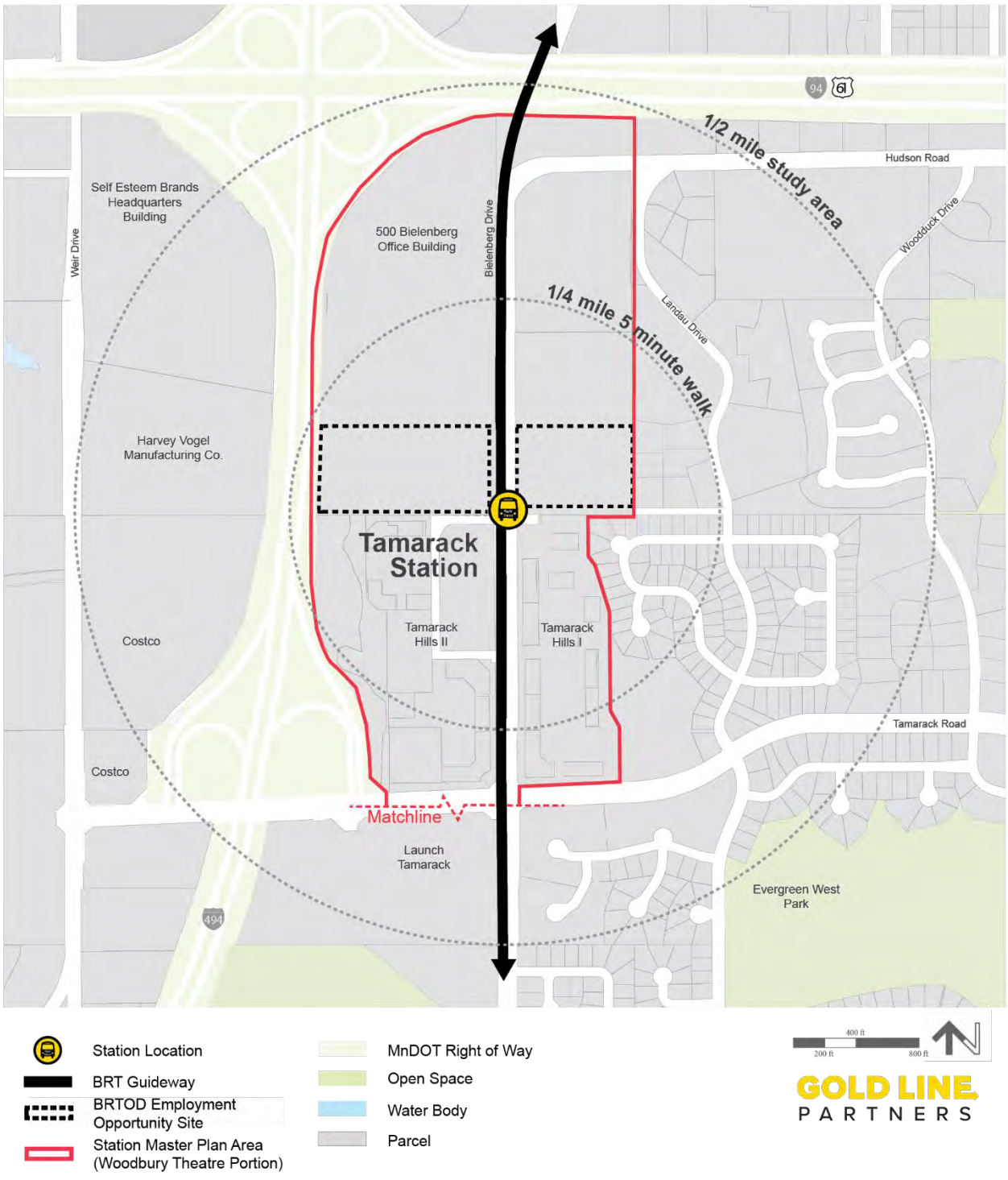


DEVELOPMENT

Planning for transit-oriented development within a half mile of the Tamarack Station will be guided by a future Station Master Plan and coordinated between the City of Woodbury, potential development partners, and property owners. The City will use this process to identify the appropriate combination of land uses for each station area based on each area's unique development opportunities, market conditions, and ridership potential. The City intends for the master plans to create a walkable and bike-friendly environment with an emphasis on employment uses.

The Tamarack Station Development Plan is consistent with the City's 2040 Comprehensive Plan, which identifies the Tamarack Road Station as a "Place to Work". The Development Plan identifies the vacant parcel to the northeast and northwest of the station as suitable for transit-oriented development. The site benefits from access and visibility to the BRT station and proximity to I-494, existing office, commercial, and hotel development. The Development Plan identifies these vacant parcels as a major opportunity for employment growth, perhaps the largest opportunity along the Gold Line corridor to provide additional employment options. When paired with adjacent BRTOD development at the Helmo Station in Oakdale to the north and at the Woodbury Theatre station to the south, strong transit connections will be created.

Figure 73. Tamarack Station Area Development Plan



WOODBURY THEATRE STATION

The City of Woodbury's adopted 2040 Comprehensive Plan envisions the station areas as "places to work" and as "places to shop". At the Woodbury Theatre and Woodbury I-494 Stations, attractive, high-quality and convenient retail shopping and commercial uses provide residents, employees and visitors with "places to shop". Access improvements to existing and future roadways will foster walking and biking. Trails will be designed on major roadways to increase walking and biking mobility and safety.

The Woodbury Theatre Station and Woodbury I-494 Stations, provides an opportunity to strengthen the existing Woodbury Village Shopping Center, a regional commerce destination. Improvements to walking and biking routes strengthen connections between the station, neighborhoods south of Valley Creek Road, and transit-supportive uses such as the Target and Lunds & Byerly grocery store.

At Woodbury I-494 Station, Metro Transit is exploring the possibility of consolidating their current express bus park and ride facilities with the BRT park and ride, strengthening both ridership models. It's location adjacent to I-494 provides a unique opportunity in the future to provide the express buses with direct access to I-494 via a slip ramp, further enhancing this popular transit service.

The Woodbury Theatre and Woodbury I-494 Park & Ride Stations have been identified as Commerce Stations.

CIRCULATION

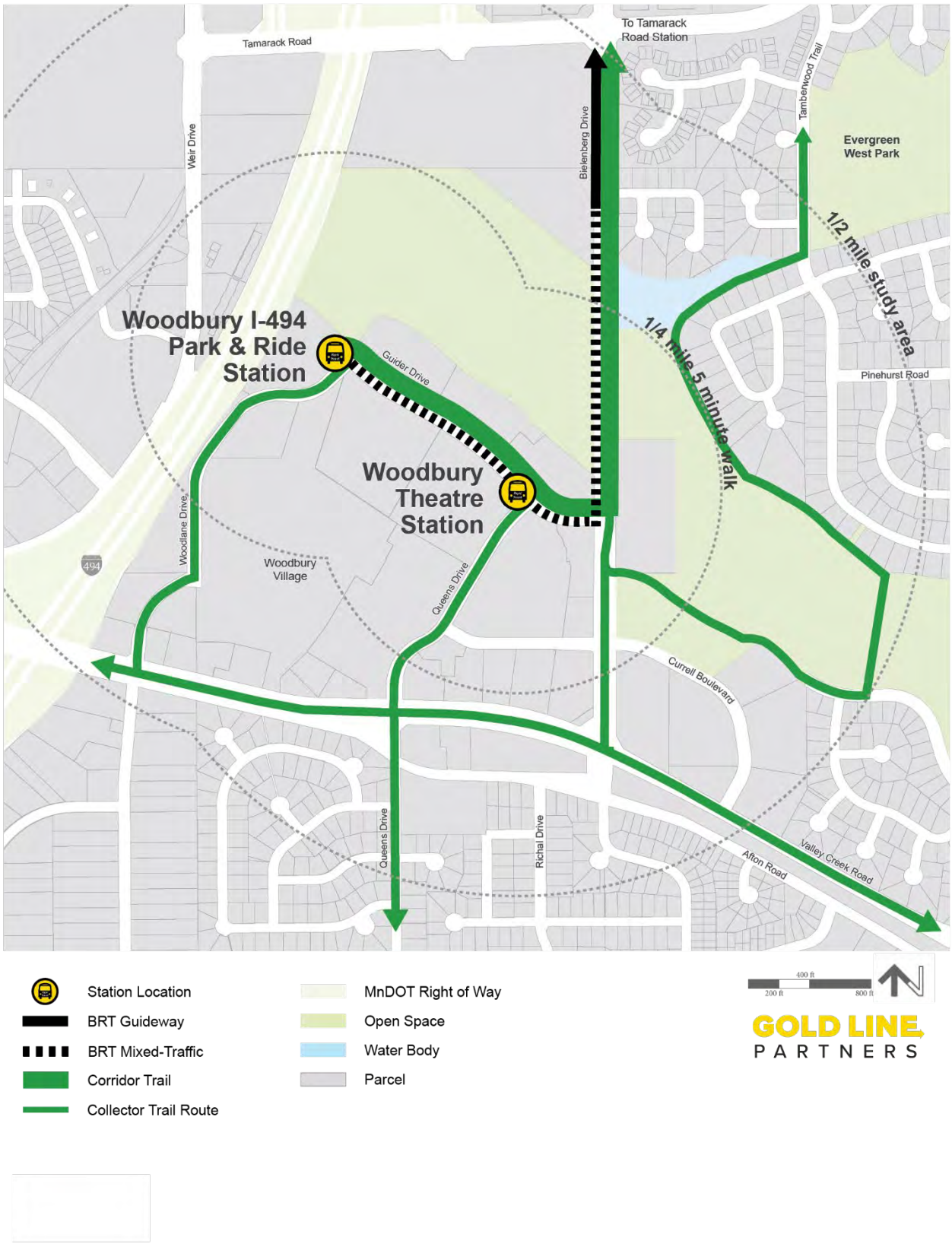
Corridor Trail

The Gold Line BRT project will construct the Corridor Trail parallel to the BRT guideway along the east side of Bielenberg Road. Connection to the Woodbury Theatre and Woodbury I-494 Park & Ride Stations is provided by a Corridor Trail along Guider Drive.

Collector Trail Routes

Collector Trail Routes include existing and planned City of Woodbury trail connections within the half mile study area.

Figure 74. Woodbury Theatre and Woodbury I-494 Stations Circulation Plan

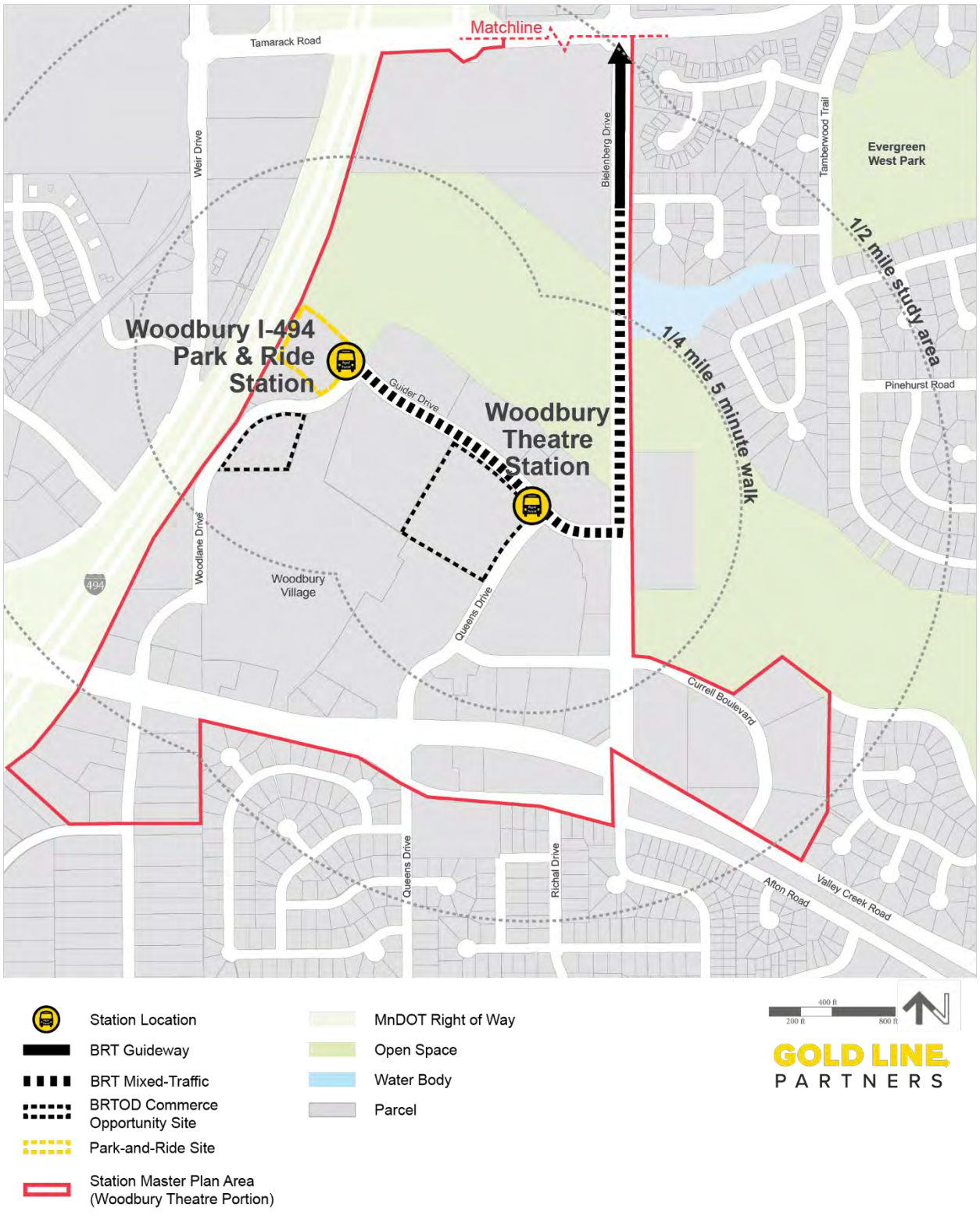


DEVELOPMENT

Planning for transit-oriented development within a half mile of the Woodbury Theatre and Woodbury I-494 Park and Ride Stations will be guided by a future Station Master Plan and coordinated between the City of Woodbury, potential development partners, and property owners. The City will use this process to identify the appropriate combination of land uses for each station area based on each area's unique development opportunities, market conditions, and ridership potential. The City intends for the master plans to create a walkable and bike-friendly environment with a mix of uses that may include housing, office, retail or other amenities.

The Woodbury Theatre and Woodbury I-494 Park and Ride Station Development Plans are consistent with the City's 2040 Comprehensive Plan, which identifies both stations as "Places to Shop". The Plan identified the Metro Transit-owned theater site as an opportunity for transit-oriented development. Future station master planning should consider transit-oriented infill and redevelopment opportunities and walking and biking improvements for the Woodbury Village Shopping Center, creating a true live, work, play environment.

Figure 75. Woodbury Theatre and Woodbury I-494 Stations Station Area Development Plan



PERFORMANCE MEASURES

WCRRA will periodically review the BRTOD Plans developed for the Gold Line stations with each of the Cities to evaluate plan effectiveness and to coordinate improvements outside each City's jurisdiction.

The outcomes of the BRTOD Plans will be evaluated relative to five performance measures. Performance benchmarks have been established for each station area based on the station area's specific implementation projects.

These performance benchmarks support:

- Cities' abilities to track the evolution of station areas into their highest and best use.
- WCRRA, Ramsey County, the Cities, and regional decision-makers in identifying the effects of the BRTOD Plans and implementation projects, monitoring trends in station access and BRTOD performance, and identifying transit ridership and walk and bike mode shifts over time.

Each of the performance measures support BRTOD and can result in significant benefits to the station areas and the overall corridor.

PERFORMANCE MONITORING

BRTOD Policies and BRTOD Regulations

Public Safety. Building and street design policies that encourage walking and biking and zoning regulations that ensure buildings provide 'eyes' on the sidewalk help reduce crime and foster public areas that are well-used.

Trip Mode and Transit Ridership. Polices and regulations that support walking, biking, and transit use can increase transit ridership and the share of these modes.

Housing Options and Affordability. Ensuring that land is guided and zoned appropriately allows for development densities that support housing choice and affordability.

Multimodal Capital Improvements

Public Safety. Walking and biking capital improvement projects ensure that residents and transit users have safe and direct access between stations and destinations.

Trip Mode and Transit Ridership. Extending walking and biking capital improvements to include first- and last-mile infrastructure can increase transit ridership and the share of these modes.

Access to healthy food and healthcare. Walking and biking improvements connecting neighborhoods and the station to commercial centers improve access to healthy foods and to healthcare options.

Equitable Growth

Community Integrity. Coordinated affordable housing and home and storefront improvement plans, programs, and funding increase housing options and affordability and reduce residential and commercial displacement.

Access to Jobs and Education. Strategic recruitment and incentives foster the location of family-wage businesses that benefit from the BRT transit and access to regional highways in appropriate station areas.

Affordable Housing

Housing Options and Affordability. Cities, in conjunction with counties and regional partners, can meet targets for affordable multi-family dwelling units by applying incentives and direct funding.

Figure 76. Performance Measures and Benchmarks

	BENCHMARKS										
	CITY OF SAINT PAUL					CITY OF MAPLEWOOD	CITY OF LANDFALL CITY OF OAKDALE	CITY OF OAKDALE	CITY OF WOODBURY		
PERFORMANCE MEASURES	Mounds Boulevard Station	Earl Street Station	Etna Street Station	White Bear Avenue Station	Sun Ray Station	Maplewood Station	Greenway Avenue Station	Helmo Avenue Station	Tamarack Station	Woodbury Theatre Station	Woodbury I-494 Park & Ride Station
BRTOD Policies	–	–	–	–	–	BRTOD Policy Amendment to the 2040 Comprehensive Plan	BRTOD Policy Amendment to the 2040 Comprehensive Plan	–	BRTOD Policy Amendment to the 2040 Comprehensive Plan	BRTOD Policy Amendment to the 2040 Comprehensive Plan	BRTOD Policy Amendment to the 2040 Comprehensive Plan
BRTOD Regulations	–	–	BRTOD Zoning Amendments	BRTOD Zoning Amendments	–	BRTOD Zoning Amendments	BRTOD Zoning Amendments	–	BRTOD Zoning Amendments	BRTOD Zoning Amendments	BRTOD Zoning Amendments
Multimodal Capital Improvements	Corridor Trail Improvements Kellogg Boulevard/Third Street Bridge	Earl Street Bike Lanes	Etna Street Protected Bike Lanes	Old Hudson Road Bike Lanes White Bear Avenue Bridge Trail Corridor Trail Improvements	Corridor Trail Enhancements	Maplewood Bridge Feasibility Study Conway Avenue Protected Bike Lanes Upper Afton Road Bike Lanes	Dellwood Lane Improvements Greenway Avenue Trail Corridor Trail Enhancements	Fourth Street Trail Realigned Hudson Boulevard and Trail Neighborhood Park and New Streets	Corridor Trail Improvements	Corridor Trail Improvements	Corridor Trail Improvements
Equitable Growth	Storefront Improvement Plan Affordable Housing Study	Storefront Improvement Plan Affordable Housing Study	Etna Employment Center Developer Offering and Request for Proposal	Suburban Avenue Corridor Plan Affordable Housing Study	Multimodal Transit Center Plan	Residential Infill (Missing Middle) Study	ABI & Regan Properties Small Area Plan	Public/Private Partnership Multi-family Affordable Housing Project	–	–	–
Affordable Multi-Family Housing Units	40 dwelling units	–	–	80 dwelling units	180 dwelling units	–	160 dwelling units	200 dwelling units	–	–	–